

**LAKE ARROWHEAD COMMUNITY SERVICES DISTRICT**

**MEMORANDUM**

**DATE:** AUGUST 13, 2019

**TO:** BOARD OF DIRECTORS  
Lake Arrowhead Community Services District

**FROM:**   
AIDA HERCULES-DODARO, District Engineer

  
CATHERINE CERRI, General Manager

**SUBJECT:** CONSIDER APPROVING AN AGREEMENT WITH THE UNITED STATES GEOLOGICAL SURVEY FOR WATER YEAR 2020 OPERATIONS AND MAINTENANCE OF STREAM AND RAIN GAGING STATIONS

**A. RECOMMENDATION**

Authorize the General Manager to execute the United States Geological Survey (“USGS”) Joint Funding Agreement (“JFA”) for continued operation and maintenance of one stream gaging station and one precipitation monitoring station as detailed in the attachment.

**B. REASON FOR RECOMMENDATION**

The Lake Arrowhead Community Services District (“LACSD”) relies on the data provided by the stream gage between Lake Arrowhead and Grass Valley Lake. The precipitation gage provides data for inflow and infiltration analysis.

**C. BACKGROUND INFORMATION**

The proposed agreement for the period November 1, 2019 to October 31, 2020 will cover maintenance and data storage for one precipitation gage and one stream flow gage at the tunnel entrance to Lake Arrowhead. The total cost of the proposed cooperative water-resources program for this period is \$21,800, a 0.9% increase over the prior year. If Federal matching funds are not available, the entire cost of \$29,750 will be the responsibility of the

District. Since 2009, the matching funds have always been made available. The proposed costs are as follows:

<b>Program Element</b>	<b>LACSD Funds</b>	<b>USGS Funds</b>	<b>Total</b>
1.Surface-Water Monitoring	\$15,800	\$7,950	\$23,750
2. Precipitation Monitoring Network	\$6,000	-0-	\$6,000
<b>TOTAL</b>	<b>\$21,800</b>	<b>\$7,950</b>	<b>\$29,750</b>

The prior year contract cost to LACSD was \$21,600.

**D. FISCAL INFORMATION**

This is a budgeted item and will be shared between the Water and Wastewater Operating Funds. If the USGS cost share is approved, the total LACSD share would be \$21,800 for FY 2019/2020. If not, the total cost to the District will be \$29,750.

**E. ATTACHMENTS**

Attachment 1 – Draft proposal letter from USGS

California Water Science Center  
6000 J Street, Placer Hall  
California State University  
Sacramento, California 95819-6129  
Phone: (916) 278-3000 Fax: (916) 278-3070  
<https://ca.water.usgs.gov>

DRAFT

Ms. Catherine Cerri, General Manager  
Lake Arrowhead Community Services District  
27307 State Highway 189  
P.O. Box 700  
Lake Arrowhead, California 92352

Dear Ms. Cerri:

This letter confirms discussions between our respective staffs, concerning the continuation of the cooperative water resources program between the Lake Arrowhead Community Services District (LACSD) and the U.S. Geological Survey (USGS) during the period November 1, 2019 to October 31, 2020.

The proposed program elements and associated costs are as follows:

The surface water program will consist of the continued operation and maintenance of the streamgaging station on Grass Valley Lake Tunnel Outlet at Lake Arrowhead, installed during water year 2008. The station consists of a Data Collection Platform (DCP) equipped with a pressure transducer capable of recording gage height (stage) readings at 15 minute intervals. Data collected from the streamgaging station is transmitted hourly and stored in the National Water Information System (NWIS) at <http://nwis.waterdata.usgs.gov>. Data for Grass Valley Lake Tunnel Outlet may be viewed at [http://waterdata.usgs.gov/nwis/uv?site\\_no=10260855](http://waterdata.usgs.gov/nwis/uv?site_no=10260855).

### 1. Surface Water Monitoring

The station costs are as follows:

<u>Station number and name</u>	<u>LACSD Funds</u>	<u>USGS Funds</u>	<u>Total Funds</u>
10260855 Grass Valley Lake Tunnel outlet at Lake Arrowhead	\$15,800	\$7,950	\$23,750
<b>TOTAL</b>	<b>\$15,800</b>	<b>\$7,950</b>	<b>\$23,750</b>

All data collected will be entered into the USGS database with appropriate quality control, published, and will be available upon request.

***Total WY 2020 cost for Element 1 -- \$ 23,750***

**2. Precipitation Monitoring**

The precipitation monitoring program will consist of the continued operation and maintenance of the Bernina Drive Precipitation Gage at Lake Arrowhead (341545117124001). The USGS will perform an annual calibration of the precipitation gage and will work in cooperation with LACSD staff to ensure that the gage is functioning properly or repaired as necessary. The measured data from the precipitation gage will be reviewed for quality assurance and input into the National Water Information System (NWIS). The USGS will publish the precipitation data in the USGS annual data report at the end of WY20. Data for the site can be viewed online at [http://waterdata.usgs.gov/nwis/uv?site\\_no=341545117124001](http://waterdata.usgs.gov/nwis/uv?site_no=341545117124001).

The station costs are as follows:

<u>Station number and name</u>	<u>LACSD Funds</u>	<u>USGS Funds</u>	<u>Total Funds</u>
341545117124001 Bernina Drive Precipitation Gage at Lake Arrowhead	\$6,000	\$-0-	\$6,000
<b>TOTAL</b>	<b>\$6,000</b>	<b>\$-0-</b>	<b>\$6,000</b>

***Total WY 2020 cost for Element 2 -- \$6,000***

**SUMMARY**

The total cost of the proposed cooperative water-resources program in WY20 is \$29,750. The cost to LACSD is \$21,800 and subject to the availability of Federal matching funds, the USGS will provide \$7,950. The proposed costs for WY20 by program element are as follows:

Program Element	LACSD Funds	USGS Funds	Total Funds
1. Surface-Water Monitoring	\$15,800	\$7,950	\$23,750
2. Precipitation Monitoring Network	\$6,000	-0-	\$6,000
<b>TOTAL</b>	<b>\$21,800</b>	<b>\$7,950</b>	<b>\$29,750</b>

Enclosed are two originals of Joint Funding Agreement (JFA) 20ZGJFA42200, signed by our agency, for your approval. If you are in agreement with this proposed program, please return one fully executed JFA to our office. Work performed with funds from this agreement will be conducted on a fixed-price basis. Billing for this agreement will be rendered quarterly.

The USGS is required to have an agreement in place prior to any work being performed on a project. We request that a fully executed JFA be returned prior to November 1, 2019. If it is not received by November 1, we will be required to suspend operations until an agreement is received.

**Ms. Catherine Cerri, General Manager - Lake Arrowhead Community Services District**

If you have any questions concerning this program please contact Al Caldwell in our San Diego office at (619) 225-6103. If you have any administrative questions please contact Tammy Seubert in our Sacramento Office at (916) 278-3040.

Sincerely,

Eric G. Reichard  
Director, USGS California Water Science Center

Enclosures

cc: Al Caldwell, USGS CAWSC