



GM Newsletter

March 2024

From The Desk of Jennifer Hanson, General Manager

Water For Life

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Message from the General Manager

Sadly and significantly, our community is about to feel firsthand the impacts of Mother Nature against aging and failing infrastructure.

PG&E notified NID that a landslide severely damaged its portion of the South Yuba Canal, which is the primary supply to NID's Deer Creek System and Scotts Flat Reservoir. To make matters worse, PG&E's Spaulding 1 powerhouse sustained a failure that curtailed flows into the Drum Canal that provides water to Rollins Reservoir and the Bear River.

This means flows, upon which we rely from the headwaters, are unable to reach NID foothill reservoirs until repairs are made. PG&E estimates these repairs will be completed by June 8. NID will use existing stored water in Scotts Flat and Rollins reservoirs to deliver to our customers until then. But that is a limited supply, and the drawdown will be consequential.

As a result, the District requests that all customers cut back on their water use by 20 percent for the remainder of the year. This is a voluntary action, but the water we can save now is water that remains in the system to be used when our community needs it most.

This situation is unprecedented. Never before have we faced the challenge of having an adequate water supply in the headwaters and yet are unable to convey it to customers in the foothills. We understand this poses huge disruptions and inconveniences for our agricultural customers as well as treated water customers. I personally thank you all for your understanding, patience and commitment to reducing water use as we work our way through this situation. Full story on [Page 2](#).

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After the recent Sierra snow, NID crews stayed on patrol to keep canals clear and flowing. See photos, [Page 6](#)

NID declares water shortage emergency, calls for customers to cut water use

The NID Board of Directors has declared a “water shortage emergency” after unanticipated infrastructure repairs in the headwaters have cut off water supply to the District.

Pacific Gas & Electric Company (PG&E) notified NID that a landslide significantly damaged its portion of the South Yuba Canal, which is the primary supply to NID’s Deer Creek System and Scotts Flat Reservoir. In addition, PG&E’s Spaulding 1 powerhouse sustained an infrastructure failure that has curtailed water flow into the Drum Canal. That canal provides water to Rollins Reservoir and the Bear River.



Rollins Reservoir

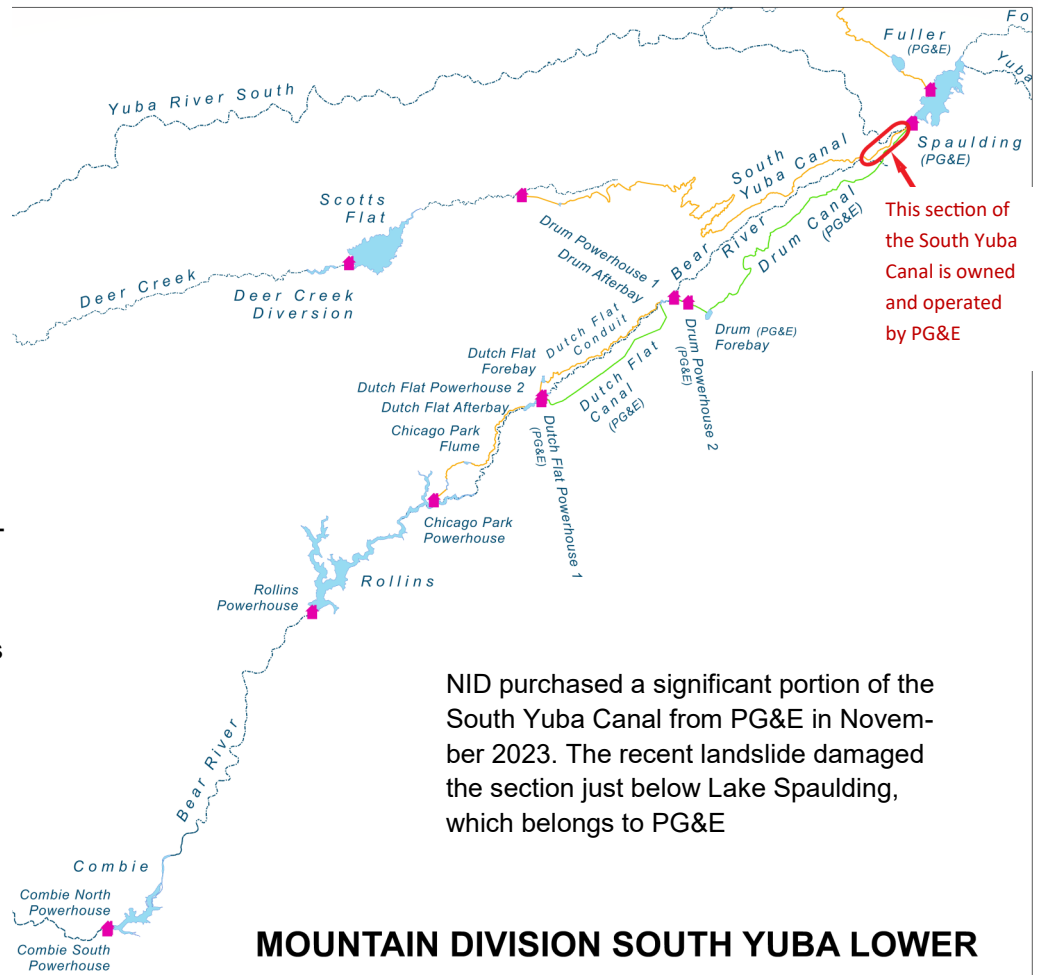
PG&E estimates repairs will be completed by June 8. In the meantime, NID will use existing stored water in Scotts Flat and Rollins reservoirs. But that is a limited supply, and the drawdown will be consequential.

