



4/22/15



Dear Ms. Bean,

The Big Bear City Community Services District (BBCCSD) and the City of Big Bear Lake, Department of Water and Power (BBLDWP) would like to applaud the State Water Resources Control Board for your tremendous effort in crafting the Emergency Regulations and the attention paid to input received thus far. The increased number of tiers, three month average baseline, cumulative tracking and revised penalties are all helpful revisions and are much appreciated.

BBCCSD and BBLDWP have reviewed the April 18, 2015, "Proposed Text of Emergency Regulation" and have compiled the following comments. BBCCSD and BBLDWP respectively request that the Executive Director consider allowing BBCCSD and BBLDWP to reduce their total water usage by 4%, consistent with Section 865 (c) (2), for each month as compared to the amount used in the same month in 2013.

BBCCSD's and BBLDWP's service areas are located in the Bear Valley (8-9) water basin, which is located in the San Bernardino Mountains. BBCCSD and BBLDWP are the two urban water suppliers in the Bear Valley. There are scattered private wells within the Bear Valley but they are minor producers. BBCCSD and BBLDWP are not connected to the State Water Project and we do not import water from outside of our hydrologic region. One hundred percent of the recharge to our local aquifers is from rainfall and snowmelt within our watershed. ***Water resources planning and development in the Bear Valley Basin does not impact water supplies anywhere else in the State.***

In 2002, BBCCSD's and BBLDWP's annual production was 4,276 acre feet, which was approaching the estimated perennial yield of 5,500 acre feet per year. BBCCSD and BBLDWP evaluated imported water supply alternatives but they were cost prohibitive. So in 2002, BBCCSD and BBLDWP began aggressive water conservation programs. The community worked together with BBCCSD and BBLDWP and the water conservation programs have been very successful. BBCCSD's and BBLDWP's average water production over the last five years was 3,286 acre feet per year (see Attachment No. 1), which is a 23% reduction from our production in 2002 and is only 60% of our estimated perennial yield.

Even though the Bear Valley has received below average annual precipitation over the last four years, our ground water levels are stable. BBCCSD and BBLDWP have been closely monitoring ground water levels in our aquifers (see Attachment No. 2, Hydrographs), are 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 the estimated perennial yield.

Based on our current usage patterns and population growth, we will not approach the estimated perennial yield of our basin until after 2050, if ever. BBCCSD, 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 Bear Valley's sewage to secondary levels and then exports the treated water out of the watershed. 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 within 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 on April 24, 2015. We have recently been invited to complete a pre-application package for a USDA loan, which may secure partial Federal funding of the project.

Since 2002, BBCCSD and BBLDWP have implemented comprehensive water conservation programs that have resulted in significant reductions in total water usage. This achievement has resulted in a sustainable water supply for BBCCSD's and BBLDWP's rate payers and eliminated the demand for an imported water supply from outside of our hydrologic region.

Sec. 865 (c) (2) provides for a modified reduction of 4% for those urban water suppliers whose source of supply does not include groundwater or imported water, from outside the hydrologic region, and received average annual precipitation in 2014. BBCCSD and BBLDWP request that the State Water Board consider allowing basins that are isolated from other communities' water supplies, are properly managed, and have ample supplies to satisfy projected needs notwithstanding the drought, be allowed to request a modified reduction factor of 4%.

BBCCSD and BBLDWP complied with last year's drought related water conservation regulations and have effective water conservation plans in place. Our current water usage patterns have not adversely affected local ground water levels and we are currently planning a valley wide project that will develop additional water supply for our service areas. BBCCSD and BBLDWP respectfully request that the State Water Board Executive Director consider and approve a reduction to our total water usage by 4%, consistent with Section 865 (c) (2), for each month as compared to the amount used in the same month in 2013 in lieu of the proposed tiered related reductions.

BBCCSD and BBLDWP appreciate the State Water Board's time and consideration in reviewing our comments. If you have any questions, please call Reggie at 760-559-8172 or Scott at 909-273-4306.

Thank You.

