



GM Newsletter

December 2023

From The Desk of Jennifer Hanson, General Manager

Water For Life

BOARD OF DIRECTORS



Rich Johansen
Division V
President



Ricki Heck
Division I
Vice President



Chris Bierwagen
Division II



Karen Hull
Division III



Trevor Caulder
Division IV

Message from the General Manager

As far as the winter season, it's a conundrum. We have both a lack of water and an abundance of it. The wet season has started off slow; currently precipitation is 73 of average at Bowman Lake. Still, NID reservoir levels remain above average; current storage is at 112 percent of a 10-year average.

Climate change is having an impact on how the winter weather unfolds. Historically, the wet months were December through March. Now, climate change has brought extreme events, ranging from extended dry periods to atmospheric river deluges.

So even though we are experiencing a dry start to our winter weather, we'll have to simply wait and see what the upcoming months will bring. Rest assured, NID water managers are prepared and staying on top of the conditions. You can track the latest precipitation data ([Page 8](#)) and reservoir storage levels ([Page 9](#)).

As 2023 draws to a close, we at NID send our holiday wishes. Thank you for the support you've shown the District throughout the year.



Merry Christmas and Happy Holidays to you and yours



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Hazard trees are removed along the D-S Canal in the Brunswick Basin. [See Page 3](#)

NID Board elects new president, vice president for 2024



Rich Johansen

The NID Board of Directors have elected new officers for 2024: Rich Johansen will serve as Board President, and Ricki Heck will serve as Vice President.

Rich Johansen (District V) is a fourth-generation farmer and a long-time resident of Nevada County. He has an extensive background in agriculture as a certified organic farmer and more than 18 years of service in local government and community organizations, including the Nevada County Agricultural Commission, the Nevada County Planning Commission, and the Land Trust.



Ricki Heck

Ricki Heck (District I) has lived in Nevada County for 38 years. During her career, Ricki has been a consultant to the California Legislature, and an Executive Director of a local non-profit agency; and most recently, in the private sector she oversaw more than \$750 million dollars in investment real estate funds throughout the Southern United States. Ricki chose to bring her knowledge and experience in business to NID with the intent of serving our community.

For 2023, Karen Hull served as Board President and Rick Johansen served as Vice President.

[Read more about the NID Board of Directors: click here.](#)

Plan for Water: climate change impacts and future water supplies

Summary available on the NID website

Today, NID faces the new challenge of planning for climate change impacts. NID is already seeing the impacts through increased temperatures and changes in precipitation patterns.



While talking about climate change and water supplies in the future, an important component for consideration in water management is inflow projections; that is, the effect of a warmer climate on how much water might enter reservoirs each year.

Given how much is at stake, NID has implemented the Plan for Water (PFW) process, which is a long-range decision tool to guide the District's water management.

Temperature – Higher temps in NID watersheds

Global warming has raised global surface temperature about 2° F higher than those temperatures experienced in the 1900s. Generally, an increase in temperatures will make the soils drier and increase evapotranspiration resulting in higher water losses and reduced inflows.

Snow – less snowpack that melts faster

NID's mountainous upper watershed acts as a natural reservoir, releasing snowmelt runoff during the spring and summer months. Climate change impacts will result in less snowpack and faster melting of the snowpack. During recent PFW workshops, discussions have focused on climate change impacts and presented scientific modeling to show how those impacts might affect local water supply.

[Read the full summary of the climate change presentation \(with graphs and charts\). Click here.](#)

Hazard trees removed on the D-S Canal in the Brunswick Basin



Work is ongoing to remove hazard trees along the D-S Canal above the Wolf Creek spill in the Brunswick Basin, Grass Valley.

This section of canal is critical for NID's water supply to support both raw and treated water customers. The area is surrounded by large trees that make normal operations and emergency maintenance and repairs increasingly difficult.

