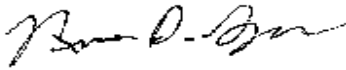


City of Calistoga

Staff Report

TO: Honorable Mayor and City Council
FROM: Richard Spitler, City Manager
DATE: April 1, 2014
SUBJECT: Report on Status of Calistoga's Stage II Water Emergency

APPROVAL FOR FORWARDING:



Richard D. Spitler, City Manager

1
2 **ISSUE:** Receive Report on Status of Calistoga's Stage II Water Emergency and provide direction.

3
4 **RECOMMENDATION:** Receive Status Report on Calistoga's Stage II Water Emergency and
5 provide direction to prepare contingency plans to ensure adequate water supply.

6
7 **BACKGROUND / DISCUSSION:** Due to three years of low rainfall, the City Council
8 declared a Stage I water emergency in September 2013 that set forth voluntary water
9 conservation measures with the goal of 10% conservation. On February 4, 2014 the Council
10 declared a Stage II water emergency which sought to reduce water consumption by 20% overall
11 and required mandatory water conservation through best practices. It also imposes a monetary
12 surcharge for violations.

13
14 Following this action staff initiated a community outreach which included educational hand-outs
15 in the local papers, utility billing inserts, web site information, Channel 28 announcements and
16 distribution of flyers at the mobile home parks. The emphasis has been on education rather than
17 enforcement.

18
19 Staff has reviewed the data on water use from September 2013 to February 28, 2014 and
20 compared it to the same time period for the previous twelve months (Sept. 2012 through Feb.
21 2013). It has been determined that there has been an increase in water use by 13.2% or 37 acre
22 feet. There are several reasons for this, but one is that the lack of rain in December 2013 meant
23 that residential users were irrigating their lawns when normally they would not.

24
25 In December 2013 the Department of Water Resources stated that no water allocation will be
26 forthcoming from the North Bay Aqueduct (NBA) during calendar year 2014. However, the City
27 has a water reserve of 882 acre feet from prior year savings. This is the source of water which
28 has been used since January 1st of this year.

29
30 Over the last five years the City's annual water consumption has averaged 754 acre feet. Of this
31 amount, 497 acre feet (66%) is used by residential customers. The other 256 acre feet are used by
32 the commercial and industrial user (with some towards public buildings).

33
34 It did rain 11.97 inches in February which allowed the Kimball Reservoir to fill up, amounting to
35 315 acre feet in storage. Except for bypass (February bypass was 45.7 million gallons or 140 acre
36 feet) staff is holding as much water in storage as possible in anticipation of peak summer
37 demand. Staff has also kept track of the issue of water supply relative to the State Water Project
38 ("SWP") allocation for the NBA. It is uncertain what the State will do, as information changes
39 daily. We have to assume that what water we receive from the NBA will be extremely low (5%
40 or less of our normal allocation). We have advised the State that we will need all of our
41 carryover water to meet our needs. At 5% SWP allocation we would receive 96 acre feet of
42 SWP water. The State has the authority to direct water supplies on an "as needed basis".

43 44 **New Development Projects**

45
46 There are several development projects that have received land use entitlements that will
47 ultimately result in increased water demand. They are varying stages of pulling building permits
48 (see Attachment 2). Some, like a single family residence, will be completed and occupied within
49 9 to 12 months. Others, like the Calistoga Family Apartments or the Silver Rose resort, will take
50 12 to 22 months to complete before they impact our water system. Accordingly, there will be no
51 significant water consumption by these projects in the near term. During construction City code
52 requires that no City potable water be used, only recycled water. Should a water emergency still
53 exist after occupancy they would be subject to the best management practices that apply to other
54 similar uses.

55
56 There are also several projects that are still under the planning review process such as the Francis
57 House renovation project or the Roman Spa renovation. It is not known when they will receive
58 their land use entitlements; and, subsequently their construction timeframes, after which they
59 will have a demand on the City water supply.

60
61 It is staff's position that the immediate impact of new development on water supplies will be
62 negligible. The projects presently under construction are vested and the city must provide a water
63 hook-up. This is a total demand of 23.38 acre feet with 7.668 acre feet of this coming on line in
64 January 2015 (i.e., the affordable housing project on Washington Street). The voter approved
65 projects of Silver Rose and Calistoga Hills (Enchanted Resorts) are also vested under a
66 development agreement to have the City serve water. The Silver Rose project is scheduled to
67 begin demolition in April 2014 and will not be ready to occupy (and use city water) until April
68 2016, at the soonest. They also have access to two wells on the site which could reduce demand.
69 The Calistoga Hills project is scheduled to begin construction in 2015, although they are
70 presently moving ahead with a sewer pipe installation on Lower Washington as required in their
71 development agreement (whether they build the resort or not). They would occupy the buildings

72 in 2017 at the soonest. Both projects combined have advanced paid development impact fees in
73 the amount of \$3.2 million to allow the City to address vital improvements to our water and
74 wastewater systems.

75
76 In the future should the Council decide to stop new water hook-ups it does have authority if a
77 public health and safety finding can be made (and after a public hearing is held).

