



GM Newsletter

April 2022

From The Desk of Jennifer Hanson, General Manager

Water For Life

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Message from the General Manager

It was nice to see rain this month after such a long dry spell earlier in the year. But the recent storms represent just a fraction of what we need to make up for record-low precipitation.

Now we are entering the warmer days of spring with a snowpack that is well below average and runoff that is already underway. This puts pressure on our water resources. And what becomes clear is the necessity for everyone to do their part to reduce water use.

Every drop saved really does matter.

Last year, when drought gripped our region and we began to feel the impacts of a water shortage, our community stepped up. We saved 12 percent,

compared to 2020. That was good progress. And we could see those around us were embracing wise water use as a daily habit.

This year, as we enter the third consecutive summer of drought, an early snowmelt means less water in the months to come.

Unfortunately, so far this year, we've fallen off our good conservation practices. Overall, we've used 10 percent more water than in 2021. Last month, we used 22 percent more than in March 2021.

It is more critical than ever that we all do our part. Let's step up to make sure we avoid any shortages of water for our fields, farms and drinking water for our homes.

Now is the time to be water wise and save as much as we can. Conservation truly will make a difference for our community and families.



Irrigation Season begins

On April 15, NID began filling canals that transport untreated water to farms and ranches. Flowing through 500 miles of canals, District water irrigates 32,000 acres that are used for grazing and growing crops, such



as wine grapes, nursery stock, apples, rice, plums, citrus, grass, and alfalfa hay.

What are the top crops grown by NID customers?

[See page 8](#)



Plan for Water

Invitation to get involved

The Plan for Water process will continue on May 10 with a workshop focusing on watersheds. This discussion will include an NID presentation on watershed management.

The process is intended to be a comprehensive analysis of the District's water needs for the next 50 years.

All meetings are open to the public, and community input and questions are encouraged throughout the process.

NID looks forward to hearing from the public and working together to develop strategic options that reflect a balanced mix of community perspectives to guide the District's water management into the future.

[View the NID watershed presentation Plan for Water webpage](#)

“Risk is added as a new stage

“Risk” has been added as a new stage in the Plan for Water process. The discussion will include risk analysis and mitigation efforts presentation relating to three organizational considerations: Operational; Regulatory; and Environmental.

View the updated planning matrix [here](#). The matrix details each of the 11 stages, including Stage 4: Risk.

‘No Motor Day’ at Scotts Flat Reservoir is on May 15

The quiet, natural beauty of Scotts Flat Reservoir will be showcased on Sunday, May 15, when NID hosts its annual “No Motor Day.”

Non-motorized watercraft, including sailboats, canoes, kayaks and paddleboards, will be allowed entry to the Scotts Flat Recreation Area without charge for the day.

Use of motorized boats will be suspended for the entire day.

Vehicle admission is \$15, which includes up to four people.



April Snow Survey: dry, warm weather starts early runoff

NID calls for conservation

Dry weather and warming in higher elevations do not bode well for the summer water supply.

Water content in the snow is only 55 percent of average for this time of year, based on the findings of the April survey on snow courses that provide water to raw- and treated water to District customers.

On the five courses, the April 1 historical average water content is 33.4 inches. The latest snow survey measured 18.4 inches.

Dry conditions have continued through March and resulted in precipitation that was well below the monthly average. In addition, the latter part of March experienced some very warm temperatures and, as a result, created early runoff from the snowpack.

