

# Staff Report

for the Board of Directors' Meeting of March 27, 2019

**TO:** Board of Directors  
**FROM:** Chip Close, Water Operations Manager  
**DATE:** March 18, 2019  
**SUBJECT: Surplus Water Declaration (Consent)**

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## ***OPERATIONS***

### **RECOMMENDATION:**

Informational Item: Receive an update on the declaration of surplus water availability for the 2019 irrigation season as declared by the Water and Hydroelectric Operations Committee (Per Policy 8200).

### **BACKGROUND:**

The District provides water service to roughly 35 outside District customers per an annual contract. In addition, the City of Grass Valley and the City of Nevada City are also outside District customers supplied via long-term water supply agreements. Per Board direction in 2005, the District will no longer accept new outside District customers, but will honor these existing accounts.

To serve these customers, section 22259 of the CA Water Code States that the District must make a determination of whether there is water in excess of the needs of current internal customers before it can make a determination of availability to outside customers. This water is commonly referred to as surplus water.

The District has historically reviewed current and forecasted water supply conditions in early March to make the declaration of surplus water. The earlier declaration the better, as it allows customer service and operations to communicate, bill, and set up irrigation deliveries prior to irrigation season billing. Additionally, the early communication to our agricultural water customers allows for proper planning and seed purchases for the coming growing season.

A review of the District's current and forecasted water supply portfolio is as follows: District reservoir storage as of March 13 is 217,829 AF which is 99% of average for this time of year. The forecasted April – July runoff from the Department of Water Resources for the Yuba River basin currently sits at 129% of average, which correlates to approximately 182,000 AF in expected District watershed runoff. PG&E has made at least 10,000 AF available as a preliminary contractual amount of water that is available for purchase if needed.

The total of current and forecasted available water supply is equal to 409,830 AF. Based on these factors, the District is above the 235,700 AF threshold for normal operations as established in the Drought Contingency Plan and has water that is surplus to the needs of customers within the District boundaries.

Review of District water supplies in concert with the declaration of surplus water availability is in line with District's Strategic Plan Goal #2 "Stewardship of District resources requires a collaborative and responsive relationship with our Local and Regional Community". The District is ensuring adequate water resource availability to protect inside District customers, while making a determination of surplus availability to share with outside District customers in support the local community.

Based on the information above, the Water and Hydroelectric Operations Committee made a declaration of surplus water availability on March 12, 2019.

**BUDGETARY IMPACT:**

A declaration of available surplus will provide an increase in water sales revenue. The fee for outside District customer sales includes a 25% increase to offset the lack of tax revenue contributions from out of District parcels. The estimated revenue for 2019 season is \$474,319.49 as depicted below:

35 Customers Fixed Fee	(35 X \$604.04)	= \$21,414.40
133 Miners Inches	(133 X \$355.96)	= \$47,342.68
	Total	= \$68,757.08

City of Grass Valley Usage Calculation:

Base Rate + Per Acre Feet (\$604.04 + (\$313.97 X 1,075 AF) = \$338,121.79

City of Nevada City Usage Calculation:

Base Rate X Per Acre Feet (\$604.04 + (\$313.97 X 214 AF) = \$67,793.62

Total of Estimated Surplus Water Sales:

Outside Customers	= \$ 68,757.08
City of Grass Valley	= \$ 338,121.79
City of Nevada City	= \$ <u>67,793.62</u>
<b>Total</b>	<b>\$ 474,672.49</b>