As a result, all customers – using raw irrigation water and treated water -- are requested to conserve by 20 percent for the remainder of 2024.

“The lack of access to normal watershed runoff means NID will have to rely upon limited water storage to begin the irrigation season on April 15,” said General Manager Jennifer Hanson.

The situation will impact deliveries to District customers, as well as have severe effects on lake levels and recreation opportunities this summer. Also, hydroelectric generation will be affected by the water restrictions.

The PG&E infrastructure repairs are estimated to be completed by June 8. Any delay in the repair schedule will lead to future mandatory water restrictions from NID.



This section of the South Yuba Canal is owned and operated by PG&E

NID purchased a significant portion of the South Yuba Canal from PG&E in November 2023. The recent landslide damaged the section just below Lake Spaulding, which belongs to PG&E

MOUNTAIN DIVISION SOUTH YUBA LOWER

“NID cannot get our water into the South Yuba Canal or the Drum Canal,” said NID’s Director of Operations Chip Close during the March 27 Board meeting. “We are concerned that if this outage is to extend into July we will really suffer. Our supply in Scotts Flat and Rollins becomes an issue.”

Planning grant awarded to NID and TNF for 3,000-acre project

Partnership will advance water security and forest health, address wildfire risk



The Nevada Irrigation District (NID), in partnership with the USDA Forest Service, Tahoe National Forest, has received a planning grant to complete environmental surveys and compliance for a forest management project to return the Middle Yuba headwaters region to a healthier state.

The project will complete the surveys and assessments that are needed to begin forest restoration and fuels reduction work on up to 3,000 acres in the Middle Yuba headwaters, which are an important source of water for NID's water system.

The project area is located near Jackson Meadows and Milton reservoirs on the Tahoe National Forest in Nevada and Sierra counties.

The Sierra Nevada Conservancy (SNC) has awarded \$386,100 to complete work considering potential environmental effects

Potential project area with Jackson Meadows Reservoir in the background.

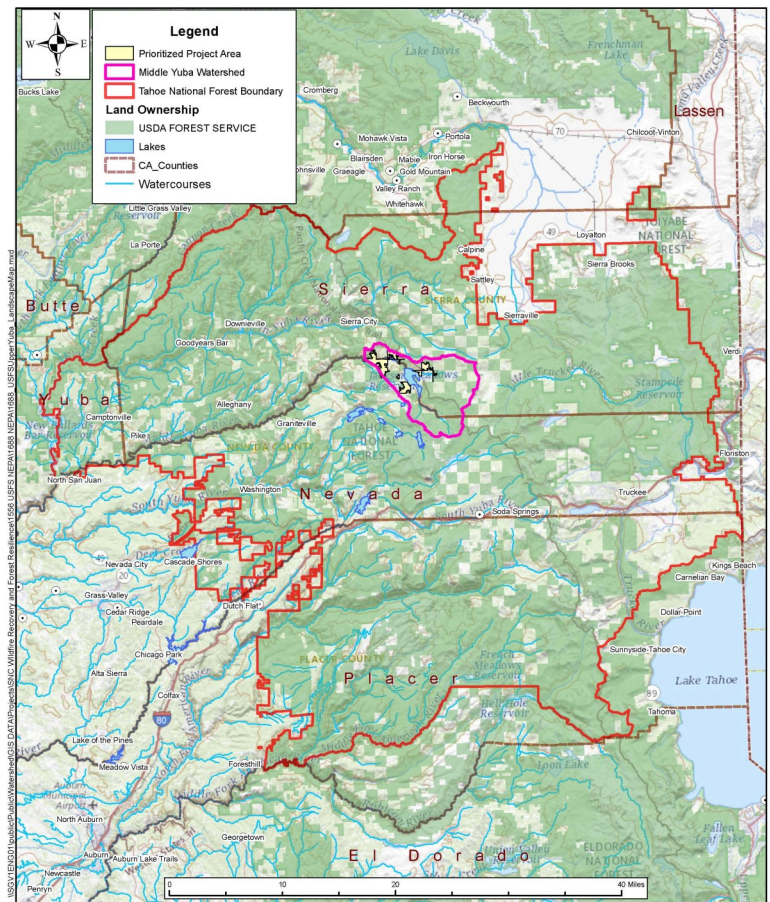
of the project, as part of the National Environmental Policy Act (NEPA). Once the necessary environmental compliance and forestry/fuels planning is complete, work can begin in the forest to increase resiliency of the forest.