Sincerely,



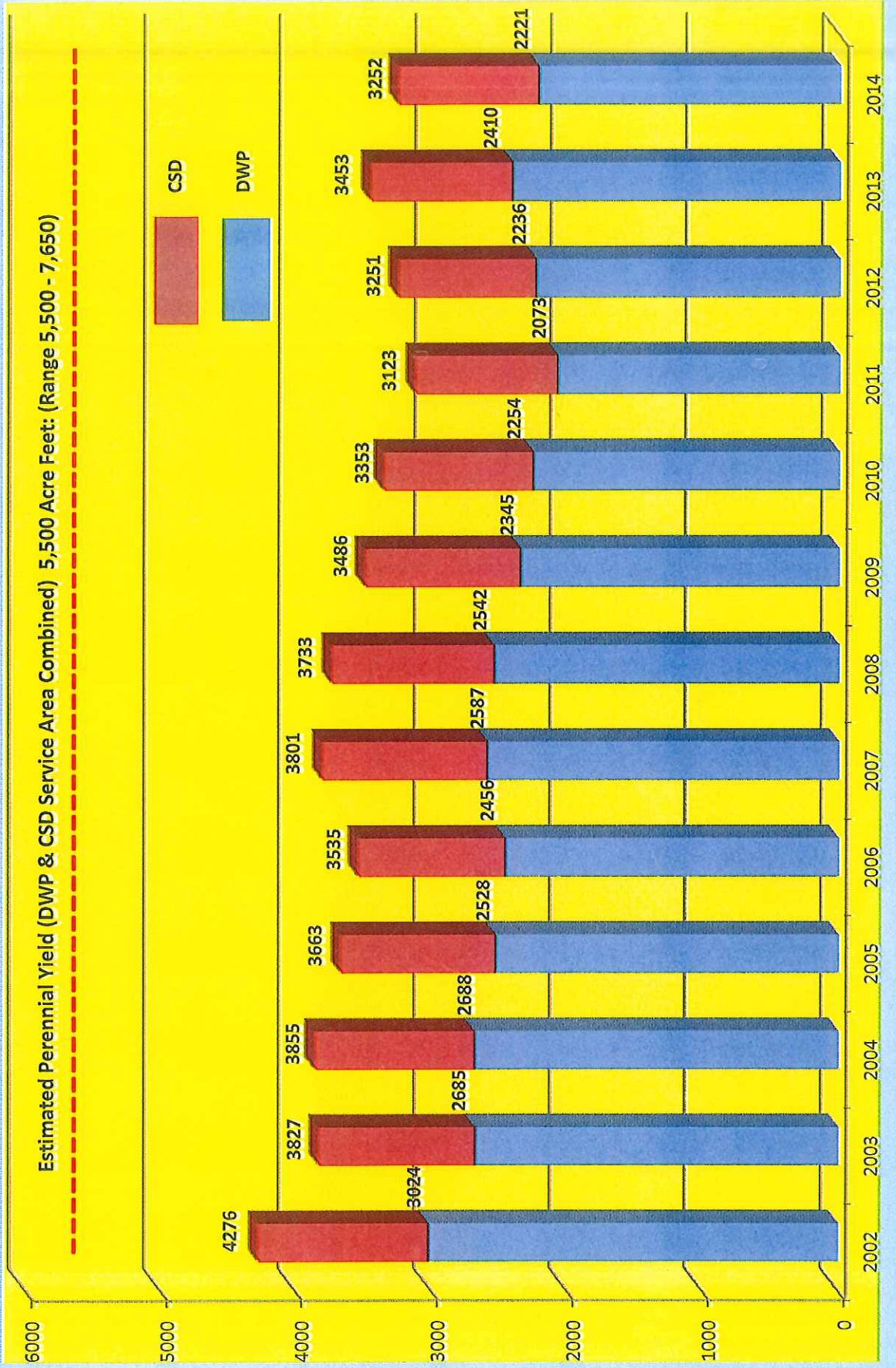
Reginald A. Lamson, PE LS  
General Manager, DWP

