



# GM Newsletter

October 2022

From The Desk of Jennifer Hanson, General Manager

*Water For Life*

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## Message from the General Manager

As we come to the end of the irrigation season, our water supply situation is better than last year, especially compared to others around the state. For example, Lake Oroville and Lake Shasta are fuller than they were at this time last year, but still remain well below average. By comparison, NID's reservoirs are storing 196,598 acre-feet of water. That's 71 percent of capacity and 112 percent of an eight-year average, as of Sept. 28.

This means the District will have carryover -- sufficient end-of-year reserves of water in storage -- to protect its ability to continue delivering water to all beneficial uses in the succeeding year should the current drought conditions continue.

And unfortunately, the prospect of a wet winter is not good. Water managers and state leaders are now preparing for a "fourth dry year," as well as more unpredictable weather and wildfires associated with climate change.

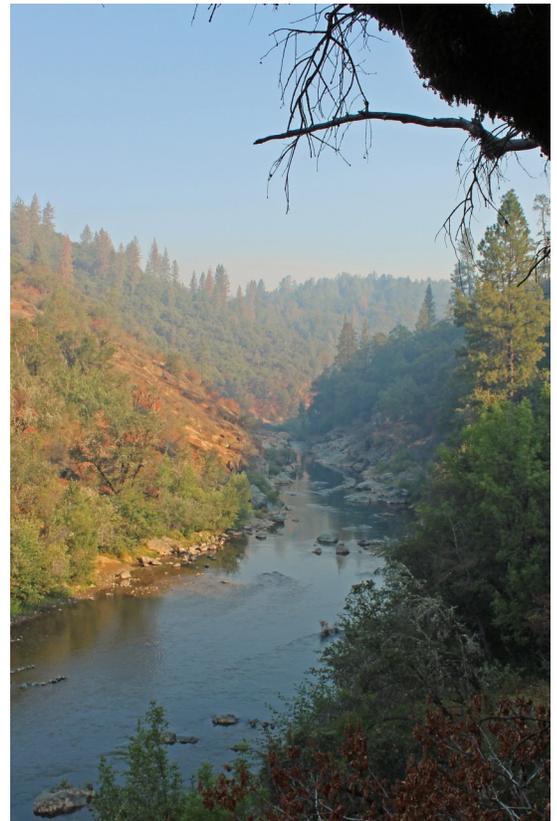
So, as we enter into fall, let's hope for the best during winter, when we get the most rainfall. For example, average rainfall for the Grass Valley area is this: October (1.7 inches), November (3.9 inches), December (5.6 inches), January (5.3 inches), and February (5.9 inches).

We have made solid efforts to conserve water during this drought. For example, in August, customers used 17 percent less treated water than in August 2020. For the year, they have used 12 percent less than in 2020.

Yet, we cannot take our foot off the pedal. As we face a possible fourth year of drought, every drop of water becomes more precious every day.

We're in this together -- let's continue to pull together as a community to conserve our water, now and for the future.

**(Right) The Bear River**



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# Another summer irrigation season comes to an end

Since the 1920s, NID has brought pure water from the high mountains to the ranches and farms of the drier Sierra foothills. During those many decades, the steady source of irrigation water has helped grow our region's agricultural economy.

Today, Placer County agriculture is worth \$100 million and Nevada County is worth \$19.7 million, based on the 2021 and 2020 Crop Reports, respectively, for each county.

Another successful NID summer irrigation season is coming to a close on Oct. 15 for about 5,600 raw water customers who irrigate more than 32,000 acres in Nevada and Placer counties.

Most raw water users purchase their raw water on a seasonal basis – the primary six-month irrigation season normally runs from Apr. 15 through Oct. 15.

Here's how it works: snowmelt is collected on a 70,000-acre Sierra watershed, stored and routed through a system of mountain and foothill reservoirs and hundreds of miles of canals on its way to NID customers. As the water flows past individual properties, users tap the water to irrigate their ranches, farms, vineyards and orchards.

