



City of Sunnyvale

Agenda Item-No Attachments (PDF)

File #: 16-0398, Version: 1

REPORT TO COUNCIL

SUBJECT

Adopt a Resolution Adopting the 2015 Urban Water Management Plan (UWMP)

BACKGROUND

The California Urban Water Management Planning Act (Act), Water Code Division 6, Part 2.6, sections 10610 through 10656, requires that water suppliers prepare an Urban Water Management Plan (UWMP) (Attachment 1) and that such plans be updated at least once every five years in years that end in five and zero. The Act requires agencies that provide potable water to the public to assess the reliability of water sources over a 20-year planning horizon under both normal and dry hydrologic conditions and to ensure adequate water supplies are available to meet existing and future water demands. The UWMP also describes efficient uses of water, demand management measures, implementation strategy and schedule, and other relevant information and programs.

Senate Bill x7-7 (SBx7-7), adopted in November 2009, mandates a statewide per capita potable water use reduction of 20% by the year 2020. Urban water suppliers are required to identify a baseline usage (expressed in gallons per capita per day, or gpcd) for their service area, calculate a target to meet the 20% reduction, and include a plan of compliance in the 2015 UWMP. The City's 2010 UWMP set the 2015 interim water use target at 157 gpcd and the 2020 final use target at 139 gpcd. The 2015 UWMP addresses the City's compliance towards achieving the mandated goals.

Sunnyvale last updated its UWMP in 2011 (RTC 11-138, June 28, 2011). The 2015 UWMP is being presented to Council in 2016 consistent with other California water agencies. The City must adopt the 2015 UWMP by July 1, 2016 and submit it to the California Department of Water Resources within 30 days of adoption. Council is being asked to adopt a resolution (Attachment 2) approving the 2015 UWMP.

EXISTING POLICY

GOAL EM-1, GENERAL PLAN, CHAPTER 7: ADEQUATE WATER SUPPLY

Acquire and manage water supplies so that existing and future reasonable demands for Water, as projected in the 20-year forecast are reliably met.

ENVIRONMENTAL REVIEW

California Water Code Section 10652 provides that the California Environmental Quality Act (CEQA) does not apply to the preparation and adoption of Urban Water Management Plans or to projects implementing such plans under Water Code Section 10632.

DISCUSSION

The 2015 UWMP was prepared to provide a comprehensive update to the 2010 UWMP and to include new legislatively mandated language and calculations.

The State Department of Water Resources will use the information provided by all water providers in their UWMPs to make projections on water usage and determine the status of water conservation efforts throughout the state.

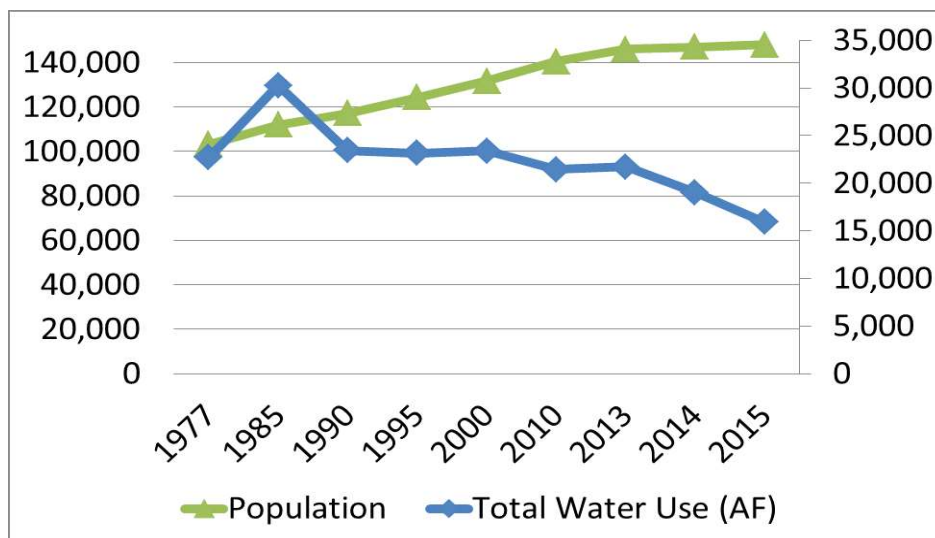
The 2015 UWMP was prepared primarily by HydroScience Engineers in coordination with City staff and interested stakeholder groups. It builds upon previous updates, includes details about Sunnyvale's projected water supply and demands through 2035 during an average water year, a single dry year, and multiple dry years; and includes current projected recycled water use, water conservation program details; and detailed information about Sunnyvale's regional water supply.