Sincerely,



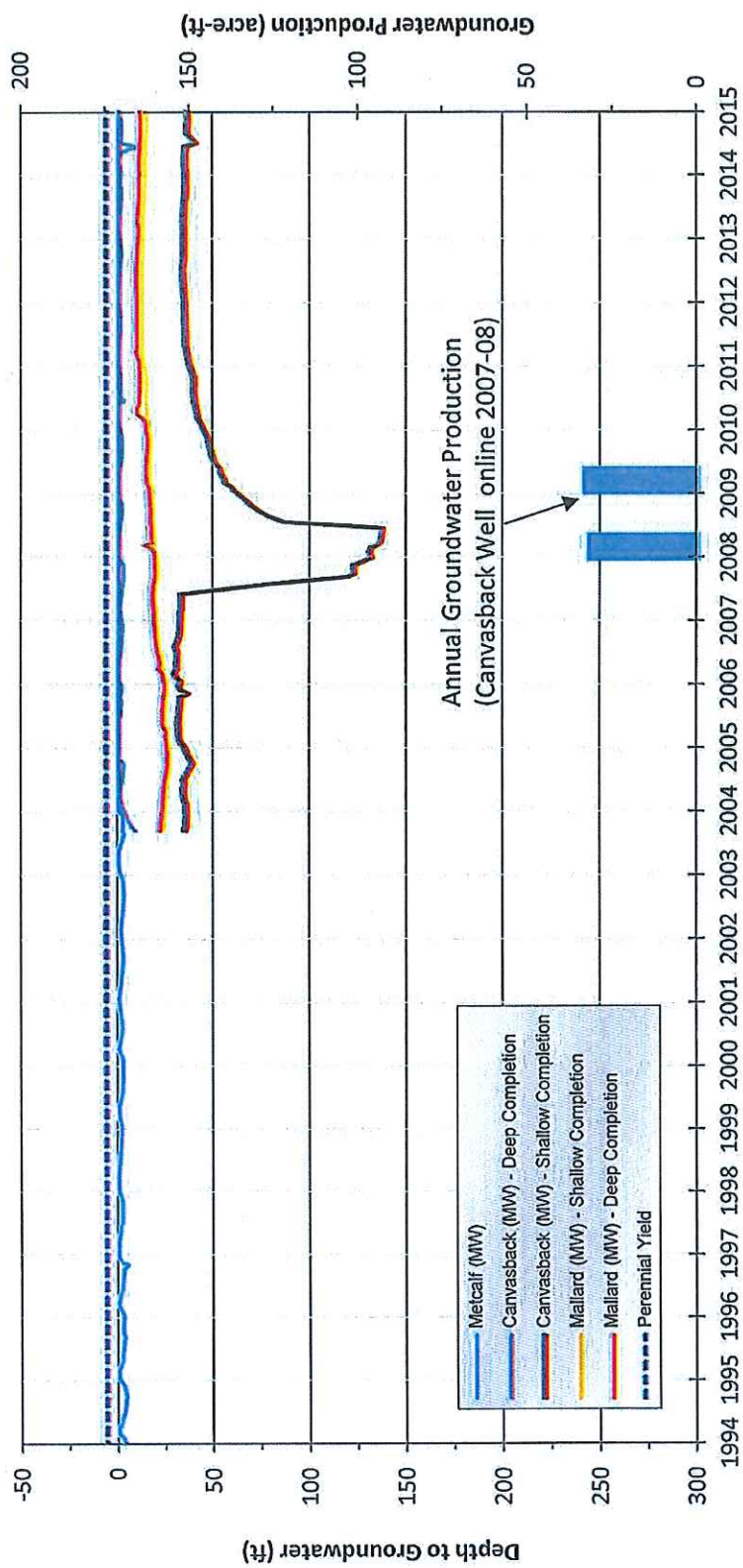
Scott Heule, CHG  
General Manager, CSD

# DWP & CSD Annual Production Water Year (July 1 to June 30) Acre Feet

