



NID

NEVADA IRRIGATION DISTRICT

Waterways

A NEWSLETTER TO THE CUSTOMERS OF THE NEVADA IRRIGATION DISTRICT

✓ GOVERNOR'S CALL:
REDUCE WATER USE BY 36%
UNTIL THE DROUGHT ENDS

NEW OUTLET
FOR AN
OLD DAM
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Volume 36 • Number 2 • Summer 2015

Dealing With The Drought NID Customers Save 36% in June

NID water users are thanked and commended for saving significant amounts of water as the region struggles through a fourth year of drought.

NID treated water customers reduced water usage by 33 percent in May (from 2013 baseline levels) and 36 percent in June. NID has called upon treated water users to cut use by 36 percent and irrigation water users to reduce their use by at least 25 percent.

The reduced urban usage is allowing NID to comply with mandatory reductions set forth by Gov. Brown and the State Water Board.

NID is asking all water users to limit their water use until drought conditions ease. For ideas and advice on how to save water, please see the Conservation/Drought tab at www.nidwater.com, or go to www.SaveOurH2O.org.

10 Easy Ways
to Save Water

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Leading by Example



SIGN OF THE TIMES: NID Operations and Customer Service teams take calls and help customers save water. From left, Aurora Tipton, Megan Pontius, Kim Crabtree, Mark Volheim, Pam Robinson, Barbara Wibberley, Monica Reyes and Tricia Panock.

NID's WaterWise Landscape

If you've driven by the NID Business Center in Grass Valley this summer, you may have noticed that NID's once green lawn has turned brown. The district stopped watering the lawn and has cut back on all of its campus irrigation. "We're asking everyone to cut water use and we're cutting ours, too," said NID Water Efficiency Technician Aurora Tipton. "We want to set an example."

The brown grass is a first step in a transformation of the lawn into a waterwise demonstration landscape. The experts at Weiss Landscaping are designing the new landscape, which is expected to be planted this fall into next spring. The Nevada County Master Gardeners, who operate the adjacent demonstration garden to the east, are expected to be involved in the new project as well.



General Manager's Report

By Rem Scherzinger

NID Moving Forward On Centennial Reservoir

I would like to take this opportunity to update district customers on our active project to construct a new 110,000 acre-foot reservoir on the Bear River in Nevada and Placer counties.

Centennial Reservoir is named to commemorate NID's upcoming 100th anniversary. The district was formed Aug. 21, 1921 and will mark its centennial in six short years.

Site Identified in 1926

The reservoir is being planned at a site first identified in 1926 as part of an early NID reconnaissance project on the Bear River. It was found to be a very good water storage location.

This location may be even more attractive today than it was a century ago. As our climate changes we are seeing precipitation patterns that bring more rain and less snow. This increases the need for mid-alpine storage in the NID system. Today, we are too reliant on snowpack runoff.

Recovering Lost Water Storage

Centennial reservoir is being designed not as an expansion project but as a storage recovery project to recapture water lost due to changing climate and reduced snowpack. It will allow us to continue making water deliveries as we do today and bring us more flexibility in meeting the water supply needs of customers in all parts of the district.

The site is located between two existing NID reservoirs, Rollins and Combie. Centennial is planned to extend six miles upstream from just above Combie to a point west of Colfax. Hydroelectric energy generation and low impact (no wake) public recreational opportunities are planned.

One year ago, on Aug. 13, 2014, your elected Board of Directors authorized the district to make the first project filings with the State Water Resources Control Board. The district holds pre-1914 and post-1914 water rights on the Bear River and our petition was accepted by the state.

We have since completed surveys of the property and completed hydrologic and geologic studies of the reservoir site. Geotechnical feasibility and site studies are currently in progress. The NID board is expected to award a contract for preparation of an EIR/EIS this summer.

'It is in our community's best interests to have that storage here and in our control.'

Most of the land in the project footprint is publicly owned, with NID property on the Nevada County side of the river and state land on the Placer County side. Some acquisitions and easements on private land are needed and we have received understanding and cooperation in our meetings with landowners.

At this point - we're still very early in the planning process - we're estimating an overall cost of about \$200 million with construction beginning in 2021 and operation in 2023. Funding could be made available through NID hydroelectric revenues, Prop. 1 and perhaps a bond issue.

