BEAR VALLEY WATER DISTRICT

Quarterly Newsletter

Safe & Reliable Wastewater Services for Our Community

April 2014

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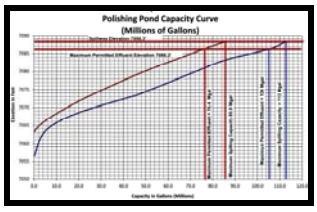

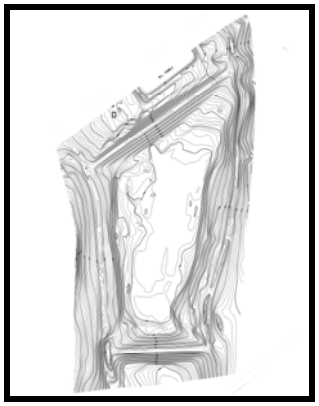

PUBLIC NOTICE

PROP 218 RATE PROPOSAL

PUBLIC HEARING RESCHEDULED

NEW DATE: MAY 24, 2014

NEW TIME: 10AM

LOCATION: PERRY WALTHER BEAR VALLEY

Bear Valley Water District
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Bear Valley, CA 95223

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DISTRICT CAPACITY – PERMIT BY PERMIT EXPECTATIONS

At no time since inception has the District had such a comprehensive and refined water balance analysis. It is through this detailed water balance analysis that the District estimates existing and future capacity to project availability for new customers in the wastewater disposal network in anticipation of increasing demand.

Credited largely to the work of District Engineer Gary Ghio, aided in large part by the 2011 greater than 1-in-100 water year and the 2011 renewal of the District's surface water discharge permit, the component estimates that converge to inform the water balance analysis, including precipitation, snow influx, percolation and evaporation, are the most accurate they have ever been.

Yet, at the same time, the recent aerial study of the storage reservoir, revealing 76.4 million gallons (MG) of storage capacity instead of 106MG, has led to two critical revisions of the latest water balance in only a few months. Indeed, the Board of Trustees reviewed a December 2013 engineering memo indicating 645 available residential living units (RLUs) only to receive and ultimately accept a revised February 2014 memo providing for only 245 RLUs.

Conservatively, the Board both at once requested an outside, independent peer review of the latest water balance and also directed engineer Ghio to consider the impact of variable permit criteria in future surface water discharge permits, anticipated in 2016, 2021 and beyond, on this analysis. The peer review largely affirmed Ghio's work but consideration of future permit terms ultimately led to the dramatic reduction in projected RLU capacity.

With a reduced storage reservoir and limited land disposal capabilities, surface water discharge and the permit criteria for this discharge are in fact now the central controlling factors to all current and future capacity calculations. At stake with each 5-year permit renewal are criteria written in the permit related to minimum storage levels, creek flow volumes, dilution criteria, maximum daily discharge limits and other criteria which have the potential to change with each permit and impact the District's capacity estimates.

Emerging then from this permit to permit perspective will be a more conservative lens through which the District will promote and advise on available wastewater capacity. With at least 105MG of estimated storage required in a 1-in-100 water year without a single new connection, the smaller 76.4MG reservoir and limited land disposal operations suggest the District is incapable of serving current demand without a viable surface water discharge permit. Incumbent therefore on the District will be perpetual permit compliance, conservative, permit-criteria driven capacity projections and concerted negotiations during each permit renewal cycle for permit terms favorable to future capacity.

RATE RESTRUCTURING PROPOSAL - UPDATE

On March 17, 2014, the Board of Trustees for the Bear Valley Water District voted to re-issue the Proposition 218 Public Notice to all property owners and reschedule the Proposition Public Hearing for May 24, 2014 due to concerns that the objection process may been unclear.

Please disregard the Public Notice dated January 4, 2014 that was mailed to all ratepayers.

As indicated on the revised Public Notice, the March 29, 2014 public hearing was CANCELLED and the public hearing has been rescheduled for May 24, 2014 at 10AM at the Perry Walther Community Center in Bear Valley.