The 2015 UWMP includes an updated demand analysis based on population and an employment projection of the City's currently adopted General Plan, and also incorporates water demand projections expected with the draft update to the Land Use and Transportation Element (LUTE).

Water Demand

Incorporating the profound effects of the current drought and state-imposed mandatory potable water use reductions presented an additional challenge when developing the water demand projections for this 2015 UWMP. Until 1985, population increase typically translated into increase in water demands. However, given the permanent reduction in demand resulting from the 1987-92 drought, coupled with updates to the CalGreen elements of the Building Code, aggressive water conservation programs, manufacturing operations relocating out of the area, and effective public outreach; total water use within Sunnyvale has been trending down as shown in Table 1 below.

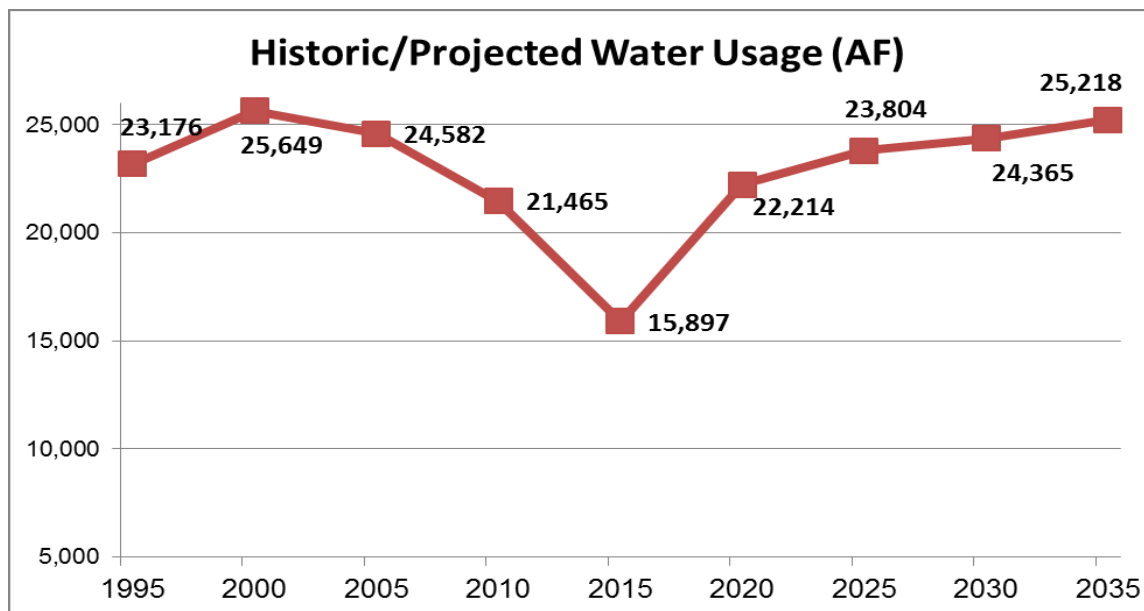
TABLE 1
Population vs. Water Use



1 AF = 326,000 gallons

For future water demand projections staff relied upon projections prepared in 2013 by the Association of Bay Area Governments (ABAG) and also included more recent projections detailed in the City's draft update to the Land Use and Transportation Element. It is worth noting that in the year 2035 water use within Sunnyvale is expected to be less than it was in the year 2000. For purposes of planning water supply needs, staff used assumptions based on the highest reasonably expected water use. As the graph in Table 2 below illustrates, staff assumed a substantial rebound of water use after 2015 and into the future. While it is likely that future water use will be less than assumed, it is prudent to use this approach in this plan to ensure that the City accounts for unexpected growth and other unforeseen factors for future water demand projections.

