



GM Newsletter

February 2024

From The Desk of Jennifer Hanson, General Manager

Water For Life

BOARD OF DIRECTORS



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Message from the General Manager

Midway through winter, the Sierra snowpack is increasing and NID reservoir levels are slightly above average. This is a positive sign of water availability for our customers this summer.

One issue NID is keeping an eye on right now is an upcoming decision by state water officials to help imperiled fish in the Bay-Delta. One proposal is for 55 percent unimpaired flows down to the delta and beyond. This would cause significant and irreversible impacts to our local water supply and watersheds.

NID supports a holistic alternative called the Healthy Rivers and Landscapes agreements as the best alternative for balancing local water needs with Bay-Delta concerns.

Read about the issue and the threats to NID water supply and operations, not to mention our customers and local watersheds. The story is on [Pages 2 and 3](#).

We are one community with many water needs. When it comes to the Bay-Delta issue, we need to keep in mind that there is a way to provide the water to keep our local farms, cities, and wildlife habitat thriving while providing water for downstream fish. The proposed 55 percent unimpaired flow is not the answer.

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Winter storms mean NID crews are on patrol to keep canals clear and flowing.

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Unimpaired flows to the Bay-Delta threaten our water supply

NID's promise: to keep water flowing for our community



Water has been a clarion call for decades throughout the West. Today, a new challenge for NID is presenting itself in a state proposal that could force more than half of our local water supply directly to the San Francisco/Bay Sacramento-San Joaquin Delta (Bay-Delta).

What's the issue?

California water officials are working to update an action plan for the Bay-Delta to address serious declines of native fish populations and improve water quality.

The State Water Resources Control Board is in the process of deliberating between generally two options: a flow-only approach, which involves flushing 55 percent unimpaired flows (55%UIF) down rivers and streams into the Bay-Delta or an alternative that calls for a more balanced approach, which combines sustainable habitat restoration with sufficient water flow for aquatic wildlife and other diverse beneficial uses of water.

At first glance, the 55%UIF approach does not appear so detrimental. But looking deeper, we find that it forsakes our local water supply and adequate aquatic habitat for the imperiled fish in question. Unimpaired flows are defined as water flowing in streams that would occur if all runoff from the watershed remained in tributaries without dam storage or diversions.

The 55%UIF regulations, if implemented, would cause significant and irreversible impacts to our community by forcing drastic cuts in water supplies and services while altering our regional way of life.

NID supports the holistic alternative, known as the Healthy Rivers and Landscapes Program. This approach will provide a new pathway for diverse interests to work together stressing that every drop needs to serve multiple uses.

Beyond significant improvements for declining fish populations and wildlife habitat, it recognizes the District's commitment to providing essential water supply reliability for its customers and communities. We depend on water diversions of Sierra snowmelt into reservoirs to distribute to local farms, fields, households, and cities.

This approach will also allow District water managers to adapt operations based on real-time conditions and enable broad coordination across watersheds to manage flows for maximal benefits. This more flexible, adaptive management is critical as climate change increases uncertainty and drives extreme conditions.

In the early 1920s, Nevada County farmers, ranchers and average citizens rallied the vote to establish a district that could secure a dependable water source. It was an exceptional move. The promise was that the new district would deliver water from watersheds of the Sierra Nevada to parched customers in the foothills of Nevada and Placer counties.

Since the formation of the Nevada Irrigation District (NID) in 1921, our towns and farms have flourished and as a result, we live in one of the finest regions in the state.

Now, in the grip of extreme weather events and a changing climate, we are recognizing more than ever that every drop of water is precious. It is central to our health and wellness, our environment, and it is what keeps our economy thriving.



Modeling helps us see the impacts on future water supply

Over the past eight months, NID commissioned a computer model to predict our regional future water supply in the face of climate change and projected demands. The model calculated both the impacts of a changing climate and a 55%UIF requirement. The challenges of climate change are serious. Compounding that, the results showed that on average under the 55%UIF scenario, NID would face a water supply deficit in more than 70 percent of the next 50 years moving forward.