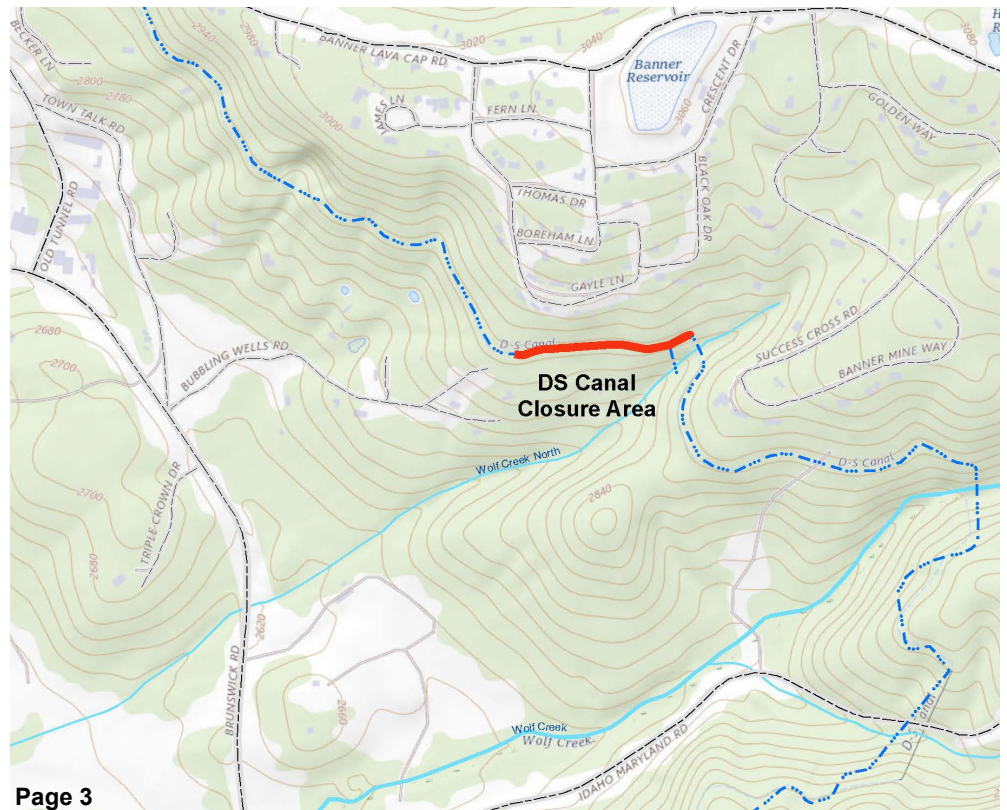
Last winter's significant snowfall caused many mature pine trees and black oak trees that grow around Grass Valley and Nevada City to break or collapse under the weight. As a result, NID canals were damaged and clogged by the woody debris.

The District has prioritized this section of the D-S Canal and will complete about 2,000 feet of hazard tree removal. Approximately 40 trees have been removed using a combination of climbers, a bucket truck, excavators and tree falling.

This work is scheduled to be completed before the end of the year. Additional sections are planned for hazard tree removal in the future.

NID will continue to address hazardous trees that pose a threat to critical water system infrastructure, or a risk to District staff and the public, as well as monitor the water system that winds through the mountains from the headwaters of the Middle Yuba River to the communities and customers it serves in the foothills.

Hazard tree removal and fire fuels reduction is a priority as NID works to ensure the long-term protection and delivery of water.



Emergency Outage: South Yuba Canal repairs

NID's primary conveyance, the South Yuba Canal, has had to be temporarily shut down for repairs. There was minimal disturbance in water delivery for customers.

During the Week of Dec. 11, NID's Hydro crews replaced two badly damaged girders on a stretch of canal upstream of Highway 20.

The damage was discovered during a routine inspection, and it was determined that replacements needed to be made before snow began in order to ensure water delivery could be maintained.

The repairs were complicated because the work took place several stories above the ground on two damaged girders in a row. In addition, the remote nature of the location required support from a helicopter.

"We have been planning for situations like this for several years now," said Director of Power Systems Keane Sommers.

"While it is impossible to plan for everything that will go wrong on a system that is nearly 120 years old, NID crews were able to quickly respond to this situation and make the necessary repairs with minimal disturbance to our customers."



[Read about the South Yuba Canal in the NID Infrastructure Library](#)

Treated water: NID's annual flushing program underway

NID has begun to flush hydrants to ensure the District's water pipelines function properly and customers continue to receive high-quality drinking water.

This annual program to clean the District's treated water distribution system will extend through March 2024. The work will start in Cascade Shores and end in North Auburn.

During the process, the NID crew will tap fire hydrants, allowing water to flow through main lines at a higher velocity to wash away any residue that may have collected throughout the year.

Water will be dechlorinated and flushed from the hydrants up to 400 gallons a minute.

Flushing does not usually affect water service in the area. Customers may experience momentary pressure changes when nearby hydrants are tapped. They also may experience some turbid or discolored water, which can be cleared quickly by opening a faucet and letting the water run.

If you have any questions about the flushing program, please call the NID operations desk at (530) 271-6885.



The NID flushing crew was at work on Cement Hill Road, Nevada City in early December.

Fire Hydrant Locator — where is yours?



Throughout the District, NID has installed nearly 2,600 hydrants to help protect neighborhoods in the event of fire. Water to the hydrants is supplied by the treated water system.