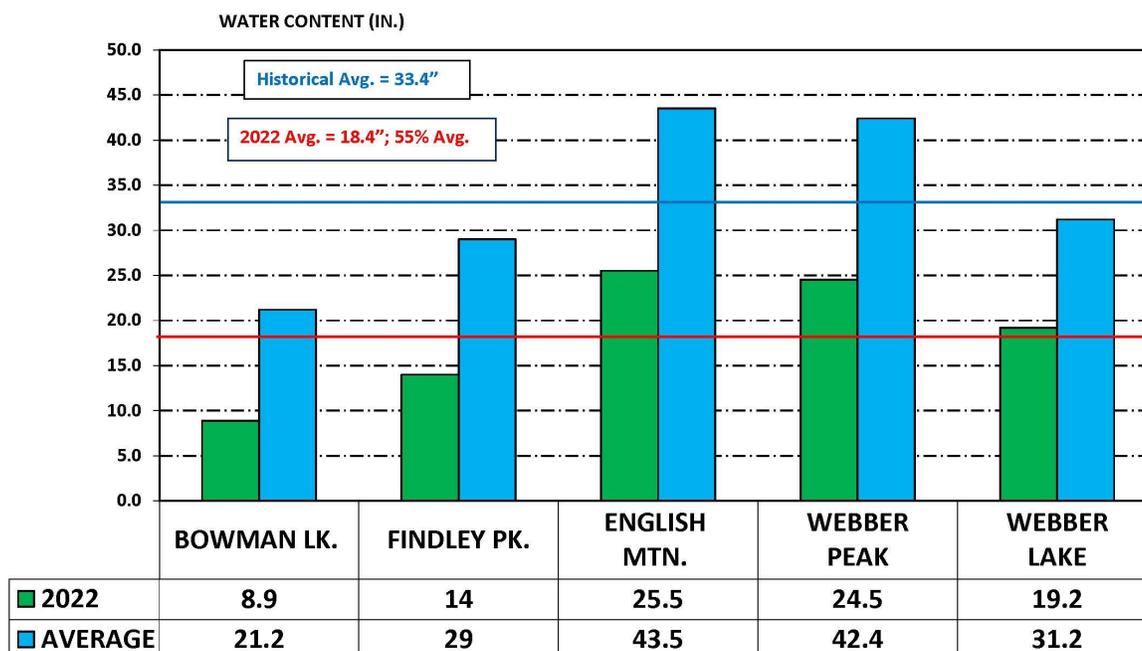
NID's nine reservoirs are currently storing 213,848 acre-feet of water, which is 79 percent of capacity and 98 percent of average.

While reservoir storage is near average for this time of year, the early runoff from the snowpack will mean a longer drawdown period through the irrigation season.

This will result in lower carryover storage heading into the fall. NID plans on utilizing all available supplies and continues to request conservation.



NID SNOW SURVEY APRIL 1, 2022 WATER CONTENT



Read the April Snow Survey and see the statistics for each of NID's five snow courses.

[Click here](#)