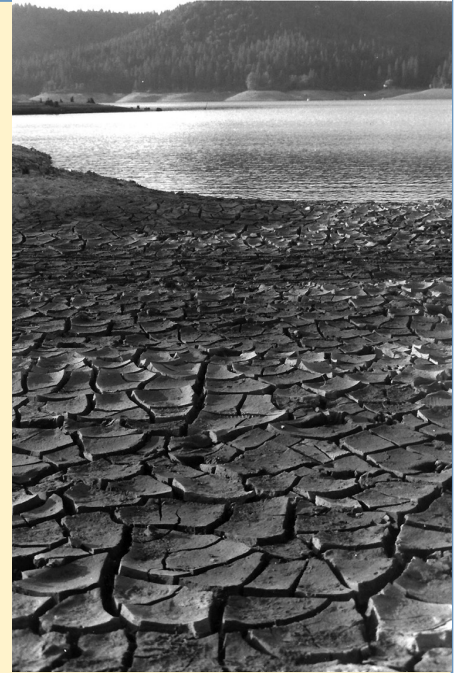
Case Study: Scotts Flat Reservoir

Scotts Flat Reservoir is the primary source water supply for Nevada County. Given its small Deer Creek watershed, Scotts Flat is highly reliant on interbasin diversion from the Yuba River.

Under the 55%UIF approach, interbasin water deliveries would be constrained, forcing water to be kept away from Scotts Flat. As a result, the reservoir would be effectively at “dead pool” for the majority of years. Dead pool is when reservoir levels are so low, water can no longer flow downstream.

At dead pool, there effectively would be limited water supply for NID customers and would greatly hinder other beneficial uses including recreation and hydropower generation.

Learn more about negative impacts to Scotts Flat and see a bar chart showing the data. [Click here.](#)



Our Community Water

When you think about it, we are one community with many water needs. NID water is used for the food we find in our local stores and at our farmers’ markets. Regional ranches provide the meat on our tables at dinner.

Our wildlife depends on adequate water to support healthy habitats. Water also supplies our lakes and reservoirs that are central for recreation and soul-soothing blue space. And, of course, NID provides the drinking water in our homes.

NID understands that water is essential for our economic, social, and ecological well-being. Our community will continue to thrive only as we are able to advance healthy rivers and lakes, landscapes and populations from the Sierra to the foothills.

A 55%UIF will devastate our way of life as we know it. The Healthy Rivers and Landscapes Program agreement is our best alternative for balancing local water needs with Bay-Delta concerns.

What can you do?

We need to work together to address the diverse array of water demands. Regardless of your particular interest in water use, at NID we believe that we all want the same thing: for our community and aquatic wildlife to thrive.

Please educate yourself about the proposal before the State Water Board. Visit the NID website to learn more about the [Healthy Rivers and Landscapes Program](#).

Update: Storm Damage

Whenever it storms, NID crews are at the ready to respond to damages that might threaten District infrastructure.



An NID crew needed to clear a large downed Gray Pine on the Magnolia III Canal, which is the raw water feed to the Lake of the Pines Water Treatment Plant.



Left: an NID equipment operator cleans up storm damage on the Smith Gordon canal in Penn Valley.

Below: NID electricians ensure the lights function at the Auburn Water Treatment Plant.



NID Directors approve lake name “Hoot Owl”

The NID Board of Directors has approved the naming of “Hoot Owl Lake,” a previously unnamed tiny lake located just north of Island Lake on Grouse Ridge in Nevada County.

