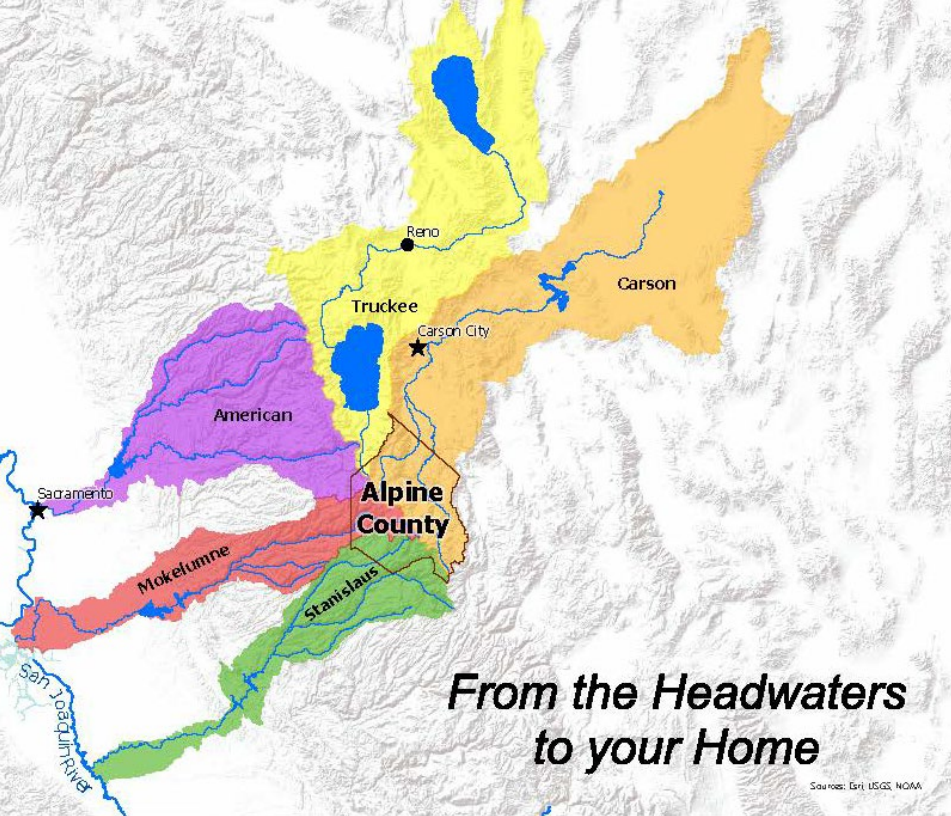




Alpine Watershed Group protects, conserves, and restores the watersheds of Alpine County by promoting sustainable community and science-based collaborative solutions.

CWSD Board Meeting— June 17, 2026

Headwaters of 5 Watersheds



Updates

- Monitoring Programs
- Restoration Projects
- Community Outreach & Education
- Planning Projects



Monitoring



- River monitoring program – QAPP update
- Post-fire seedling survivability surveys
- Aspen regeneration following fuels reduction
- Restoration project monitoring

Markleeville Creek Floodplain Restoration Project



Forest Health Community Working Group



- Public education meetings
- Arbor Day & October volunteer tree planting events
- Tribal engagement



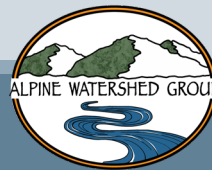
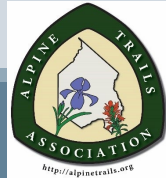
Alpine County Stakeholder Assessment: Forest Health, Economic Conditions, Community Well-Being, and Landscape Resiliency

Zachary Browning

Jonathan Kusel, Ph.D.

March 31st, 2026

Alpine
Biomass
Collaborative



Amador-Alpine-Calaveras-Tuolumne (AACT) Natural and Working Lands Hub

Rancher to Rancher: Rangeland Health Series
A field day series for observing Sierra Nevada rangeland health and rancher-to-rancher knowledge sharing

Session 4: Adaptive Management: Stewardship in the Immediate & Long-Term

Woollystar Ranch
Markleeville, CA
June 27, 2026
9am - 4pm



- For ranchers, graziers, and rangeland managers
- Learn and observe in-field indicators of rangeland health
- Participate in knowledge sharing and community learning with fellow ranchers
- Prior attendance not required

Registration is FREE!



