

Staff Report

TO: Board of Directors

FROM: Chip Close, Water Operations Manager

DATE: February 9, 2022

SUBJECT: Reducing Drought Emergency Response to Stage 1 Drought Contingency Plan Level

OPERATIONS

RECOMMENDATION:

Rescind Resolution No. 2021-21 (Declaration of Stage 2 Drought) and adopt Resolution 2022-10 (Reducing the Severity of Emergency Response Due to Drought by Adopting Stage I Drought Contingency Plan Requirements).

BACKGROUND:

The period from July 1, 2020, through June 30, 2021, was the third driest precipitation year on record for the District. The severely dry hydrologic conditions across California stressed water resources statewide and led to the District declaring a drought emergency at the April 28, 2021 Board of Directors' meeting. Continued dry conditions along with one of the warmest springs on record resulted in the adoption of resolution 2021-21, placing the District into a Stage II Drought. The Stage II declaration put into effect mandatory water use reductions of 20% for municipal users and strongly encouraged reductions of irrigation water from raw water customers. In addition, the stage II drought plan implemented drought surcharge pricing for both treated and raw water customers.

The start of the 2021/2022 water year has significantly improved District water supplies with record-breaking rainfall in the month of October and record-breaking snowfall in the month of December. As of January 26, 2021, precipitation is at 43.46," which is 123% of average for this time of year. District reservoirs have also improved, with water storage nearing average at 185,800-acre feet (96% of average). The February 1, 2022, snow survey indicated a snowpack with 24.7" of water content which is 123% of average for February 1.

Given the unusually dry conditions in January, staff took a conservative approach in forecasting April 1 water availability. Utilizing the above-noted rainfall and snowpack to date, combined with 50% of average February through July precipitation and 60% of estimated available runoff provides an estimated April 1 availability of 275,600-acre feet. This puts the District in a normal water year category for drought planning purposes. Staff is not including the availability of PG&E water at this time.

While hydrologic conditions have made a marked improvement, water supply is not at a point where all drought considerations should be dropped. Staff is recommending the Board adopt resolution 2022-10, which will decrease the District’s drought level to Stage I. This action will allow staff to continue to communicate the need for conservation and water efficiency and will return consumptive water rates to normal pre-drought levels.

Lastly, Resolution 2022-10 provides the details on Stage I action items but deviates from the Drought Contingency Plan Stage I in the declaration of no surplus water availability. Staff will be returning to the Board in March with an updated water supply analysis for the final determination of surplus water.

BUDGETARY IMPACT:

Resolution 2021-21 enacted drought pricing to recoup lost revenue and offset increased operational costs due to drought. The drought rate is based on the February 2019 Water Rate Cost of Service Study, and the associated water rates adopted by the Board. Per the Rate Study, the drought rates are intended for cost recovery associated with increased costs due to drought and the implementation of conservation measures, and decreased volume associated with voluntary and/or mandatory volumetric reductions. Below is an estimate of the costs and revenues gained since the implementation of Resolution 2021-21.

Reduction of Revenue Due to Drought

<i>Treated Water Sales July 1 – December 31</i>			
Year	Consumption in HCF	Revenue Reduction Compared to 2020	
2021	2,234,410 (15% < 2020)	(\$997,181)	
<i>Seasonal Raw Water Voluntary Reductions</i>			
Year	Voluntary Raw Water Reduction Amount	Revenue Reduction from Conservation	
2021	172 Miners Inches	(\$57,875)	
<i>Fall Water Sales Elimination</i>			
Year	Number of Customers	Purchased	Revenue Reduction
2020	88 Customers	\$30,399	
2021	0 Customers	\$0	(\$30,399)
Total Reduction of Revenue			(\$1,085,455)

Increased Operational Costs*

Description	Cost
PG&E Water Purchase	\$700,000
Outreach and Mailings	\$25,000
Staff Time for Regulatory Reporting & Bill Adjustments	\$50,000
Staff Time for WTR Waste Patrol	25,000
Staff Time for Canal Regulations	\$50,000
* Estimates to date	Total Increased Operational Costs \$850,000

Total of both increased operational costs and loss of revenue = \$1,935,455

Increased Revenue from Drought Surcharge 7/1/ 2021 through 12/31/2021

Treated Water	\$1,541,430
Raw Water	\$503,216
Total	\$2,044,646

In summary, it is estimated the total cost of drought is \$1.935 million dollars while drought surcharge pricing has increased revenue by \$2.045 million dollars. Per these estimates, the District has fully recouped its drought losses to date.

