

**Table 6.1 – Surface Water Management – Proposed Project Tasks and Preliminary Budget Estimates**

Proposed Project / Management Action	Components	Implementation Years	Preliminary Budget Estimate Equipment or Contractor	Preliminary Budget Estimate Professional Services	SVGMD and Plumas County Administration
<b>Smithneck Watershed – Development and Implement of a Pilot AR Program</b>					
<b>Task 1 - Preliminary Design and Permitting of Pilot AR</b>	Landownership Discussions and Establish Land Access / Utilization Agreements a) Stream gages b) Water Conveyance Routes c) Infiltration Sites d) Monitoring Well Sites e) Including legal descriptions	2023	NA	\$20,000	\$2,000
	Smithneck Stream Gage installation at Water Master Point of Measurement: a) Installation of Equipment	2023 (Oct 1 for start of WY)	\$15,000	\$10,000	\$2,500
	Smithneck Stream Gage Maintenance and Operation (4 water-years)	2023 (WY2024 – 2027)	\$2,000	\$20,000 per year \$80,000	\$8,000
	Updated Hydrogeologic Characterizations for Siting Potential Infiltration Facilities a) Update Numerical Flow Model, to include AEM Data for extent of clays b) Area-specific geophysics to ID prospective infiltration sites c) Phase I borings to determine/confirm lithologies at prospective locations d) Refined modeling for mounding assessment (volume limitations) and predicted effectiveness of AR	2023-2024	\$50,000	\$30,000 + <b>MODELING \$</b>	10,000

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	<p>Geotechnical Investigations at proposed locations for infiltration:</p> <ul style="list-style-type: none"> <li>a) Upper soils profiles (backhoe test pits and soil gradation and PI testing) at prospective infiltration sites</li> <li>b) Phase 2 borings to water table to characterize unsaturated zone soils at planned infiltration sites (VPW piezometer completions)</li> <li>c) Small basin flooded infiltration tests measurements at planned bottom depths of infiltration basins, galleries, or dry wells.</li> </ul>	2024	\$50,000	\$40,000	\$8,500
	<p>Refined Hydrology at Planned Pilot AR Site(s)</p> <ul style="list-style-type: none"> <li>a) Determine 1-yr, 10-yr and 100-yr runoff event flows using HEC-RAS</li> <li>b) Update PRMS model based on preliminary Smithneck stream gage data.</li> </ul>	2024	NA	\$20,000	1,500
	<p>Preliminary Design of Pilot AR Infiltration System, sufficient to advance Water Right Application and CEQA for project implementation (anticipated 30% design)</p> <ul style="list-style-type: none"> <li>a) Stream Diversion, Conveyance and Basin(s) – Galleries - Dry Wells Design</li> <li>b) Surveying for Site Plans</li> <li>c) Potential wetlands mapping (avoidance)</li> <li>d) Preliminary Involved Agency Coordination</li> <li>e) Engineering Estimate for Construction</li> </ul>	2024	NA	\$120,000	\$10,000

Proposed Project / Management Action	Components	Implementation Years	Preliminary Budget Estimate Equipment or Contractor	Preliminary Budget Estimate Professional Services	SVGMD and Plumas County Administration
	Water Right Application a) Draft Application b) Filing and Hearing Technical Support	2024-2025	NA	\$40,000	\$4,000
	CEQA for Pilot AR Program	2024-2025	NA	\$40,000	\$4,000
<b>Task 2 - Construction of Pilot AR Facilities at Smithneck Creek Watershed</b>	Construct all facilities, including diversion works, conveyance, and infiltration facilities, including diversion gaging, and water table and vadose zone monitoring network at infiltration facilities. a) Complete Engineering Design to 100% b) Secure Construction Permits (County, ACE possible) c) Bid Project and Select Contractor d) Construction with Inspection Services e) Start-up Testing and Documentation of constructed facilities	2025	\$300,000	\$120,000	\$20,000
<b>Task 3 - Pilot AR Performance Monitoring</b>	Assume 2 years of monitoring and reporting after construction of Pilot AF facility (through end of grant funding period) a) Bi-weekly monitoring during diversion period (assumed 4 months – Dec 1 through March 31) b) Reporting c) Assumes minor basin and infrastructure maintenance required each year	WY 2026 - 2027	\$10,000	\$30,000 / yr \$60,000	\$7,000

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<b>Little Last Chance Watershed – Opportunity Area A – Refinement of Potential AR Project (Only to Water Right Application Step)</b>					
<b>Task 1 - Initiate Discussions with Landowners</b>	Working with the Little Last Chance Irrigation District – determine possibilities and/or major obstacles.	2024			
<b>Task 2 – Advance a Preliminary AR Concept (assuming successful in Task 1)</b>	<ul style="list-style-type: none"> <li>a) Drilling to evaluate soils and depth to groundwater</li> <li>b) Infiltration testing at potentially suitable locations for infiltration</li> <li>c) Modeling of proposed project(s) effects</li> <li>d) Initial design report (10% design level)</li> <li>e) Engineering estimates for permitting, complete design, construction and operation</li> <li>f) Potential funding structure for AR use of surface water rights</li> </ul>	2025-2026	\$100,000	\$250,000	\$30,000
<b>Task 3 – File Water Right Application</b>	Prepare and file a water right application using Task 2 information, provide support through application review process	2026	NA	\$50,000	\$5,000
<b>Task 4 – CEQA Permitting</b>	Initiate and complete CEQA, assuming favorable outcome for water right application	2027	NA	\$100,000	\$10,000