TABLE 2

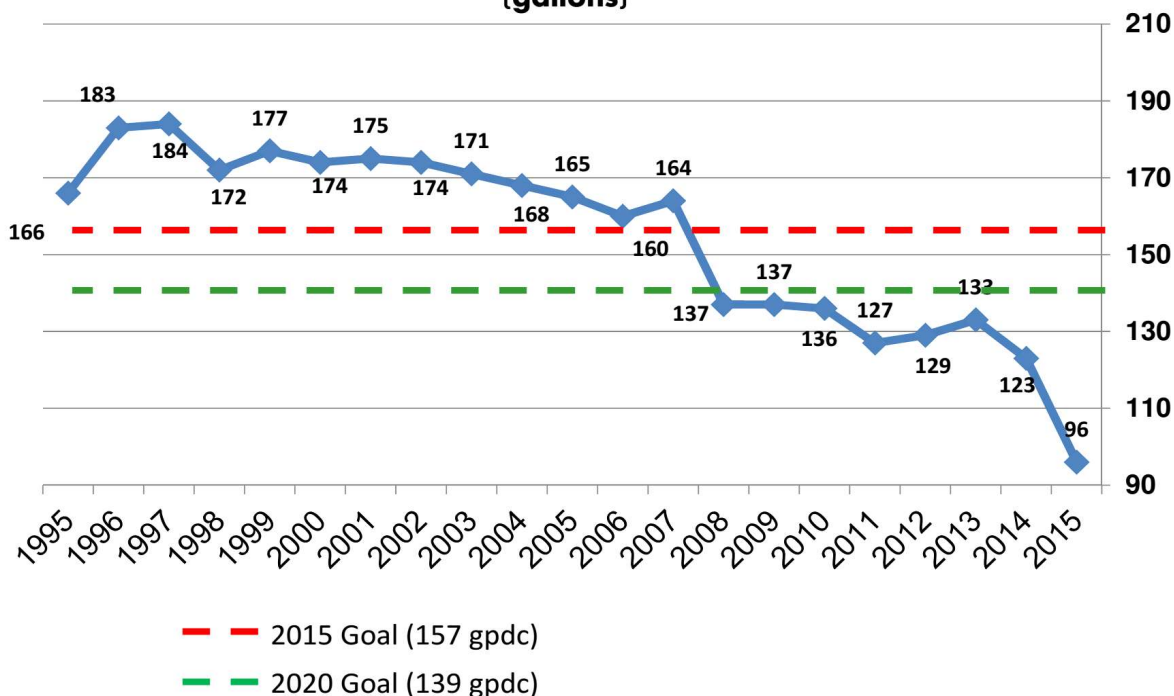


1 AF= 326,000 gallons

Water Conservation Act (SBx7-7)

The 2015 UWMP addresses the City's requirement under Water Conservation Act of 2009 (SBx7-7). This statute requires water suppliers to reduce average per capita daily water consumption by 20% by December 31, 2020. The baseline for the reduction target is the average water use during the 10-year period 1995-2004. As shown in Table 3 below, the City met the 2015 interim target and has already achieved the 2020 goal. While the drought certainly contributed to the drastic reduction in per capita use, water use was already trending downward as a result of conservation measures and more water efficient developments being constructed.

TABLE 3
Per Capita Water Usage
(gallons)



Water Shortage Contingency Plan

Sunnyvale has experience dealing with various stages of droughts. In all cases residents and businesses reduced water consumption to in essence meet the reduction target. The City's actions included the implementation and enforcement of emergency water restrictions and focused public outreach campaigns to provide information on ways to efficiently use available water. As shown in Table 4 below, the 2015 UWMP outlines actions that the City Council could take to achieve varying degrees of water use reduction.