Check NID's [website](#) to learn more about irrigation water systems and to find out more of how NID is committed to delivering water for food, for play, for life.

**[Click here to see the “Top Crops” fact sheet to learn about what is grown with District raw water](#)**





## Invitation to get involved

The Plan for Water process is now focusing on strategic planning. The Oct. 4 workshop will include a continued discussion on NID's strategic goals progress. On the agenda are creating a vision statement, developing District values and strategic priorities.

There will be two workshops in October to complete work to draft strategic planning material. All will be approved by the Board of Directors during an upcoming meeting.

Strategic Planning is Stage 5 of 11. It focuses on the development of NID's updated Strategic Plan, developing new and/or revised Mission, Vision, Strategic Priorities and Goals of the District. The Strategic Plan is intended to be a stand-alone document.

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.

### October Workshops: Strategic Planning

#### October 4, 2022: Stage 5 Strategic Planning

Time: 2 p.m. At the Gold Miner's Inn in Grass Valley and also via Zoom.

#### October 11, 2022: Stage 5 Strategic Planning

Time: 4 p.m. time certain at the NID main office, 1036 W. Main Street, Grass Valley and also via Zoom.

Visit NID's website [nidwater.com](http://nidwater.com) for more details

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## NID hosts tour of work on forest resilience at Scotts Flat *State and local agencies participate*

The importance of forest resiliency to counter wildfire risk was the discussion point as state officials, local and state agencies, and non-governmental organizations gathered at the Nevada County Fairgrounds.

The California Wildfire & Forest Resilience Task Force held its Sierra Regional meeting on Sept. 27-28.

After a jam-packed day talking about how the Sierra Nevada can best protect itself, the following day NID hosted a field tour of its project to address wildfire risks and to improve forest resilience at Scotts Flat Reservoir.

In total, The Scotts Flat Fire Fuels Treatment Phase 4 Project completed 300 acres of fire fuels treatment adjacent to the reservoir in the Deer Creek watershed.

This area is integral to the water supply infrastructure that NID manages for communities in Nevada and Placer counties.

[Read more about the project, click here.](#)



**NID was on-hand during the California Wildfire & Forest Resilience Task Force meeting on Sept 27.**

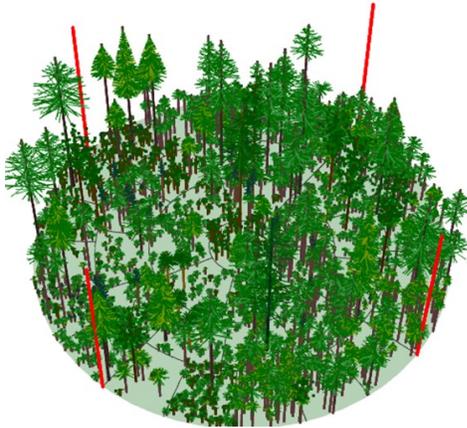


**On Sept. 29, NID hosted a tour of the Scotts Flat project so meeting attendees could get a first-hand look at successful fire fuels treatment.**

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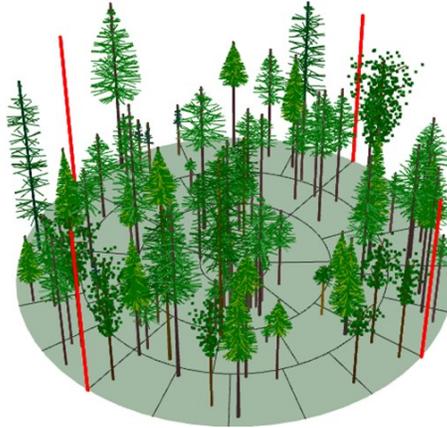
# Scotts Flat Fire Fuels Treatment Phase 4 Project

## *Forest Vegetation Simulator Model*



### Pre-Treatment

Trees per Acre: 2,025  
Basal Area per Acre: 212  
Stand Density Index: 391  
Quadratic Mean Diameter: 4.3"  
Thousand Board Feet per Acre: 17.976



