AGENDA DATE: May 28, 2014

TO: Parks and Recreation Commission

FROM: Water Resources Division, Public Works Department

SUBJECT: Drought Update - Declaration of Stage Two Drought Condition

RECOMMENDATION:

That the Commission receive a report from the Public Works Water Conservation Program on the Stage Two Drought Condition and new adopted Stage Two Drought Water Use Regulations.

DISCUSSION:

Santa Barbara is currently experiencing the three consecutive driest years on record. On February 11, 2014, City Council declared a Stage One Drought Condition, which included a request for the community to voluntarily reduce its water use by 20%. Since that time, Santa Barbara has had minimal rainfall. On May 20, 2014, Council declared a Stage Two Drought Condition and adopted new water use regulations which will be in effect during that condition.

The City plans for drought conditions based on the water supply strategy outlined in the City’s 2011 Long-Term Water Supply Plan and the 2010 Urban Water Management Plan. While the City currently has adequate water supplies to meet water demands through September 2014 (the end of the current water year), there is uncertainty associated with the availability of surface supplies in the next water year.

While there has been a reduction in City-wide water demands since the Stage One Drought was declared, water conservation efforts have fallen short of the 20% targeted reduction that is needed to help ensure that the City will have sufficient water supplies throughout the duration of the drought. Based on the potential need to reduce water demands in the coming water year, a Stage Two Drought Condition has been declared. This is the second of three stages under the City’s Water Shortage Contingency Plan.
The goal in declaring a Stage Two Drought Condition is to alert the public that the City will experience a serious water shortage if dry weather continues, and that the required 20% City-wide reduction in water use will greatly assist with extending existing water supplies. With the Stage Two Drought Declaration new water use regulations have been adopted. These include requiring hoses to be equipped with self-closing valves, except in limited circumstances, prohibiting the use of running water to clean exterior hardscape surfaces, limiting the hours for irrigating landscape, prohibiting the filling of ornamental water fountains, and requiring covers for swimming pools and spas.

Due to the current dwindling water supplies, the City also sent drought water rate change notices to its customers in accordance with Proposition 218. These proposed drought water rates are structured to encourage extraordinary water conservation and to ensure that the Water Fund remains financially stable for the duration of the drought. Council will consider adoption of the drought rates following the required public hearing.

A Stage Three Drought Condition ("Water Shortage Emergency") is the highest level of drought response. Stage Three would be triggered by worsening water supply conditions or the need for more aggressive reductions in water use. Extraordinary water conservation by customers now could delay or eliminate the need for the declaration of a Stage Three Drought Condition, which is associated with more restrictive mandatory water conservation measures.

**ATTACHMENT:**

1. City of Santa Barbara Stage 2 Drought Regulations & Waste of Water Prohibition
2. Drought Update PowerPoint Presentation

**PREPARED BY:** Joshua Haggmark, Acting Water Resources Manager/CT/mh

**APPROVED BY:** Rebecca J. Bjork, Public Works Director
City of Santa Barbara
Stage 2 Drought Regulations & Waste of Water Prohibition

On May 20, 2014, the Santa Barbara City Council declared a Stage Two Drought Condition in response to the driest consecutive three years on record, triggering drought related water use regulations.

The Stage Two Water Use Regulations (SBMC 14.20.215) are Summarized as Follows:

- Hoses must be equipped with an automatic shut-off nozzle.
- Washing of pavement and other hard surfaces is generally prohibited. Exception: preventive maintenance of buildings and other facilities if accomplished by means of a pressure washer and when it is the only feasible means of correcting a potential threat to health and safety, provided it is accomplished by use of a pressure washer, mop, bucket, or brush.
- Irrigation is limited to evening and early morning hours between the hours of 6:00 p.m. and 8:00 a.m. If manually operated, such irrigation is allowed only between the hours of 4:00 p.m. and 10:30 a.m.
- Cars and boats must be washed at commercial facilities that recycle the water, or by hose with shut-off nozzle.
- The use of water in ornamental water features and fountains is prohibited except: 1) if located indoors or on residential properties; 2) for fountains that have a total water surface area less than or equal to 25 ft.²; or 3) as of May 20, 2014 are home to aquatic life.
- Pools and spas must be equipped with a cover when not in use.
- No draining of pools by more than one third, unless authorized.
- Drought notices required in restaurants and hotels; water served on request only.
- Gyms, pools and other businesses providing showers must post drought notices and promote limitation of shower use.