TABLE 4

Stage No.	Action/Prohibition

Stage 0 Normal	<ul style="list-style-type: none"> • Permanent water use prohibitions please refer to Sunnyvale Municipal Code Section 12.34.020 • Allowing plumbing fixtures to leak • Using potable water in a manner where it floods premises and runoff into the street • Using a hose to wash vehicles without shut off valve. • Using a hose to wash driveways, sidewalks (except for health and safety). • Service of water to restaurants patrons without being requested. • Installation of single pass cooling process in new construction • Sprinkler irrigation between the hours of 9 AM - 6 PM when daylight savings is in effect. • Irrigating for more than 15 minutes per day each station. • Irrigation with potable water during and within 48 hours after measureable rainfall is prohibited. • Use of decorative fountains without recirculation • Operators of hotels and motels shall provide guests with the option of choosing not to have towels and linens laundered daily. • The irrigation with potable water of ornamental turf on public street medians
Stage 1 up to 15%	<ul style="list-style-type: none"> • All of the above • Low level informational outreach • Enforcement of permanent water use restriction Ordinance (Sunnyvale Municipal Code Section 12.34.020) • Hydrant flushing (unless for public health or safety)
Stage 2 up to 30%	<ul style="list-style-type: none"> • All of the above • Stepped up outreach effort • Irrigation of ornamental landscapes with potable water more than two days per week is prohibited.
Stage 3 up to 45%	<ul style="list-style-type: none"> • All of the above • Water allocation may be imposed • Washing vehicles with potable water except at commercial vehicle washing facility • Watering turf, grass or dichondra lawns (can provide minimal water for sports playing fields) • New installations of lawns. • Irrigating with potable water of golf courses except for tees and greens
Stage 4 Greater than 45%	<ul style="list-style-type: none"> • All of the above • New swimming pool or pond construction • Filling or refilling swimming pools (can replace water loss due to evaporation) • Outdoor watering December through March. • Landscape irrigation with potable water of any City-owned premises or businesses where recycled water is available for connection.

2015 UWMP Coordination

Staff coordinated the preparation of this UWMP update through numerous meetings with the Santa Clara Valley Water District (SCVWD) retailer network, and through the Bay Area Water Supply and Conservation Agency and San Francisco Public Utilities Commission with meetings and correspondence. Several specific subcommittee meetings were held with SCVWD and neighboring water service providers to deal with details of regional water issues.

FISCAL IMPACT

There is no fiscal impact for approval of the UWMP. However, the City could incur costs associated with implementing various stages of a declared drought.

PUBLIC CONTACT

A notice was published in the Sunnyvale Sun publicizing a public meeting at the Community Center held on May 23, 2016 and also informing the public about the Public Hearing the City Council is

holding today June 21, 2016. Public contact was also 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. The UWMP was also presented to the Sustainability Commission on May 16, 2016 and to the Planning Commission on May 23, 2016.

ALTERNATIVES

1. Adopt a resolution adopting the 2015 Urban Water Management Plan as presented, and direct staff to forward the UWMP to the California State Department of Water Resources.
2. Do not adopt the 2015 Urban Water Management Plan and direct staff to request an extension from the State Department of Water Resources in order for staff to revise the UWMP.

STAFF RECOMMENDATION

Alternative 1: Adopt a resolution adopting the 2015 Urban Water Management Plan as presented and direct staff to forward the UWMP to the California State Department of Water Resources.

Prepared by: Mansour Nasser, Water & Sewer Division Manager
Reviewed by: John Stufflebean, Director, Environmental Services
Reviewed by: Kent Steffens, Assistant City Manager
Approved by: Deanna J. Santana, City Manager

ATTACHMENTS

1. 2015 Urban Water Management Plan
2. City Council Resolution