### Post-Treatment

Trees per Acre: 110  
Basal Area per Acre: 135  
Stand Density Index: 192  
Quadratic Mean Diameter: 15.0"  
Thousand Board Feet per Acre: 17.802



### Difference

Trees per Acre: 1,915 trees / acre  
Basal Area per Acre: 76 sq. ft.  
Stand Density Index: 199  
Quadratic Mean Diameter: 10.7"  
Thousand Board Feet per Acre: .174 (Mbf)

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# Sky-high partnership to train a local rescue team



NID partnered with the Nevada County Consolidated Fire District (NCCFD) to provide a training site for its helicopter rescue team at Scotts Flat Reservoir.



On Sept. 20, The rescue team did water hoist trainings from the “island” area off the south end of the dam and some hoists of simulated patients at the mouth of the lower reservoir.

Both NCCFD and the California Highway Patrol have expressed interest to conduct future training at the reservoir.

**Map of the training site**

# Going to the Birds

## Constructing an Osprey Platform Nest after the River Fire



The River Fire was ignited in early August 2021 and ripped through NID property near the Bear River. In all, the fire burned 2,619 acres and destroyed 142 structures in Placer and Nevada counties.



Among the damage was a power pole housing an osprey nest. Last month, an NID crew was there to build a new nest platform.

Because ospreys return to the same nest year after year, odds are they will take advantage of the new platform.

The pole was erected using a crane, whose operator expertly placed it into a concrete block. Then atop that, he set the metal grid nest.

Ospreys are territorial and tend to come back to the same nest year after year. Females lay eggs between mid-April and late May. So there is a good chance the ones living on the property before the fire will return.

The River Fire began at the Bear River Campground in Placer County on Aug. 4, 2021 and was fully contained on Aug. 13. The fire had wide-spread impacts within the Bear River watershed, including dramatic impacts to the forest, water supply, and watershed function.

### Bear River fire recovery

NID is currently working to remove burned trees on 150 acres of District property for erosion control on the steep slopes of the Bear River canyon, between Chicago Park and Lake of the Pines.

This area is integral to water supply infrastructure that NID manages for local communities.

Read more about the Bear River Wildfire Recovery Project, [click here](#).



## **Wilson Creek Diversion Conduit: a straight-forward project with many complexities**

A new regulating gate in the Wilson Creek Diversion Conduit makes it possible to manually control flows from the creek to the Milton-Bowman Tunnel and ensure we meet state regulations involving water rights curtailment.

Although not a huge project (construction was completed in about five days), it was challenging due to the forested location, state/federal permitting and environmental work.

### **What the project does**

NID's Hydropower crew recently installed a 30-inch slide gate valve and steel pipe conduit, using hand tools after a telescoping forklift lowered the apparatus into place.

The project provides a solution for the Wilson Creek Diversion and associated curtailments. As anticipated, the State Water Resources Control Board put a curtailment order into effect on July 7, 2022. This requires NID to cease diversion of water. The new gate allows the District to effectively do this in the Wilson Creek Diversion Conduit.

### **Extra attention to protect species**

The project is an example of the added complexities of work done in and around waterways to protect species. This demands extra attention to special-status species' habitats, forest service property, and other restricted/special areas.



**NID workers install the new gate valve and conduit.**

For example, prior to the construction, surveys were conducted to keep a lookout for nesting birds and sensitive species, such as the northern goshawk and the Sierra Nevada Yellow-legged frog. In addition, water quality surveys were conducted throughout the project.

It is a reminder that many of NID's future projects are going to look similar to Wilson Creek regarding agency coordination and permitting.

# Bear River Cleanup

NID pitched in to clean up around the Bear River earlier in the month. The crew spent the morning working on District property at the Dog Bar bridge, removing trash from local area trails and beach on the Bear River.