Bowman Lake statistics

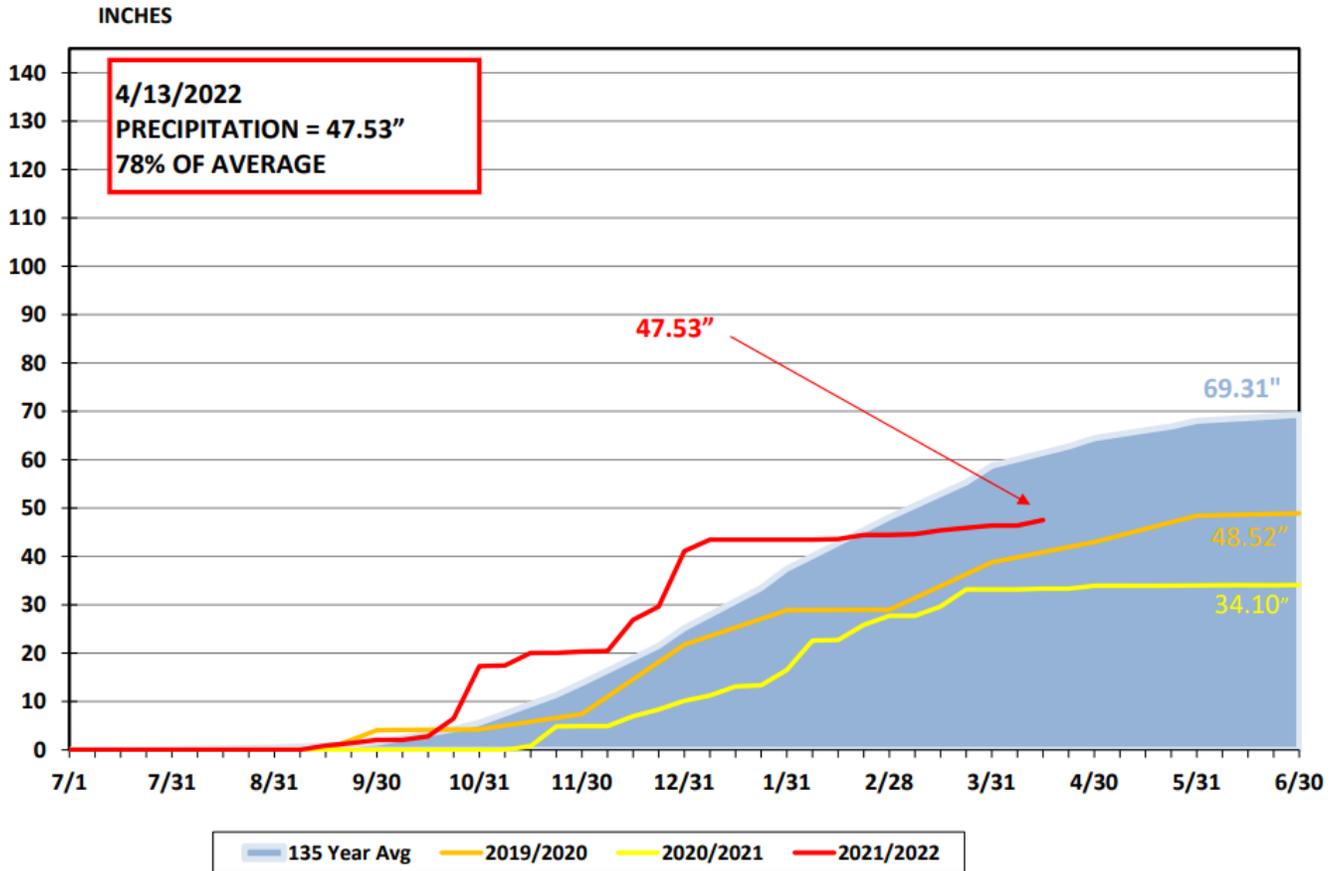
NID has been keeping weather records for Bowman Reservoir (elevation 5,650 ft.) since 1929.

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 April 13, 47.53 inches had fallen, which is 78 percent of average.

BOWMAN LAKE PRECIPITATION



Keep track of reservoir levels

NID reservoir storage has improved since last year, but we still are lacking. Storage is 228,171 acre-feet as of April 13. That is 102 percent of average and 84 percent of capacity.