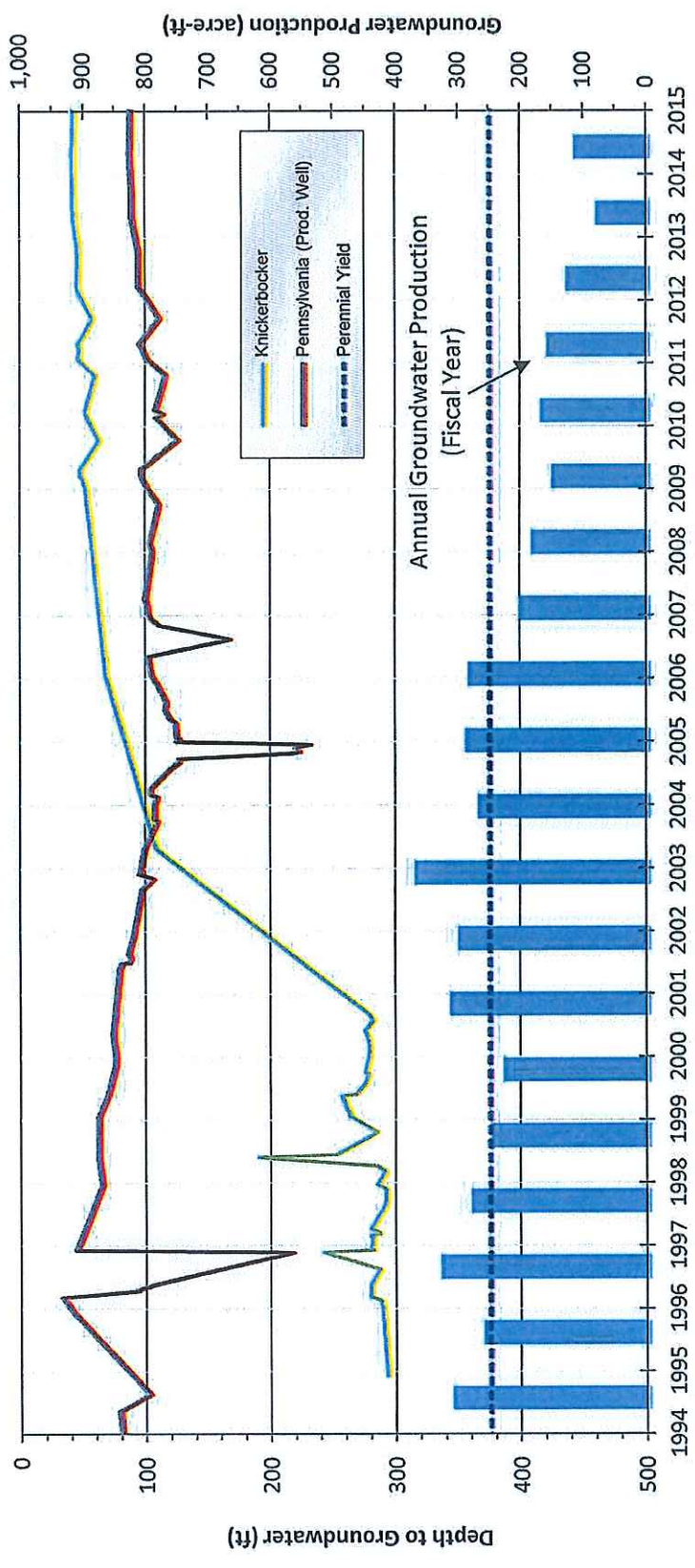


# Mill Creek Hydrologic Subunit

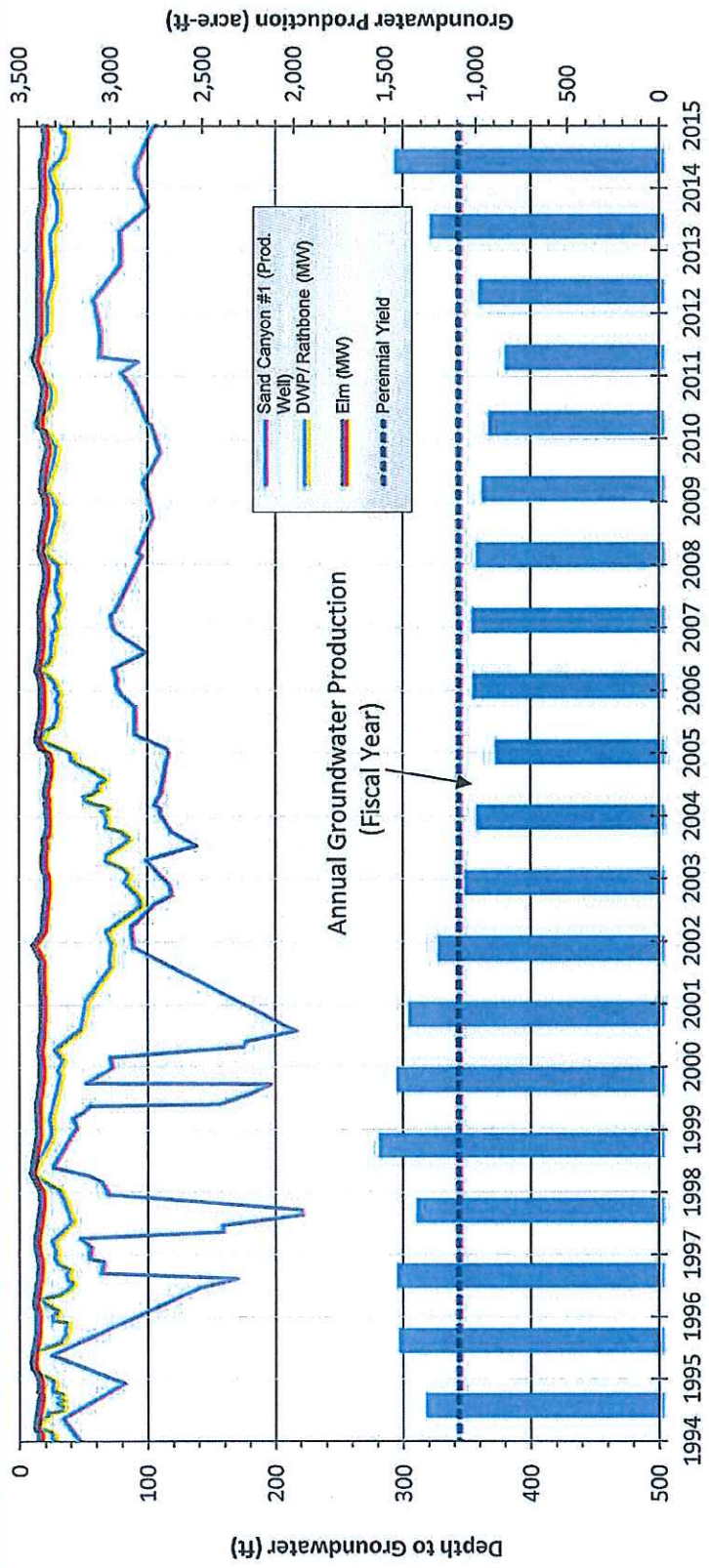
## Depth to Groundwater vs. Groundwater Production