In all, 13 bags of garbage were picked up, in addition to car parts, remnants of clothes cans, tires, broken lawn furniture, and other household trash.

Unusual items included a porcelain fairy and a mountain lion skull.

The cleanup effort was part of the annual Yuba River Cleanup, sponsored by the South Yuba River Citizens League (SYRCL).





## Bowman Lake

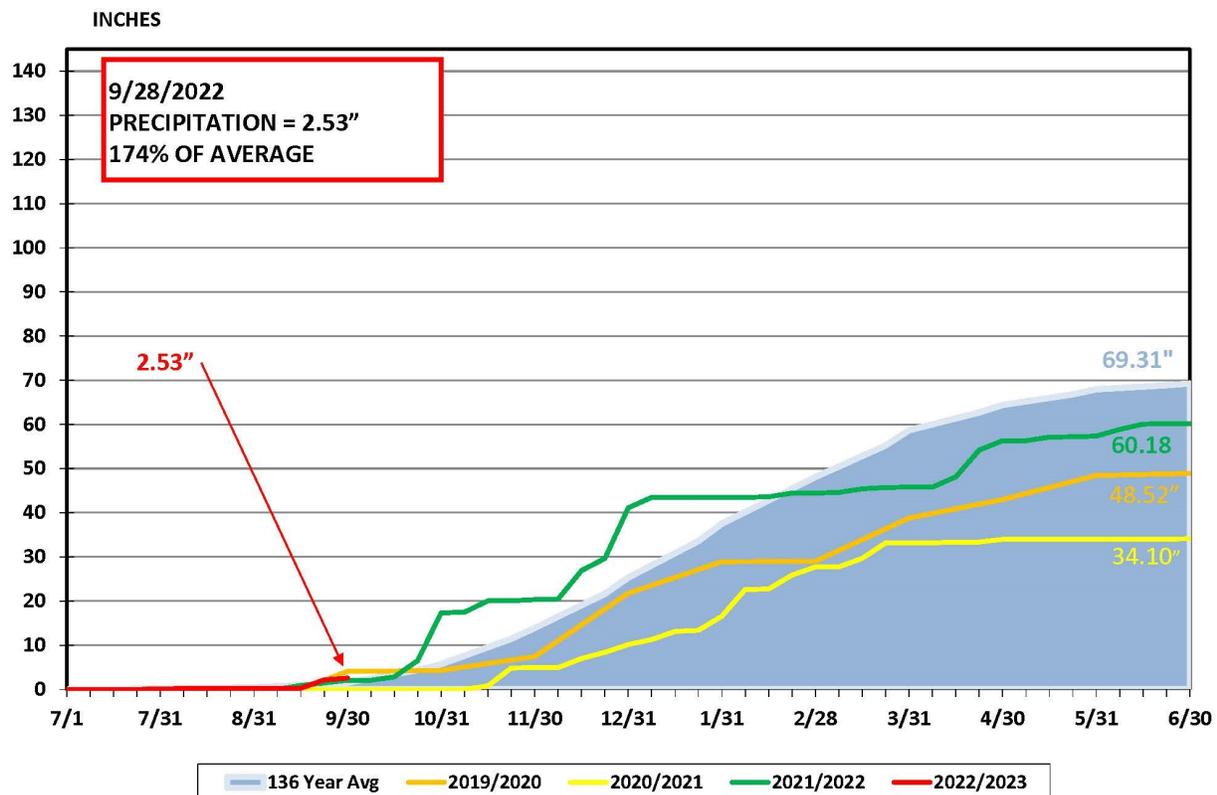
NID has been keeping weather records for Bowman Reservoir (elevation 5,650 ft.) since 1929.

The 69.2-inch annual average precipitation at Bowman compares to an annual average of 56 inches at 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.

The new water year began on July 1. A bit more than two and a half inches of rain has fallen since then. That is 174 percent of average.

## BOWMAN LAKE PRECIPITATION



## Reservoir storage is above average

Reservoir storage is 192,268 acre-feet as of Sept. 28. That is 112 percent of average and 71 percent of capacity.

