

Staff Report

TO: Board of Directors

FROM: Keane Sommers, P.E., Director of Power Systems
Lacy Cannon, P.E., Associate Engineer

DATE: August 23, 2023

SUBJECT: **2023 Budget Amendment and Award of Construction Contract for Jackson Lake Dam Toe and Channel Banks Protection (Project #2597)**

HYDROELECTRIC

RECOMMENDATION:

Adopt a Resolution:

- Amending the 2023 Annual Budget to provide additional funding for construction and environmental work: Jackson Lake Dam Toe and Slope Protection in the amount of \$143,700 to be funded by Fund 55.
- Reducing funding and delaying one previously approved project in Fund 55 for a total deduction of \$143,700 resulting in a net zero change to the Fund 55 budget when combined with the addition above.
- Authorizing a construction contract with Syblon Reid for Jackson Lake Dam Toe and Channel Banks Protection construction quote dated July 24, 2023 in the amount of \$217,000 with a \$21,700 contract contingency, and authorizing the General Manager to execute all necessary documents.
- Allocating \$5,000 to Jackson Lake Dam Toe and Channel Banks Protection project for additional environmental work.

BACKGROUND:

Jackson Lake Dam is an earthen embankment dam which impounds an approximately 1,000-acre-foot reservoir. This facility is a part of the Yuba-Bear Hydroelectric Project and is regulated by both the California Department of Water Resources, Division of Safety of Dams (DSOD), and the Federal Energy Regulatory Commission (FERC). The reservoir is the headwater of Jackson Creek, which flows into the Bowman Reservoir, approximately 3.5 miles downstream.

Although the dam and associated storage has an insignificant impact on hydropower operations, it is important to the water supply of the District as the reservoir includes pre 1914 water rights to store 1,330 acre-feet of water. Costs of the repairs will be entirely paid by hydroelectric revenues.

Since its construction in the 1940s, the area of the dam toe by the 18-inch-diameter outlet pipe and the downstream channel banks have experienced seepage leading to gradual erosion and sloughing. Although the erosion does not appear to threaten the safety of the dam, it needs to be mitigated to prevent further loss of material.

The concrete fish flow weir located approximately 100 feet downstream of the dam outlet, has cracks and spalls, exposing the embedded portion of the weir blade. The exposure of the structure to freeze/thaw cycles will continue to degrade the structure and it needs to be replaced to maintain its functionality.

A request for quotes (RFQ) for construction services was sent to eight contractors. Five firms did not participate the mandatory pre-quote meeting and thus were eliminated from quoting. One quote was received on July 24, 2023 from Syblon Reid in the amount of \$217,000.

Staff is recommending that the Board approve a 10% contract contingency in the amount of \$21,700 at the same time as the award of the construction contract. This contingency is requested to avoid delays if unanticipated challenges arise during construction.

This work will be performed in an active streambed and is subject to multiple environmental permits. An additional \$5,000 is needed for consulting and monitoring to meet the conditions defined in the environmental permits.

Staff allocated \$100,000 for construction in the 2023 Annual Budget. This amount is not enough to complete this work. The total amount required including the construction contract, 10% contingency, and remaining environmental work is \$243,700. An additional \$143,700 is needed for this project.

Staff recommends reducing funding for the Chicago Park Powerhouse Refurbishment Project (PN 2655) in Fund 55 in the amount of \$143,700 and adding it to Jackson Lake Dam Toe and Channel Banks Protection (PN 2597) to provide the outstanding funding needed for this work. The Chicago Park Powerhouse Refurbishment Project is delayed due to staffing constraints and scheduling issues outside of the District's control. The change to Fund 55 in the 2023 Annual Budget will be net zero.

As a result, a Budget Amendment in the attached Resolution is proposed to fund the project with \$143,700 from Fund 55.

Staff recommends award of a construction contract to Syblon Reid in the amount of \$217,000 and a contract contingency amount of \$21,700.

BUDGETARY IMPACT:

The proposed amendment to the 2023 Annual Budget to fund the Jackson Lake Dam Toe and Channel Banks Protection work will result in a net zero change to Fund 55. If approved, the cost of services for a construction contract with Syblon Reid in the

amount of \$217,000 with a contract contingency amount of \$21,700 would be covered by funds reallocated during the proposed amendment to the 2023 Annual Budget.

Attachments: (1)

- Resolution amending the 2023 Annual Budget, approving the authorization of a construction contract with Syblon Reid, and authorizing the General Manager to execute the necessary documents.

KS
LC



RESOLUTION NO. 2023-38
OF THE BOARD OF DIRECTORS OF THE NEVADA IRRIGATION DISTRICT

**2023 Fund 55 Capital Budget Amendment and Award of Construction Contract for
Jackson Lake Dam Toe and Channel Banks Protection (PN 2597)**

WHEREAS, the Nevada Irrigation District (District) budget for the 2023 fiscal year reflects resources to meet the essential needs of the District and the District's customers; and

WHEREAS, the Board of Directors adopted the 2023 Annual Budget on December 14, 2022; and

WHEREAS, District staff has reviewed the approved Fund 55 budget and identified projects that can be delayed or otherwise deferred due to the Jackson Lake Dam Toe and Channel Banks Protection Project.

NOW THEREFORE, BE IT RESOLVED by the Board of Directors of Nevada Irrigation District:

1. The Board of Directors hereby approves amending the 2023 Annual Budget to reduce capital project funding for the Chicago Park Powerhouse Refurbishment Project (PN 2655) in the amount of \$143,700 from Fund 55 to offset the outstanding funding required to complete construction of item 2, below.
2. The Board of Directors hereby approves amending the 2023 Annual Budget to increase funding for Jackson Lake Dam Toe and Channel Banks Protection Project (PN 2597) in the amount of \$143,700 from Fund 55 to provide necessary funding to award a construction contract with a 10% contract contingency and fulfill environmental work requirements.

3. The Board of Directors hereby approves the authorization of a construction contract with Syblon Reid for Jackson Dam and Toe Slope Protection Quote dated July 24, 2023 in the amount of \$217,000 plus a contingency of \$21,700.
4. The Board of Directors hereby authorizes the General Manager to execute the documents necessary to cause the actions contemplated by this resolution.

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PASSED AND ADOPTED by the Board of Directors of the Nevada Irrigation District at a regular meeting held on the 23rd day of August 2023, by the following vote:

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

President of the Board of Directors

Attest:

Secretary to the Board of Directors