### Village Hydrologic Subunit Depth to Groundwater vs. Groundwater Production

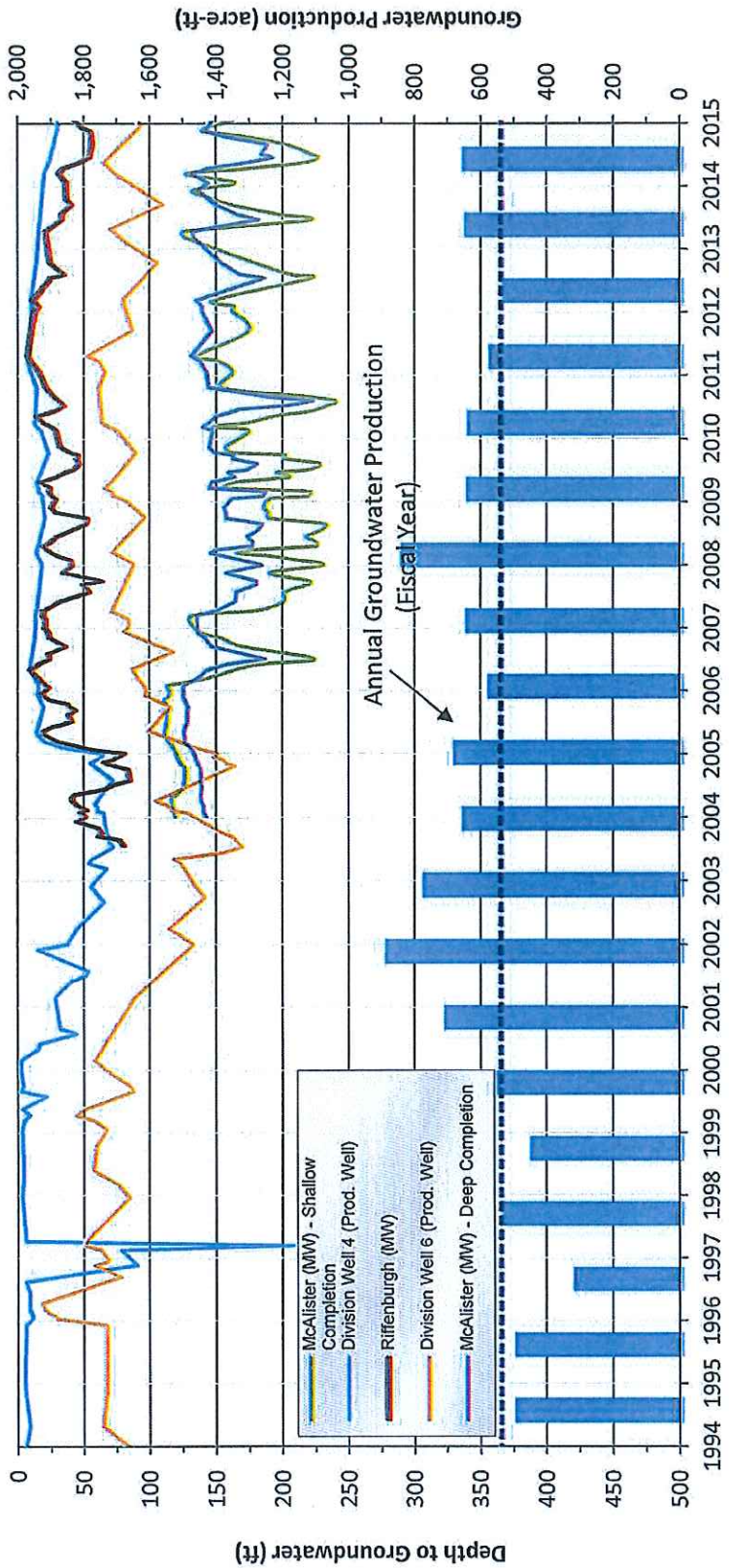


### Rathbone Hydrologic Subunit Depth to Groundwater vs. Groundwater Production

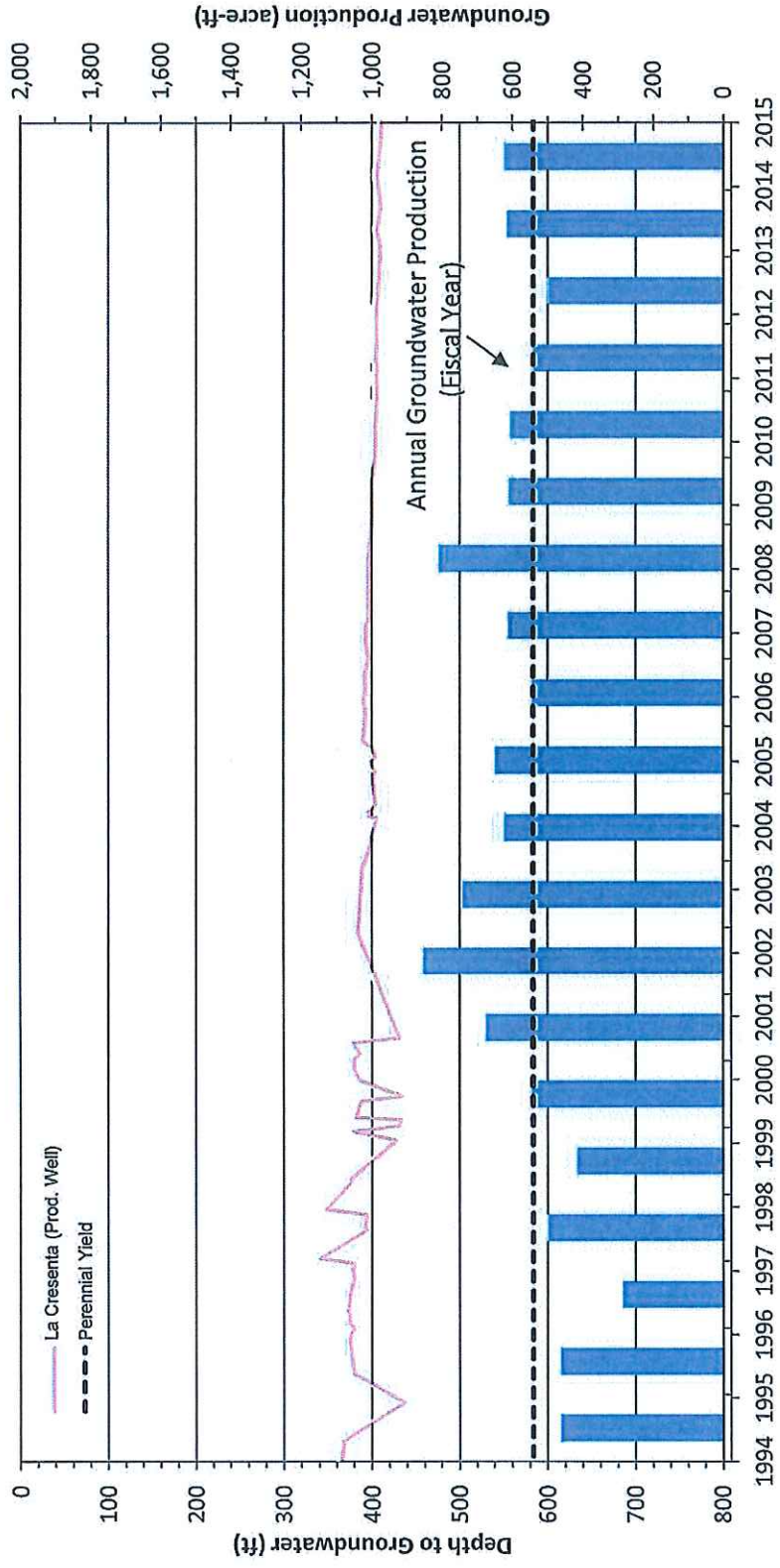