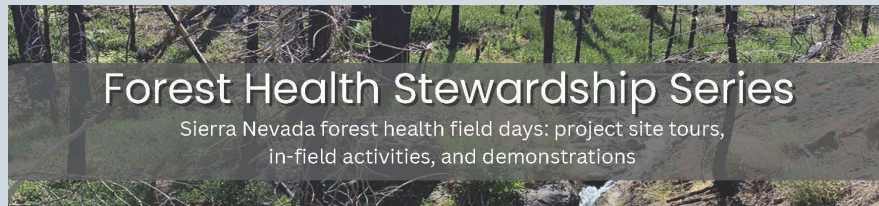
Point of contact: Kelci Brown,
Alpine Watershed Group
(Kelci@alpinewatershedgroup.org)

**FREE LUNCH
PROVIDED!**

Provided by the AACT Natural & Working Lands Hub, a collaborative of Alpine Watershed Group and Amador, Calaveras County, and Tuolumne County Resource Conservation Districts. Event funding provided in part by California Department of Conservation.



CALIFORNIA
RANGELAND
Trust



Forest Health Stewardship Series

Sierra Nevada forest health field days: project site tours,
in-field activities, and demonstrations

"Forest stewardship is based on conservation principles that ensure protection of all forest resources including wildlife, timber, soil, water, recreational opportunities and natural beauty."
- UCCE Central Sierra

Forest Health Treatment Selection & Planning

Woodfords, CA

Multi-Stop Field Day Tour with Treatment Selection & Planning Discussions

- For forestland owners & stewards
- Learn and observe forest health indicators, management strategies, and treatments
- Learn about forest health technical assistance
- Knowledge sharing and community learning with fellow forestland stewards

Saturday,
July 25, 2026
9am-2pm

Field Day Facilitators:

Clint Celio - Alpine County
Wildfire Projects Coordinator
Annabelle Monti - Forester

FREE LUNCH!

Registration is FREE

Point of contact:
Clint Celio
(ccelio@alpinecountyca.gov)



Future Session: **Fire Resilience & Forest Health**
Tuolumne County, Fall 2026

Provided by the AACT Natural & Working Lands Hub, a collaborative of the Alpine Watershed Group and Amador, Calaveras County, and Tuolumne County Resource Conservation Districts. Event funding provided by the California Department of Conservation and Sierra Nevada Conservancy.



Environmental Education



- Trout in the Classroom *in partnership with Trout Adventures*
- Snapshot Day *in partnership with River Wranglers*
- Developing annual plan with Diamond Valley Elementary School *with support from River Wranglers*



West Fork Carson Prioritization Project

- Basin-scale planning project for the West Fork Carson River watershed in California
- Focus on water quality

Funding

- \$250,000 — US EPA funding through the CA State Water Resources Control Board
- \$83,350 — required 25% match from Carson Water Subconservancy District



West Fork Carson Prioritization Project

This project included two parts:

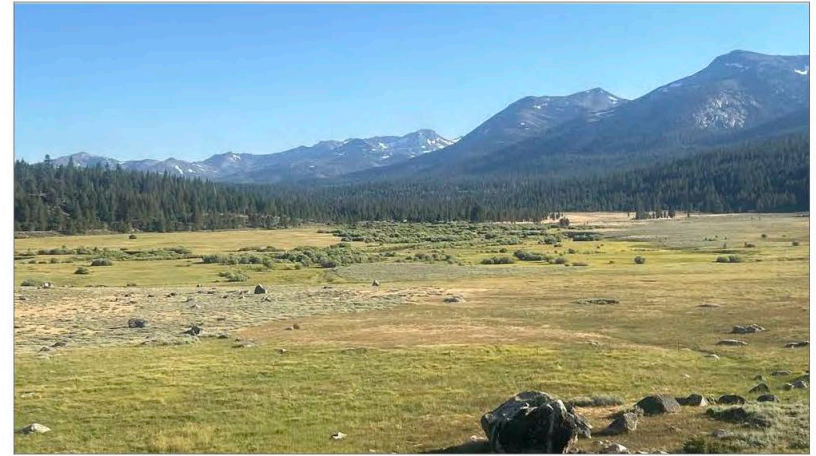
- Geomorphologic model
- Identification and prioritization of potential stream restoration actions that can improve water quality