Is there an NID fire hydrant near you?
[Check out the NID locator map.](#)

Jackson Lake Toe Slope Protection Project

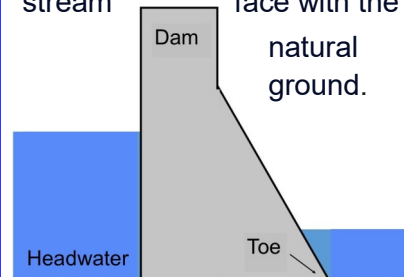
Slope reinforcement plus new weir will measure environmental flows

Just ahead of the first snow, work has been completed to stabilize the toe slopes near the downstream outlet of Jackson Lake Dam.

To reinforce the soil at the dam toe, a geogrid was installed. The contracted construction crew laid the grid over the slope, then filled in each cell with gravel.

Also, a bit downstream of the dam a new weir was constructed to accurately take measurements for environmental flows.

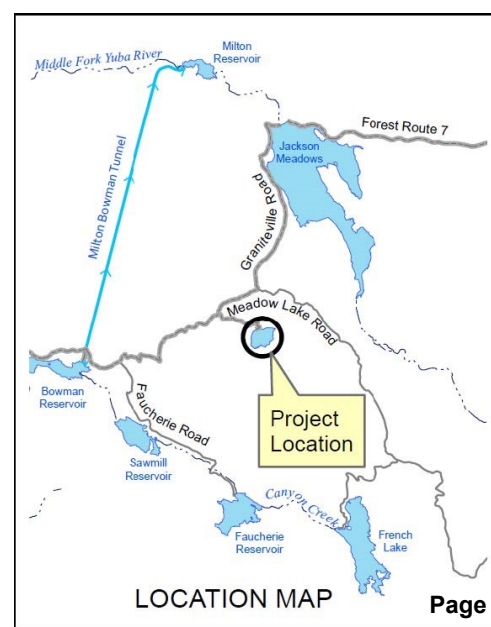
A toe? The toe of a dam is the junction of the downstream face with the natural ground.



The geogrid is positioned on the slope



The gravel will stabilize the slopes



Nevada Irrigation District

REBATES\$

Toilet Rebate Program

Up to \$100

- Replace old inefficient toilet with new high efficient 1.28 gallons per flush or less.
- NID residential treated water customer.
- Limited to one rebate per parcel served by NID.
- Proof of purchase and installation required.

Raw Water Storage Tank

- Available for NID raw water customers.
- Rebate amount varies based on tank size.
- Proof of purchase and onsite inspection required for approval.

500 gallons- \$150

600-1,500 gallons- \$300

1,600 gallons- \$500

Turf Removal Program

- Remove up to 1,000 sq. ft. of turf and replace it with water efficient landscape.
- Minimum 250 square feet must be converted.

**\$1.00 per
square foot**



To check your eligibility:

Call 530-273-6185 ext. 1244 or email strongk@nidwater.com

Visit <https://www.nidwater.com/incentives-rebates>

Funding is limited, and rebates are issued on a first come first serve basis.

Reminder in advance of stormy weather

During storm events, NID's water managers will cut back the amount of water flowing through District canals. This is for public safety to reduce the potential for flooding. With storms, customers might see an influx of water in the canals.