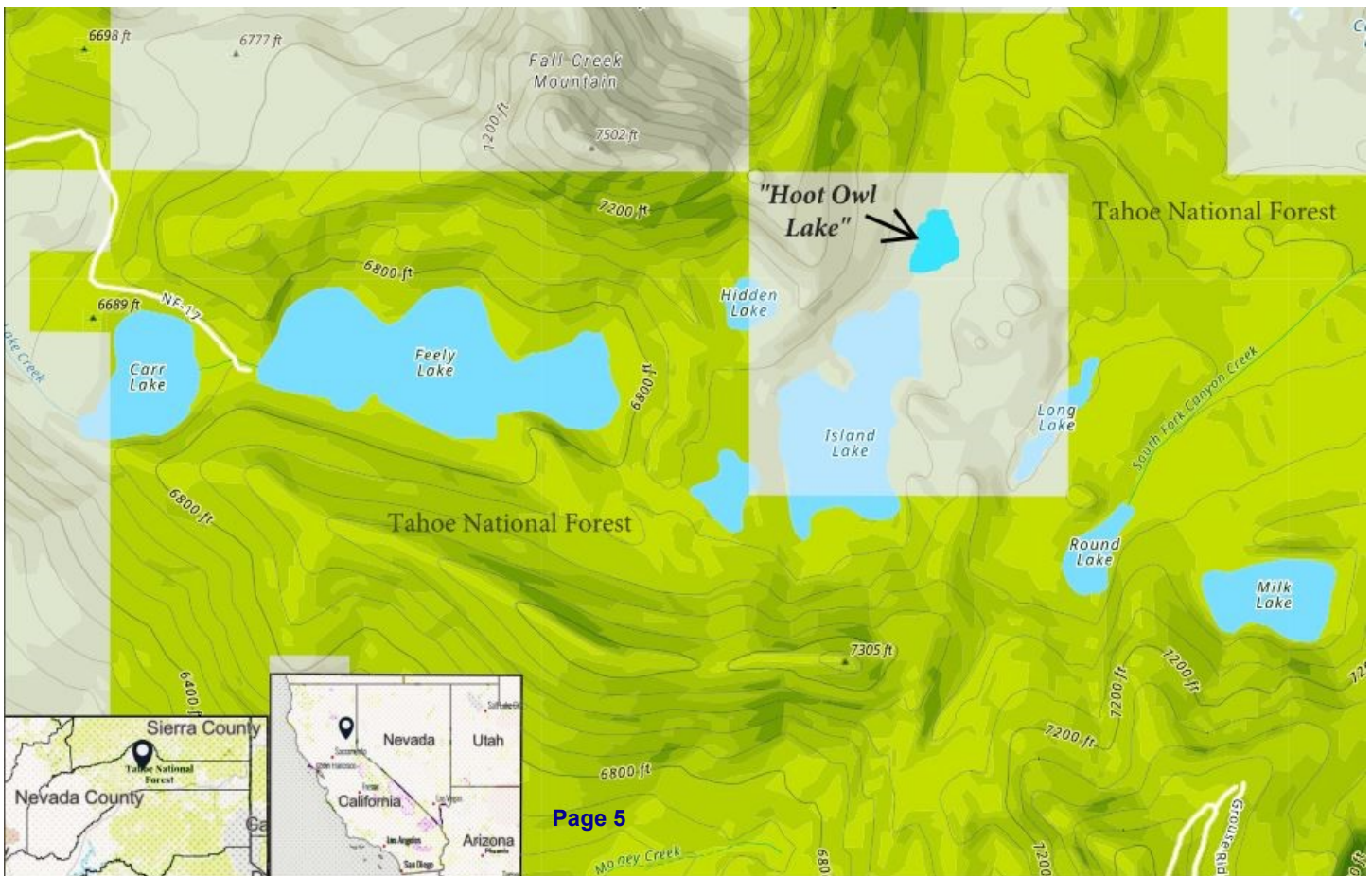
The request came from a Smartsville resident who grew up hiking and camping around the Grouse Ridge area. She noted it is common to see great horned owls and that it is common to hear the owls hooting at night: “We have base camped at the end of Island Lake many times As we settled in for the night listening to the evening sounds and the Great Horned Owls, I thought that this lake should be named ‘Hoot Owl Lake.’”