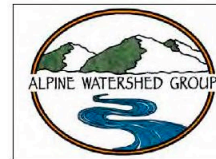
WFCPP Findings and
Planning Report

WEST FORK CARSON PRIORITIZATION PROJECT

FINDINGS AND PLANNING REPORT



prepared for



prepared by



Project Manager: Daniel Malmon

*1020 SW Taylor St. Suite 380
Portland, Oregon 97205*

March, 2026

West Fork Carson Prioritization Project

- *Specific objectives*
- *Potential project features*
- *Likely outcomes*
- *Costs*
- *Logistical hurdles*
- *Other information*

Project 11: Willow Creek Meadow Restoration

Willow Creek, River Mile 0.0 to 1.7

West Fork Carson River
Prioritization Project -
Project Description



Existing Conditions:

The potential project area is along Willow Creek from its confluence with the West Fork Carson River to approximately 2 miles upstream. The upper section is in a geologically confined basin with a floodplain 100 to 250 feet wide, and the lower section encompasses the Willow Creek fan as it enters the West Fork Carson River. In the upper area, the channel is about 2 to 4 feet below the meadow surface (see Figure 11-A). In the lower part of Willow Creek the channel is mostly disconnected from its floodplain (see Figure 11-B). Beaver are extensive in Willow Creek, but their influence is confined to areas where there are healthy willow stands. The channel has incised about two to three feet, leading to a drop in the water table in the meadow, a loss of connectivity, and loss of willow in some meadow areas.

The upper and middle portions of the project area are rarely visited but the lower portion near the West Carson River is close to Pickett's Junction and gets significant foot traffic.

Project Concept:

The project would employ "low-tech process based restoration" (LTPBR) techniques to reconnect the floodplain, expand and enhance wetland, store sediment, and support beaver in lower Willow Creek. The scale of the channel and the relatively moderate amount of incision makes this area a good candidate for a low cost, low risk, beaver-focused restoration effort. Hand crews would build beaver dam analogs and post-assisted log structures, fell trees, and install willow in strategic locations to accomplish the project objectives of raising the water table, storing fine sediment, improving in-channel habitat, and expanding beaver influence. There is a small fen in the confined section that could be protected with additional BDAs and fencing. There are opportunities for public education and outreach in the frequently visited lower portion of Willow Creek.

Potential Project Elements:

Beaver dam analogs (BDAs), tree felling, post-reinforced beaver dams, post assisted log structures (PALS), willow plantings, fencing to protect fen.

Design Considerations and Potential Constraints:

The primary constraint is proximity to busy intersection and popular recreational area. The main constraint in the upper section is the relatively difficult access. No roads or infrastructure that would be impacted, and there would be little impacts to recreational uses during construction. Opportunities for signage, education, and tours. The upper project area could be built using hand crews and materials could be harvested on site or brought in by pack animals or ATVs.

Multiple Accounts Analysis Scores:

Technical: 4.31
Economic: 3.50
Environmental: 3.48
Social and Cultural: 4.28
Overall MAA Score: 3.84
MAA Rank: #2 of 15

Summary:

Relatively small, low risk project would reconnect small meadow and store sediment, plus provide opportunities for education and signage in a high visibility area.

