



THE SOCIAL AND ECOLOGICAL CONSIDERATION FOR BEAVER COEXISTENCE AND RELOCATION ALONG THE FRONT RANGE

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PURPOSE

Beavers are ecosystem engineers that create wetlands and strengthen watershed resilience. Beavers offer nature-based solutions for wildfire mitigation by holding water and allowing it to spread across a landscape. These actions increase community resiliency. However, their tree felling and dams can also damage infrastructure and lead to conflict with humans. Understanding barriers to coexistence is vital.

METHODS

A mixed-methods approach was utilized, combining literature reviews, ecological monitoring, key informant interviews, and a social survey of agencies in Colorado. The mix of qualitative and quantitative data provided both scientific and stakeholder-informed insights of local beaver management, helping shape practical strategies for coexistence and restoration in Colorado.

OUTCOME

The project produced social and ecological insights to strengthen beaver coexistence in Colorado. Surveys revealed how agency perceptions and practices shape management, while ecological monitoring protocols established practical metrics for restoration. Together, these outcomes inform BWC's strategies and support Colorado Parks & Wildlife's Beaver Strategy.

KEY DATA AND FINDINGS

In total, 40 agency representatives took the social survey, with most from local governments or non-profits.

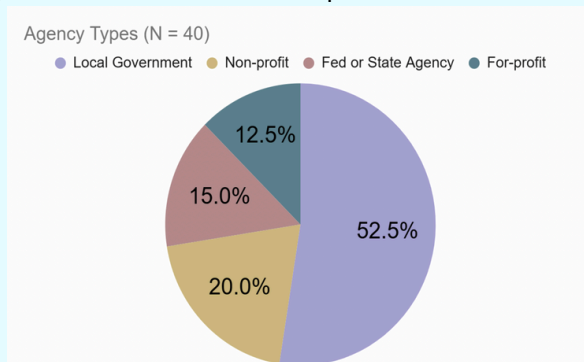


Figure 1. Distribution of survey respondents by agency type

Survey respondents favored coexistence approaches over lethal control, indicating broad awareness of non-lethal methods and positive perceptions of beavers. Still, lethal management was sometimes deemed necessary when it threatened resources like water infrastructure.

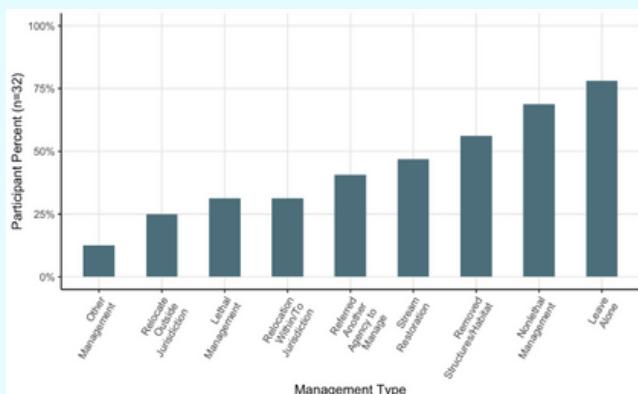


Figure 2. Beaver management actions indicated by respondents

DELIVERABLES

- 1) Internal Report** of findings and recommendations to inform BWC's beaver coexistence program
- 2) Ecological Monitoring Plan** for regular monitoring of key ecological metrics to assess beaver impact
- 3) StoryMap** to share project and findings summary with general public

RECOMMENDATIONS

- Collaborate across multiple agencies and with CPW to support beaver coexistence
- Engage general public and private landowners
- Standardize monitoring across relocation sites, consistently track ecological restoration outcomes, and support broader landscape analysis by sharing monitoring data with partners



Amanda Opp recording water quality metrics in-field (personal photo)

IMPACT

The project strengthens BWC's beaver coexistence and relocation strategies by assessing agencies' current beaver management and barriers to coexistence. The literature reviews and survey insights inform BWC's beaver coexistence program and Colorado Parks & Wildlife's Beaver Management Strategy, while the ecological monitoring framework gives natural resource practitioners practical tools for determining beaver impacts on the surrounding watersheds.

ACKNOWLEDGEMENTS

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