NID's watermaster regularly posts 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](#).

## Know before you go ...

Check out reservoir level information before you head out to enjoy the water. NID provides the latest on capacity and elevation of higher Sierra- and foothill reservoirs.

Deer Creek Watershed:

\* [Scotts Flat Lake](#)

Jackson Creek Watershed:

\* [Jackson Lake](#)

Bear River Watershed:

\* [Rollins Lake](#)

\* [Bear River below Rollins](#)

Canyon Creek Watershed:

\* [French Lake](#)

\* [Faucherie Lake](#)

Middle Yuba River Watershed:

\* [Jackson Meadows](#)

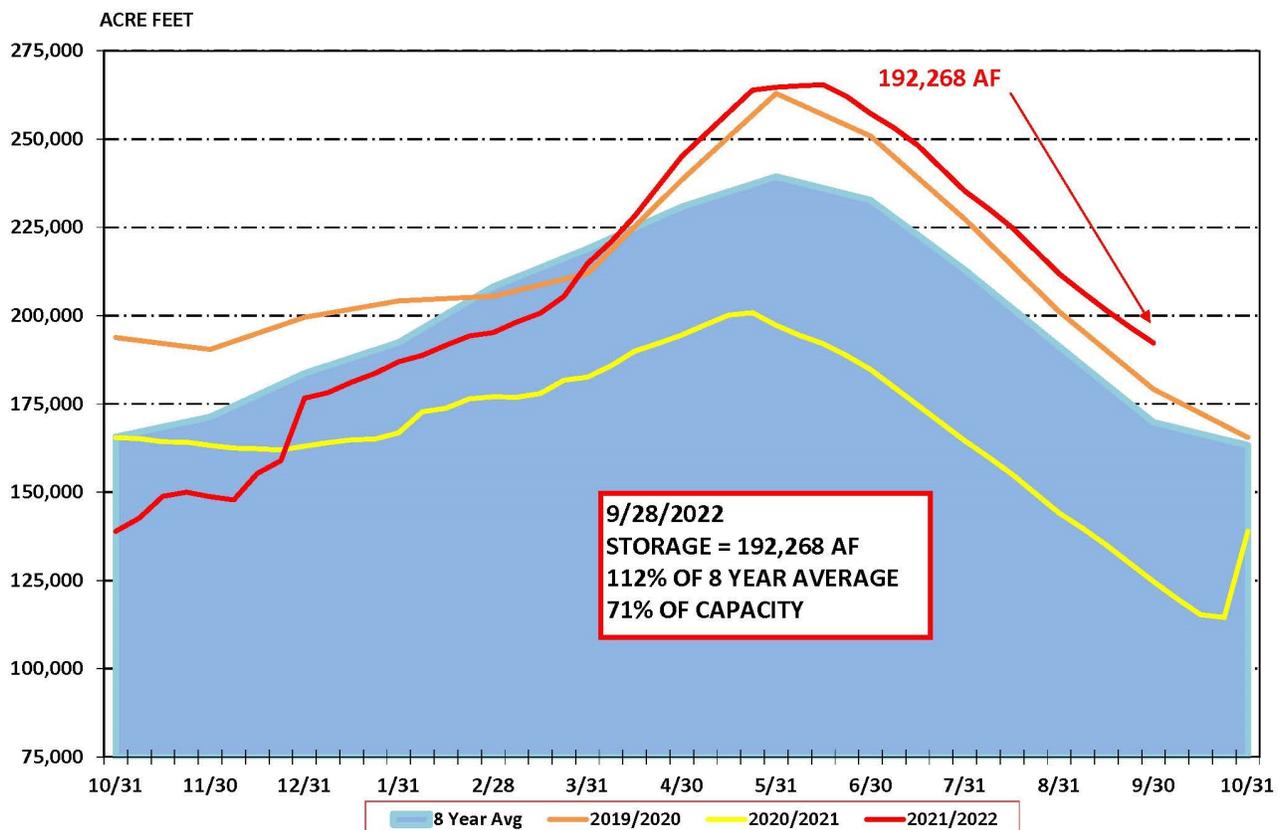
\* [Middle Yuba River below Milton](#)