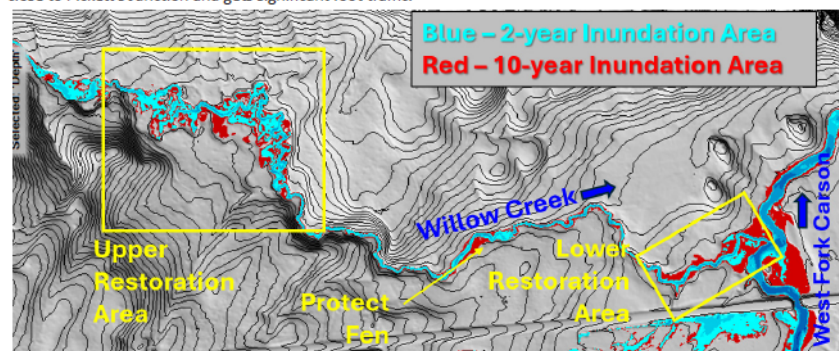
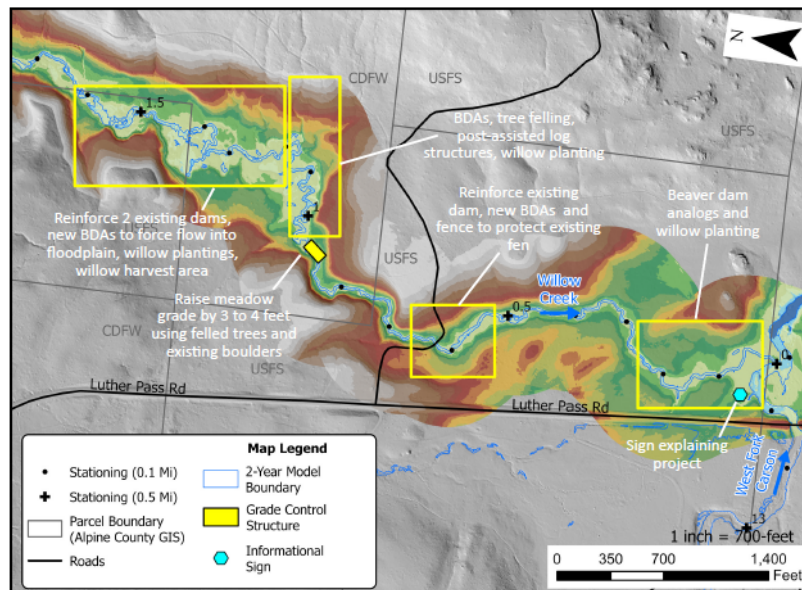


Figure 11-A. Topography and hydraulic model results showing flood extent during 2-year and 10-year events in the lower portion of Willow Creek (existing conditions).



Figure 11-B. Photo of Willow Creek channel and floodplain in the upper area, which could be easily reconnected with LTPBR.