The total cost is \$556,100 with in-kind match to be provided by the Tahoe National Forest, Nevada Irrigation District and Wildfires.org.

Specifically, the forest management actions aim to improve forest health, wildfire resilience, key terrestrial and aquatic habitats, public safety and protect critical water system infrastructure. This will protect reservoir water quality and capacity, unique montane meadow environments and other wildlife habitats in the Sierra Nevada, and popular recreational sites like the Pacific Crest Trail, campgrounds and publicly accessible roads.

The project will leverage ongoing planning work by Tahoe National Forest to improve forest health within the Middle Yuba River watershed and will advance implementation of a priority project for the east side of the forest.

The grant announcement was made during SNC's quarterly Board Meeting Thursday, March 7, in Sacramento. [Read more, news release](#)



SNC Project #1688
Upper Middle Yuba Watershed Forest Restoration: Landscape Map

Date: 9/28/2023
NEVADA IRRIGATION DISTRICT
NEVADA COUNTY - PLACER COUNTY
GRASS VALLEY, CALIFORNIA
Scale: 1:528,000
Drawn By: C. TOWNSEND

NID's Annual Mulch Magic Giveaway is April 27

Free mulch available for pick-up

The Nevada Irrigation District (NID) will provide free mulch available to local residents for pick up on a first-come, first-served basis on April 27 at the Nevada County Fairgrounds.

"Mulch Magic is part of the District's continuing efforts to promote conscientious water use and conservation," said NID's Water Efficiency Technician Kaycee Strong.

Mulch is a great tool to help save water in gardening and landscaping. Two or three inches of mulch helps retain water, keeping the soil moist for longer periods of time.

Last year, 80 residents took away about 250 cubic yards of free mulch.

"Get there early on April 27. The mulch will go fast!" Strong said.



- **Date:** Saturday April 27, 2023 from 7am-11am (or until supplies are gone)
- **Location:** Nevada County Fairgrounds- Enter Gate 8 off Brighton Street (event will be held in the arena)
- **Self-load:** Bring your own shovels, container, truck, and tarp to cover your load.

Need Help Loading? Local Boy and Eagle Scouts will be available to help load mulch into your vehicle. NID reminds you to "tip your scout."

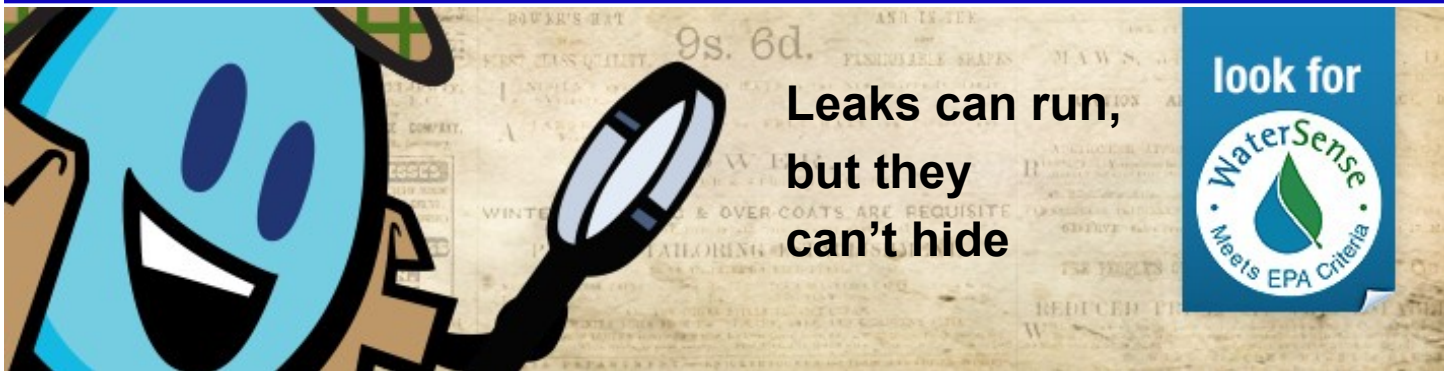
Limitations:

- Limit 1 cubic yard per vehicle
- For personal use only; not for resale or commercial use.

