Dear Ms. Bean,

The City of Big Bear Lake, Department of Water and Power (BBLDWP) has reviewed the April 7, 2015, “Mandatory Conservation Proposed Regulatory Framework” and has compiled the following comments. BBLDWP respectively requests that the State Water Board consider BBLDWP’s “Alternate Plan” in lieu of the proposed additional regulations.

BBLDWP’s service area is located in the Bear Valley (8-9) water basin, which is located in the San Bernardino Mountains. BBLDWP is not connected to the State Water Project or any other outside water supply, so we rely only on natural recharge to replenish our aquifers. Water consumption in our basin does not affect water supplies anywhere else in the State. In 2002, BBLDWP’s annual production was 3,024 acre feet, which was approaching our estimated perennial yield of 3,100 acre feet per year. BBLDWP evaluated imported water supply alternatives but they were cost prohibitive. So in 2002, BBLDWP declared a water shortage emergency and began an aggressive water conservation program. The community worked together with BBLDWP and the water conservation program has been very successful. BBLDWP’s average water production over the last five years is 2,239 acre feet per year (see Attachment No. 1), which is a 26% reduction from our production in 2002. Also, BBLDWP has been closely monitoring ground water levels in our numerous aquifers (see Attachment No. 2, Hydrographs), is part of the Department of Water Resources CASGEM project and our ground water levels are stable, which is another indication that our water production is safely below our perennial yield.

Based on our current usage patterns and population growth, we will not approach our estimated perennial yield of our basin until after 2050, if ever. BBLDWP and the other Bear Valley agencies are currently developing the Bear Valley Water Sustainability Project (BVWSP), which will ensure a sustainable water supply for the foreseeable future. Currently, our regional sewer treatment facility treats the Valley’s sewage to secondary levels and then exports the treated water out of the valley. The BVWSP (see Attachment No. 3) will add tertiary facilities to the treatment plant and distribute an estimated 2,000 to 2,200 acre feet of treated water per year throughout the Bear Valley to off-set many potable uses, thus increasing the potable water supply available for domestic consumption. The preliminary engineering for this project is scheduled to begin in May of 2015 and we were invited to complete a pre-application package for a USDA loan, which may secure partial Federal funding of the project.

Since 2002, BBLDWP has implemented a comprehensive water conservation program that has resulted in significant reductions in residential potable water usage. BBLDWP’s water conservation program or “Alternate Plan” includes a turf buyback program, odd even watering schedules, public school education programs, plumbing retrofit programs and many other water conservation programs (see Attachment No. 4, “Alternate Plan”). These ongoing programs have resulted in a sustainable water supply for BBLDWP’s rate payers without having to construct costly infrastructure to connect to the State Water Project and eliminated the demand for an imported water supply that would have existed otherwise.

BBLDWP complied with last year’s drought related water conservation regulations, has an effective water conservation plan in place, our current water usage patterns have not adversely affected our ground water levels, and we are currently planning a local project that will develop additional water supply for our service area. BBLDWP respectfully requests that the State Water Board consider and approve our “Alternate Plan” in lieu of the proposed regulations in Executive Order B-29-15.

Thank you for your consideration,
Sincerely,

Reginald A. Lamson PE LS
City of Big Bear Lake, Department of Water and Power
General Manager
Erwin Central Hydrologic Subunit
Depth to Groundwater vs. Groundwater Production

Annual Groundwater Production (Fiscal Year)

Groundwater Production (acre-ft)

Depth to Groundwater (ft)


Lakewood Well #3 (Prod. Well)
Perennial Yield

April 2015
BEAR VALLEY WATER SUSTAINABILITY PROJECT

Project Description

Develop and implement water sustainability efforts to augment groundwater supplies, offset the use of potable water, create surface impoundments for environmental and educational purposes in Bear Valley. The range of potential water uses includes: landscape irrigation, habitat enhancement, fish hatchery supply, groundwater recharge, Big Bear Lake recharge, provide additional supply for snowmaking via Big Bear Lake, and construction purposes.

Goals and Objectives

The general objective is to retain treated water within Bear Valley and utilize this water as a sustainable resource to augment potable groundwater supplies in the Bear Valley.