CONCLUSION

Due to the current availability of water supply, staff recommends that the Board adopt the proposed resolution reducing the current drought stage from Stage 2 to Stage 1. Associated with this action would be the elimination of the drought surcharge. It should be noted that the Annual Budget for 2022 includes the purchase of additional water from PG&E; however, even with the purchase, it is projected that water revenues (budgeted at \$74,620,100) will exceed planned expenditures.

As previously stated, staff also recommends that the Drought Contingency Plan be reconsidered based on the Plan for Water outcomes to better define future supply challenges and demand projections.

JH

Attachments: (1)

- Resolution 2022-10



RESOLUTION NO. 2022-10

OF THE BOARD OF DIRECTORS OF THE NEVADA IRRIGATION DISTRICT

REDUCING THE SEVERITY OF EMERGENCY RESPONSE DUE TO DROUGHT BY ADOPTING STAGE I DROUGHT CONTINGENCY PLAN REQUIREMENTS

WHEREAS Nevada Irrigation District (NID) provides water for residential, commercial, industrial, agricultural, municipal, environmental, fire protection and prevention purposes as well as other beneficial uses of water; and

WHEREAS, 2020 was the start of multi-year dry conditions that created increased withdrawals from storage, reduced end of year carryover storage to below-average amounts, and increased operational costs, and

WHEREAS, on April 21, 2021, Governor Gavin Newsom issued a State of Emergency Proclamation, stating that “much of the West is experiencing severe to exceptional drought and California is in a second consecutive year of dry conditions, resulting in drought or near-drought throughout many portions of the State” and “drought conditions vary across the State and some watersheds...are extremely dry and are facing substantial water supply and ecosystem challenge”; and

WHEREAS, the 2020/2021 water year was classified as critically dry and resulted in drought conditions throughout the District’s service area and watersheds, with precipitation being 49% or worse as compared to normal and actual snowpack runoff being historically low; and

WHEREAS, on April 28, 2021, due to continued dry conditions, the Board of Directors of the District adopted Resolution No. 2021-11 Declaration of Drought, which imposed increased conservation measures, and requested a 10% voluntary reduction in water use from all District customers; and

WHEREAS, on May 10, 2021, Governor Newsom issued a second Proclamation of a State of Emergency due to drought, observing “a historic and unanticipated” depletion of the expected snowpack runoff and declaring drought emergency in forty-one counties, including Nevada, Placer, and Yuba Counties; and

WHEREAS, on May 25, 2021, recognizing the sudden, unexpected lack of snowpack runoff which exasperated emergency drought conditions, the District, the Board of Directors authorized the purchase of 16,000 acre-feet of water at the cost of \$700,000 from Pacific Gas & Electric Co.; and

WHEREAS, on July 1, 2021, to assure continued supply of water for public health and safety, including domestic, irrigation, sanitation, environmental and fire prevention and suppression uses during this drought, the District adopted Resolution 2021-21, implementing a modified Stage II of its Drought Contingency Plan (that did not include mandatory reductions for irrigation customers); and

WHEREAS, the 2021/2022 water year has begun with record-breaking precipitation in October and December, which has led to 43.46" of precipitation at the Bowman Lake reporting station, which is 123% of average for this date; and

WHEREAS, substantial precipitation produced a marked increase in the District's water storage reservoirs from the low point of 69% of average in October 2021 to 98% of average for the end of January 2022; and

WHEREAS, the results of the District's February 1, 2022, snow survey indicated a snowpack with 24.7" of water content which is 123% of average for this time of year; and

WHEREAS, conservative forecasting accounting for 50% of average precipitation and 60% runoff recovery, without the addition of PG&E purchased water in 2022, results in an anticipated water availability of 275,600 by April 1, 2022; and

WHEREAS, per the District's Drought Contingency Plan, 275,600 acre-feet of water availability by April 1, places the District in a normal water year based upon supply; and

WHEREAS, the 2021/2022 water year started wet; however, long-term forecasting predicts a return to dry conditions continuing the need for water efficiency awareness and conservation in line with Stage I of the District's Drought Contingency Plan.