Santa Barbara Municipal Code (SBMC 14.20.007) Prohibits Waste of Water at All Times:

Waste: "Waste" means any excessive, unnecessary or unwarranted use of water, including but not limited to any use which causes unnecessary runoff beyond the boundaries of any property as served by its meter and any failure to repair as soon as reasonably possible any leak or rupture in any water pipes, faucets, valves, plumbing fixtures or other water service appliances.

Prohibition Against Waste of Water. It shall be a violation of this Chapter for any consumer or account holder to waste any water obtained from or through the distribution facilities of the City.

Wasting Water - Repairs - Required. Each and every consumer shall maintain in good order all his water pipes, faucets, valves, plumbing fixtures or any other appliances, at all times, to prevent waste of water.

Violations

A. Any failure to comply with a provision of this Chapter shall constitute a violation of this Code, regardless of whether the failure to comply is caused by an account holder, a consumer or any other person or entity.

B. Where the failure to comply with this Chapter is continuing and reasonably preventable by the person or entity failing to comply, each successive hour of such failure to comply shall be a separate and distinct violation.

Enforcement Process:

1st Violation: Door hanger and Warning letter
2nd Violation: $250 fine per violation
3rd Violation: $250 fine per violation and possible flow restrictor
4th and Subsequent Violation: $250 fine per violation, possible flow restrictor or shut off water service
Stage Two Drought Declaration

Parks and Recreation Commission
May 28, 2014
Outline

- Drought Condition Recap
- Status of City Water Supplies
- City’s Water Shortage Plan
- Stage 2 Water Use Regulations
- Summary of Drought-Based Water Rates
Drought Condition Recap

- Jan 17: State Drought Emergency - Gov. Brown asked for 20% Reduction in Water use
- Jan 21: Santa Barbara County Drought Emergency
- Feb 11: City of Santa Barbara Declared Stage One Drought Condition
- Apr 25: State issues 2nd Drought Emergency Proclamation
- May 20: City of Santa Barbara Declared Stage Two Drought Condition
Water Supply Outlook

- No significant measurable rain anticipated until next winter
- Projected El Nino Cycle next Winter does not guarantee rainfall
- The combined rainfall from the last 3 years at Gibraltar are the driest on record
Surface Water Supplies

- **Gibraltar Reservoir**
  - 34% of Capacity with ~ 1,800 AF
  - Average Rainfall ~26” per year
  - 33.28” – Total rainfall for 3 years

- **Lake Cachuma**
  - 37% of Capacity with ~ 71,000 AF
Water Supplies

WHERE YOUR DRINKING WATER COMES FROM

- Bradbury Dam
- Santa Ynez River
- Lake Cachuma
- South Coast Conduit
- Mission Tunnel 3.7 miles long
- Water from Gibraltar Reservoir to Cater Water Treatment Plant
- Gibraltar Reservoir
- Sheffield Reservoir
- Cater Water Treatment Plant
- Lauro Reservoir
- Charles Meyer Desalination Facility
- Goleta
- Groundwater Wells
- Montecito
- El Estero Wastewater Treatment Plant

Building the Tecolote Tunnel
The photo below shows a crew at work on the Tecolote Tunnel. It took six years to build and was completed in January 1996.
Current Supply Strategy:
(no reservoir inflows, no State Water)
Desalination Project Timeline