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

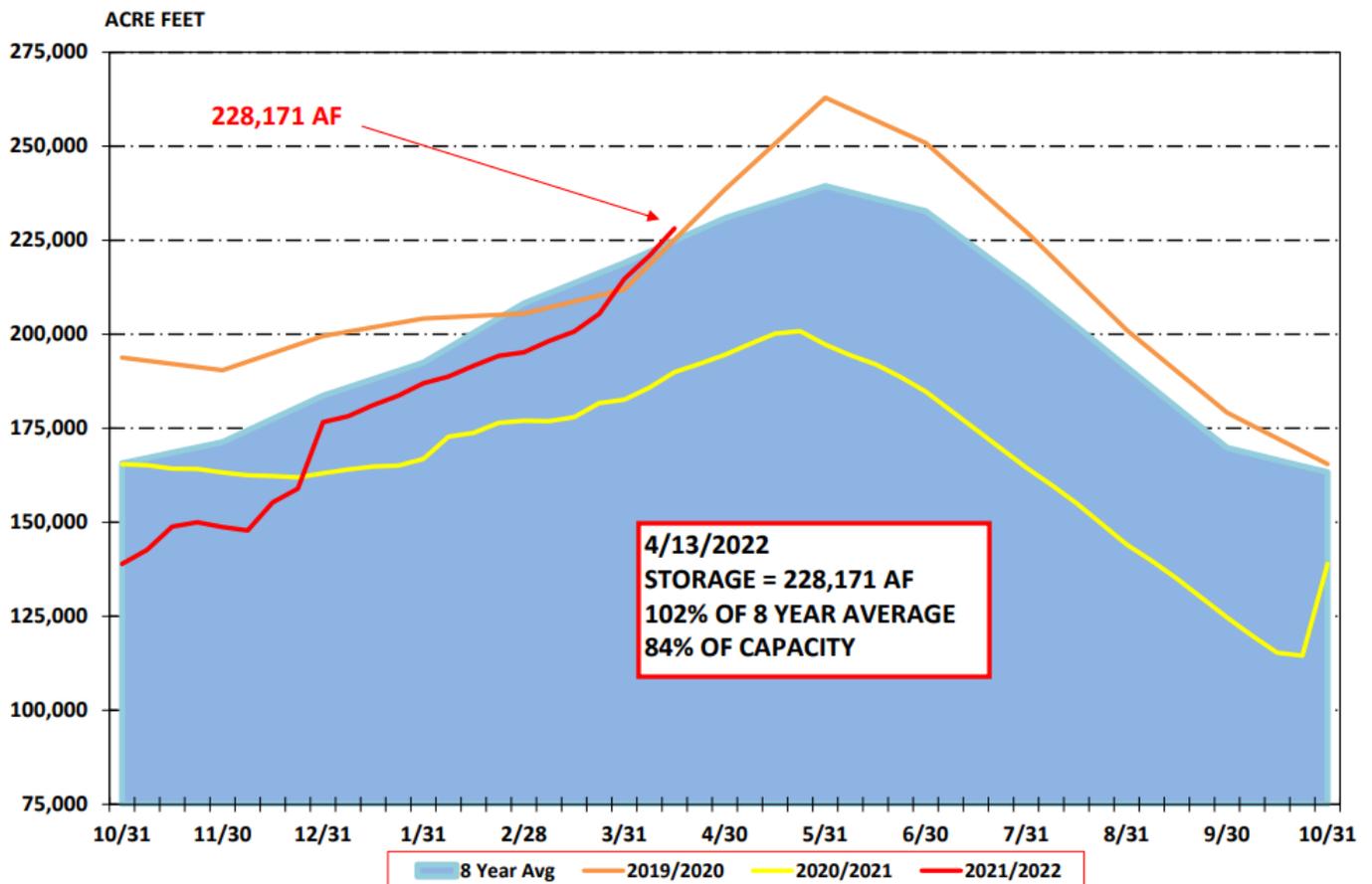
The District's River & Reservoir Data measures both capacity and elevation for different reservoirs, from the High Sierra Canyon Creek watershed (Bowman Lake and others) to the Deer Creek watershed (Scotts Flat Lake) and Bear River watershed (Rollins Lake).