Bowman Lake

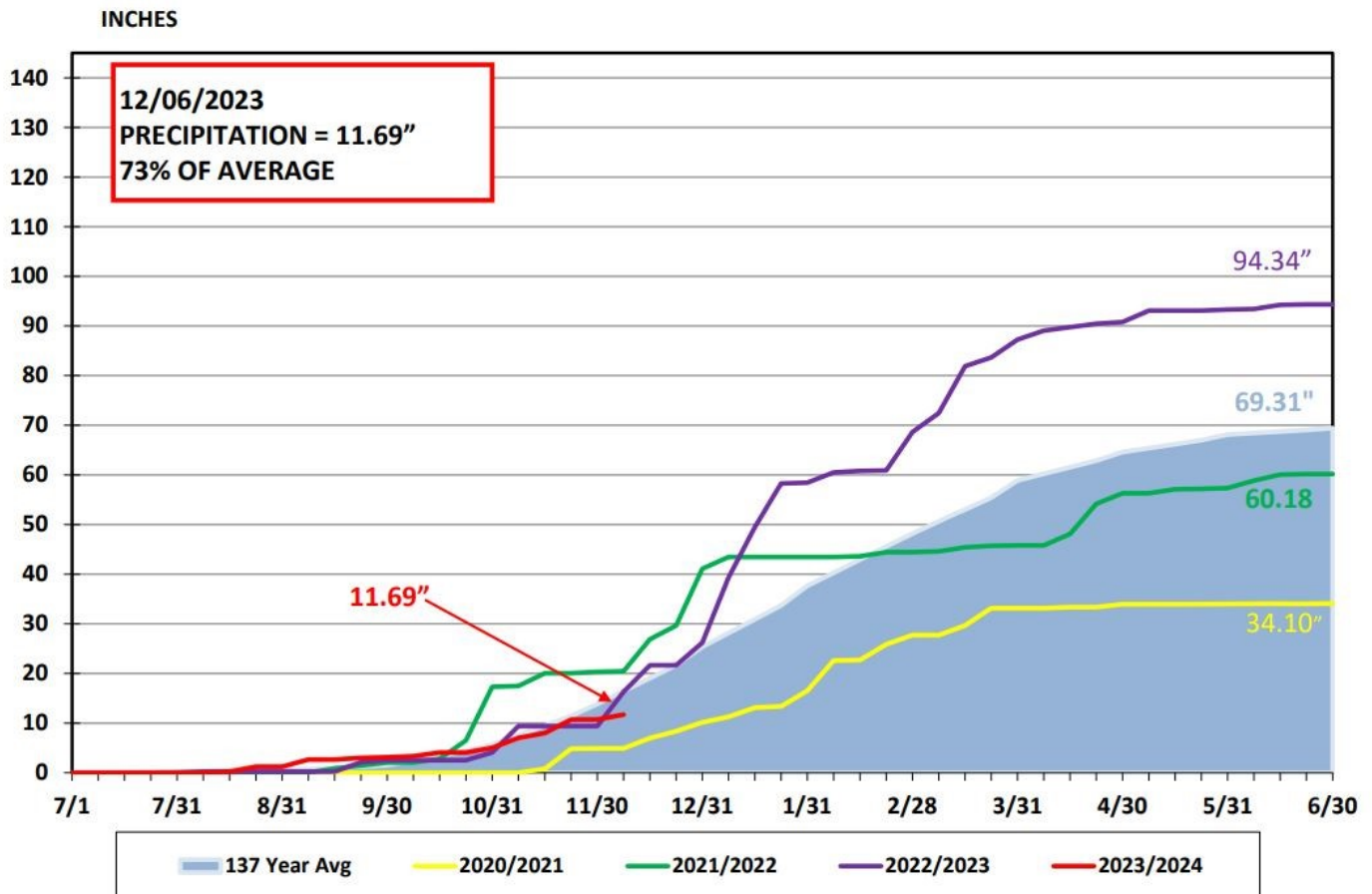
NID has been keeping weather records for Bowman Reservoir (elevation 5,650 ft.) since 1929.

The 69.2-inch annual average precipitation at Bowman compares to an annual average of 56 inches at 2,700 feet near Nevada City and 52 inches at 2,400 feet in Grass Valley.

Precipitation is measured for the 12-month period beginning July 1 and ending June 30.

As of Dec. 6, 11.69 inches of precipitation have fallen at Bowman. That is 73 percent of average.

BOWMAN LAKE PRECIPITATION



Reservoir storage is 112% of average

Reservoir storage is 192,857 acre-feet as of Dec. 6. That is 71 percent of capacity and 112 percent of the nine-year average.

