

**Meeting Date:** 1/14/2014

**Report Type:** Public Hearing

**Report ID:** 2014-00057

**Title:** Water Shortage Contingency Plan

**Location:** Citywide

**Issue:** Current low storage in Folsom Reservoir and lack of rain and snow forecast for the foreseeable future warrant the declaration of a local water shortage condition and implementation of Stage 2 of the City of Sacramento Water Shortage Contingency Plan.

**Recommendation:** Pass a Resolution 1) declaring a water shortage, and 2) implementing Stage 2 of the City of Sacramento's Water Shortage Contingency Plan.

**Contact:** Dave Brent, Director, (916) 808-1400; Bill Busath, Engineering & Water Resources Manager, (916) 808-1434, Department of Utilities

**Presenter:** Bill Busath, Engineering & Water Resources Manager, (916) 808-1434, Department of Utilities

**Department:** Department Of Utilities

**Division:** Engineering & Water Resources

**Dept ID:** 14001311

**Attachments:**

1-Description/Analysis

2-Background

3-Resolution

4-Attachment - Folsom Lake Reservoir

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**City Attorney Review**

Approved as to Form

Joe Robinson

1/8/2014 10:43:35 AM

**Approvals/Acknowledgements**

Department Director or Designee: Dave Brent - 1/3/2014 2:42:39 PM

## Description/Analysis

**Issue Detail:** Calendar year 2013 was the driest year on record for much of Northern and Central California. Storage in Folsom reservoir is below 20% of its storage capacity and there is no significant rain or snow forecast in the near future. If these conditions continue, in a matter of months the reservoir surface elevation is anticipated to drop to a level that will preclude upstream purveyors from diverting water from the reservoir. Continued drought conditions could significantly limit the City's ability to divert water from the American River for treatment. The critical nature of this drought condition is approaching an emergency condition and warrants the declaration of a water shortage, as authorized under City Code section 13.04.910, and implementation of Stage 2 of the City of Sacramento Water Shortage Contingency Plan (WSCP) outlined in the City's 2010 Urban Water Management Plan (UWMP). Stage 2 requires all customers to reduce water consumption by 20 to 30 percent and adhere to a variety of water conservation provisions.

**Policy Considerations:** The proposed action is consistent with the requirements of Section 10632 of the California Water Code, Chapter 5 of the City's 2010 UWMP, and Article XI (Outdoor Water Conservation) of Chapter 13.04 of the City Code.

**Economic Impacts:** Unknown.

### Environmental Considerations:

#### California Environmental Quality Act (CEQA):

The proposed action would implement Stage 2 of the City's Water Shortage Contingency Plan (WSCP), which is designed to reduce water use by 20 to 30 percent. The action implements the City's Urban Water Management Plan and ongoing efforts to conserve water. The reductions in water use, including reductions in irrigation of parks and cemeteries, would not have a significant effect on the environment. The Master Environmental Impact Report (EIR) certified in connection with the adoption of the 2030 General Plan evaluated water supply and cumulative effects.

The proposed action is exempt from review under CEQA as part of the City's continuing administrative activities to implement the UWMP (CEQA Guidelines section 15378(b)(2)), and because it can be seen with certainty that the action would have no significant effect on the environment (CEQA Guidelines section 15061(b)(3)). A reduction in water usage will reduce potential environmental effects associated with water use, by reducing surface water diversions, as well as reducing energy consumption and other impacts associated with water production and distribution and the collection and treatment of this water after it has been used. A reduction in surface water diversions also will

increase the availability of surface water for the maintenance and protection of natural resources and the environment.

**Sustainability:** Implementation of the UWMP supports the City's sustainability goals of reducing greenhouse gasses and conserving resources.

**Commission/Committee Action:** Not applicable.

**Rationale for Recommendation:** Implementation of Stage 2 of the WSCP is the appropriate City response to the current drought conditions and will trigger the conservation actions designated under this stage in the UWMP.