Faucherie Lake

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

NID RESERVOIR STORAGE



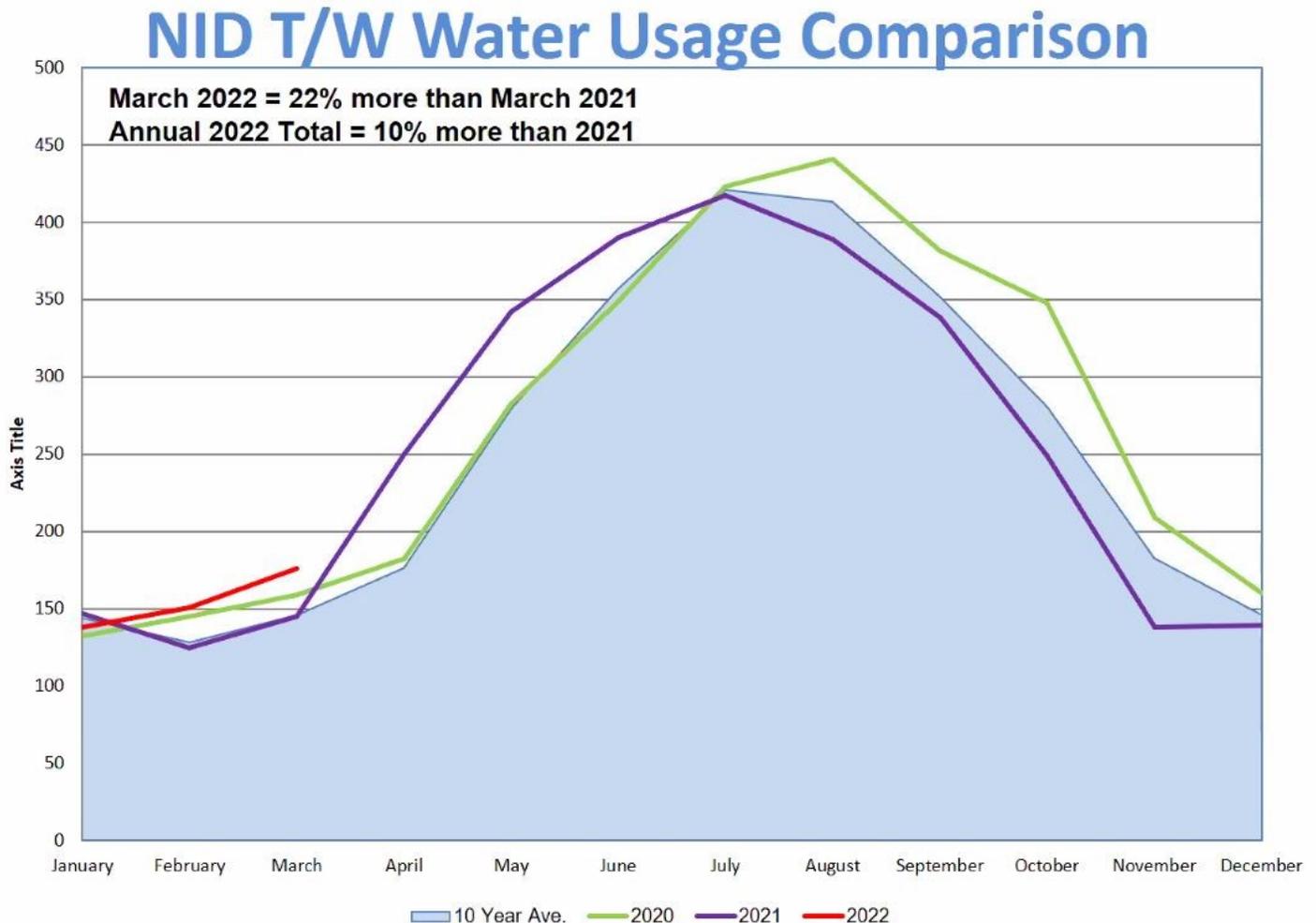
Water conservation lags—water usage up 22%

The warm, dry weather means customers are using more treated water. In March treated water customers used 22 percent more water compared to March 2021.

Compared to 2021, we are using 10 percent more water.

Still experiencing drought conditions and facing a dry, warm summer, our community can't afford to waste water. It's important to make water efficiency a habit.

Let's start saving water. Start with knowing what you use
[Measure Your Water Use Calculator](#)



The above graph shows the overall treated water usage and effectiveness of conservation within the District's treated water customer base.

Mulch Magic Giveaway returns on May 14



**FREE
MULCH!**

Mulch is a great way to save water.

2-3 inches of mulch helps retain water and keeps soil moist for longer periods of time

[LEARN MORE HERE](#)

FREE MULCH available for pick-up! NID and the Nevada County Fairgrounds will be hosting the Mulch Magic Giveaway.

When: Saturday May 14, 2022 7:00 am – 12:00 pm.
First come, first served while supplies last. Get there early!

Location: Nevada County Fairgrounds. Enter Fairgrounds at Gate 8 off Brighton Street. The event will be held in the arena.

SELF-LOAD. Bring your own shovels, containers, truck, and tarps.

Questions? Contact NID's Water Efficiency Technician Kaycee Strong at 530-273-6185 ext. 1244 or strongk@water.com



Need Help Loading?

Local Boy and Eagle Scouts will be available to help load mulch into your vehicle.

****BE SURE TO TIP YOUR SCOUT****

Limitations:

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

Irrigation Water



Nevada Irrigation District was formed in 1921 to provide water to ranches, fields and orchards in Nevada and Placer counties.



The District encompasses 287,000 acres, and stretches from the headwaters of the Yuba River, Bear River and Deer Creek down to the Sierra foothills.



Within the service area, diverse crops flourish due to the differences in topographical, geological, climatic, and soil conditions.

NID provides irrigation for more than 32,000 acres, with 12,306 miner's inches of water sold in 2020.



The largest crops by acreage are irrigated pasture and family gardens/orchards (61% and 20%, respectively).