WHEREAS, drought surcharge pricing adopted on July 1, 2021, has allowed the District to recoup \$2.045 million in revenue to offset the \$1.935 million in costs due to drought; and

WHEREAS, on January 4, 2022, the State Water Resources Control Board adopted an emergency regulation that became effective January 18, 2022, to prohibit wasteful water practices, including irrigating ornamental landscapes when it is raining, using potable water to clean hard surfaces or driveways, and the use of ornamental fountains without recirculating pumps.

NOW, THEREFORE, BE IT RESOLVED AND PROCLAIMED by the Board of Directors of the Nevada Irrigation District that Resolution 2021-21 is rescinded, and for reasons set forth herein, the severity of response to local drought emergency is reduced to Stage I throughout the District's service area, which includes portions of Nevada County, Placer County, and Yuba County.

BE IT FURTHER RESOLVED that to continue to conserve supplies, including carryover storage, required for various beneficial uses of water, and to preserve the health and safety of the customers of the District, the District will implement Stage I of the District's Drought Contingency Plan as provided here within.

BE IT FURTHER RESOLVED that Stage II drought surcharge pricing will terminate with the next billing cycle beginning March 1, 2022.

BE IT FURTHER RESOLVED that the General Manager is authorized to identify additional operational actions and request additional conservation measures as determined necessary to meet the needs of public health and safety. Additional conservation measures, as imposed, shall be specifically described and communicated to all customers through one or more of the following: newspaper, public posting, and website and reported to the Board of Directors at the next available board meeting.

BE IT FURTHER RESOLVED that the target minimum carryover storage to be preserved for the 2023 water year shall be >110,000-acre feet for end of October storage.

BE IT FURTHER RESOLVED that water use for domestic, municipal, and industrial purposes by all District customers, including wholesale customers, shall observe the water use practices established in the District's Drought Contingency Plan Stage I.

BE IT FURTHER RESOLVED that irrigation water customers shall be subject to the following reduction measures as established in Stage I of the District's Drought Contingency Plan. Staff shall utilize the methods below to equitably reduce irrigation water deliveries to conserve supply, including maintenance of adequate carryover storage, as necessary for public health and safety:

- (a) All District irrigation water customers are strongly encouraged to implement irrigation efficiency practices.
- (b) New and increased irrigation water sales to in-District customers shall be subject to review and approval by Staff to confirm that the order is limited to the smallest amount of water necessary to serve the customer's beneficial use.
- (c) Existing outside District sales shall be subject to restriction or interruption at any time

as needed to prevent harm or shortages to in-District customers and to ensure the District achieves its carryover storage target.

(d) Customers who request a reduction, or who voluntarily forego water delivery during the 2022 irrigation season will not lose their priority of service for 2023 allocations.

(e) Availability of fall and new winter water sales will be at the discretion of the General Manager based on actual and forecasted storage carryover targets.

BE IT FURTHER RESOLVED that preliminary forecasts show adequate water for surplus water sales; however, due to a dry short term forecast, staff will return to the Board with a complete surplus water analysis in March, and

BE IT FURTHER RESOLVED that the District incorporates the State Water Resources Control Board's prevention of drought wasteful water uses as set forth in California Code of Regulations, title 23, section 995.

* * * * *

PASSED AND ADOPTED by the Board of Directors of Nevada Irrigation District at a meeting duly called and held within the District on the 9th day of February 2022 by the following roll call vote:

AYES: Directors:
NOES: Directors:
ABSENT: Directors:
ABSTAINS: Directors:

President of the Board of Directors

Attest:

Secretary to the Board of Directors