NID Directors, who were contacted by the United States Geological Survey (USGS), were pleased to approve the request, and a letter of support for the name will be sent to the California Advisory Committee on Geographic Names (CACGN).

The lake is 3.1 acres in size and was previously thought to be part of Island Lake. Recent imagery has been used by USGS to show that the lake is distinct. Before the name could be approved, NID staff confirmed there are no conflicts associated with the proposed name.



Island Lake (Hoot Owl Lake is just beyond the small dam in the background center).



NID declares surplus water supply

What's a surplus supply?

The amount of water that exceeds the needs of NID customer demands (within the District's service area boundary).

The NID Board of Directors has supported a declaration for surplus water as confirmation of an ample water supply for this year.

The surplus declaration is important as it allows NID to provide water service to a small number of outside-District customers per an annual contract. Additionally, NID supplies raw water to the City of Grass Valley and Nevada City through a long-term surplus water supply agreement.

Each year, prior to the start of irrigation season that begins in mid-April, Directors review the forecasted water supply to consider a surplus water declaration.

This is based on an analysis of forecasted water availability for the upcoming summer months. This considers current storage and anticipated snowpack runoff, which is based on snow survey data.

The declaration is based on the following:

- The 2022/2023 water year was one of the wettest on record, with an April 1 snowpack that was ranked as the 3rd highest in recorded history, leading to above-average runoff
- Careful water management throughout the 2023 irrigation season capitalized on the increased runoff, maintaining a high reservoir carryover storage into 2024
- Precipitation amounts at the District's Bowman Lake recording station are at 82 percent of the average for this date as of February 1
- The February snow survey results indicated a snowpack with a water content of only 55 percent of average. However, recent storms occurring after the survey have increased the snowpack
- The District's current water storage is at 210,900 acre-feet, representing 108 percent of average for this date, with lower elevation reservoirs nearly full, and high elevation reservoirs forecast to fill and spill once snow runoff begins
- The forecasted available water supply for April 1, 2024, is 276,600 acre-feet, exceeding the threshold for the implementation of the Drought Contingency Plan (in the Urban and Agricultural Water Management Plans) by 40,900 acre-feet

NID snow survey for February: 55% of average water content (before the storms)

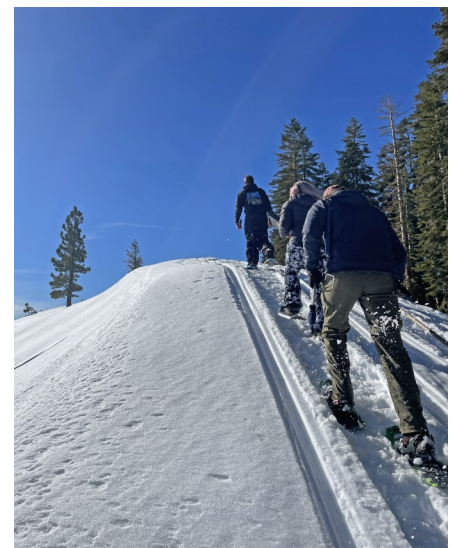
What a difference a couple of weekends make. The atmospheric rivers that have powered in have brought heavy snow to the Sierra Nevada. But at the beginning of the month, snow in the mountains measured about half of average.

During the first snow survey of the year, NID hydrographers measured an average of 11.2 inches, or 55 percent, of water content in the snow. The historical average is 20.5 inches. Interestingly, total January precipitation was 103 percent of average at 12.65 inches. Despite average precipitation for the month of January, warmer weather patterns contributed to a below-average snowpack.

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

The District conducts its snow surveys on courses at varying elevations that provide water to raw water and treated water customers.

See the data for the February snow survey, [click here](#).



NID hydrographers snowshoe to take measurements on Webber Peak.