Background **–** Under Direction from the Board, District Engineer Gary Ghio concluded in his September 2013 rate study that water use trends revealed no direct correlation between the level of water usage (and therefore assumed wastewater production) and the number of sewer service units (SSUs) or bathrooms and kitchens associated with a residence.

Hence, Ghio determined ". . . it is inequitable to base rates on the assumption that larger SSU residences produce more wastewater than the smaller SSU residences and therefore should pay more."

Furthermore, Ghio continued, "due to the lack of water meters for all District residential customers, it is not feasible to utilize water usage as a basis for the District's residential rates."

However, Ghio noted, "the one area that the District can continue to utilize a usage based rate structure is for its commercial users as there are water meters and/or other measured data for these customers."

Equally as significant in the proposed rate concept, according to revised engineering calculations due in part to the dramatic reduction in District expenses over the last two years, 89% of BVWD's costs are now known to be fixed and occur irrespective of flows.

Based on these findings, District Engineer Ghio recommended that BVWD establish a flat rate for all residential customers ($91.37 per month) and a usage rate based on a cost per gallon ($0.064) for commercial customers.

The engineer's rate study can be reviewed at www.bearvalleywater.org. Alternately, contact any board member or General Manager Jeff Gouveia at 209-753-2112 with questions.

Pharmaceuticals & Wastewater – Legislation Highlights Growing Impact

Much attention has been devoted to the life and behavior of pharmaceuticals in the water cycle. The major entry route for pharmaceutically active compounds (PhACs) into the aquatic environment is release from wastewater treatment plants. Several studies have concluded that only about half of the prescription drugs and other newly emerging contaminants in sewage are removed by treatment plants.

The problem is so severe, the California Senate, in response to the growing detection of drugs in California waters, is currently considering legislation (SB 1014 - Jackson) to require producers of pharmaceuticals to safely and conveniently take back unwanted pharmaceuticals so fewer of them are flushed down toilets or disposed of down sinks.

When pharmaceuticals, notably analgesics, anti-inflammatory drugs, lipid regulators and antibiotics, enter a wastewater-treatment plant, they are not usually completely mineralized.

Instead, they are either partially retained in the sludge or the molecules interact with and are dissolved by water, passing through the wastewater-treatment plant to end up in receiving waters.

The presence of residual PhACs in surface, drinking, and wastewaters is well documented. These drugs can have adverse and chronic effects on aquatic organisms.

As BVWD prepares to utilize its surface water discharge permit in the event of limited storage capacity in large water years, this issue is of particular significance for Bear Valley residents and guests.

As a reminder, similar to fats, cooking oils, and grease (FOG) which can disrupt wastewater treatment processes with detrimental results and should be disposed of with other solid wastes, pharmaceuticals should never be flushed down the sink or toilet into the wastewater system as the environmental impacts are serious and far reaching.

Thank you Barbara Goodrich !

BVWD would like to thank outgoing Director Barbara Goodrich for her tireless dedication and the countless hours she invested to advance the mission and improve management of the District.

Barbara was particularly instrumental in refining BVWD's accounting structure and financial reporting systems as well as cleaning up legacies within 40 years of past accounting.

Bear Valley Water District

PERMIT & PERFORMANCE

2013 Annual Average

	INF	EFF	PERMIT
BOD	326 mg/L	9.0 mg/L	30 mg/L Avg. Mo. 60 mg/L Daily Max
	93.3 % Average Annual Removal		85% Removal
TSS	233 mg/L	8.3 mg/L	30 mg/L Avg. Mo. 60 mg/L Daily Max
	91.9 % Average Annual Removal		85% Removal

Permit & Performance – Nutrient Removal & Water Quality Preservation

One common measure of wastewater treatment plant performance is an analysis of its effluent water quality relative to its discharge permit criteria.

According to the Water Environment Research Foundation (WERF), the goal for domestic wastewater treatment in the 21st century should be to have a minimal carbon footprint while achieving a discharge or reuse quality that preserves the quality of receiving waters.

The dissolved oxygen (DO) content of a water body is among the most important water quality characteristics necessary for protecting fish and aquatic life. Low DO levels can induce fish kills and reduce reproduction rates in aquatic biota.