\* [Sawmill Lake](#)

\* [Bowman Lake](#)

\* [Canyon Creek below Bowman](#)

## NID RESERVOIR STORAGE



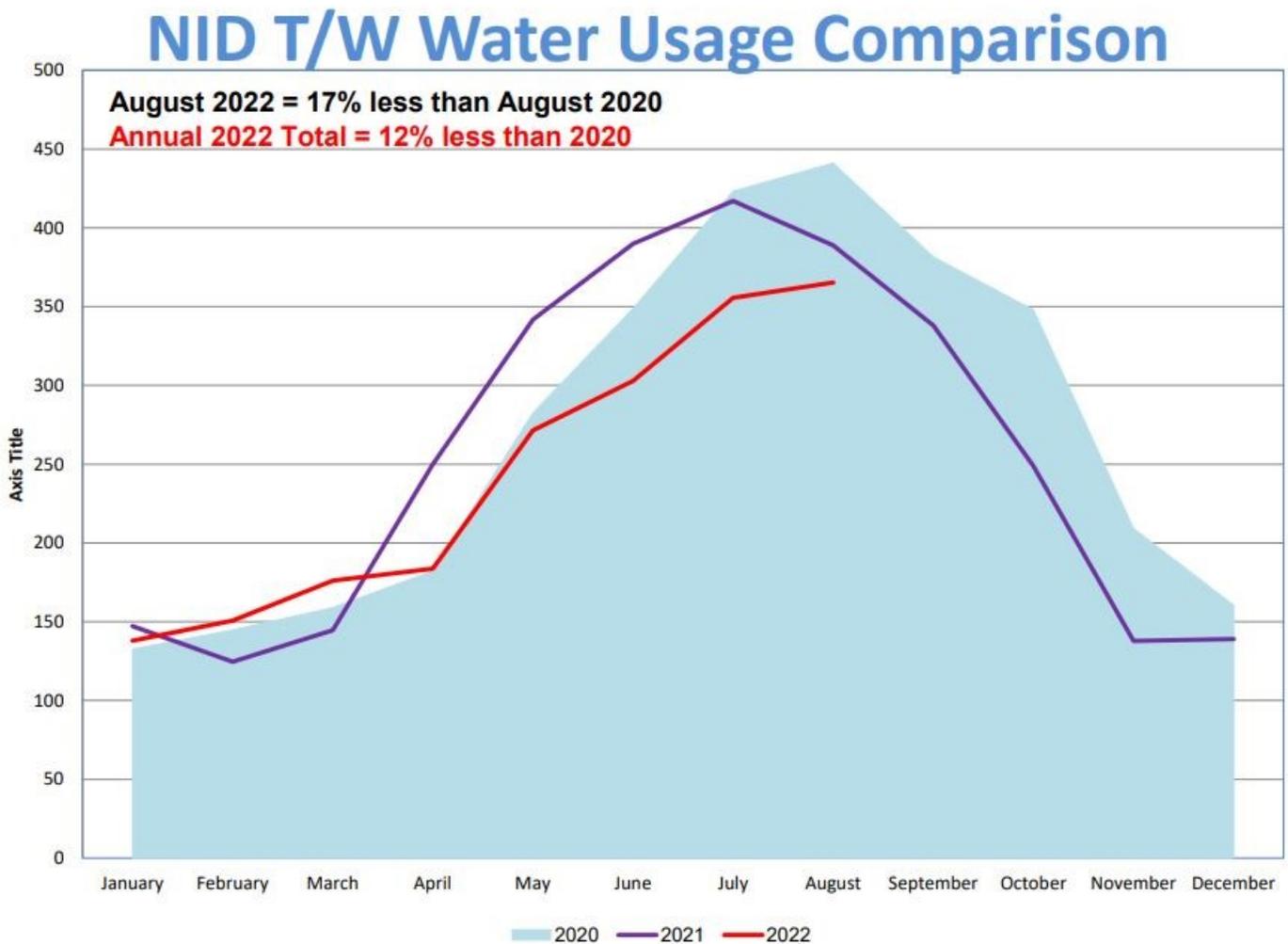
## Water conservation — treated water use down 17%