## Division North Hydrologic Subunit

Depth to Groundwater vs. Groundwater Production



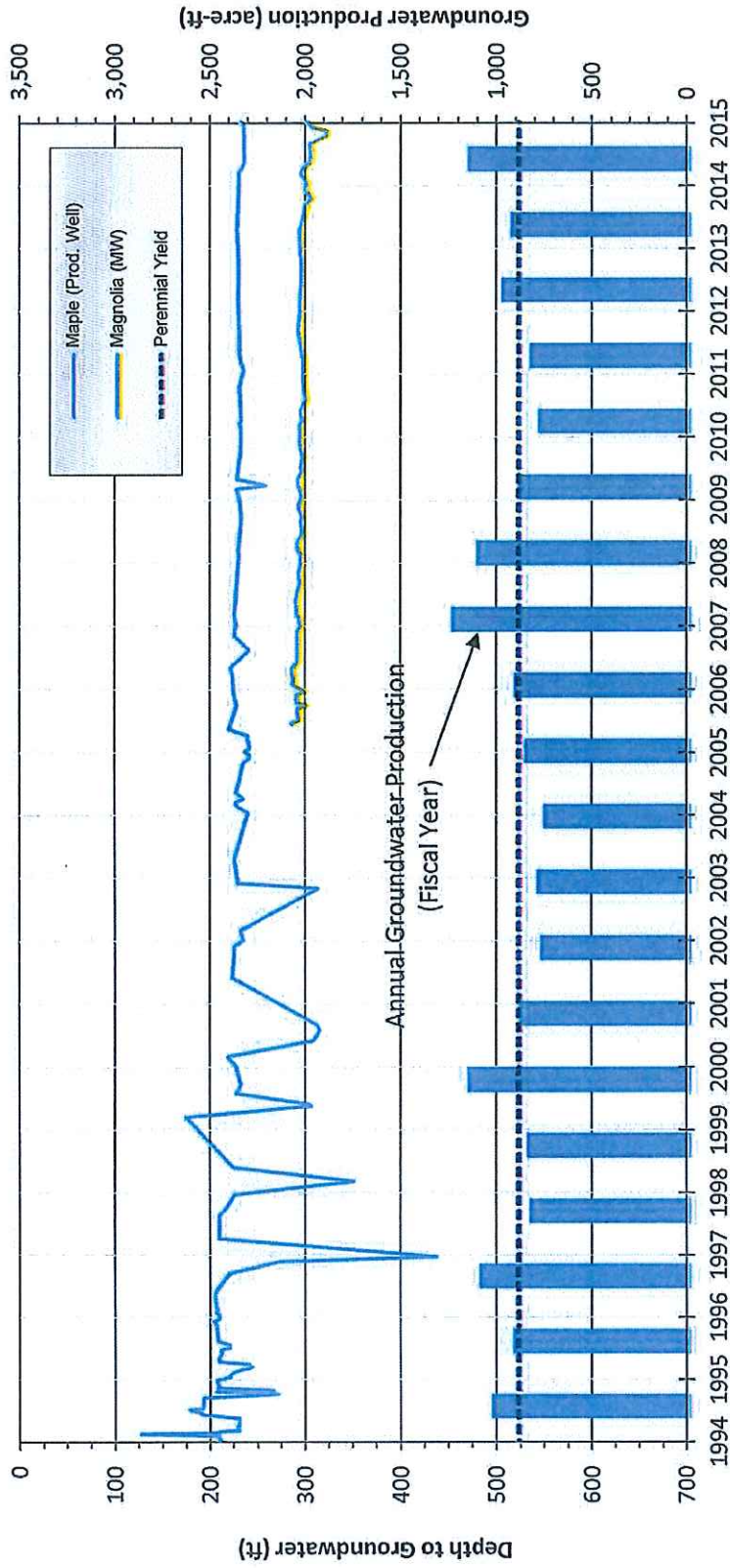
**Division South Hydrologic Subunit**  
 Depth to Groundwater vs. Groundwater Production