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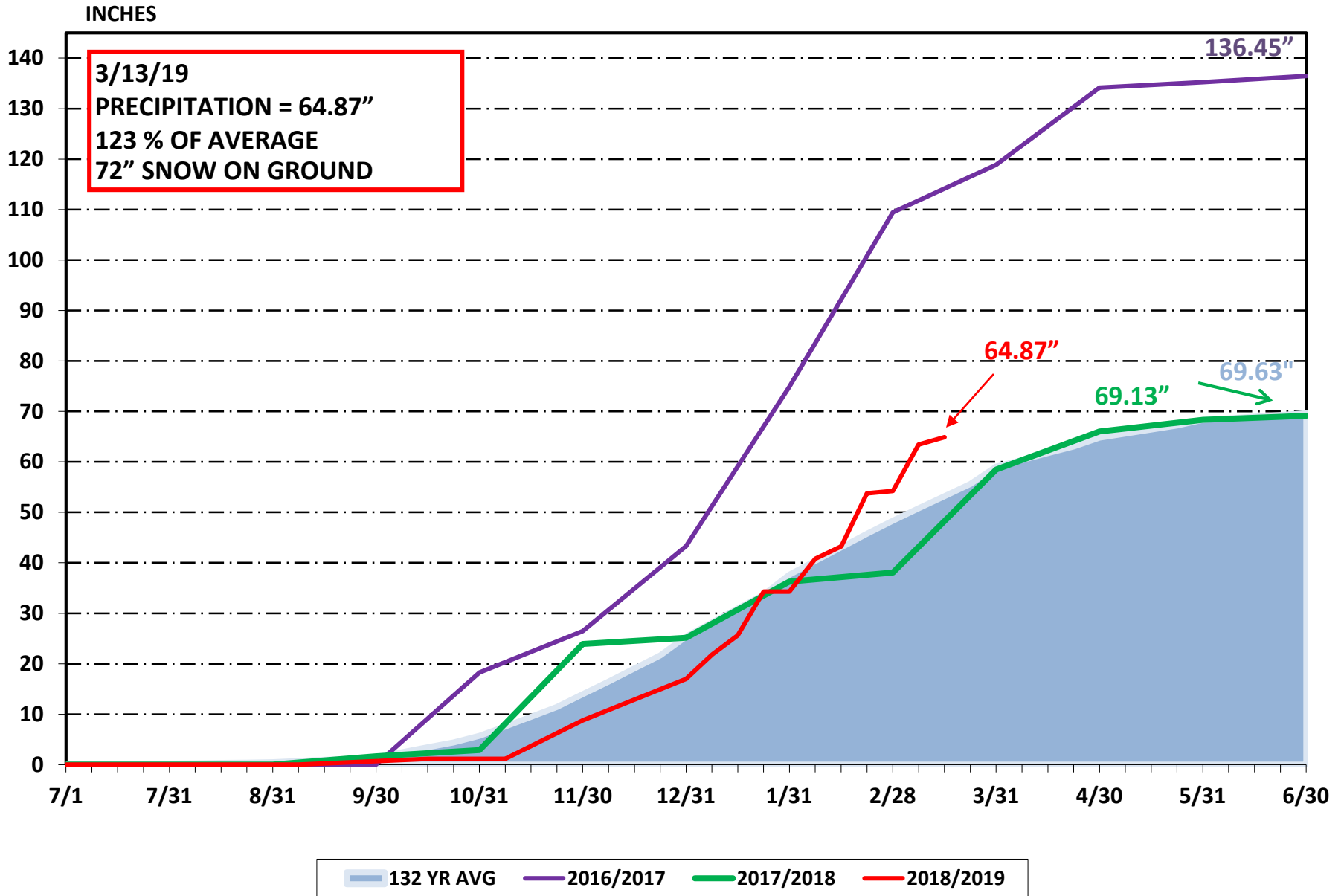
Attachments (4):

- Drought Contingency Plan Water Availability Guidance Chart
- Bowman Lake Precipitation Graph
- NID Snow Survey March 1, 2019 Graph
- NID Reservoir Storage Graph
- 2019 Storage Forecast Graph