This is the District's seventh annual Mulch Magic Giveaway.

Sponsor: Nevada County Fairgrounds.

Questions? Contact Kaycee Strong at 530-273-6185 extension 1244 or strongk@nidwater.com



**Leaks can run,
but they
can't hide**



Water waste caused by ordinary household leaks, such as running toilets and leaky faucets, can account for nearly 10,000 gallons of water wasted every year.

Plus, 10 percent of homes have leaks that waste 90 gallons or more per day.

But you can find and fix leaks inside and outside your home to save valuable water and money.

Fixing leaks is a way to substantially save water.

Checking for Leaks


To check for leaks in your home, you first need to determine whether you're wasting water and then identify the source of the leak. Here are some tips for finding leaks:

- Take a look at your water usage during a colder month. If a family of four exceeds 12,000 gallons per month, there are serious leaks.
- Check your water meter before and after a two-hour period when no water is being used. If the meter changes at all, you probably have a leak.
- Identify toilet leaks by placing a drop of food coloring in the toilet tank. If any color shows up in the bowl after 10 minutes, you have a leak.
- Examine faucet gaskets and pipe fittings for any water on the outside of the pipe to check for surface leaks.

Here are tips from the U.S. Environmental Protection Agency (EPA):

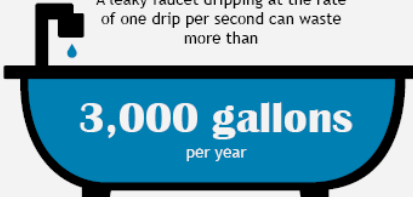
- * [Assess your home and water usage](#)
- * [Bathroom](#)
- * [Kitchen](#)
- * [Laundry room](#)
- * [Outdoors](#)

THE FACTS ON LEAKS



10


percent of homes have leaks that waste 90 gallons or more per day



A leaky faucet dripping at the rate of one drip per second can waste more than

3,000 gallons
per year


Did you know?
Minor water leaks account for nearly



1

trillion gallons

of wasted water each year and is equal to annual household water use in nearly



A shower leaking at

10 Drips

per minute wastes more than

500
gallons per year



11


million homes

Repair

leaks by checking faucet washers and gaskets for wear and replacing them if necessary




Replace old toilets with WaterSense models & save




13,000


gallons of water savings for the average family

Homeowners
can save



10 percent on their water bills




epa.gov/watersense

Snowstorm Damage

Overall, the snowstorm in early March caused minimal damage. NID crews were still busy, making sure canals were clear, and water continued to flow.



A large tree fell into the Bowman–Spaulding Canal that conveys water flows from NID’s Bowman Reservoir to PG&E’s Lake Spaulding.

An NID crew managed to section it into smaller pieces and remove them from the waterway.



SHORT VIDEO (2:24 minutes)



March 2024 roars in ...

NID crews keep the icy water flowing

[Click here to watch](#)



Carole Friedrich becomes NID's first female director in 1978

"Maybe I was a little ahead of my time," mused Carole Friedrich, who, in 1978, was the first woman elected to the Nevada Irrigation District Board of Directors. She made headlines earlier when she became the first woman to serve on the Nevada City Council in 1964 and then on the Local Agency Formation Commission (LAFCO).

In an interview by the Western Slopes Connection Newspaper just after she was sworn in to the NID Board, Friedrich observed that women have a great deal to contribute to politics because they are trained to care about people. "I think we see the solutions to problems in a different manner than men—we bring a different side to issues, and that's good."

"Curiosity and uninhibited questioning is another strength women bring to public service. I ask a million questions, and that's very important. Men seem to be afraid to ask for fear they'll look stupid. Women don't have that problem."

Friedrich served on the NID Board from 1978-1985 as director of Division 1, which covered Nevada City, Cascade Shores, Gold Flat and Union Hill.

Notably, she was Board President during the construction of the Rollins power plant, which was built as a second phase to the Yuba-Bear Hydroelectric Project, funded with a \$65 million bond in the early 1960s.

The Union Newspaper ran a story on Aug. 17, 1981 about the "11-megawatt power plant that stands today beneath Rollins reservoir. Rollins power plant is designed to produce an estimated 70-million kilowatt hours of electricity per year, enough to meet the needs of about 7,000 homes. To generate an equivalent of power using oil, officials calculate, would consume 90,000 barrels of oil per year."