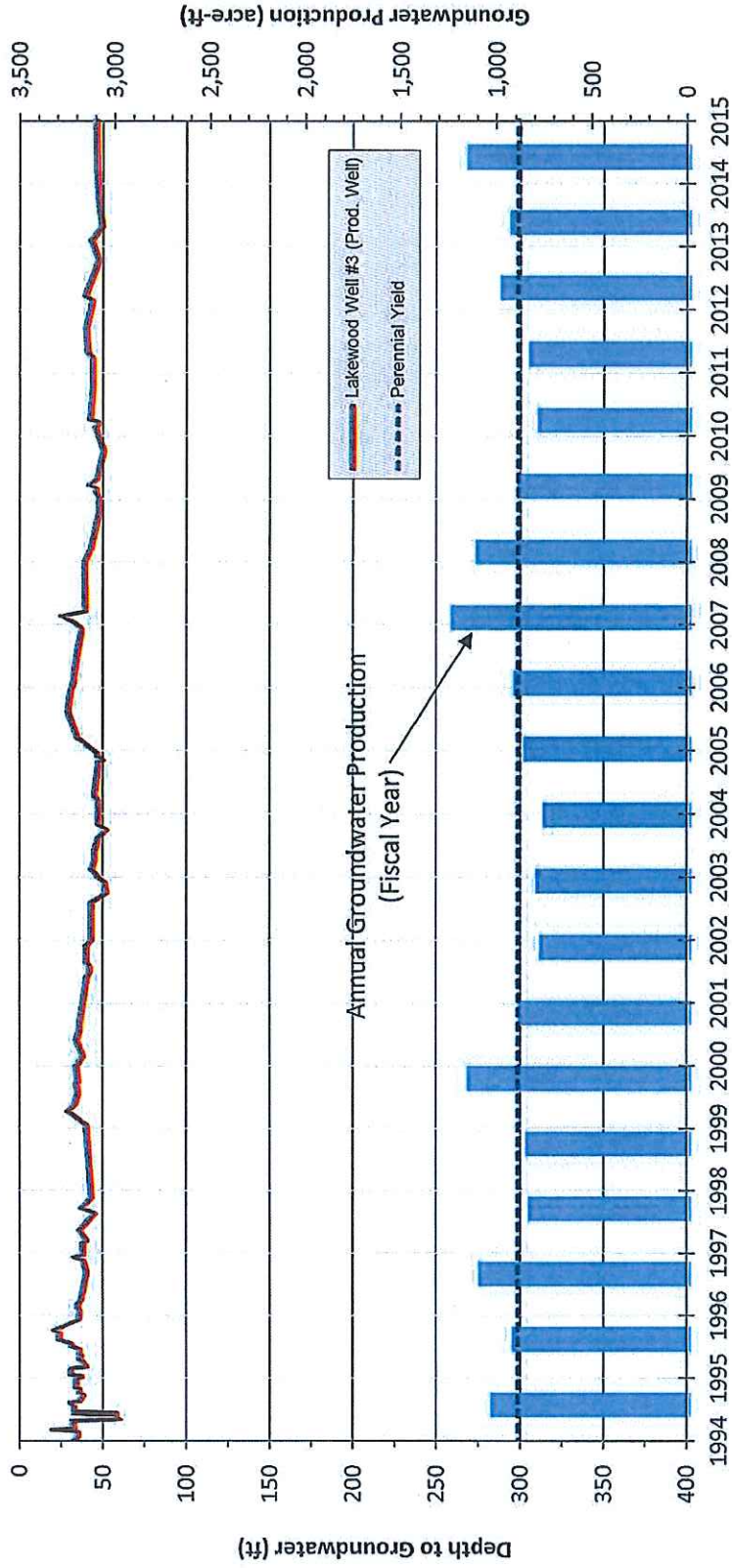


## Erwin West Hydrologic Subunit

### Depth to Groundwater vs. Groundwater Production

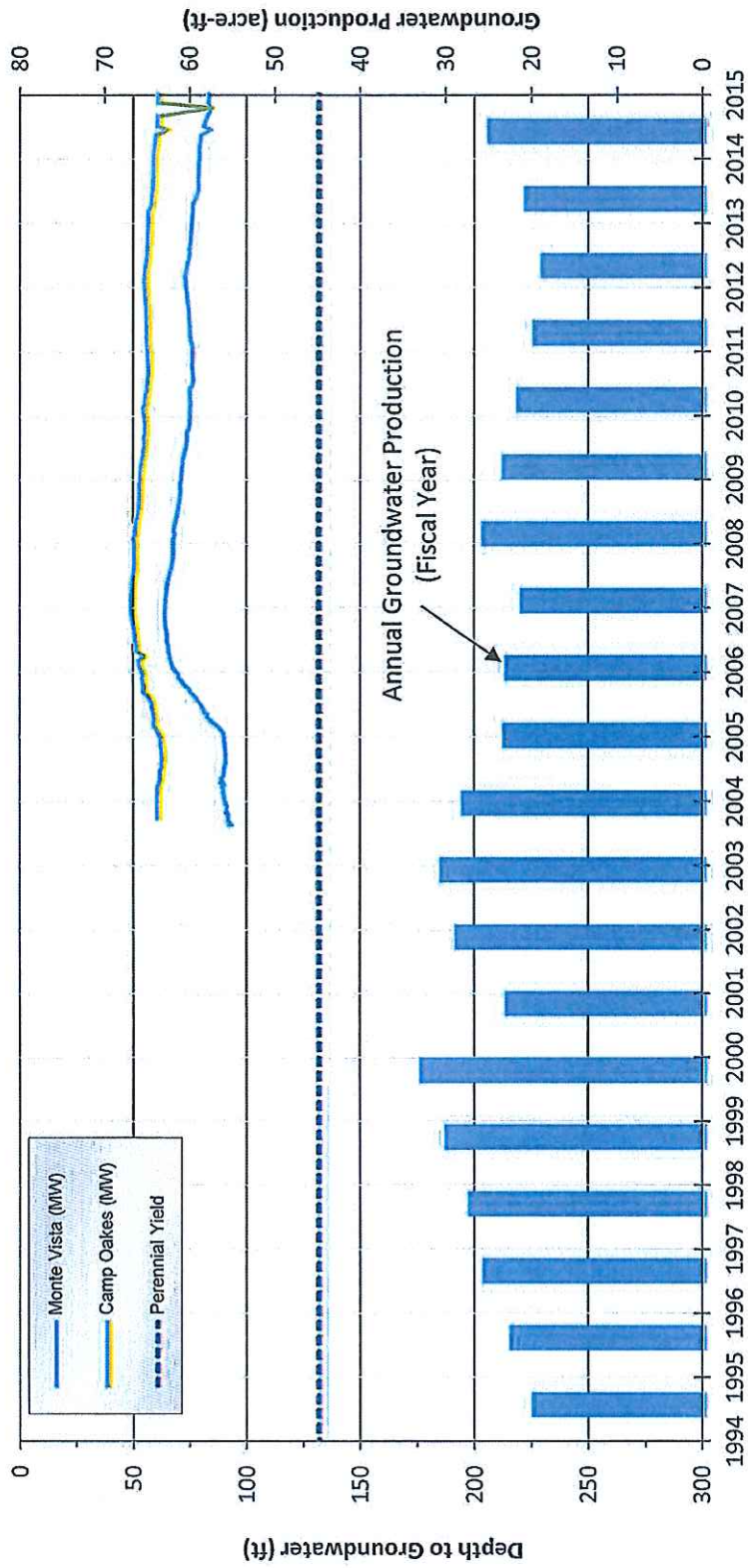


### Erwin Central Hydrologic Subunit Depth to Groundwater vs. Groundwater Production



## Erwin East - Lake William Hydrologic Subunit

### Depth to Groundwater vs. Groundwater Production