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

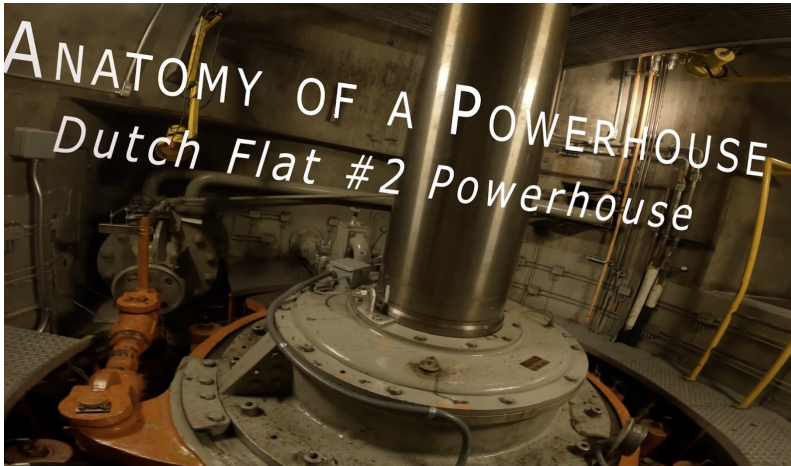
So what is infrastructure as it relates to NID and, ultimately, to you?

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"

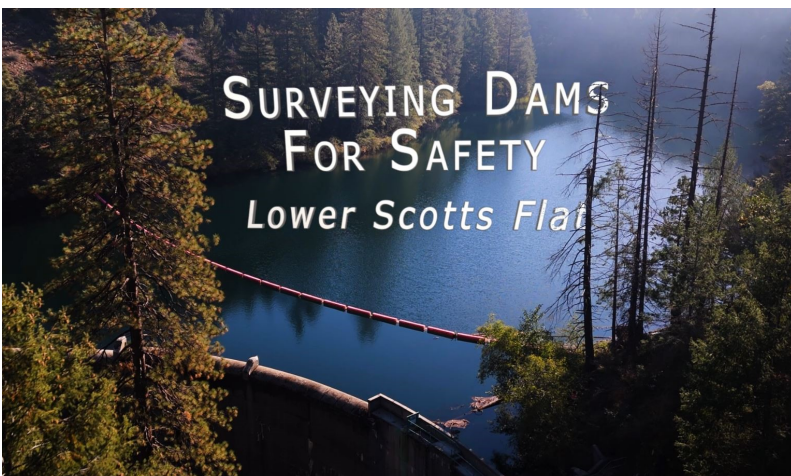


Now this is something you have never seen before. Come along for a tour inside the NID hydroelectric powerhouse at Dutch Flat.

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](#)



Strategic Alternatives for the future discussed

Presentation made before the Nevada County Board of Supervisors

NID General Manager Jennifer Hanson provided an overview of the work to-date of the Plan for Water process before the Nevada County Board of Supervisors on Feb. 20. NID Directors are discussing different strategic options to determine the best ways to meet the community's demand for water over the next 50 years.

The Plan for Water is a public collaboration process that has included a review of NID's available water supply and the long-term impacts on varying water demands.

The Plan is showing how future supply and demand scenarios may be integrated into the District's water management practices. Key to this has been water modeling that provides demand and supply projections for a 50-year planning horizon.

Before the Board of Supervisors, Hanson provided an overview of different strategies that are being considered to address future unmet demands, which are projected to be about 35-thousand acre feet, depending on the season. The strategies include operational changes, watershed management, canal improvements, potential storage augmentation, and demand management.

Initiated in November of 2021, the process is scheduled to be completed in March of 2024. Once the undertaking is complete, the strategies that have been selected for further consideration will be included in the appropriate master plan (treated water, raw water, watershed, and operations).

During the past few Plan for Water workshops, NID Directors have discussed different strategic alternatives going forward into the future.