**Financial Considerations:** Under the current rate structure, implementation of Stage 2 will likely decrease the Department of Utilities' revenues that are generated from its customer base that is billed on a volumetric basis. In addition to probable revenue reduction, the cost of implementing the public outreach requirements of Stage 2 of the WSCP is estimated to be about \$200,000. The Department has sufficient funds in the current operation budget to cover the cost of Stage 2 implementation, and believes that current water fund reserves will be sufficient to cover any revenue decreases. The Department will be closely monitoring the cost and revenue impacts of Stage 2 implementation.

**Local Business Enterprise (LBE):** Not applicable.

## **Background**

### Situation/Recommendation

Calendar year 2013 was the driest year on record for much of Northern and Central California. This was preceded by two consecutive years of below-normal precipitation in the Sacramento region and snow pack in the Sierra Nevada Mountains. Storage in Folsom reservoir is at an historic low, below 20% of its storage capacity (see "Reservoir Conditions – Folsom Lake" chart attached to this council report), and current weather forecasts predict continued below-normal precipitation throughout the region and snow fall in the Sierra Nevada mountains. If these conditions continue, in a matter of months the reservoir surface elevation is anticipated to drop to a level that will preclude the purveyors who rely on water from Folsom reservoir from diverting water from the reservoir. Continued drought conditions could significantly limit the City's ability to divert water from the American River for treatment.

The critical nature of this drought condition is approaching an emergency condition and warrants the declaration of a water shortage, pursuant to City Code section 13.04.910. Staff is recommending implementation of a Stage 2 Water Shortage Contingency Plan (WSCP) as outlined in the City's 2010 Urban Water Management Plan (UWMP). Should the dry weather conditions persist into the late winter and early spring, it may be necessary to implement increased measures as called for in Stages 3 and/or 4.

Staff has already begun coordinating internally in anticipation of implementation of Stage 2 of the WSCP. These preparations include drafting a robust public outreach plan per the action requirements under Stage 2, and a plan to reallocate existing City resources in several departments to significantly increase enforcement of the City's water conservation ordinance to meet the increased water use reduction goals of Stage 2. Stage 2 reduction measures are outlined later in this section.

Article XI of Chapter 13.04 of the Sacramento City Code establishes the City's outdoor water use requirements and penalties for noncompliance. These provisions prohibit using water to wash down a sidewalk, driveway, or parking area, and limit outdoor water use to specified days and times. When daylight savings time is in effect, irrigation may only take place between the hours of seven p.m. and ten a.m. no more than three days per week – different days are specified for odd and even numbered addresses. There is

no irrigation allowed on Mondays, and residential vehicle washing must coincide with irrigation days and times for the address where the vehicle is being washed.

During the winter months (defined as the period between the end and beginning of daylight savings time), outdoor irrigation is limited to once per week, on Saturday or Sunday, unless the director provides prior written consent to a different irrigation pattern. This year, these winter rules took effect on November 2, 2013, and will remain in place until daylight savings time begins on March 9, 2014.

The Department of Utilities (DOU) currently has a Water Conservation Manager and seven staff who enforce the City's water conservation ordinance full time.

Section 13.04.910 of city code gives the City Council authority to declare a water shortage in response to any condition necessitating increased water conservation, such as a water shortage due to drought, natural disaster or other reduction of water supply availability, or as may otherwise be required to protect the public health.

#### City of Sacramento Water Shortage Conservation Plan (WSCP)

In October of 2011, the City Council approved the City's 2010 Urban Water Management Plan (UWMP). The plan includes a four-stage water shortage conservation plan. Each stage includes specific water conservation actions and use restrictions designed to reduce water use by successively greater amounts. Implementation of the stages is cumulative, meaning that implementation of a higher stage shall also include implementation of previous stages. Reduction requirements for each stage are based on a target percent reduction of water usage.

#### Stages of Action

The City's WSCP specifies four stages as described below:

**Stage 1** - All customers would be requested to reduce consumption by 10 to 20 percent. Customers would be requested to implement Stage 1 water conservation measures and adhere to the City's Outdoor Water Conservation provisions.

