

OLYMPIC VALLEY PUBLIC SERVICE DISTRICT



EXHIBIT F-10 8 pages

WASHESHU CREEK STREAMFLOW GAGING IMPROVEMENT PROJECT PROFESSIONAL SERVICES AGREEMENT - UES

- **DATE**: March 25, 2025
- TO: District Board Members
- FROM: Dave Hunt, District Engineer
- **SUBJECT:** Authorize the General Manager to Execute a Professional Services Agreement with UES for Hydrologic Consulting Services
- **BACKGROUND:** In November 2024, the District applied for a grant from the Department of Water Resources (DWR) under the California Stream Gage Improvement Project (CalSIP). California Senate Bill (SB) 19 (2019) directed the DWR and the State Water Resources Control Board to develop a plan to deploy a network of stream gages to help address significant gaps in information needed for water management.

The District's grant application requested funding for three (3) stream gages along Washeshu Creek:

- Gage 0442-01 North Fork Washeshu Creek Upgrade an existing active USGS gage to include flow measurement and telemetry. The gage is located at the end of Chamonix PI near the Shirley Lake trailhead.
- Gage 2876-01 South Fork Washeshu Creek Installation of new gage with telemetry to replace a historical gage that was discontinued in 2016. The gage is located near Shirley Canyon Rd. and the Granite Chief subdivision.
- Gage 2877-01 Washeshu Creek at County Bridge Installation of a new gage with telemetry to replace a historical gage that was discontinued in 2020. The gage is located near the bridge on Olympic Valley Rd. near Winding Creek Rd.

On February 19, 2025, DWR notified the District that our request for grant funding was approved for all three (3) gages in the amount \$208,420.00.

DISCUSSION: The District intends to contract with our hydrologic consultant, UES (Dwight Smith), to install and operate the stream gages identified in the DWR grant agreement. Dwight has been the District's hydrogeologist for several years and has supported numerous Olympic Valley Groundwater Management (OVGMP) initiatives. His knowledge of groundwater activities in the Valley and specifically

his extensive experience in streamflow gaging is critical for successful completion of this Project.

UES's scope of work includes:

- Task 1: Planning, Site Selection and Permitting
- Task 2: Equipment Installation
- Task 3 Telemetry Instrumentation
- Task 4 Operations and Maintenance Field Measurements and Rating Curve Development
- Task 5: Operations and Maintenance Equipment Functionality, QA/QC, and Annual Reporting

The UES proposal includes \$178,650 to complete the tasks above. The remaining portion of the grant is set aside for District staff time associated with grant administration and planning and field support.

The grant agreement requires that all stream gages be fully operational by October 1, 2026, and all expenditures are invoiced for reimbursement by March 30, 2027. All work for the project will be reimbursed under the grant agreement. It is anticipated that the gages will be operational by June 1, 2025.

- ALTERNATIVES: 1. Approve the Proposal from UES to provide hydrologic consulting services for Washeshu Creek Stream Gaging Improvement Project in an amount not to exceed \$178,650.00.
 - 2. Do not approve the Scope of Work from UES.
- **FISCAL/RESOURCE IMPACTS**: There is no fiscal impact on any District funds for the Project. All work proposed for the Project will be funded by a grant awarded to the District by DWR through its CalSIP program.
- **RECOMMENDATIONS**: Staff recommends approval the Proposal from UES to provide hydrologic consulting services for Washeshu Creek Stream Gaging Improvement Project and authorization for the General Manager to execute a Professional Services Agreement with UES in an amount not to exceed \$178,650.