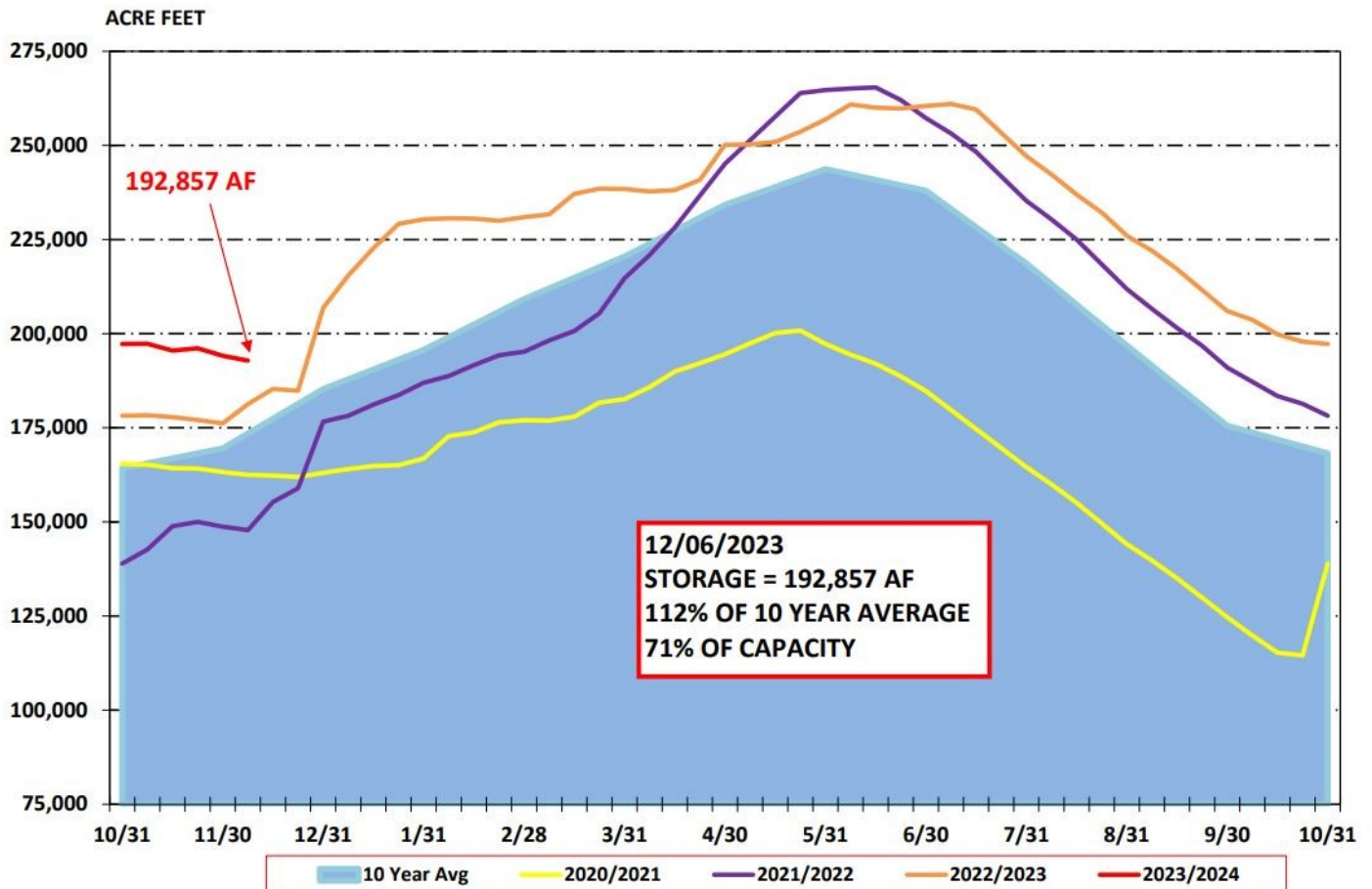
NID's water managers regularly post updates of local reservoir levels. You can see how water levels fluctuate in easy-to-read charts.

It's all just a click away on the NID website under [River & Reservoir Data](#).



Milton Reservoir

NID RESERVOIR STORAGE



Project Updates - Engineering, Hydropower and Operations

The NID Engineering Department has a number of projects in various phases of construction.

Updated Project Status Reports are now available on the [District's Projects webpage](#). These reports provide project information, planner information, and a brief project description. Be sure to sign up for email news alerts about projects.

[Engineering Department Project Status Report](#)



Project status: North Auburn Water Treatment Plant

The project will feature a rebuild of the motor control center for highlift pumps and a conversion to variable frequency drives.

Construction is beginning now.

Infrastructure
**WHAT IT TAKES
TO DELIVER
WATER TO YOU**



NID Infrastructure Library

An A-Z listing of NID infrastructure, including dams, reservoirs, treatment facilities, canals, conduits and pipes, and hydroelectric facilities.

Click on specific structures to see details, photographs, and maps.

What's the oldest NID reservoir in the mountains? Which water system brings water to you? Where's the closest water treatment plant to your neighborhood?

It's all here in the NID Infrastructure Library.

[Check it out!](#)

**Special Board of Directors Meeting
(Plan for Water workshop)**

Tuesday, Jan. 9, 2024

NID Main Office, Grass Valley 4 PM

Board of Directors Meeting

Wednesday, Jan. 10, 2024

NID Main Office, Grass Valley 9 AM

Board of Directors Meeting

Wednesday, Jan. 24, 2024

NID Main Office, Grass Valley 9 AM

* Dates and times subject to change. Please check
nidwater.com for updates

**Meetings
& Events**



Note: The NID Business Office will be closed on Dec. 29 to conduct year-end procedures and make modifications to the District's financial system. You can still reach us via telephone at (530) 273-6185.

**HAPPY
HOLIDAYS**