Specific objectives include:

Provide Bear Valley with a sustainable, drought proof and uninterruptible new source of water to meet existing and future water demands;

Construct an advanced treatment system at the existing WWTP followed by a constructed wetland that will produce high quality water and keep all Bear Valley water in Bear Valley;

Install distribution infrastructure to deliver the high quality treated water to irrigation, environmental, commercial, and construction users. All of these potable uses can be offset with treated water;

Pursue grants and long term low interest loans to fund the treatment and distribution infrastructure to minimize the impact to the sewer rate payers;

Design an automated treatment system that minimizes the amount of additional labor required to operate the new plant;

Maximize the number of paying users (irrigation and construction) to offset operating cost and minimize the treatment cost impact to the sewer rate payers.

Beneficiaries

The water sustainability project will benefit the entire Bear Valley through the project partners, the Big Bear City Community Services District (CSD), the Big Bear Municipal Water District (MWD), the City of Big Bear Lake, Department of Water and Power (DWP), and the Big Bear Area Regional Wastewater Agency (BBARWA).

The CSD and DWP customers will benefit by offsetting potable water uses related to irrigation, construction water and an alternate source for the Stickleback Pond.
MWD customers will benefit by providing a new water supply to Stanfield Marsh and Big Bear Lake and the addition of a fish hatchery and a multi-use educational facility. The additional water supply to Big Bear Lake could offset the water used for snow making. A fish hatchery will guarantee a source of game fish for planting in the Lake and revenue to offset operations by fish sales to other lakes.

The Big Bear Fire Authority will benefit by having additional water for fire protection within the Baldwin Lake area and water for wild lands firefighting.

The Big Bear Valley Recreation & Parks District will benefit by reducing the irrigation water costs at the proposed Moonridge Zoo and park sites.

The Bear Valley Unified School District will benefit by reducing the irrigation water cost at each of the school sites.

**Participants and Responsibilities**

BBARWA will construct and operate an advanced treatment system at the existing WWTP to produce high quality water for the water sustainability project.

CSD and DWP will construct and operate the infrastructure required to deliver the high quality water to various end users for construction, irrigation, and other purposes.

MWD will construct and operate infrastructure including, a fish hatchery, multiuse educational facility, Stanfield Marsh, and Big Bear Lake facilities.

BBARWA and MWD will jointly construct and operate constructed wetlands.

**Lead Agency**

Big Bear Area Regional Wastewater Agency

**Decision Making Authority**

Big Bear Area Regional Wastewater Agency
(ATTACHMENT NO. 4)

Big Bear Lake Department of Water & Power's

Alternate Plan

- Toilet Rebate Program – 2000 to Present
- Declared Water Shortage Emergency – 2002 to 2013
- Tiered-rate Billing Structure – 2003 to present
- New Water Service Connection Limitation – 2003 to 2013
- Landscaper coordination (low water-use landscapes) – 2003 to Present
- Nursery coordination (drought tolerant plants) – 2003 to Present
- Xeriscape Garden Tour co-sponsor – 2003 to Present
- Established Technical Review Team (Water Supply Committee) – 2004
- Establish Water Shortage Emergency Stages (I-IV) – 2004
- Plumbing Retrofit on Change of Property Ownership – 2004 to Present
- Established Turf Limitation Guidelines (500 sq. ft.) – 2004
- Turf Buy-back Program – 2004 to Present (92,000 sq. ft.)
- Established Water Feature Limitation Guidelines (500 sq. ft.) – 2004
- Updated Guidelines for Landscape Planning & Installation - 2004
- Water Demand Offset Program – 2004 to 2009
- ET Controller Program – 2004 to 2010
- Indoor Surveys – 2004 to Present
- Landscape Surveys – 2004 to Present
- Native Plant Program (seed collection, grow plants, distribute to nurseries) - 2004 to Present
- Updated Guidelines for Landscape Planning & Installation - 2005
- Updated Water Conservation Guidelines - 2006
- No New Water Service Connections in Lake William Service Area – 2007 to 2014
- Updated Water Shortage Emergency Guidelines - 2007
- Approved being a Partner in the Upper Santa River Integrated Regional Water Management Plan – 2008 & 2015
- Updated Guidelines for Landscape Planning & Installation - 2013