

Council Communication April 21, 2015, Business Meeting

2015 Potential Drought Plan

FROM:

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SUMMARY

This is an informational communication updating the Council on a 2015 response plan for a potential 2015 drought. The current snow pack is lower now than at the same time in 2014, therefore staff is preparing for a potential 2015 drought. Staff will maintain a full reservoir for as long as possible by adding TID and TAP water as needed. The community will be asked to reduce its water use to 4.5 million gallons per day (mgd). The multi-departmental committee will be activated and blue lawn signs that say "Use Water Wisely" will be placed in the medians. In addition, Water Conservation staff will assist customers with ways to reduce water use, and as a last resort, the City will implement the water waste and curtailment steps as outlined in the municipal code.

BACKGROUND AND POLICY IMPLICATIONS:

At the March 17, 2015 City Council meeting, staff provided an initial report on the potential for a drought in 2015. While staff will wait for final snowpack results on May 1, 2015, it appears that snow pack (see chart below) is worse this year than in 2014. Even with the most recent snowfall, there is a high probability that we will be entering into another drought this summer.

April 1 Ashland Creek Watershed Snowpack Data

Snow Course/Aerial Marker Sites	Elevation	2014 Snow Depth (inches)	2015 Snow Depth (inches)	2014 Snow Water Equivalent (in.) (SWE)	2015 Snow Water Equivalent (in.) (SWE)
* Big Red Mountain SNOTEL					
Site	6,050 ft	24	7	5.4	3.9
Caliban	6,500 ft	38	9	10.9	4.2
Mt. Ashland Switchback	6,430 ft	20	4	4.8	1.3
Ski Bowl Road	6,070 ft	11	0	2.6	0

^{*} Big Red Mountain SNOTEL Site is an automated site that provides daily snowpack data. The three additional sites are measured manually by the Jackson County Water Master at the end of each month.

As of April 15, 2015 Big Red					
Mountain SNOTEL Site snow	6,050	15	15	5.3	6.0
data is:					

Data Source: Natural Resources Conservation Service

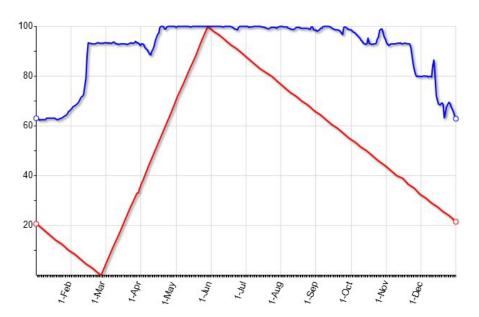




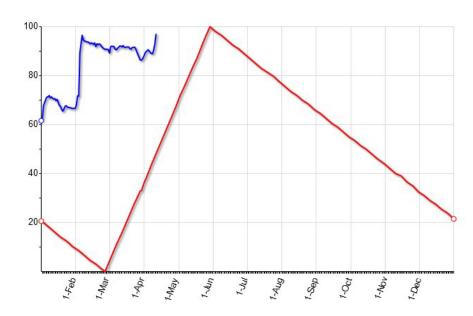
2014 and 2015 Reservoir Data

The reservoir graphs (below) provide a daily look at Ashland's water supply over the last couple of years. The **red line** represents the theoretical reservoir use rate necessary to adequately meet Ashland's water supply needs. The **blue line** represents the current reservoir level. If at any point the demand on Reeder Reservoir drops below the theoretical drawdown curve as shown in the chart below, staff is prepared to implement the water curtailment strategies.

2014 drawdown curve



2015 drawdown curve







Talent Irrigation District (TID)

TID water is used to supplement our raw water supply during drought conditions. Howard Prairie and Hyatt Lake feed the TID irrigation system through Ashland. At this point, Howard Prairie is 43% full; Hyatt Lake is 41% full (see attached, 'US Bureau of Reclamation, Pacific Northwest Region Bear Creek and Little Butte Creek Basins').

