

Staff Report

TO: Board of Directors

FROM: Chip Close, Director of Water Operations

DATE: June 12, 2024

SUBJECT: Canal Rotations Due to Emergency Water Shortage

OPERATIONS

RECOMMENDATION:

Adopt Resolution No. 2024-23 - Establishing Emergency Canal Outage Rotations Throughout the Duration of the PG&E's Unplanned Spaulding One and South Yuba Canal Outages.

BACKGROUND:

On or about February 9, 2024, PG&E notified NID that a portion of the South Yuba Canal (SYC) suffered a collapse, rendering the canal inoperable. On March 6, 2024, PG&E's Spaulding One powerhouse suffered a failure, causing the Drum Canal to be inoperable. The combination of these two failures has made it impossible to transport water into the Drum and South Yuba Canals, both of which are crucial for providing water to thousands of District customers.

The initial return to service date of the Spaulding One / Drum Canal (SPA 1) was scheduled for June 8, 2024, while the return to service date of the SYC was scheduled for June 18, 2024. Both estimates were delayed to June 18th. In response to the delay, NID crews enacted emergency backup plans, including rerouting water through alternate channels, purchasing available runoff water, and activating all available backup pump stations. These efforts were expected to provide sufficient flows to meet NID customer demands with only voluntary conservation actions necessary.

In mid-May, NID was informed that the return to service date on the SYC was postponed again until the end of August. NID adjusted operations for this delay with anticipated utilization of SPA 1 flows into the SYC, upon the June 18th return to service date.

On May 30, 2024, PG&E notified NID that further delays had occurred on the SPA 1 repairs, pushing the return to service date to June 30, 2024. NID staff has projected customer demands based on the new return to service date and determined that canal capacity in Nevada County will likely run short.

Normal irrigation season flows in Nevada County are supplied via two major arteries, the Cascade Canal, and the DS Canal. The Cascade Canal diverts flows from the SYC above Scotts Flat Lake. Due to the SYC outage, NID has relied on runoff in the Deer Creek watershed as a source of supply. Unfortunately, runoff flows are diminishing, and the delay in the return to service of the SYC means NID will have to rely solely on the DS canal for water deliveries.

The DS Canal was not designed to carry the entire load of the Nevada County water supply; thus, the canal is anticipated to run out of capacity towards the end of June. Staff is preparing for the shortfall with a proposal for temporary rotating canal outages to a limited number of canals. Each rotating outage is expected to last 3 days (plus travel time to the end) before moving on to the next canal. If the current PG&E return to service date of June 30th holds, four rotations are expected. The canals and schedules include:

- a. Rotation #1**
 - i. Clear Creek Canal**
 - ii. Outage: June 20 through June 23**
- b. Rotation #2**
 - i. Tarr Canal downstream of Retract Road**
 - ii. Outage: June 23 through June 26**
- c. Rotation #3**
 - i. Cole Viet, Wolf, Pearl Barnes, and Carpenter Canals**
 - ii. Outage: June 26 through June 29**
- d. Rotation #4**
 - i. Smith Gordon, Casy Loney, Stinson Pipe, Pet Hill, Pet Hill Extension**
 - ii. Outage: June 29 through July 2**

If the PG&E outage extends beyond the June 30th date, NID staff will establish additional canal outage rotations until service is restored. Notification to all affected customers will be accomplished through direct outage mailings.

The limited capacity is based on current estimates. NID staff will continue to maximize all available resources to delay the rotating outages if possible. Real time outage information will be available on NID's outage webpage located at the following link: <https://www.nidwater.com/irrigation-water-outages>. Customers may also call our customer service department at (530) 273-6185 for the latest information.

BUDGETARY IMPACT: N/A

Attachments: (1)
Resolution 2024-23



RESOLUTION NO. 2024-23
OF THE BOARD OF DIRECTORS OF THE NEVADA IRRIGATION DISTRICT

**AUTHORIZING ROTATING OUTAGES TO IRRIGATION WATER SERVICE FOR
CERTAIN CANALS GIVEN ONGOING EMERGENCY WATER SHORTAGE
CONDITIONS**

WHEREAS, the Nevada Irrigation District (NID) is a California Irrigation District formed and existing pursuant to Division 11 of the California Water Code and is empowered to provide water for residential, commercial, industrial, agricultural, environmental, fire protection and prevention and other beneficial uses of water; and

WHEREAS, on March 27, 2024, the NID Board of Directors adopted Resolution No. 2024-10 “Declaring a Water Shortage Emergency, Authorizing Extraordinary Water Conservation Rules and Regulations, and Authorizing Emergency Response Activities and Projects”; and

WHEREAS, Resolution No. 2024-10 was adopted due to multiple failures of facilities owned by Pacific Gas & Electric Company (PG&E) that are utilized by NID to transport NID water to its downstream facilities and customers, thereby causing emergency water shortage conditions; and

WHEREAS, resolved paragraph 5 of Resolution No. 2024-10 authorized the NID General Manager to take appropriate emergency actions necessary to mitigate emergency water shortage conditions, including adopting and publishing reasonable regulations and restrictions on the delivery of water within NID’s service area; and