78
79 **Recommendation**

80
81 Staff recommends that the Council direct staff to develop contingency plans to address a
82 potential water supply shortfall caused by a significant reduction or elimination of NBA water in
83 the near term. Several other cities and counties presently served by the NBA face a similar
84 situation. All have been cooperating to find possible solutions. Potential options include a
85 temporary connection to Lake Berryessa water, use of Rector Reservoir or Lake Hennessey
86 water, use of groundwater wells, and trucking in water from nearby sources.

87
88 In addition, it is clear that the educational and enforcement of the water conservation measures
89 must be more aggressive to achieve use reduction objectives.

90
91 As the situation further develops, staff will report to the City Council. The municipal code allows
92 the council to go to a Stage III emergency which would require more stringent water
93 conservation and enforcement if deemed necessary.

94
95 **FISCAL IMPACT:** There will be reduction in the Water and Wastewater Enterprise funds,
96 however, the exact amount is unknown at this time, but it could be significant. The cost to
97 implement the water conservation program is estimated at \$25,000 for the remainder of this
98 fiscal year and \$40,000-\$50,000 for FY 14/15. It should be noted that these estimated costs do
99 not include any costs associated with alternate water sources.

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101 **ATTACHMENT:**

- 102 1. Stage II Best Practices
103 2. Potential New Development Water Demands

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ATTACHMENT 1

STAGE II WATER CONSERVATION BEST PRACTICES

All Water Customers:

- Outdoor irrigation with potable water only during the early morning hours to reduce evaporation loss with an odd/even address watering schedule (odd addresses water Tuesday and Thursday and even water Monday and Wednesday). No outdoor irrigation on Friday, Saturday or Sunday with potable water.
- No initial filling or draining of swimming pools with potable water. Pools can be topped off to prevent damage to pumps and equipment.
- No washing sidewalks, buildings, driveways, patios, or other paved areas with potable water
- No noncommercial washing of privately owned motor vehicles, trailers and boats except from a bucket and hose equipped with an automatic shut-off nozzle
- Prohibiting any use of water from a fire hydrant, except for fighting fires and line flushing required by regulatory agencies.
- No use of potable water for dust control or compaction at construction sites
- Inspect all irrigation systems, repair leaks, and adjust spray heads to provide optimum coverage and eliminate avoidable over-spray.
- Run full loads through dishwasher
- Wash full loads of laundry

Restaurants

- Tap water provided to customers only upon request
- Scrape all dishes prior to rinsing
- Run full loads through dishwasher
- Wash full loads of linens

Hotels and Spas

- Bed linens and towels changed only upon guest request
- Wash full loads of linens/laundry
- Inspect all irrigation systems, repair leaks, and adjust spray heads to provide optimum coverage and eliminate avoidable over-spray
- No washing sidewalks, driveways, patios, or other paved areas with potable water
- Prohibit any use of water from a fire hydrant, except for fighting fires and line flushing required by regulatory agencies
- No initial filling or draining of swimming pools using potable water. Pools can be topped off to prevent damage to pumps and equipment.
- No noncommercial washing of privately owned motor vehicles, trailers and boats except from a bucket and hose equipped with an automatic shut-off nozzle

- Outdoor irrigation with potable water only during the early morning hours to reduce evaporation loss with an odd/even address watering schedule (odd addresses water Tuesday and Thursday and even water Monday and Wednesday). No outdoor irrigation on Friday, Saturday or Sunday with potable water.

Monetary Penalty

A violation would occur if a BMP is observed to be violated and documented by City staff. The first violation would result in a written warning being issued to the person in responsible charge of the water account. Subsequent BMP violations would result in the issuance of a notice of violation or citation and result in a “Tiered Surcharge multiplier” being assessed to any water use above Tier 1 usage on the subsequent water bill for multiple tiered water users, or the Tier 1 water use for single-tiered water users. Violations would be cumulative unless there are no violations for the subsequent billing cycle.

Violation	Surcharge Multiplier
First	0 – written warning issued
Second	1.20
Third	1.35
Fourth	1.50
Fifth	Suspension of water service for seven days, surcharge multiplier of 2.0, payment of all delinquent charges, and a restart charge of \$150

Appeals would be handled as specified in Section 1.20 of the Municipal Code.

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ATTACHMENT 2

Potential Water Demands
 April 1, 2014

Project	Annual Water Req'd. in acre feet	Start of Water Need
Under Construction		
Indian Springs expansion	12.990	July 2014
Brian Arden Winery Phase I	.565	September 2014
Coates SFD – Camp Street	.382	September 2014
Elzey SFD – Emerald Drive	.428	October 2014
Puerto Vallarta Market	.783	October 2014
Calistoga Family Apts.	7.668	January 2015
Brian Arden Winery Phase II	.565	February 2015
In Plan Check		
Solage locker rooms expansion	tbd	undetermined
Approved Projects		
Silver Rose	37.04 (plus 5 reserve)	April 2016
Enchanted Resorts	30 (plus 20 reserve)	2017-18
Pending Approval		
Roman Spa expansion	14.536	undetermined
Brogan Parcel Map SFDs (2)	.856	undetermined
Sprenger Brew Pub	tbd	undetermined
Francis House Inn (18 rooms)	2.82	undetermined

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