Operations:

- Canal Automation
- Metered Raw Water Accounts
- Rotation of Raw Water Accounts

Watershed Management:

- Meadow Restoration within District lands
- Forest Management (fuel reduction)

Canal Improvements:

- Encasement of Canals
- Lining of Canals

Demand Management:

- Conservation
- Conservation rebates
- Hierarchy for Raw Water Uses
- Regulations (treated water)
- Abandon Small Canals with Limited Customers
- Reduce the irrigation season

Storage augmentation:

- Sediment Removal from Existing Reservoirs
- Increase Rollins Reservoir 10,000 acre-feet
- Increase Rollins Reservoir 50,000 acre- feet
- Build Centennial Reservoir 110,000 acre-feet

NID Directors will continue discussions during the March workshop, the date of which will be announced shortly.

- * Read more details about the alternatives for addressing future predicted unmet demands (presentation from the Plan for Water Jan. 25, 2024 workshop), [click here](#).
- * Read the Nevada County Board of Supervisor presentation from Feb. 20 (with graphs), [click here](#)
- * Learn more about the Plan for Water Process on the NID website, [click here](#)

State program will help residents pay their water bill

California's Low Income Household Water Assistance Program (LIHWAP) will remain open through March 2024

NID is encouraging low-income customers to apply for help paying their current or past-due water and sewer bills by signing up for the [Low Income Household Water Assistance Program](#) (LIHWAP).

Customers now have until March 31, 2024 to apply, and eligible households should apply now while funds last.

LIHWAP, initially established by Congress in December 2020 during the COVID-19 pandemic, is designed to support financially struggling low-income households to settle outstanding water bills. Originally slated to conclude in Fall 2023, the program has received a federal extension through March 2024.

With the LIHWAP extension, more low-income households can find relief from water and sewer costs. NID is pleased the program has been extended, yet it's crucial to note that funding is limited and assistance is granted on a first-come, first-serve basis. Residents are encouraged not to delay their applications.

NID urges eligible individuals and families to seize this opportunity for financial assistance. Through LIHWAP, thousands of low-income residents in Nevada and Placer counties have already received substantial financial support, addressing both current and overdue bills.

Many Customers Already Qualify

Households with an income below 60 percent of the state median income, such as \$103,856 for a family of four, and households that are already participating in CalFresh, CalWORKs, or the Low Income Home Energy Assistance Program (LIHEAP) are eligible for LIHWAP.

Apply Now for Assistance

LIHWAP is administered by the [California Department of Community Services and Development \(CSD\)](#).

To learn more about the program, find your local LIHWAP service provider, and apply visit <https://www.csd.ca.gov/WaterBill>.