Many of the District's raw water customers have 10 acres or less of irrigated land.

NID's Crop Report

Every year, NID surveys its agriculture customers to inventory the type and approximate acreage of cultivated crops. This information is used in the District's annual Crop Report data. The Crop Report can be found in the [NID Agricultural Water Management Plan](#).

What is a miner's inch?

The majority of NID's irrigation customers purchase seasonal water, April 15 through October 14, based on a miner's inch, a water measurement that dates back to the California Gold Rush.

A miner's inch equals 11.22 gallons per minute, on a 24-hour per day basis. On average, irrigated pasture requires about one-half miners-inch of water per acre, but this can vary.



Top Crops

Irrigated pasture

19,727 acres ... 7,043.42 miner's inches

Family gardens/orchards

6,409 acres ... 3,073.60 miner's inches

Golf courses

986 acres ... 674.50 miner's inches

Hay

826 acres ... 227.92 miner's inches

Grapes (non-table)

661 acres ... 162.6 miner's inches

Nursery

384 acres... 206.46 miner's inches

Apples

248 acres ... 90.15 miner's inches

Parks

224 acres ... 47.42 miner's inches

Nuts

203 acres ... 34.53 miner's inches

Citrus

182 acres ... 52.46 miner's inches

Plums

160 acres ... 49.79 miner's inches

Alfalfa hay

155 acres ... 43.37 miner's inches

Berries

136 acres ... 41.26 miner's inches

Pears

34 acres ... 39.39 miner's inches

Peaches

118 acres ... 39.47 miner's inches

* Source: 2020 Crop Report, NID Agricultural Water Management Plan

Banner Cascade Pipeline: Tree Health, Canopy Cover and Pond Monitoring Report 2021

A recent study has found tree canopy is in “good health” along two canals with reduced flows as a result of the Banner Cascade pipeline.

This monitoring study was part of the environmental mitigation measures NID needed in order to complete the pipeline project, which was constructed to ensure reliable water deliveries to Grass Valley and Nevada City. It also serves as the primary means for conveying raw water to the Loma Rica and Elizabeth George Treatment Plants.

From 2013 through 2023, the goal has been to assess how the reduced flow affects canal area vegetation, canopy cover, and associated seep wetlands or ponds.