Actions: Continue the City's existing water conservation programs, and:

1. Declare a water shortage under City Code section 13.04.910.
2. Initiate a public information campaign to inform customers the need for water conservation and explain the water conservation measures.
3. Request that customers reduce water use by 10 to 20 percent.
4. Provide information to customers on ways to reduce their water use.
5. Increase water waste patrols to enforce the City's outdoor water conservation ordinance.
6. Enforce the City's public fire hydrant use regulations.
7. Reduce irrigation of parks and cemeteries.
8. Require shut-off valves on all hoses used for irrigation purposes, car washing, and other uses.
9. Enforce irrigation schedule as detailed in the City's outdoor water conservation ordinance.

**Stage 2** - All customers would be required to reduce consumption by 20 to 30 percent. Customers would be requested to implement Stage 1 and 2 water conservation measures and adhere to the City's Outdoor Water Conservation provisions.

Actions: Continue existing conservation programs, Stage 1 provisions above, and:

1. Intensify the public information campaign to inform customers the need for water conservation and explain the water conservation measures.
2. Further increase water waste patrols to enforce the City's outdoor water conservation provisions in the City code.
3. Limit outdoor irrigation during daylight saving time to two days per week.
4. Limit irrigation hours.
5. Further reduce irrigation of parks and cemeteries.
6. Allow car washing with the use of a bucket only.
7. Prohibit all public water uses not required for health and safety.
8. Allow main flushing only for emergency purposes.

**Stage 3** - All customers would be required to reduce consumption by 30 to 40 percent. Customers would be requested to implement Stage 1, 2, and 3 water conservation measures and adhere to the City's Outdoor Water Conservation provisions.

Actions: Continue existing conservation programs, Stage 1 and 2 provisions above, and:

1. Continue the public information campaign to inform customers of the need to for water conservation and explain the water conservation measures.
2. Intensify the City's leak detection program.
3. Limit outdoor irrigation to one day per week using manual application only.
4. Prohibit automatic sprinklers.
5. Limit irrigation hours.
6. Further reduce irrigation of parks and cemeteries.
7. Prohibit car washing.

**Stage 4** - All customers would be required to reduce consumption by 40 to 50 percent. Customers would be requested to implement Stage 1, 2, 3, and 4 water conservation measures and adhere to the City's Outdoor Water Conservation provisions.

Actions: Continue existing conservation programs, Stage 1, 2, and 3 provisions above, and:

1. Continue the public information campaign to inform customers the need for water conservation and explain the water conservation measures.
2. Prohibit outdoor irrigation of residential turf.
3. Prohibit irrigation of median strips.
4. Further, reduce irrigation of parks and cemeteries.

In addition, under City Code section 13.04.890 (D), when the City Council declares a water shortage, the penalty amounts specified in the City Code for violations of the City's Water Conservation Ordinance are doubled while the water shortage remains in effect.

## RESOLUTION NO.

Adopted by the Sacramento City Council

January 14, 2014

### DECLARING WATER SHORTAGE AND IMPLEMENTING STAGE 2 OF THE CITY OF SACRAMENTO WATER SHORTAGE CONTINGENCY PLAN

#### BACKGROUND

- A. The City of Sacramento has three water supply sources: American River water, Sacramento River water, and groundwater. Normally, the City's water supplies are adequate to meet the City's retail and wholesale water demands. However, calendar year 2013 was the driest year on record for much of Northern and Central California, Folsom reservoir water storage is below 20% of capacity, and there is no significant rain or snow forecast in the near future. Because of these on-going critical drought conditions the Sacramento City Council has determined that it is necessary to enact water conservation measures and water use restrictions, in addition to those already included in the City Code (Chapter 13.04 Water Service System, Article XI Water Conservation), to reduce water use within the City's water service area.
- B. City Code section 13.04.910 authorizes the City Council, by Resolution, to declare the existence of a water shortage and impose revised or additional limitations and restrictions on outdoor water use while the water shortage remains in effect.
- C. The City's 2010 Urban Water Management Plan, adopted by the City Council in October 2011, includes a Water Shortage Contingency Plan that sets forth four water conservation stages designed to reduce overall water usage as follows:

<u>Water Conservation Stage</u>	<u>Water Use Reduction Goal</u>
Stage 1	10 to 20%
Stage 2	20 to 30%
Stage 3	30 to 40%
Stage 4	40 to 50%

Each water conservation stage includes specific water conservation measures and water use restrictions designed to conserve water. Implementation of the water conservation stages is cumulative, meaning that implementation of a higher stage also includes implementation of all

lower stages. For example, if Stage 2 is to be implemented, all of the provisions in Stage 1 also are included.