West Fork Carson Prioritization Project

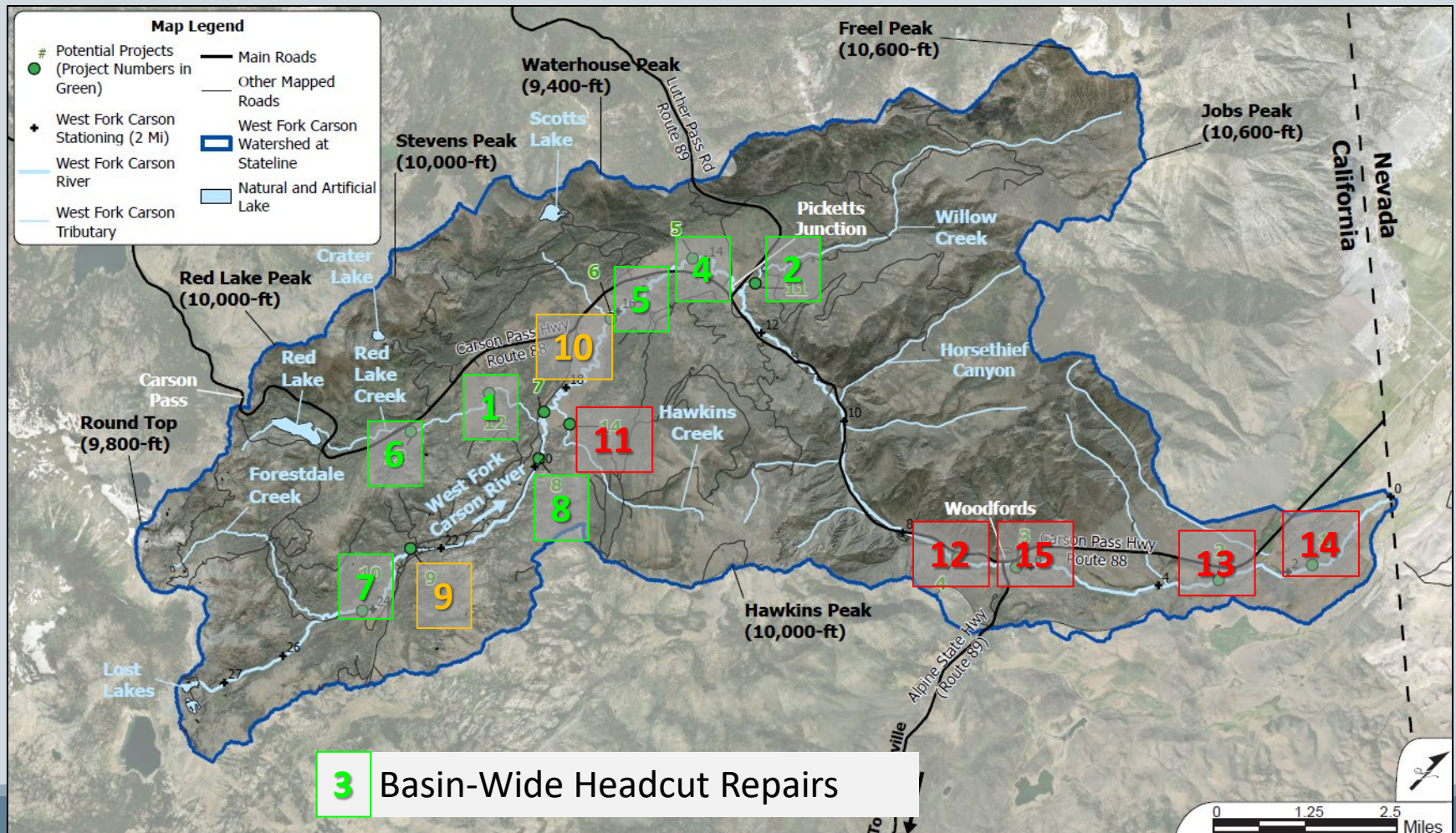
Prioritization Results

Project #	MAA Rank	Projects	Creek	Project Size	Overall Score	Technical	Economic	Environmental	Social and Cultural
Project 12	1	Red Lake Creek Lower Meadow Restoration	Red Lake Creek	Small-Medium	4.07	4.37	3.50	4.08	4.18
Project 11	2	Willow Creek Beaver Restoration	Willow Creek	Small	3.84	4.31	3.50	3.48	4.28
Project 15	3	Basinwide Headcut Repairs	Basinwide	Small-Medium	3.72	4.37	3.50	3.54	3.40
Project 5	4	Lower Hope Valley Restoration	West Fork Carson	Large	3.60	3.36	2.00	4.24	4.15
Project 6	5	Middle Hope Valley Restoration	West Fork Carson	Large	3.57	3.34	2.00	4.24	4.00
Project 13	6	Red Lake Creek Upper Meadows Restoration	Red Lake Creek	Small	3.49	3.84	4.00	3.04	3.43
Project 10	7	Upper Faith Valley Floodplain Reconnection	West Fork Carson	Medium	3.26	3.65	2.50	3.34	3.30
Project 8	8	Blue Lakes Road Restoration	West Fork Carson	Small	3.01	4.15	4.00	1.60	3.45
Project 9	9	Faith Valley Campground Restoration	West Fork Carson	Medium	2.97	3.55	2.50	2.54	3.55
Project 7	10	Upper Hope Valley Restoration	West Fork Carson	Large	2.77	2.47	2.00	3.24	2.97

Priority Ranking	Project #	Project Name	Annual Fine Sediment Reduction (tons/yr)	Sediment Reduction as a Function of Total Basin Export percent
1	12	Red Lake Creek Lower Meadow Restoration	207	4%
2	11	Willow Creek Beaver Restoration	111	2%
3	15	Basinwide Headcut Repairs		
4	5	Lower Hope Valley Restoration	473	9%
5	6	Middle Hope Valley Restoration	672	13%
6	13	Red Lake Creek Upper Meadows Restoration	79	2%
7	10	Upper Faith Valley Floodplain Reconnection	70	1%
8	8	Blue Lakes Road Restoration	29	0.6%
9	9	Faith Valley Campground Restoration	126	3%
10	7	Upper Hope Valley Restoration	250	5%

