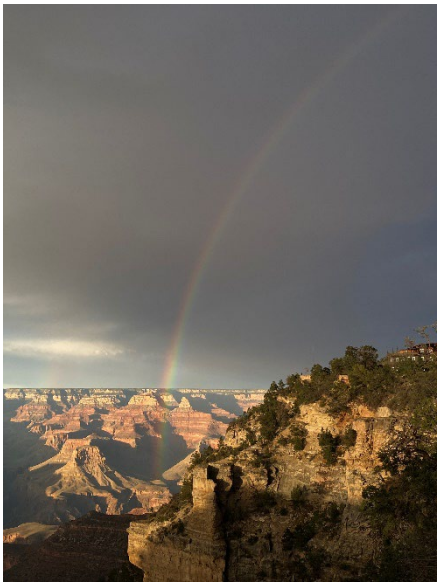
ALDO LEOPOLD
WILDERNESS RESEARCH INSTITUTE
Quarterly News Letter

Q4: September 2026

The Wilderness Act tasks managers with protecting the "natural character" of wilderness, as well as maintaining wilderness as "untrammeled", or free from human manipulation and controls. Maintaining wilderness as both natural and untrammeled is becoming increasingly difficult in an era of climate change. ALWRI scientists recently published two papers at the heart of this issue exploring how the Resist—Accept—Direct (RAD) framework can be applied to help navigate this challenge.



Grand Canyon National Park after the rain, September 2026. Photo, Olga Helmy.

ALWRI Social Scientist, Jaclyn Rushing, led an interagency and institute-wide publication exploring the **wicked nature of this problem** and, through four illustrative cases, demonstrate how the RAD framework can untangle it. Understanding that climate change will continue to challenge wilderness managers, we consider how the RAD framework might help clarify a range response options, assess trade-offs among response options, and preserve wilderness character into the twenty-first century.

More specifically, in a recent paper, ALWRI's research ecologist Kellie Carim worked with a team of university colleagues to examine challenges of and opportunities in responding to **freshwater biodiversity** loss in protected areas like wilderness. The team outlined how the Resist-Accept-Direct (RAD) framework may help managers navigate conflicting mandates while balancing the tradeoffs. By allowing for consideration of a wider range of management approaches, RAD expands the decision-making space. This work demonstrates that though they may not recognize them as such, managers are already often making Resist, Accept, and Direct decisions.

ALWRI Research Social Scientist Lauren Redmore is partnering with fellow Social Scientist Lauren Miller, of the US Fish and Wildlife Service, for a new study on the Poudre Headwaters Project. This collaborative effort of federal, state, and non-profit partners, seeks to reclaim 37 miles of prime habitat for the **greenback cutthroat trout, Colorado's state fish**. The social scientists joined up with a team representing all four federal land management agencies (NPS, BLM, FWS, and USFS), Colorado Parks and Wildlife, and Trout Unlimited, for a week-long effort to reset the fish community in a headwater stretch of the Cache la Poudre River, Colorado's only nationally designated Wild and Scenic River. With sections flowing through Rocky Mountain National Park and the Never Summer Wilderness on the Arapaho National Forest, this high-elevation stream system gave the team the opportunity to spend 4 days at 10,000 ft. while they worked to deepen understanding of key social science aspects of the project, including the scale of the

effort, the meanings of collaboration, and the challenges that come with doing conservation work in the alpine.

Here in Missoula, ALWRI's new institute-wide project on **recreation ecology** is well underway. A joint effort with the Belote lab at Montana State University, we are working to capture and synthesize the current state of recreation ecology science, with the intention to better inform management decision-making. Focusing on federally designated Wilderness and similarly protected areas, we are considering the field through a contemporary lens, understanding that as recreational use of public lands increases, managers need scientific guidance to balance recreation access with ecological protection. Our team is operating with 4 main objectives:

- Developing a contemporary conceptual framework to help managers address challenges associated with recreation ecology within areas of the National Wilderness Preservation System
- Characterizing trade-offs between recreational use and ecological conditions at multiple spatial and temporal scales
- Evaluating management concerns related to recreation impacts on natural resources (water quality, vegetation, soils, wildlife)
- Proposing novel adaptive approaches to recreation in wilderness areas

The Belote lab is currently hiring a postdoctoral researcher to advance this effort. Screening of applications will begin on October 30, 2026, but applications submitted after that date will be accepted until the position is filled. Please share widely with your networks.

Earlier this year, ALWRI researchers Chris Armatas and Lauren Redmore teamed up with the Society for Wilderness Stewardship to explore how wilderness managers understand and manage for the "**Solitude or Primitive and Unconfined Recreation**" quality of wilderness character adapted by the four agencies tasked with managing wilderness. In particular, the project sought to disentangle how these distinct components (i.e., solitude, primitive, and unconfined), along with other elements of wilderness character, are monitored and assessed through frameworks that vary across agencies and may not equally consider all three of these elements. Data collection is wrapped up and a report is forthcoming.

As the quaking aspen leaves turn to gold-rimmed green and the larch gilds your trails, ALWRI wishes you an autumn full of crisp air, long hikes, and good hunting.

See you out there!

The ALWRI Team:

Chris Armatas, Kellie Carim,
Olga Helmy, Lauren Redmore,
Jaclyn Rushing, and Travis Warziniack