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

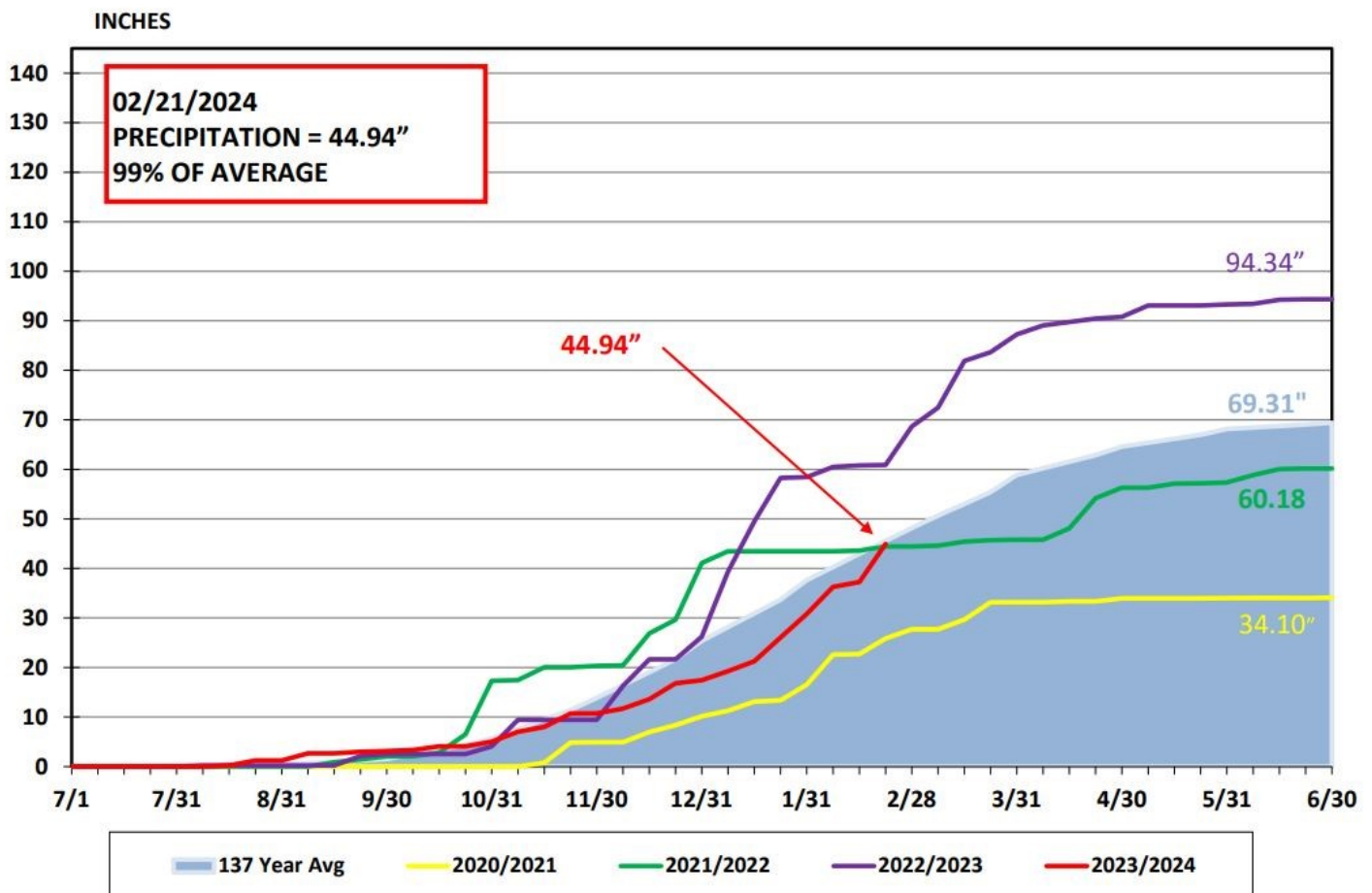
NID has been keeping weather records for Bowman Reservoir (elevation 5,650 ft.) since 1929.

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 Feb. 21, 44.94 inches of precipitation had fallen at Bowman. That is 99 percent of average.

BOWMAN LAKE PRECIPITATION



Reservoir storage is 105% of average

Reservoir storage is 216,032 acre-feet as of Feb. 21. That is 80 percent of capacity and 105 percent of a 10-year average.