Friedrich dedicated the powerplant on NID's 60th anniversary as a memorial to Albert Scurr, district manager who died in January 1978.

She addressed the women's movement in the 1978 Western Slopes Connection article: "... [Friedrich] admits that without a supportive husband and adequate daycare for her child, when he was young, she would not have been able to maintain her high level of involvement in the community.

'The good thing about the women's movement is that it's given women more choices. But it's hard for me to identify with it because I've always been able to do what I wanted. I'm certainly not a downtrodden little woman. The movement is necessary, it's necessary—I didn't have a women's movement when I was trying to do these things.' ... 'I was socialized differently than most women,' she concedes. 'I love to get into good conversations with people who are aware of and interested in the county's problems. I mean, how much time can you spend talking about recipes?'"



NID Female Directors

- Carole Friedrich (1978-1985)
- Nancy Weber (1998-2018)
- Laura Peters (2018-2022)
- Ricki Heck (2018-present)
- Karen Hull (2020-present)



Directors tour the site of the new Rollins Power Plant in 1980.

The importance of infrastructure to keep water flowing has been making headlines lately.

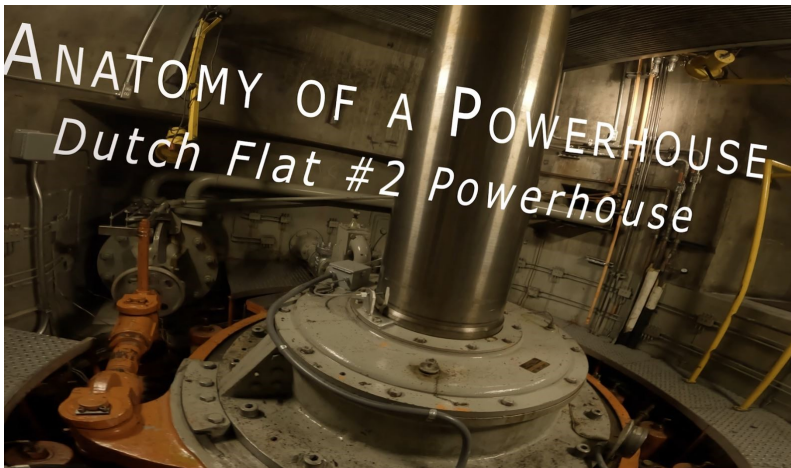
So what is infrastructure as it relates to NID and, ultimately, to you?

At NID, infrastructure includes dams, reservoirs, treatment facilities, canals, conduits and pipes. In addition, the District generates hydroelectricity, which requires powerhouses, afterbays and forebays.

That's a lot. We'd like to break it down with examples. Through short videos highlighting different infrastructure components, our employees will tell you about their roles in keeping the NID system operating efficiently so you get reliable deliveries of water.



[Anatomy of a Powerhouse](#) - "It's pretty unique"

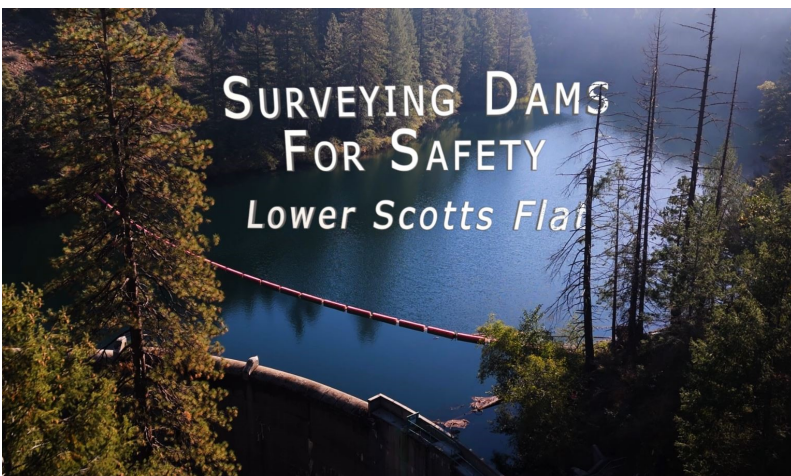


Now this is something you have never seen before. Come along for a tour inside the NID hydroelectric powerhouse at Dutch Flat.

Background: Dutch Flat No. 2 Powerhouse is an off-stream powerhouse on the Bear River. It was constructed in 1964-65 as part of the Yuba-Bear Hydropower Project. The powerhouse is rated at 24.57 megawatts.