NID is pleased with the level of community support we have received for the project. The ongoing drought and increasing demand for water have heightened public awareness of water storage needs. It is in our community's best interests to have that storage here and in our control.

2014/15 Seasonal Precipitation: 48.52"

The 2014/15 rainfall season ended June 30 with 48.52 inches of precipitation measured at NID's Bowman Reservoir (elev. 5600 ft.).

This equals 70 percent of average and falls within a normal range, however, it comes after three years of drought. With near-record low snowpack runoff, the district remains in a drought condition.

Water storage as of June 30 measured 198,300 acre-feet, which is 89 percent of average for the date and 75 percent of capacity, but with no snowpack runoff to replenish water levels, reservoirs are dropping much earlier than normal.

With No Snowpack Runoff, Reservoir Levels are Dropping Early

The most visible low levels are anticipated at Scotts Flat where boat ramps were projected to be out of water by late August. Current and projected lake levels for district reservoirs are posted under the Recreation tab at nidwater.com.

El Niño Brings Hope

A building El Niño event in the Pacific Ocean could bring increased precipitation to California this winter, federal scientists reported in mid-July.

"There are obviously no guarantees, but above-normal rainfall is becoming more likely," said Mike Halpert, deputy director of the National Oceanic and Atmospheric Administration (NOAA) Climate Prediction Center.

NOAA reported that chances are "greater than 90 percent" that El Niño wind and water conditions that began in March will continue into next winter. The report notes that the conditions are similar to the very wet El Niño year of 1997/98 but cautions that El Niños do not always produce wet California winters.

Big Job at Bowman Dam

Bowman Reservoir lies at the heart of NID's mountain water system. Water from surrounding watershed and six other district reservoirs flows through Bowman (elev. 5650 ft.) enroute to NID customers in the Sierra foothills.

In early 2013, a large crack was detected in a 90-year-old riveted steel outlet pipe that runs beneath the Bowman rockfill dam. The failure threatened normal water operations and deliveries.

NID directors declared an emergency and by March a repair project had begun and construction of an emergency outlet was planned so water could be supplied through the upcoming irrigation season.

Meanwhile, NID engineers designed a permanent repair project for sections of pipeline and valves damaged by the incident. The repair project soon won approval from the Federal Energy Regulatory Commission (FERC) and the California Division of Dam Safety (DSOD).

The repaired section of the pipeline was capped off and water was routed through the Bowman Powerhouse during 2014 as plans were finalized. The district contracted with Syblon Reid Construction, Inc. for the work.

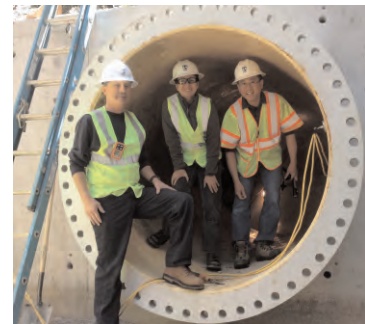
This year, beginning in late May, the repair project began. To save water during the current drought, it was carefully coordinated with a PG&E downstream maintenance outage.

A new 66-inch butterfly valve, 30-foot section of pipeline and a 48-inch Howell-Bunger Valve (also known as a rig jet valve) were installed at the end of the dam tunnel.



New Outlet

New outlet pipe, above, is lowered into place, after NID inspection of the dam tunnel, right.



By late June, the system was ready for operation. It was inspected by the DSOD and approved for operation on July 1. The district planned to operate the outlet manually through July while a new valve house and electrical controls were being completed.

Bowman reservoir dates to 1872. It originally supplied hydraulic gold mines in the area. Bowman and related properties were acquired by NID in 1925 from the Northern Water & Power Co. for \$275,000.

The current emergency repair project was authorized by the NID board at an estimated cost of \$2.1 million.

NID Salutes Jim Bachman

NID wishes to recognize the public service of former Division IV Director Jim Bachman, of Lincoln, who resigned for health reasons on May 13, following six years on the board.

His fellow directors on July 8 appointed William Morebeck of Lincoln to serve the remaining 16 months of Mr. Bachman's term. The position will be up for election in November 2016.