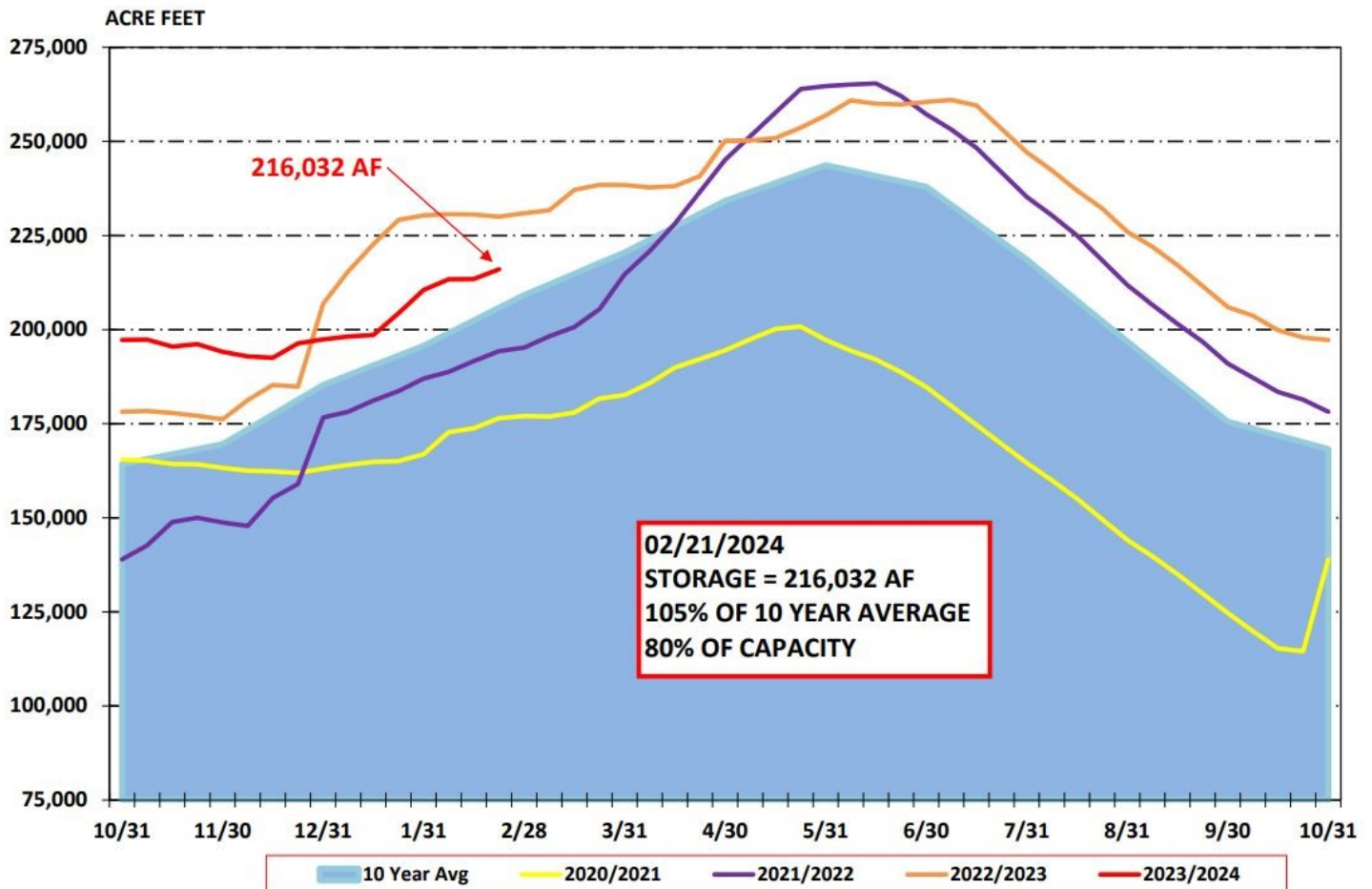
NID's water managers regularly post updates of local reservoir levels. You can see how water levels fluctuate in easy-to-read charts.

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



Sawmill Lake

NID RESERVOIR STORAGE



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](#)

Protecting the system in Lake of the Pines



An NID maintenance crew recently replaced a valve in Lake of the Pines. Now, when a water outage is necessary only six to eight homes are affected, compared to up to 100 homes.

Board of Directors Meeting
Wednesday, Feb. 28, 2024
NID Main Office, Grass Valley

Board of Directors Meeting
Wednesday, March 13, 2024
NID Main Office, Grass Valley

Board of Directors Meeting
Wednesday, March 27, 2024
NID Main Office, Grass Valley

Meetings & Events



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



Bowman Lake