ATTACHMENTS:

• Proposal to Provide Professional Services for CalSIP Funded Streamflow Gage Installation and Operations (UES, March 13, 2025)

DATE PREPARED: March 14, 2025



March 13, 2025

OLYMPIC VALLEY PUBLIC SERVICE DISTRICT 305 Olympic Valley Road Olympic Valley, C 96146

ATTN: Mr. Dave Hunt, PE, District Engineer (dhunt@ovpsd.org)

RE: PROPOSAL TO PROVIDE PROFESSSIONAL SERVICES FOR CALSIP FUNDED STREAMFLOW GAGE INSTALLATIONS AND OPERATIONS

Dear Mr. Hunt,

UES is pleased to provide this proposal to provide professional hydrologic services to the Olympic Valley Public Service District (OVPSD) for streamflow gage installations and operation under the CalSIP grant program award to OVPSD. These services will extend through the conclusion of the grant period of March 2027, and will include the following tasks, consistent with Exhibit A Scope of Work for the grant agreement between OVPSD and CA Department of Water Resources (DWR). The gages to be installed and operated are summarized in **Table 1**.

OVPSD Gage Name	Latitude	Longitude	Туре	Notes
South Fork Washeshu	39°11'48.71"	120°14'20.67"	Rated Open	New gage installation with telemetry
Creek			Channel	to CDEC for real time data, including
				processing and annual data report.
				New location downstream ~250 ft
				historical location.
North Fork Washeshu	39°11'55.59"	120°14'26.86"	Rated Open	Utilize the existing USGS gage which
Creek			Channel	records water stage (height),
				develop rating curve, process and
				publish discharge data.
Washeshu Creek at	39°12'24.51"	120°12'38.17"	Rated Open	New gage installation with telemetry
County Bridge			Channel	to CDEC for real time data, including
				development of rating curve, data
				processing and annual data report.
				Same location as historical gaging.

Table 1: Summary of Streamflow Gaging Locations



1.0 SCOPE OF WORK

1.1 TASK 1: PLANNING, SITE SELECTION AND PERMITTING

UES will provide gage site selection confirmation including reviewing hydrological data, conducting field reconnaissance and surveys, to confirm the gage sites have favorable hydraulic conditions for accurate streamflow measurement at various flow levels, and streambeds have relative geomorphic stability for consistent hydraulic conditions over time, along with being accessible for measurements and gage operation.

UES will provide support (descriptions of equipment, locations mapping, operational requirements) for permitting and property access agreement, but we assume that OVPSD will be the lead for permitting and access agreements, including submittals to DWR.

UES Deliverable: Site Selection Confirmation Memorandum. Supporting documents as needed for permitting and access agreements.

1.2 TASK 2: EQUIPMENT INSTALLATION

UES will provide labor and materials for installation of stream gaging equipment. OVPSD will be responsible for acquisition of primary equipment components, including water level sensors, data loggers, power supply, telemetry, and weather-proof housing. UES will assist OVPSD with component part specifications, selection, and acquiring quotes from vendors. As part of equipment installations, UES will provide surveys for benchmark reference points at each gage.

UES Deliverable: Documentation of Equipment Installed.

1.3 TASK **3**: TELEMETRY INSTRUMENTATION

UES will provide telemetry configurations and instrument calibrations, and in the case of the North Fork gage which will utilize the existing stage measurement system operated by the USGS, UES will provide a data routing and management system to process data and produce discharge measurements to be uploaded to CDEC.

UES Deliverable: Calibration and setup report detailing the configuration and calibration of instruments and telemetry systems.

1.4 TASK 4: OPERATIONS AND MAINTENANCE – FIELD MEASUREMENTS AND RATING CURVE DEVELOPMENT

UES will conduct routine field measurements of flow at each gage site to develop and maintain a rating curve to convert stage recordings to discharge. Conventional open-channel flow measurement techniques will be used, along with data processing and rating curve conventions in use by streamflow gaging professionals. A provisional rating curve may be produced for the first year (2025) to facilitate reporting of discharge on a provisional basis. Gage sites will be visited on an approximate 6 week cycle; however, the visitation frequency may increase during the spring runoff period and decrease during the summerfall periods when the stream channels may be dry. Field logs will include notes on relevant channel conditions that may affect quality of measurements and recorded data.



UES Deliverable: Field measurements documentation, inspection logs, and data analysis for development of rating curves, to be provided as part of the annual report for data validation.