West Fork Carson Prioritization Project

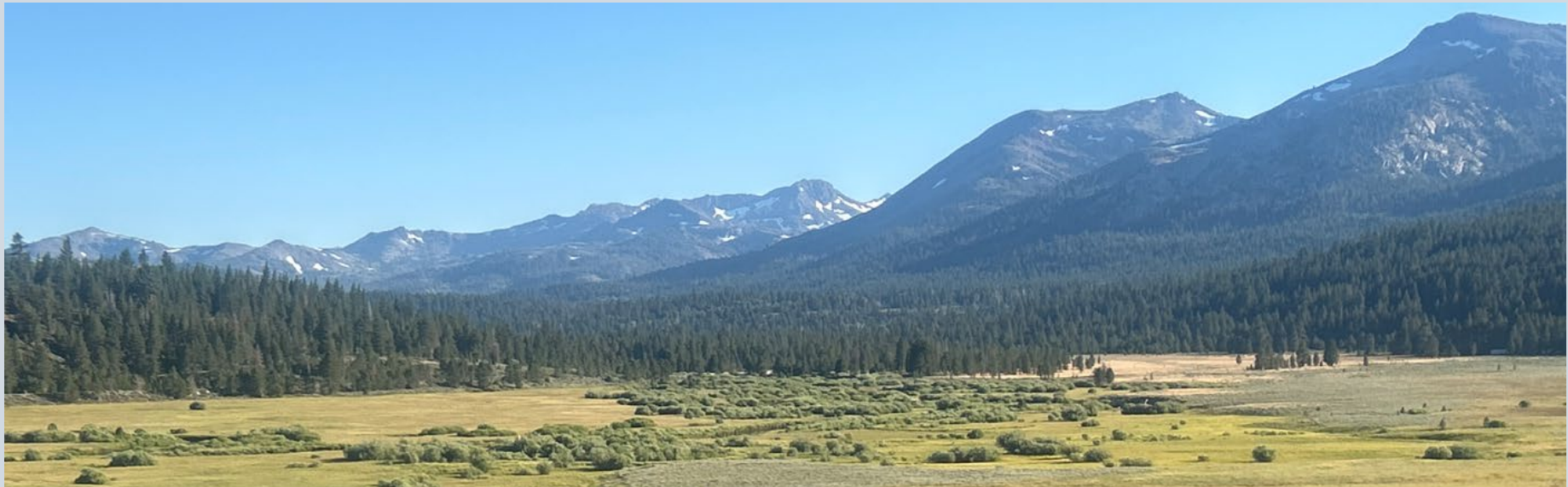
- Higher-ranking projects are all in the upper basin
- Projects in lower basin: benefits do not justify the cost, risk, and logistical hurdles



West Fork Carson Prioritization Project

Overall Management Recommendations

1. Implement “low hanging fruit” projects as funding is available
2. Restore Hope Valley as a coherent program
 - It will take 20 years to restore Hope Valley
 - Multiple interrelated projects that are worth doing
 - Get all stakeholders involved as a long-term commitment
 - Develop clear set of restoration objectives and a long-term plan
 - Develop a valley-scale plan rather than site-specific treatments
 - Learn from lessons in Faith Valley and previous work in Hope Valley



Funding for this project has been provided in full or in part by the United States Environmental Protection Agency and the State Water Resources Control Board under the Federal Water Quality Management Planning Program (Clean Water Act Section 205[j]). The contents of this document do not necessarily reflect the views and policies of the foregoing, nor does mention of trade names or commercial products constitute endorsement or recommendation for use.

West Fork Carson Prioritization Project

What's Next?

- American Rivers looking into funding sources, AWG as local partner
 - Bundling multiple projects
 - Multi-year community engagement process
 - Addressing CWSD Board concerns on downstream impacts on water delivery



East Fork Carson Prioritization Project

- 9-element watershed-based plan for upper watershed in CA
- \$250,000 from State Water Board, match from private foundations



2025 Volunteer Work

Event	Number of Volunteers	Volunteer Hours
River Monitoring	23	108
Arbor Day Tree Planting	121	242
Tree Care	3	23
Creek Day	28	70
October Tree Planting	65	130
Adopt-A-Highway Event	2	6 (second event in Creek Day hours)
Death Ride	11	60
Other (Monitoring, Enviro Ed)	10	28
Total	263	667

*Join us for Creek Day 2026
Saturday, September 19, morning*