## Water Availability Guidance

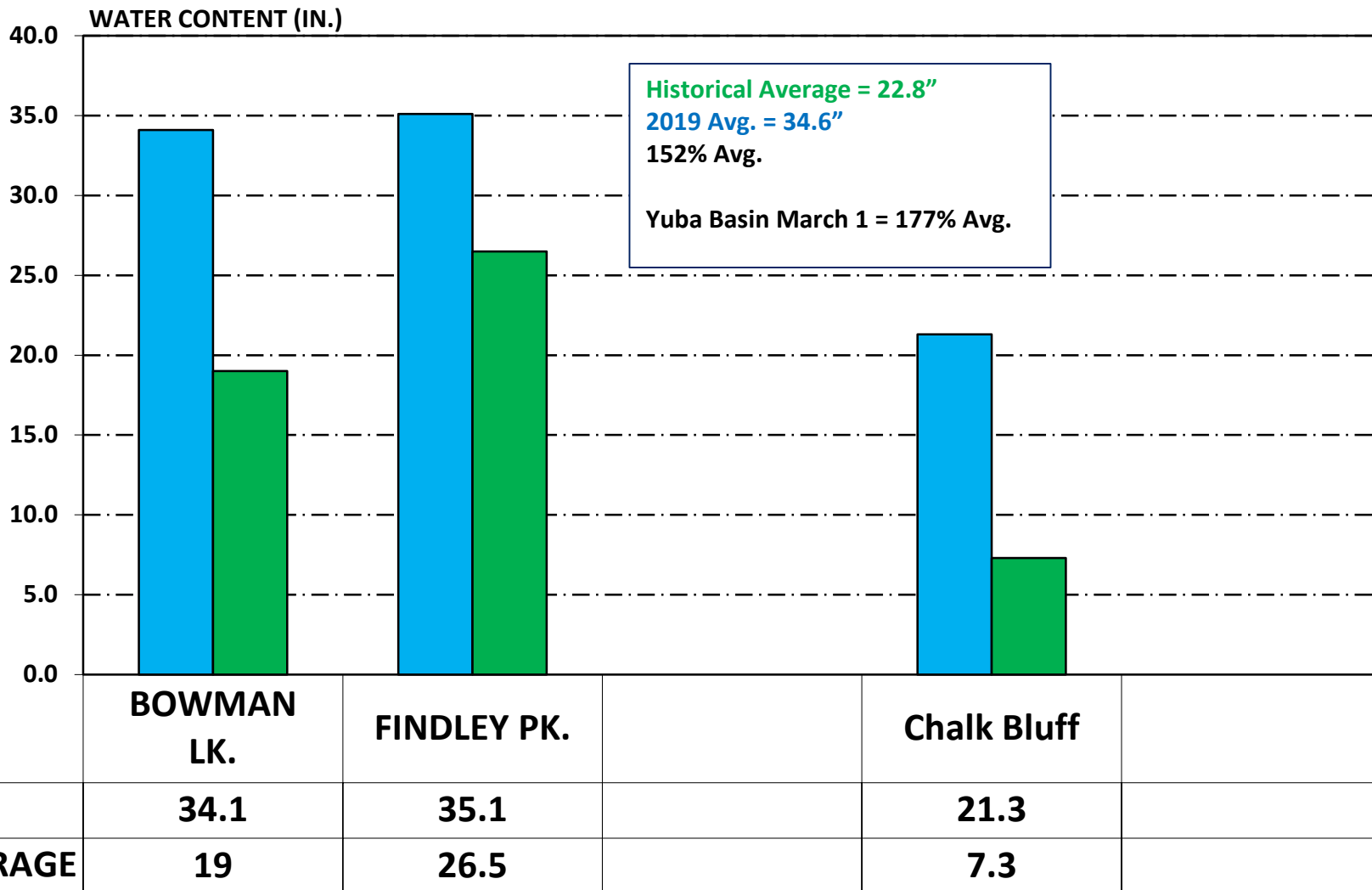
	Forecasted Available Supply April 1st	Demand Reduction Targets	Operational Changes	Rate Changes
<b>Normal Operations</b>	> 235,700	Encourage Conservation	Normal Operation	Standard Rates
<b>Stage 1</b>	235,700 to 205,700	10 – 20% Voluntary Usage Reduction	<ul style="list-style-type: none"> <li>Leak repair receives higher priority</li> <li>Increase public outreach and drought awareness</li> <li>Target 75% of end of month October storage for carryover.</li> </ul>	Standard Rates
<b>Stage 2</b>	205,700 to 198,200	10 – 25% Mandatory Usage Reduction	<ul style="list-style-type: none"> <li>Communicate mandatory reduction targets to retail customers</li> <li>Purchase of available Contract water to achieve a target carryover of 90,000 acre feet</li> <li>Distribution system flushing only for public health &amp; safety</li> <li>Organize Drought Hardship Committee</li> </ul>	<ul style="list-style-type: none"> <li>Implement Contract water purchase rates to reimburse the District for the costs associated with purchase of water above the 7,500 acre feet for normal operational needs. Charges to be reimbursed through the appropriate funding mechanisms. Water purchased will be utilized to meet carryover target.</li> </ul>
<b>Stage 3</b>	198,200 to 175,700	25 - 40% Mandatory Usage Reduction	<ul style="list-style-type: none"> <li>Purchase of available Contract water to achieve a target carryover of 80,000 acre feet</li> </ul>	<ul style="list-style-type: none"> <li>Implement Contract water purchase rates</li> <li>Implement Conservation Rates as established in the Districts Rate Schedule</li> </ul>
<b>Stage 4</b>	<175,700	> 40% Mandatory - Reductions based on available allotment and target carryover.	<ul style="list-style-type: none"> <li>Purchase full allotment of Contract water to achieve target carryover of 78,000 acre feet</li> </ul>	<ul style="list-style-type: none"> <li>Implement Contract water purchase rates</li> <li>Implement Conservation Rates as established in the Districts Rate Schedule</li> </ul>