Jim Bachman

NID's governing board includes:

Nancy Weber, Nevada City, Division I; **John H. Drew**, Chicago Park, Division II; **Scott Miller, M.D.**, South Nevada County, Division III; **William Morebeck**, Lincoln, Division IV; and **Nick Wilcox**, Penn Valley, Division V.

(For contact information see page 4)

NID by the Numbers: 2015

Customers (water connections): 27,250
Number of Employees: 185

2015 Combined Budget: \$68.5 million
Water Division: \$48.5 million
Hydroelectric Division: \$18.2 million
Recreation Division: \$1.8 million

District Size: 287,000 acres
Mountain Watershed: 70,000 acres
Years of Public Service: 94 Years (since 1921)
Avg. Annual Precipitation:
(Bowman Reservoir, elev. 5,650 ft.): 69.2"
Precipitation 2014/15: 48.52"

Reservoirs: 10
Storage Capacity: 280,380 acre-feet
Water Treatment Plants: 7
Hydroelectric Power Plants: 7
Canals: 450 miles
Pipelines: 300 miles

www.nidwater.com

In 2015, after completing an award-winning fish passage project near Highway 65 in Lincoln, NID has turned its focus to another upstream site on Auburn Ravine Creek where an old water diversion may be affecting fish migration.

District officials are studying the Hemphill diversion structure which supplies water to customers in the greater Lincoln area. Water supply needs, regulatory requirements and costs are being addressed as the district formulates its plans.

Working Together

In 2011, in partnership with Placer County, Lincoln and other organizations, NID constructed a fish ladder in the Lincoln Crossing Nature Preserve. The structure removed a barrier and opened 2.5 miles of Auburn Ravine

Stewardship

NID Improves Fish Passage on Auburn Ravine



for spawning by fall-run and late fall-run Chinook salmon and steelhead trout.

In the fall of 2012, nearly 160 migrating fish were counted above the new fish ladder. The project was recognized as one of five finalists in a statewide environmental awards program of the Association of California Water Agencies (ACWA).

10 Easy Ways to Save Water at Home

1. Time your shower to keep it under five minutes
2. Run only full loads in your washer, dishwasher
3. Fix leaky toilets
4. Install water-saving aerators on all faucets
5. As you wait for hot water, collect the water for your plants
6. Irrigate in the early morning or evening to reduce evaporation
7. Water plants deeply but infrequently to encourage deeper, healthier roots
8. Add two to four inches of mulch around trees and plants
9. Check sprinkler systems for leaks
10. Use a trigger nozzle on hoses to apply water where you want it.

How to Contact Your Elected Directors

DIVISION I - Nevada City Area
Nancy Weber, (530) 265-0424
Board Vice President, 2015

DIVISION II - Grass Valley-Chicago Park
John Drew, (530) 272-5257

DIVISION III - Lake of the Pines-Alta Sierra
Scott Miller, M.D., (530) 268-8778
Board President, 2015

DIVISION IV - Lincoln-North Auburn
William Morebeck, (916) 645-8650

DIVISION V - Penn Valley-Lake Wildwood
Nick Wilcox, (530) 432-2171



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NID NEWS BRIEFS

Reservoir Site Tour

Local community leaders toured the site of NID's proposed Centennial Reservoir on June 11 as part of the 2015 Nevada County Agriculture Tour. NID is actively planning for the new reservoir on the Bear River between Rollins and Combie reservoirs. The annual Ag Tour is sponsored by the Nevada County Farm Bureau.

Newtown Canal Upgrade

Environmental studies are being completed for the upgrade of a 1900-foot section of the Newtown Canal west of Nevada City. The canal section is in poor condition, running at capacity, and must be improved to ensure continued reliability of water supplies to Lake Wildwood and Penn Valley.

Paddlers Like Scotts

Scotts Flat Lake has been named as one of California's top 10 paddleboarding spots by Stand Up Paddleboarding (SUP) Magazine. The magazine cites qualities including "flat, clear water, gorgeous forestry and blue skies." Lake Tahoe is the other nearby destination to make the list.



Direct Link to Water Reports

NID's annual water quality report, also known as the Consumer Confidence Report (CCR), may be found through a direct link at <http://nidwater.com/wqr>. The CCR reports on the quality of water supplied through NID's network of water treatment plants in the previous calendar year.

NID's QR Code
Scan this QR Code with your smart phone for direct access to the NID website.



<http://www.nidwater.com>