**BASED ON THE FACTS SET FORTH IN THE BACKGROUND, THE CITY COUNCIL RESOLVES AS FOLLOWS:**

Section 1.

Based on the on-going drought conditions, the Sacramento City Council hereby declares that a water shortage exists and that water use within the City should be reduced by at least 20 percent.

Section 2.

The water use reduction described in Section 1 necessitates implementation of Stage 2 of the City's Water Shortage Contingency Plan. The water conservation measures and water use restrictions for Stage 2, described below, are adopted. These are in addition to the existing provisions of Article XI of Chapter 13.04 of the City Code (Outdoor Water Conservation), and in the event of any conflict between any provision of Article XI and this Resolution, the provisions of this Resolution shall govern while this Resolution remains in effect.

Stage 2 includes the following water conservation measures and water use restrictions:

1. The City Manager shall initiate a public information campaign to inform the City's water customers of the need for water conservation and the provisions enacted by this Resolution. The campaign shall also include information to customers on ways to reduce their water use.
2. The City Manager shall require that customers reduce their water use by at least 20 percent. Such requirement shall include information on practical ways for customers to reduce their water use.
3. The City Manager shall increase the City's water waste patrols to enforce the provisions of Article XI of Chapter 13.04 of the City Code (Outdoor Water Conservation) and this Resolution.
4. The City Manager shall increase the City's enforcement of its public fire hydrant use regulations in accordance with Sacramento City Code §13.04.130.
5. The City Manager shall require a reduction in the irrigation of parks and cemeteries.
6. Shut-off valves shall be required on all hoses used for irrigation purposes, car washing, or other water uses. Car washing shall be allowed with the use of a bucket only.

7. While daylight savings time is in effect, outdoor irrigation shall be limited to two days per week. Locations bearing a street address ending in an odd number shall be permitted to irrigate only on Tuesday and Saturday. Locations bearing a street address ending in an even number shall be permitted to irrigate only on Wednesday or Sunday. There shall be no water irrigation on Mondays, Thursdays, or Fridays.
8. All public water uses not required for health and safety shall be prohibited.
9. Main flushing shall be allowed only for emergency purposes.

#### Section 3.

The City Manager is authorized and empowered to delegate his authority hereunder to such assistants, deputies, officers, employees, or agents of the City as he shall designate, and to establish such rules, regulations, and procedures, and to prepare or furnish such forms, as he or she deems necessary or appropriate to carry out the provisions of this Resolution.

#### Section 4.

No person shall use, or cause to be used, City water in violation of any of the provisions of this Resolution while the water shortage remains in effect, as specified in City Code § 13.04.870(G).

#### Section 5.

The penalties for violations specified in City Code § 13.04.890 shall be doubled while the water shortage remains in effect, as specified in City Code § 13.04.890(D).

#### Section 6.

This Resolution shall be effective upon its adoption, and shall remain in effect until rescinded or otherwise modified by subsequent resolution of the City Council.

#### Section 7.

This Resolution shall be published within ten days after its adoption, pursuant to California Water Code § 376(a).