TREE HEALTH ASSESSMENT

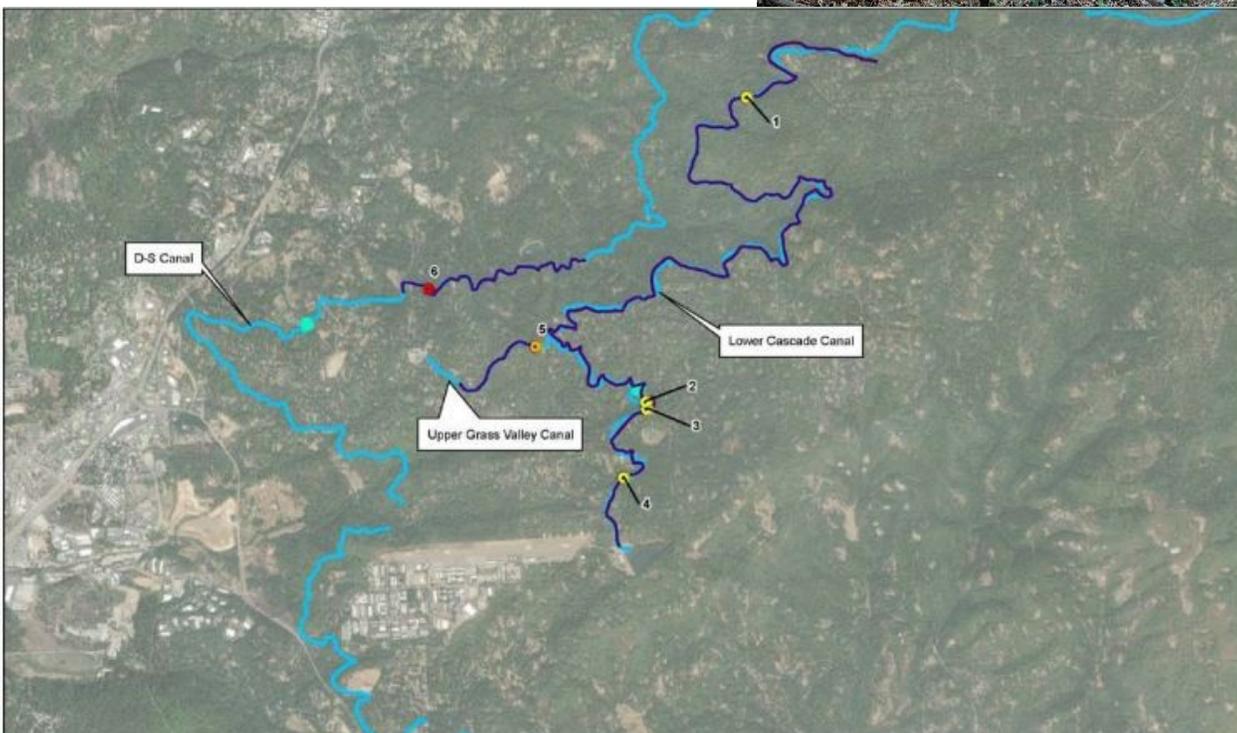
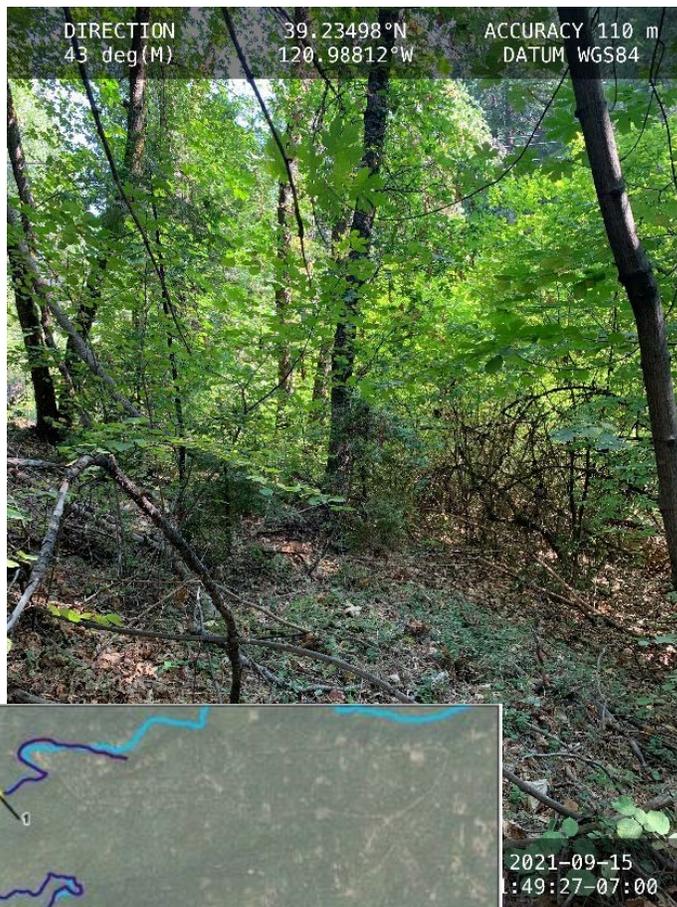
Tree health score remains above 10 at all sites = “good health”

The 2013 (Year 0) to 2021 (Year 8) results indicate a slight increase in tree health at four Lower Cascade Canal sites and is in the “good health” category. The overall analysis concludes that after eight years of flow reduction, the tree health is fairly consistent with the baseline year surveys along both canals, as compared to the DS Canal reference site, which did not receive flow reduction.

Lower Cascade Canal sites, while sites along the Upper Grass Valley Canal and DS Canal (reference site) remained consistent with previous years’ results.

Contributing Factors

- Increases noted in new growth
- Overall decrease of insect infestation
- Disease and parasites limited



Read the report. [Click here.](#)

Engineering Projects

The NID Engineering Department has a number of projects in various phases of construction. Read about the projects on our website, and sign up for email alerts for news about a specific project.

Updated Project Status Reports are now available on the [District's Projects webpage](#). This report provides project information, planner information, and a brief project description.

