

# Staff Report

for the Administrative Practices Committee Meeting of October 6, 2020

**TO:** Administrative Practices Committee

**FROM:** Adrian Schneider, P.E., Senior Engineer  
Doug Roderick, P.E., Interim Engineering Manager

**DATE:** September 29, 2020

**SUBJECT:** District-Wide Reservoir Study Project (FATR# 2500)

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***ENGINEERING***

**RECOMMENDATION:**

Award a consulting contract to McLaren Engineering in the amount of \$125,150 for the District-Wide Reservoir Study Project (FATR #2500) to conduct Bathymetric studies, and authorize the Interim General Manager to execute the appropriate documents.

**BACKGROUND:**

In June 2020, Staff began a District-wide reservoir study of the current condition of all District reservoirs. Existing information was gathered and included 35 reservoirs to be reviewed and prioritized.

Staff members from Engineering, Operations, and Hydroelectric met at the beginning of September 2020 to discuss which reservoirs should be prioritized for sediment removal. It was determined that Bathymetric Studies should be conducted on five reservoirs to gather the information needed to prioritize the reservoirs. The reservoirs include Rollins, Combie, Upper Scotts Flat, Dutch Flat Forebay, and Dutch Flat Afterbay.

Rollins and Combie Reservoirs are vital components of the District's raw water storage and are the third and sixth largest of the District's reservoirs, respectively. The Greenhorn and Steep Hollow Ravine arms of Rollins Reservoir are planned for sediment removal. Combie Reservoir has always experienced sediment

accumulation that required removal over the past decades. Upper Scotts Flat Reservoir is another key District reservoir that feeds many downstream reservoirs, canals, and customers. It is the District's fourth-largest reservoir.

The Dutch Flat Forebay and Afterbay reservoirs regulate water to the Dutch Flat II Powerhouse and the Chicago Park Canal, which feeds the Chicago Park Powerhouse, and maintains regulatory fish flows to the Bear River. These reservoirs are known to be increasing in their criticality due to past studies and repairs.

Bathymetric studies provide existing elevation profiles of the reservoir floor and provide information to compare the original floor elevation and capacity, to determine the capacity lost. This information will be used to support the prioritization of the reservoirs.

Requests for Proposals were sent to five consultants on September 3, 2020. A sixth consultant was contacted but did not return communications. On September 21, 2020, the District received proposals from Solmar Hydro and McLaren Engineering Group. Comparative costs for the same services were \$125,150 by McLaren Engineering and \$167,772 from Solmar Hydro.

Staff's recommendation is to award a consulting contract to McLaren Engineering Group in the amount of \$125,150 for the District Wide Reservoir Study Project.

This item aligns with District Goals 1 and 4 by the proactive management of our physical resources and the integration of proven practices and technologies to enhance the reliability and quality of our water supply.

**BUDGETARY IMPACT:**

The current budget for the Sediment Removal Program (10151-52914) is \$861,947. After this commitment, there will be \$736,797 remaining in Account #10151-52914.

DR/AS