[Click here to watch Anatomy of a Powerhouse \(1:41 minutes\)](#)

[Surveying Dams for Safety](#) - "We used to just measure by stringline in the old days"



As a safety measure, the NID survey team monitors the dam at Lower Scotts Flat to check for horizontal and vertical movement.

Background: NID surveyors constantly monitor the District's dams as a safety function. Data is logged over time to provide information regarding the effects of aging, earthquakes, erosion, storm events, and other variables on the overall health of the dam.

Back in the day, surveyors used stringline to measure a dam and see if it was deformed. Today, technology allows surveyors to be absolutely precise with their measurements.

[So how is it done? Watch the video \(2:07 minutes\), click here](#)



Bowman Lake

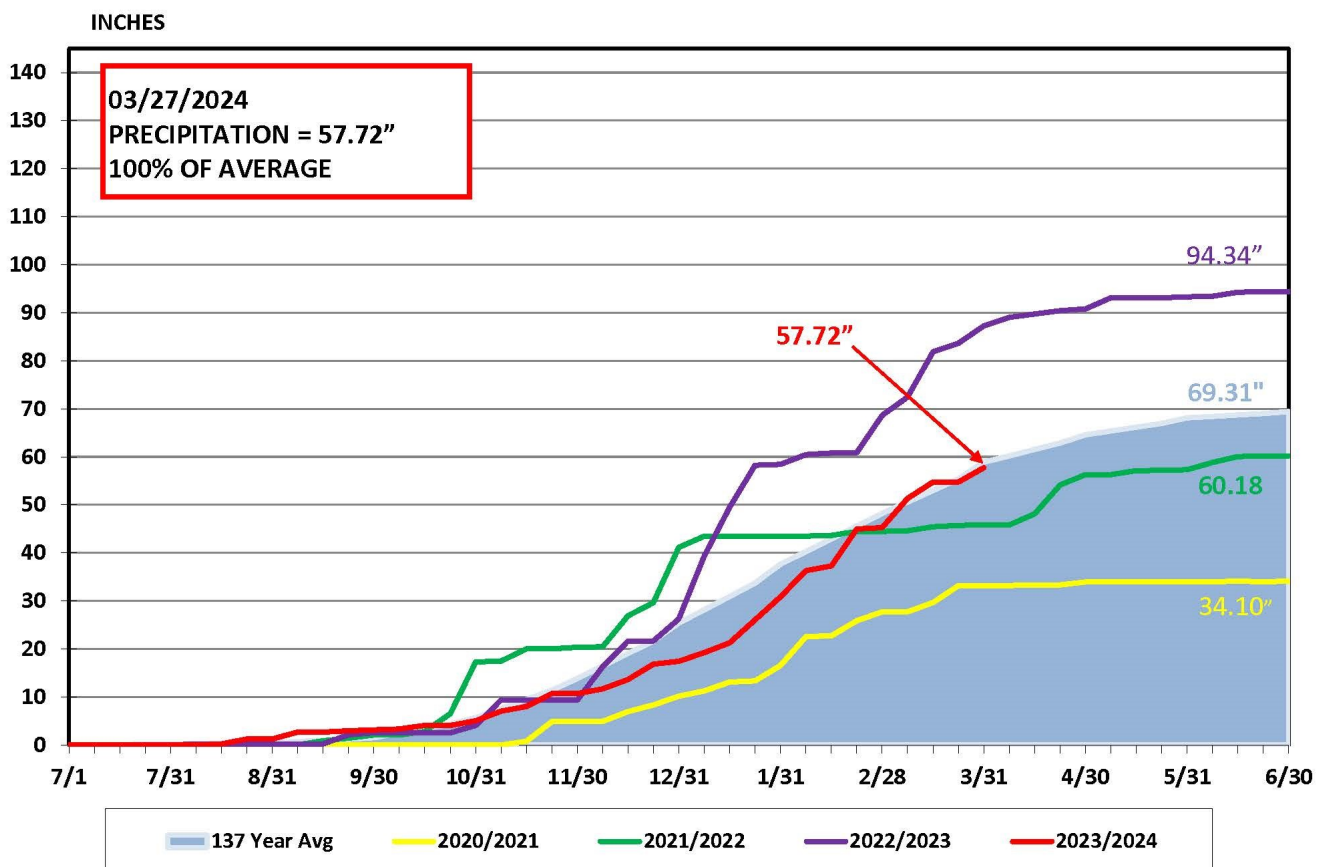
NID has been keeping weather records for Bowman Reservoir (elevation 5,650 ft.) since 1929.

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 March 27, 57.72 inches of precipitation had fallen at Bowman. That is 100 percent of average.