In August, treated water usage was down 17 percent, compared to August 2020. For 2022, total treated water usage is 12 percent less than in 2020.

The challenge for us all is to continue to use water efficiently and boost our conservation numbers. A reduction of 20% is our goal

Let's continue the good efforts. Do you how much water what you use?

[Measure Your Water Use Calculator](#)



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

# Project Updates—Engineering and Hydropower

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.

[Engineering Department Project Status Report \(as of Sept. 15, 2022\)](#)

[Hydroelectric Department Project Status Report \(as of Sept. 15, 2022\)](#)

## Centennial Water Supply Project Reservoir Quarterly Update

Since the last quarterly update, no additional work has been done. Any future work is dependent on the outcome of the Plan for Water process.

Ongoing meetings with South Sutter Water District are anticipated, and additional staff and legal time are expected. Current expenditures and property revenue as of September 15, 2022, are as follows:

### Project Related Expenses

2022	Jan – March	April – June	July – Sept.	Total
Consulting	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
Consulting Property	\$ 0.00	\$ 0.00	\$ 0.00	\$ 0.00
Water Rights Fees	\$ 5,745.60	\$ 5,588.20	\$ 0.00	\$ 11,333.80
<b>Total</b>	\$ 5,745.60	\$ 5,588.20	\$ 0.00	\$ 11,333.80

### Staffing and Legal Expenditures (Project and Property)

Staff/Payroll Exp*	\$ 370.90	\$ 1,030.57	\$ 761.04	\$ 2,162.51
Legal*	\$ 4,794.35	\$ 2,625.00	\$ 5,200.62	\$ 12,619.97
<b>Total*</b>	\$ 5,165.25	\$ 3,655.57	\$ 5,961.66	\$ 14,782.48

\*Staff and Legal costs are accounted for elsewhere in the budget.

### Property Related Income and Expenses

2022	Jan – March	April – June	July – Sept	Total
Property Revenue	\$ 50,600.00	\$ 54,633.35	\$ 40,006.77	\$ 145,240.12
Property Expenses	\$ 36,494.97	\$ 21,640.01	\$ 28,748.64	\$ 86,883.62
<b>Total (Rev – Exp)</b>	\$ 14,105.03	\$ 32,993.34	\$ 11,258.13	\$ 58,356.50

**Note:** Revenue and expenses reported in the first and second quarterly reports have been adjusted to reflect revenue and expenses that were posted after the report was generated.

## Hydropower Generation Report

The total megawatt-hours (MWh) generated per powerhouse for July

**Generation at most powerhouses was below average due to ongoing dry conditions.**

Powerhouse	Average Generation	Current Generation
Chicago Park	10,971	10,852
Dutch Flat #2	5,122	1,862
Rollins	5,022	4,833
Bowman	1,647	1,841
Combie North	185	185
Combie South	108	0
Scotts Flat	515	605
<b>Total</b>	<b>23,570</b>	<b>20,178</b>

## Hydropower Availability Report

The total percentage of time a powerhouse is available to generate during the given month.