As a reminder, if there is a need to use 2 mgd of TID water, no TID water will be sent past the pump station at Park Estates, and downstream TID customers will not receive TID water. If additional TID water is needed, the remaining sections of the TID water canal (between Walker and Park Estates) will also be diverted to the plant. If this occurs, then those TID irrigation customers will not be allowed to use TID water for irrigation purposes.

Talent, Ashland and Phoenix (TAP)

Water from Medford is available when Ashland determines a need to add TAP water. In preparation for TAP, staff is in the process of renting the same temporary pump as last year and will have it delivered to the pump station by August 15. As a reminder, even if TAP is not used in response to the 2015 drought, staff will still conduct the annual test of the system and pump TAP water for one month.

2015 Drought Response Plan

The plan is to request that our community voluntarily reduce water consumption to the same levels as the 2014 drought, maintain Reeder Reservoir full for as long as possible, implement water conservation education and technological strategies in response to drought conditions and activate the multi-departmental committee.

The first step is to ask the community to once again reduce water consumption to similar levels as in the 2014 drought in which Ashland citizens averaged 4.5 to 5 million gallons per day (mgd) of water usage. In order to improve public communications on how to water landscapes during a drought and to promote drought resiliency, two SOU student interns have been selected to assist the Water Conservation Specialist in developing a "Surviving Drought 101" guide and a "Tree Care" guide. There are many ways to create drought resilient landscapes that use less water, while keeping Ashland beautiful and maintaining our quality of life.

The strategy for Reeder Reservoir is the same as the 2014 drought response; staff will keep the reservoir full for as long as possible. The first step is to add TID water when Ashland Creek is no longer able to meet the daily demand and still keep the reservoir full. When the combination of Ashland Creek water and TID water fails to keep the reservoir full then TAP water will be added.

In conjunction with water supply strategies, the water conservation team offers our water customers the following programs:

- A lawn replacement rebate for removal of live, maintained and irrigated lawns that are replaced with climate appropriate low water use landscapes and efficient irrigation systems.
- Free irrigation system evaluations and free soil moisture meters. In most cases, this detailed evaluation of individual systems will uncover ongoing water waste (bad sprinkler heads, leaking faucets or toilets etc).





- Water Wise Landscaping website, <u>www.ashlandsaveswater.org</u> which helps people design landscapes with plants that use less water.
- Free hardware is available for residences and businesses to reduce water consumption indoors, including low flow faucets aerators, shower heads and spray rinse valves for commercial dishwashing.
- Rebates are available for installing high efficiency WaterSense labeled toilets and Energy Star labeled dishwashers and washing machines.

Fortunately the city has a robust water conservation program, so when asked these questions, staff will direct them to our water conservation specialist for specific short and long term water conservation recommendations.

Additional Measures:

- Determine if restrictions on internal trees, shrubs or annual plantings should be restricted;
- Add a 'Drought 2015' section to the City's website http://ashland.or.us/SectionIndex.asp?SectionID=524;
- Place blue lawn signs that say "Use Water Wisely" in the public right-of-way throughout town:
- When necessary, provide the Chamber of Commerce with bathroom door hangers, bed cards and tent cards to distribute to Ashland hotels and restaurants.
- Julie Smitherman, conservation specialist, and Mike Faught, public works director, will
 provide public presentations on what the community can do to conserve at local civic clubs,
 the Mayor's town hall show, and interviews with the local media.

FISCAL IMPLICATIONS:

In the short term, no fiscal implications are anticipated as the 2025-2017 biennial budget revenue projections are based on 2014 revenues.

STAFF RECOMMENDATION AND REQUESTED ACTION:

N/A

SUGGESTED MOTION:

 N/Δ

ATTACHMENTS:

US Bureau of Reclamation, Pacific Northwest Region Bear Creek and Little Butte Creek Basins