BOWMAN LAKE PRECIPITATION



Reservoir storage is 102% of average

Reservoir storage is 223,802 acre-feet as of March 27. That is 83 percent of capacity and 102 percent of a 10-year average.

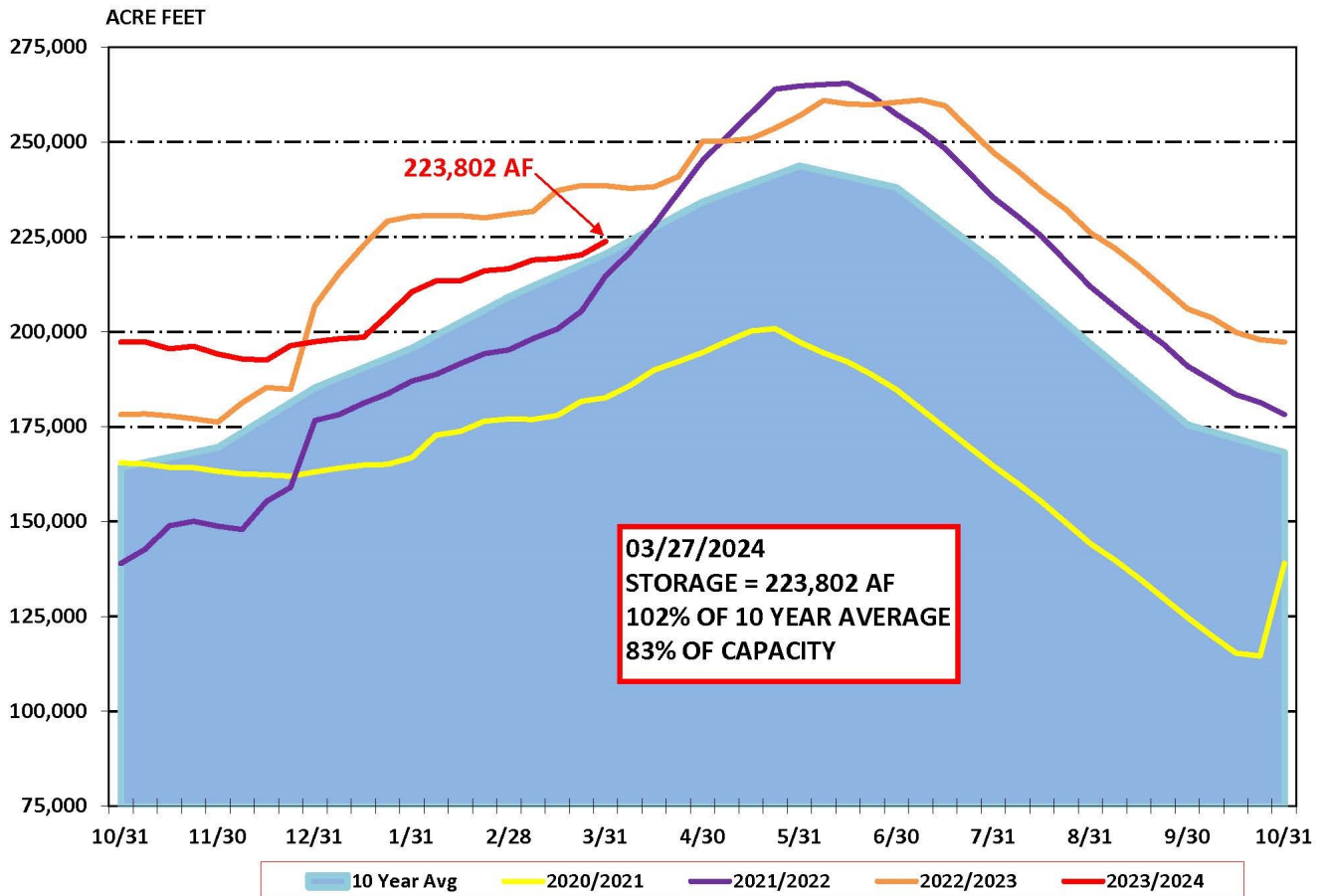
NID's water managers regularly post updates of local reservoir levels. You can see how water levels fluctuate in easy-to-read charts.