WHEREAS, resolved paragraph 6 of Resolution No. 2024-10 provided examples of the types of reasonable regulations that the NID General Manager may adopt, including subsection c that NID may employ a system of rotating water service to various users based on an evaluation of available water supply and capacity of alternative supplies to meet customer demands; and

WHEREAS, given adequate lead time, and consistent with resolved paragraph 7 of Resolution No. 2024-10, the NID Board of Directors, rather than NID’s General Manager under delegated authority, is considering in this Resolution additional emergency response measures to address the ongoing water shortage emergency; and

WHEREAS, PG&E’s initial estimate of restoration of water service to NID’s Drum Canal through PG&E’s Spaulding 1 Powerhouse (SPA 1) was June 8, 2024, and then modified to June 18, 2024; and

WHEREAS, PG&E’s estimates of restoration of its South Yuba Pipeline (SYP) which supplies water to NID’s South Yuba Canal, Cascade Canal, Scotts Flatt Reservoir

and multiple other downstream NID facilities has fluctuated significantly and currently is end of August 2024; and

WHEREAS, on May 15, 2024, PG&E informed NID that the return to service date of the SYP was delayed to approximately August 24, 2024, and on May 30, 2024, PG&E informed NID that the SPA 1 return to service was delayed to June 30, 2024; and

WHEREAS, under Resolution No. 2024-10 NID requested 20% voluntary water conservation from all NID customers, initiated operation of all emergency backup facilities including all pump stations, purchased additional source water, and rerouted irrigation flows, all designed to meet customer demands through PG&E's June 18th SPA 1 return to service date and end of August return to service date for PG&E's SYP; and

WHEREAS, notwithstanding these emergency response measures, PG&E's delays cause cascading issues impacting NID's ability to continue to supply continuous water supply to usable volumes to certain NID customers, thus necessitating further water saving measures; and

WHEREAS, NID has used and will continue to use emergency pumps to take water from NID's DS Canal to supply water to NID's Cascade Canal system, which provides potable water service to over 11,500 connections through NID's E. George and Loma Rica water treatment plants, and in-home canal use to 120 customers; and

WHEREAS, the delay in the return to service of the SYP and SPA 1 will increase the demands on NID's DS Canal beyond its maximum capacity as summer irrigation increases; and

WHEREAS, NID forecasts that its DS Canal will reach maximum capacity on or around June 20, 2024, causing the loss of a sufficient volume of water to a number of downstream canals and NID customers; and

WHEREAS, to equitably apportion the water available given limited supplies and capacity, NID anticipates the necessity of beginning rotating irrigation water outages on June 20, 2024, on canals supplied by the DS canal; and

NOW THEREFORE, BE IT RESOLVED BY THE BOARD OF DIRECTORS OF THE NEVADA IRRIGATION DISTRICT AS FOLLOWS:

1. The above recitals are true and correct and are declared to be findings of the Nevada Irrigation District.
2. The Board of Directors finds and determines that temporary canal outages on a rotating schedule are necessary to mitigate emergency water shortage conditions. Outages will be for a duration of three days, then rotate to the next set of impacted canals. Impacted customers should allow for 15 hours of travel time for water restoration, especially at the ends of the canals. The current estimated rotation and affected canals are as follows:

- a. **Rotation #1**
 - i. **Clear Creek Canal**
 - ii. **Outage: June 20 through June 23**
 - b. **Rotation #2**
 - i. **Tarr Canal downstream of Retract Road**
 - ii. **Outage: June 23 through June 26**
 - c. **Rotation #3**
 - i. **Cole Viet, Wolf, Pearl Barnes, and Carpenter Canals**
 - ii. **Outage: June 26 through June 29**
 - d. **Rotation #4**
 - i. **Smith Gordon, Casy Loney, Stinson Pipe, Pet Hill, Pet Hill Extension**
 - ii. **Outage: June 29 through July 2**
3. NID will maximize all resources and attempt to delay or minimize the duration of rotating outages if capacity in the DS Canal is available. Real-time updates will be provided on NID's outage web page <https://www.nidwater.com/irrigation-water-outages>. Customers may also contact NID Customer Service at (530) 273-6185 for up to date information.
4. This Resolution shall remain in full force and effect until PG&E's SPA1 is returned to service and sufficient water flow from the SYC, rather than pumped from the DS Canal, is available at the headworks of NID's Cascade Canal.
5. Nothing herein is intended to modify or alter Resolution No. 2024-10, including without limitation, the Board of Directors delegated authority to NID's General Manager to take appropriate emergency actions that are necessary to mitigate the emergency water shortage and as needed for the protection of persons and property.

PASSED AND ADOPTED by the Board of Directors of the Nevada Irrigation District at a regular meeting held on the 12th day of June 2024, by the following vote:

AYES:

NOES:

ABSTAINING:

ABSENT:

President of the Board

ATTEST:

Board Secretary