## **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

**"DRAFT CONCEPTUAL"**

**BEAR VALLEY WATER SUSTAINABILITY PROJECT**

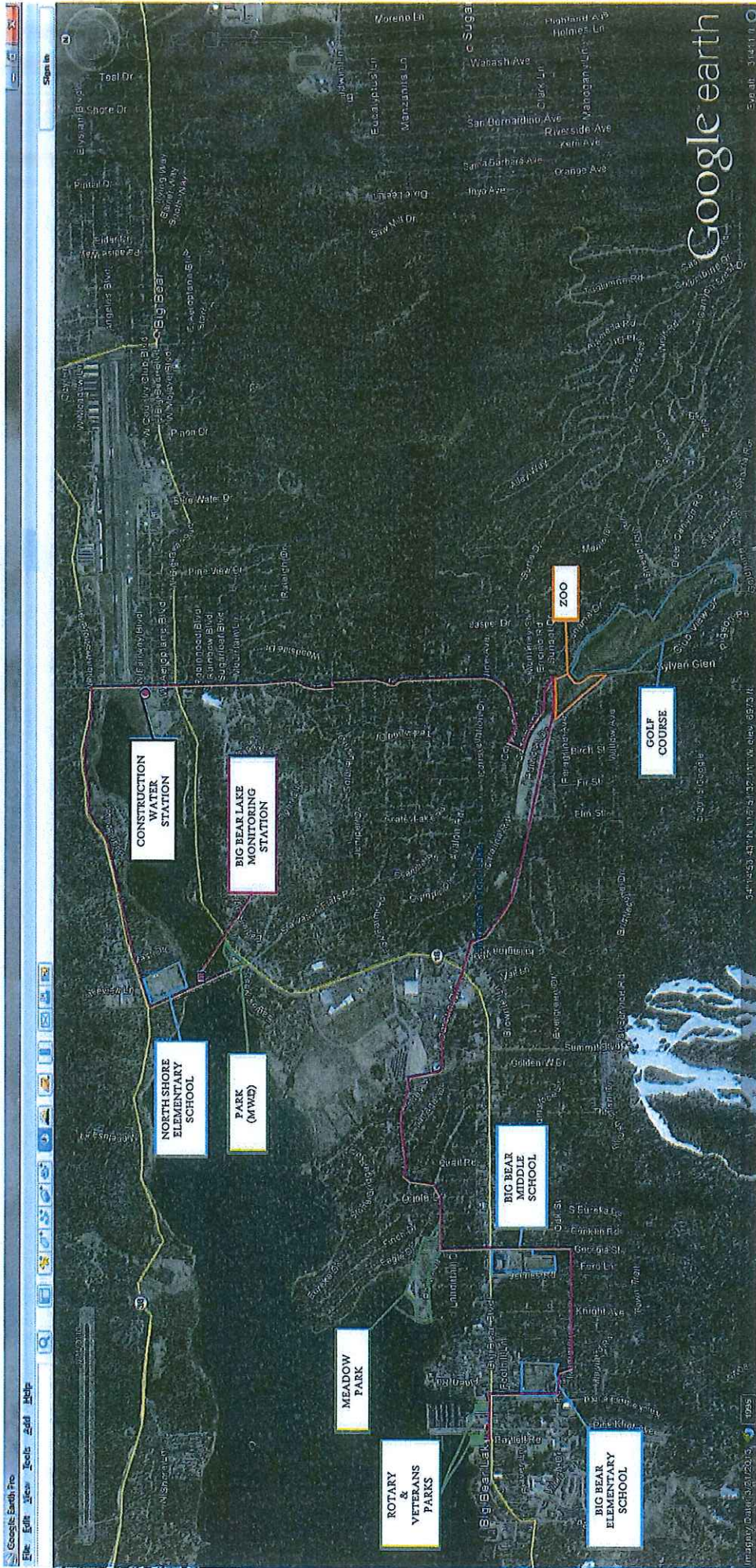


TREATED WATER TRANSMISSION MAIN  
(NON-CHLORINATED)

TITLE 22 WATER TRANSMISSION MAIN

**"DRAFT CONCEPTUAL"**

**BEAR VALLEY WATER SUSTAINABILITY PROJECT**



**TITLE 22 WATER TRANSMISSION MAIN**