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



Sawmill Lake

NID RESERVOIR STORAGE



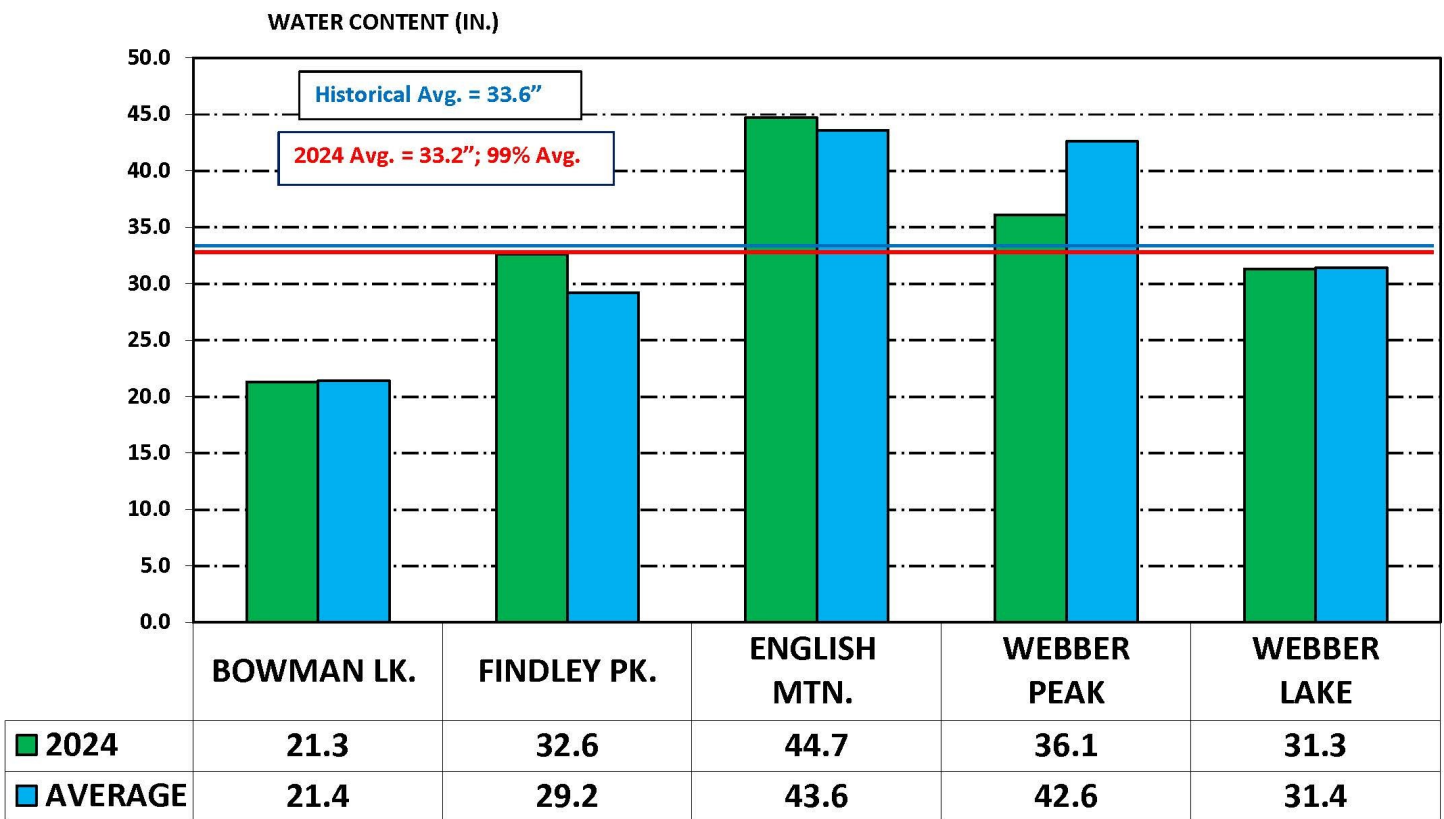
NID monthly snow survey: 99% of average

NID conducts its snow surveys on five snow courses of varying elevation that provide water to raw- and treated water customers.

Snow water equivalent is an indicator of how much water the snowpack contains. This helps water managers plan for water use.

NID is a member of the California Cooperative Snow Survey. Results of the District's snow surveys are used to predict water availability locally and statewide.

NID SNOW SURVEY April 1, 2024 WATER CONTENT



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](#)

South Yuba Canal

An NID crew walks atop the South Yuba Canal during a planned outage, during which workers repair and upgrade the crucial infrastructure.



A NID crew walks atop the South Yuba Canal during a planned outage, during which workers repair and upgrade the infrastructure.

Meetings & Events

Board of Directors Meeting
Wednesday, April 10, 2024
NID Main Office, Grass Valley

Board of Directors Meeting
Wednesday, April 24, 2024
NID Main Office, Grass Valley

Board of Directors Meeting
Wednesday, May 8, 2024
NID Main Office, Grass Valley



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



Bowman Lake