# BOWMAN LAKE PRECIPITATION

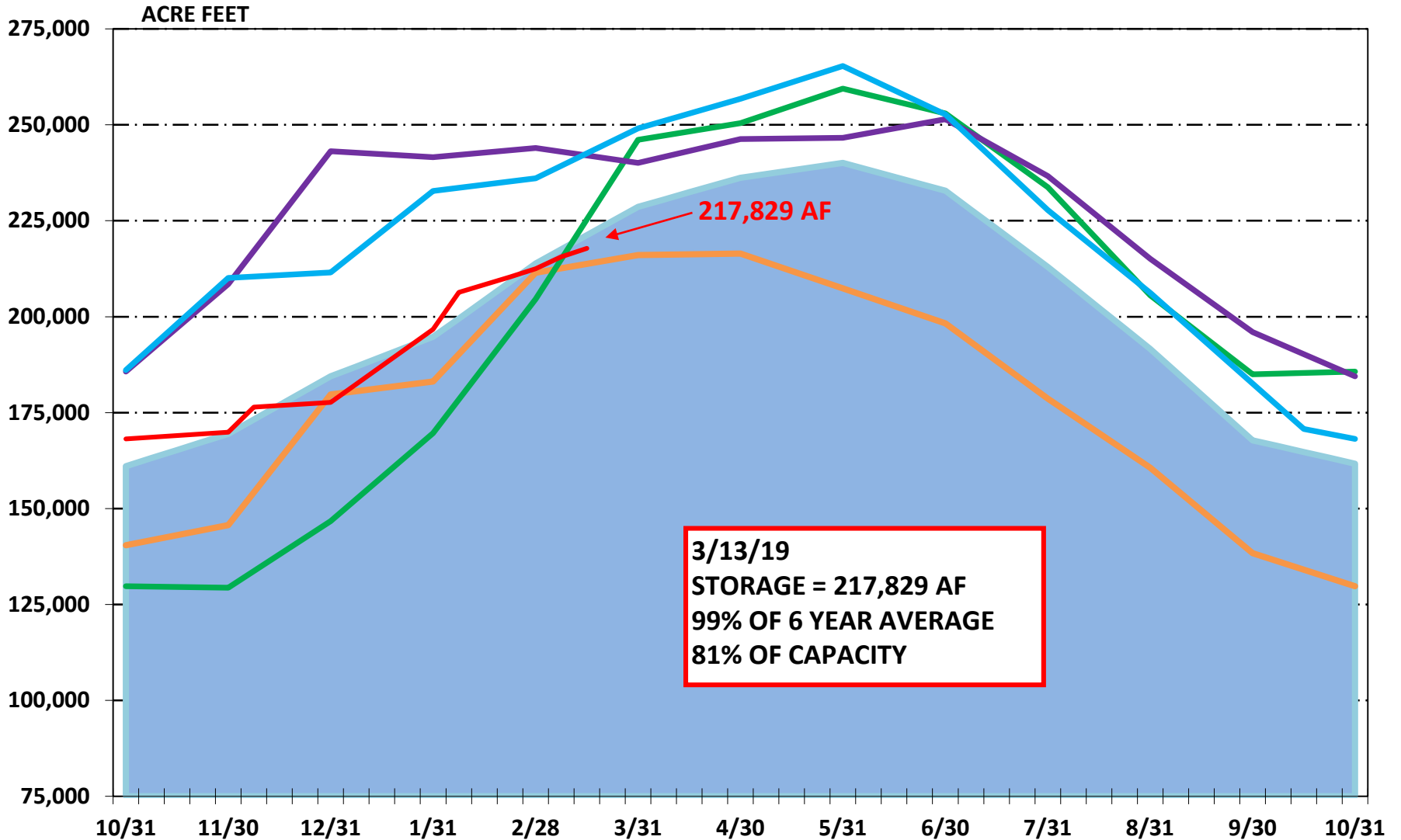


# NID SNOW SURVEY

## March 1, 2019



# NID RESERVOIR STORAGE



# 2019 Storage Forecast