- September 2014 - Preliminary Design Information
- November 2014 - RFP for Design/Build/Operate
- April 2015 – Consider Award of Contract based on Water Supply
- Summer 2016 - Earliest Timeline for Operation
Monthly Demands

Need at least 20% Reduction from Normal Demand

February 11 Stage 1 Drought Declaration

March: 12% reduction

April: 5% reduction

City of Santa Barbara • Public Works Department
City’s Water Shortage Plan

- Adopted 2011 Water Shortage Contingency Plan
- “Extraordinary” drought conservation, beyond normal water conservation actions
- Three defined Drought Stages
Stage One Drought

- Alert public that potential serious water shortage if dry weather continues and water demands remain high
- Request reduction in normal water usage
Stage Two Drought

- Serious water shortage is expected in the current or impending year
- Drought-based Water Rates
- Mandatory water use restrictions considered
Stage Three Drought

- Extreme water shortage
- Increase drought-based water rates
- More aggressive mandatory water use restrictions
Stage Two Regulations

- Hoses must be equipped with an automatic shut-off nozzle
- Washing of pavement and other hard surfaces is generally prohibited
- Irrigation is limited to evening and early morning hours
Stage Two Regulations

- Cars and boats must be washed at commercial facilities that recycle water, or by hose with shut-off nozzle.
- Pools and spas must be equipped with a cover when not in use.
- No draining of pools by more than one third, unless authorized.
Stage Two Regulations

- Use of water in ornamental water features & fountains is prohibited
  - Exception:
    - If located indoors or on residential properties;
    - Fountains that have a total water surface area less than or equal to 25 ft.$^2$
    - Were home to aquatic life (such as fish or turtles) prior to Stage 2 Declaration
Stage Two Regulations

- Drought notices required in restaurants & hotels; water served on request only
- Gyms, pools & other businesses providing showers must post drought notices & promote limitation of shower use
Drought-Based Water Rates

- Worked with Raftelis Financial Consultants
- Assess Financial Impacts of Drought
- Rate Design
  - Encourage Extraordinary Conservation
  - Minimize Impacts to Low Water Users
  - Largest Impacts to High Water Users
Projected FY15 Water Use (Normal)
Projected Water Use (20% reduction)
## Proposed Drought-Based Rates

<table>
<thead>
<tr>
<th>Water Service Rates</th>
<th>Current</th>
<th>July 2014</th>
<th>Change</th>
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<tbody>
<tr>
<td><strong>SFR</strong></td>
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<tr>
<td>Tier 1 First 4 hcf</td>
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<td>$3.28</td>
<td>+3%</td>
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<td>Tier 3 All other hcf</td>
<td>$6.62</td>
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<td>Tier 3 All other hcf</td>
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<td>$13.44</td>
<td>+103%</td>
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<td><strong>Commercial/Industrial</strong></td>
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<td>Tier 1 Base allotment</td>
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<td>Tier 2 All other hcf</td>
<td>$5.91</td>
<td>$11.61</td>
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## Proposed Drought-Based Rates

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<th>Current</th>
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<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Irrigation – Residential/Commercial</td>
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<tr>
<td>Tier 1 100% of allocation</td>
<td>$5.16</td>
<td>$6.39</td>
<td>+24%</td>
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<tr>
<td>Tier 2 All other hcf</td>
<td>$6.62</td>
<td>$13.44</td>
<td>+103%</td>
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<tr>
<td>Irrigation – Recreation/Parks/Schools</td>
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<td>Tier 1 100% of allocation</td>
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<td>Irrigation – Agriculture</td>
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<td>Tier 2 All other hcf</td>
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<td>Recycled Water</td>
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<tr>
<td>Outside City Limits</td>
<td>130%</td>
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Summary

- A water shortage is projected for next year
- Unprecedented Drought Conditions
- Working to secure & preserve water supplies & promote extraordinary water conservation
- Need for aggressive conservation to meet City-wide 20% reduction
For information & assistance on water conservation:

www.SantaBarbaraCA.gov/WaterWise

Call: 564-5460