Municipal wastewater discharges into surface waters contribute both oxygen-demanding substances, measured as bio-oxygen demand (BOD) and oxygen-depleting suspended matter, measured as total suspended solids (TSS), which can diminish dissolved oxygen levels.

Maximizing nutrient removal through process control to reduce BOD and TSS levels is then essential to keeping our environment healthy and protecting both surface and groundwater quality.

Surface water permit criteria, such as that contained in BVWD's 2011 NPDES permit, stipulates minimum nutrient removal levels to limit degradation of receiving waters, in this case Bloods Creek.

For BVWD, the treatment plant is required under permit to remove at least 85 % of BOD and TSS from its influent (INF) or untreated wastewater. An analysis of 2013 performance at BVWD relative to permit requirements revealed an annual average removal of 93.3% of BOD and 91.9% removal of TSS in the effluent (EFF) or treated water, illustrating exemplary water quality of the final effluent produced by the BVWD plant.

While BVWD maintains an active surface water discharge permit for controlled discharges to Bloods Creek, the District has yet to ever discharge to surface waters and currently maximizes land application.

Did you know. . . . . .

Auto Pay & E-bill Services

As a reminder, BVWD provides both automatic bill payment options as well e-bill and e-newsletter services.

To sign up for electronic billing and automatic payment services, visit the Payment Options page at bearvalleywater.org and complete the authorization form.

Questions ? Call 209.753.2112

BVWD District Board Vacancy

At its March 17, 2014 meeting, Director Barbara Goodrich formally notified the Board of Trustees that her pending home sale would disqualify her from meeting the ownership requirement to serve on the Board. Director Goodrich's departure became effective March 20, leaving a vacancy on the Board for her the remainder of her term ending December 5, 2015.

Pursuant to California Government Code Section 1780, the Board directed staff to follow the process to fill the vacancy through appointment instead of election.

Pursuant to Government Code §1780, vacancy notices must be posted at least 15 days prior to an appointment and notices were posted in 3 or more conspicuous locations in the District on March 25.

An appointment to fill the vacancy will be considered at the regular meeting of the Board of Directors to be held on April 28, 2014 at 9:00AM, at 441 Creekside Drive in Bear Valley. Appointment will be made by the Board of Directors for the term concurrent to that of the departing Director's term.

Interested applicants should submit an application by mail to P.O. Box 5027, Bear Valley, CA 95223, in person at the District Office at 441 Creekside Drive, Bear Valley, or by email to gmbearvalleywater@sbcglobal.net.

Applications will be accepted until an appointment is made. Please call 209.753.2112 for further information.

One standard measure of wastewater treatment plant performance is an analysis of its effluent quality relative to its discharge permit criteria.

According to the Water Environment Research Foundation (WERF), the goal for domestic wastewater treatment in the 21st century should be to have a minimal carbon footprint while achieving a discharge or reuse quality that preserves the quality of receiving waters.

The dissolved oxygen (DO) content of a water body is among the most important water quality characteristics necessary for protecting fish and aquatic life. Low DO levels can induce fish kills and reduce reproduction rates in aquatic biota.

Municipal wastewater discharges contribute oxygen-demanding substances, measured as bio-oxygen demand (BOD) and oxygen-depleting suspended matter, measured as total suspended solids (TSS), to receiving streams and can diminish dissolved oxygen levels.

Maximizing nutrient removal through process control to reduce BOD and TSS levels is then essential to keeping our environment healthy and protecting both surface and groundwater quality.

Permit criteria stipulate minimum nutrient removal levels to limit degradation of receiving waters.

For BVWD, the treatment plant is required under permit to remove 85 % of BOD and TSS from its influent (raw waste).

An analysis of 2013 performance at BVWD relative to permit requirements revealed 93.1 – 99.5 % removal of BOD and 92.7 – 98.4 % removal of TSS illustrating exemplary water quality of the final effluent produced by the BVWD plant.

While BVWD maintains an active surface water discharge permit for controlled discharges to Bloods Creek, the District has yet to ever discharge to surface waters and currently applies 100% of its effluent to land.

Thank you Barbara Goodrich !

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