[2022 Engineering Department Project Status Report \(as of April 15\)](#)

[2021 Year in Review, Department Updates, Plans for 2022](#)



[Alta Sierra Reservoir Replacement Project](#)

To learn about the Alta Sierra Reservoir Replacement Project and see photos and project documents, click on the [Project Description](#)



[Hemphill Diversion Fish Passage Project](#)

To learn about the Hemphill Diversion Fish Passage Project, read the Projects documents, participate in the Design phase, and other information click on the [Project Description](#)



[English Meadow Floodplain Restoration & Enhancement Project](#)

To learn about the English Meadow Floodplain Restoration & Enhancement Project, review environmental documents, and get updates on the progress, click on the [Project Description](#)

[Centennial Water Supply Project](#)

The Board of Directors has directed staff to focus on the Plan for Water, the District's long-range planning process. As such, the District does not anticipate any significant activity related to the Centennial Water Supply Project until the Plan for Water process has been completed.

[Project Description](#)

If you would like to receive notifications when updates to the [NID Projects Underway](#) page are made, go to the [webpage](#) and click on the Join Our Mailing List tab at the bottom of the page and select the notifications you would like to receive.

Hydropower Generation Report

This report presents the total megawatt-hours (MWh) generated per powerhouse for the previous month. Average Generation is based on the monthly generation from the previous five years. Combie North, Combie South, and Scotts Flat Powerhouses create revenue-based on MWh produced. Generation from Chicago Park, Dutch Flat #2, Rollins and Bowman Powerhouses is provided for informational purposes.

Powerhouse	Average Generation	Current Generation
Chicago Park	8,677	5,421
Dutch Flat #2	5,351	3,379
Rollins	4,581	2,867
Bowman	426	0
Combie North	88	0
Combie South	540	106
Scotts Flat	267	22
Total	19,929	11,795

Generation was at most powerhouses was well below average due to extremely dry conditions. There was no generation at Combie North Powerhouse due to a mechanical failure.

Hydropower Availability Report

This report presents the total percentage of time a powerhouse is available to generate during the given month. Powerhouses Chicago Park, Dutch Flat #2, Rollins, and Bowman produce revenue based on the percentage (%) of time the unit is available to generate.

Powerhouse	Budgeted Availability	Actual Availability
Chicago Park	94.7%	100%
Dutch Flat #2	93.7%	100%
Rollins	93.9%	100%
Bowman	92.0%	100%

Budgeted availability shown was used to develop revenue forecasts. Actual availability shown is based on the hours the powerhouse ran minus any outages that are not excused by the terms of the Power Purchase Agreement (PPA) and is the basis of payment calculation.

All powerhouses were above budgeted availability.

Hydropower Outage Report

This report presents a list of each time a powerhouse has an outage caused by something other than a lack of water or a planned extended outage as well as basic information about the outage. Minimizing the number of outages and their length is key to maximizing revenue from the powerhouses.

Powerhouse	Date and Time Out	Duration (HH:MM)	Cause
Scotts Flat	3/24/22 07:00	28:22	PG&E Line Maintenance
		28:22	Total

Unit reliability was extremely high for the month.

Meetings & Events

The District's Board room will open to a limited number of public for Regular Board of Directors' Meetings. The public may also participate in Board and Committee meetings remotely via Zoom. Note: Plan for Water workshops (Special Board of Directors meetings) will continue to be only tele-conferenced on Zoom.

Zoom information will be provided on the meeting agenda and accessible at www.nidwater.com.

NID Regular Board of Directors Meeting

Wednesday, April 27, 2022

9:00 AM

NID Special Board of Directors Meeting

Tuesday May 10, 2022

3:00 PM

Plan for Water Workshop

Tuesday May 10, 2022

4:00 PM

**Meetings
& Events**

NID Regular Board of Directors Meeting

Wednesday, May 11, 2022

9:00 AM

Mulch Magic Giveaway

Saturday, May 14, 2022

7am-noon (first come, first served) See page 7 for details

"No Motor Day" at Scotts Flat Reservoir

Sunday, May 15, 2022

All day. See page 2 for details

NID Regular Board of Directors Meeting

Wednesday, May 25, 2022

9:00 AM