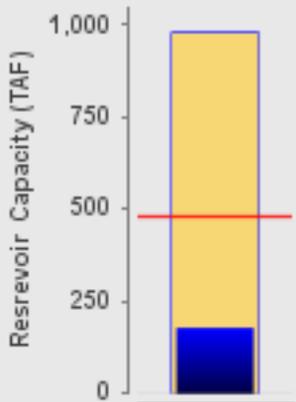


# Reservoir Conditions - Folsom Lake



## Folsom Lake Conditions

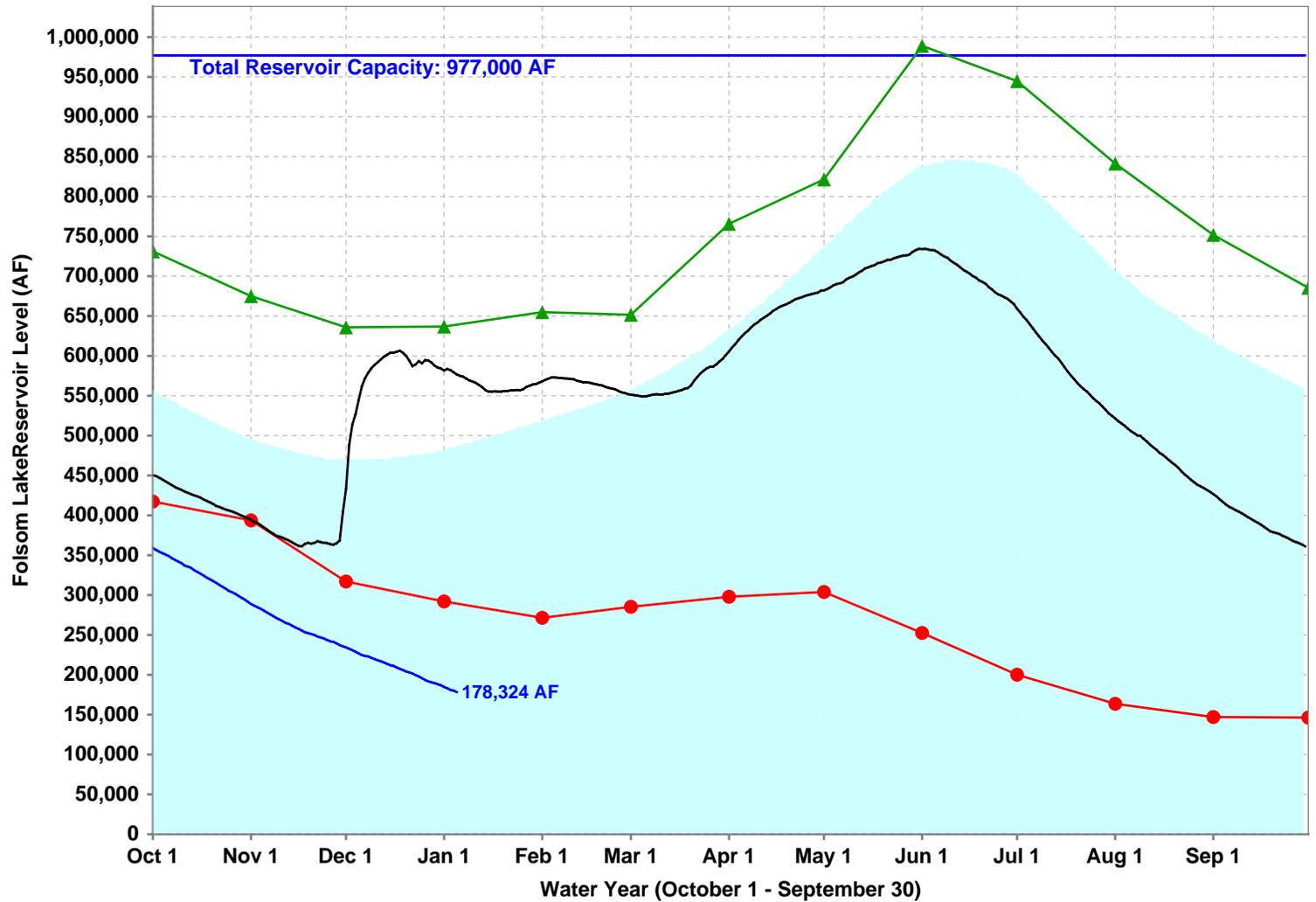
(as of Midnight - January 5, 2014)



Current Level: 178,324 AF

18% (Total Capacity) | 37% (Historical Avg.)

Folsom Lake Levels: Various Past Water Years and Current Water Year, Ending At Midnight January 5, 2014



■ Historical Average 
 — Total Reservoir Capacity 
 ● 1976-1977 (Driest) 
 ▲ 1982-1983 (Wettest) 
 — 2012-2013 
 — Current: 2013-2014