**All powerhouses were above budgeted availability for August.**

Powerhouse	Budgeted Availability	Actual Availability
Chicago Park	94.3%	100%
Dutch Flat #2	92.0%	100%
Rollins	94.2%	98.4%
Bowman	92.0%	100%

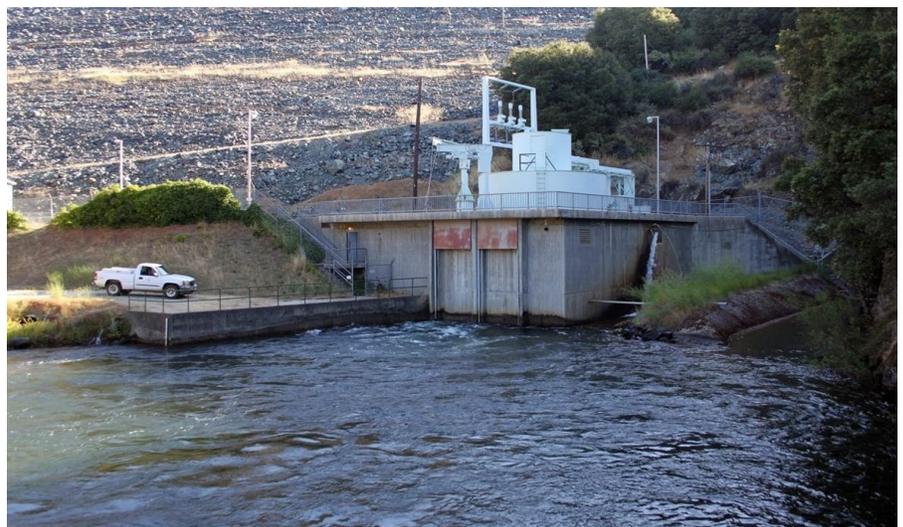
## Hydropower Outage Report

A list of each time a powerhouse has an outage caused by something other than a lack of water or a planned extended outage

**The Rollins Powerhouse experienced a significant water leak forcing an extended outage. Repairs were made and the entire system will be reviewed in detail during the October annual outage.**

[Click here: Hydroelectric Project Status Report](#)

Powerhouse	Date and Time Out	Duration (HH:MM)	Cause
Bowman	7/13/22 10:02	0:45	PLC Programming
Rollins	7/29/22 06:47	8:59	PG&E Line Outage
		9:44	Total



Rollins Powerhouse

## October 1927: Construction begins on the Dam at Combie Reservoir

With Fred Tibbetts at the helm as Chief Engineer, construction of the dam at Combie began in October 1927.

The contractor was the Morrison-Knudsen Corporation, a civil engineering and construction company that later was among the consortium of firms that built Hoover Dam, the San Francisco–Oakland Bay Bridge and the Trans-Alaska Pipeline.

The dam was completed in May 1928.

When the concrete dam was constructed and the reservoir created, the names of the two families with bordering properties stuck.

The Van Giesen family owned the property on the south side of the Bear River, while the Combie family operated a ranch along the Nevada County side to the north. Ultimately the reservoir became known as Combie, and the 87-foot-high arch dam took on the Van Giesen name.



Combie, 1930

### Say Combie as in “Comb,” not Combie as in “Common”

Is it Combie as in “comb?” Or Combie as in “common?”

The long O is correct.

The lake is named after a Frenchman named Combie (or Coombe) who reached the Bear River in mining days. Combie Crossing and Combie Ranch were named for him, but they were later inundated by the reservoir.



Behavior of water falling on left part of foundation with water 8" deep over crest of dam. Combie Spilling in 1935

Combie most likely pronounced his name as in “comb.”

“Comb” and “combe” in the French dictionary mean valley, dale or dell.

The dam is named Van Giesen Dam, pronounced “geese-en”).

## 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.

Zoom information will be provided on the meeting agenda and accessible at [www.nidwater.com](http://www.nidwater.com).

### **Plan for Water Workshop**

Tuesday Oct. 4, 2022  
Gold Miner's Inn, Grass Valley  
2 PM

### **Plan for Water Workshop**

Tuesday Oct. 11, 2022  
NID Office, Grass Valley  
4 PM

**Meetings  
& Events**

### **NID Regular Board of Directors Meeting**

Wednesday, Oct. 12, 2022  
NID Office, Grass Valley  
9 AM

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