1.5 TASK **5**: OPERATIONS AND MAINTENANCE – EQUIPMENT FUNCTIONALITY, QA/QC AND ANNUAL REPORTING

Concurrent with Task 4, UES field personnel will review equipment functionality and provide necessary repairs and maintenance for continuous data collection, to the extent possible, and excepting conditions of damage by extreme natural events or vandalize.

At the end of water-year 2025 and 2026, stage and discharge data will be reported for each gage, including adjustments, corrections, data validation and certification. A water-year 2027 report is not included in our scope of work, as grant funding of gage operation and data collection does not extend through water-year 2027.

The water-year report will include the following for each streamflow gaging station:

- A. Site summary report.
- B. Field notes from all site visits and measurements.
- C. Flow measurement report summary to summarize when, how, and results of flow measurements.
- D. Certification (signature) from a qualified and experienced reviewer (someone who has completed a USGS, or similar course; or professional licensed civil engineer).
- E. Flow measurement sheets.
- F. Rating table documentation, PDF or Excel spreadsheet.
- G. Rating table and discrete flow measurement plots.
- H. Primary computations.
- I. Mean daily gage height summary.
- J. Mean daily flow summary.
- K. Mean daily temperature summary.
- L. Mean daily gage height, water rear plots.
- M. Mean daily gage flow, water year plots.
- N. Mean daily gage water temperature, water year plots.

UES Deliverable: Water-year report with data validation for WY2025 (partial year) and WY2026. The 2025 and 2026 water-year report will be issued by the end of the calendar year (December 31).

2.0 ESTIMATED COSTS

UES professional services will be provided on a time and expenses basis in accordance with our current Professional Fee Schedule for the year in which services are being provided. Our 2025 Professional Fee Schedule is attached. Total estimated costs for professional services through March 2027 are \$178,650.00, as summarized in **Table 2.** A detailed cost estimate worksheet is attached hereto.



Table 2: Summary of Estimated Costs

Task	Description	Estimated Cost
1	Site Selection	\$ 4,340.00
1	Permitting Assistance	\$ 8,780.00
2	Equipment Installations	\$26,440.00
3	Telemetry Setup and Calibrations	\$17,040.00
4/5	Operations and Maintenance, with WY	
	2025	\$43,714.80
	2026	\$58,286.40
	2027	\$19,428.80
	Total	\$178,650.00

The DWR grant funded work only extends to March 2027, and all expenditures must be invoiced no later than March 30, 2027. Final invoicing by OVPSD to DWR must be submitted by April 15, 2027. Accordingly, work by UES to maintain and operate the gages will only extend through March 15, 2027, with final invoicing to OVPSD no later than March 30, 2027.

3.0 CLOSING

We appreciate the opportunity to submit this proposal to OVPSD and look forward to assisting with the Washeshu Creek streamflow gaging efforts. Should you have any questions regarding this proposal, please contact me at <u>dsmith1@teamues.com</u> or (775) 848-2366 (cell).

Respectfully submitted, **UES**

Dwight L. Smith, PG, CHg Principal Hydrogeologist

Attachments:

Detailed Cost Estimate Worksheet UES 2025 Rate Sheet for Professional Services

Cost Estimate Hydrologic Services

Task Number	Description	Principal	Project Professional	Staff Professional I	Admin	Subtotal Professional Services	Travel	Field Equipment	Supplies and Outside Services	Task Total
	Rate	\$250.00	\$180.00	\$150.00	\$90.00		gov. rate	cost - rounded	cost	
1	Planning and Permitting									
	Siting and Planning	8	2	12	2	\$4,340.00	\$120.00	\$0.00	\$500.00	\$4,960.00
	Permitting Support	8	20	20	2	\$8,780.00	\$0.00	\$0.00	\$0.00	\$8,780.00
2	Installation									
	Equipment Specs and Quotes	4	2	16	2	\$3,940.00	\$0.00	\$0.00	\$0.00	\$3,940.00
	Fieldwork - installations	12	8	80	2	\$16,620.00	\$300.00	\$200.00	\$1,000.00	\$18,120.00
	Bench marks and surveying	2	0	8	2	\$1,880.00	\$0.00	\$0.00	\$2,500.00	\$4,380.00
3	Installation - Telemetry and CDEC links									
	Equipment setup	2	4	20	2	\$4,400.00	\$120.00	\$0.00	\$0.00	\$4,520.00
	Links to CDEC, District account with NESDIS(GOES) IDs	2	4	20	2	\$4,400.00	\$0.00	\$0.00	\$0.00	\$4,400.00
	Coding - data push from USGS to UES to CDEC for N. Fork	2	8	40	2	\$8,120.00	\$0.00	\$0.00	\$0.00	\$8,120.00
4 and 5	15 Field Measurements, Data Processing and Reporting									
	Flow Measurements, inspections, maintenance at 6 week intervals (ave) for 25 months (est 20 field measure trips)	20	10	320	20	\$56,600.00	\$1,200.00	\$1,200.00	\$350.00	\$59,350.00
	Rating curve development	8	8	20	2	\$6,620.00	\$0.00	\$0.00	\$500.00	\$7,120.00
	Office processing of data and QA/QC of posting data to CDEC	8	8	120	4	\$21,800.00	\$0.00	\$0.00	\$0.00	\$21,800.00
	Reporting - WY25 (partial), WY26	16	8	180	8	\$33,160.00	\$0.00	\$0.00	\$0.00	\$33,160.00
	Total Estimated	92	82	856	50	\$170,660.00	\$1,740.00	\$1,400.00	\$4,850.00	\$178,650.00

Task	Description	Estimated Cost	
1	Planning and Permitting	\$13,740.00	
2	Installation	\$26,440.00	
3	Installation - Telemetry and CDEC links	\$17,040.00	2025
4 and 5	Field Measurements, Data Processing and Reporting	\$121,430.00	\$43,714.
	Total	\$178.650.00	

2025	2026	
,714.80	\$58,286.40	

2027 \$58,286.40 \$19,428.80



2025 SCHEDULE OF FEES – PROFESSIONAL SERVICES

Professional Fees

Staff	Rate (per hour)
Subject Matter Expert	\$325.00
Sr. 3 rd Party Review	\$275.00
Principal	\$250.00
Sr. Associate	\$220.00
Project Manager	\$205.00
Senior Professional	\$185.00
Project Professional	\$175.00
Staff Professional II	\$160.00
Staff Professional I	\$150.00
GIS Specialist	\$150.00
Environmental Scientist	\$140.00
Technician	\$120.00
Drafting	\$120.00
Engineering Intern	\$100.00
Administration	\$85.00
Note: Expert Witness Rate: 2 times normal billing re	ate

Equipment

Description	Rate	De
Oil/water interface probe	\$75/day	M
Multi-Meter w/Flow Through (Base)	\$115/day	Pe
 Each probe/sensor used 	\$25/day	Su
Water level meter	\$50/day	Ut
PH/Conductivity/Temp. meter	\$30/day	Sp
Dissolved Oxygen (DO) meter	\$30/day	
Data logger/Transducer	\$125/day	
PID/OVM	\$125/day	
Generator	\$60/day	
Bailers	\$12/each	
Submersible/Peristaltic pump	\$50/day	
Variable flow purge pump	\$100/day	
Air sample pump & vacuum chamber	\$25/day	
Air sample bag	\$15/each	
Anemometer	\$35/day	
Portable Bladder Pump + Controller	\$130/day	
Sampling kit	\$15 each	
GPS unit	\$110/day	
Drone – Mapping	\$350/day	
Drone – Heavy Lift	\$500/day	

Reimbursable

Description	<u>Rate</u>		
Mileage	per federal rates		
Per diem	per federal rates		
Subcontractors	cost + 15%		
Utility trailer	\$75/day		
Specialty Rental Equipm	nent cost + 15%		