

2017 Upper San Miguel River Basin Forest Health Landscape Assessment

Project Need

Beetle kill, disease, wildfire and climate change have the potential to significantly alter the nature of our forest landscape, sometimes rapidly. Naturally occurring bark beetle and disease infestations, and wildfire can be ecologically beneficial processes. They can have a wide variety of negative impacts communities however. In addition, fire suppression and recent epidemic disease and beetle outbreaks are creating new threats and ecological outcomes. Being aware of these processes and potential outcomes can help communities prepare for and mitigate impacts.

Project Purpose

To create a scientifically informed, community-driven tool to inform the public and guide regional land management decisions on both public and private lands. This project is modeled on a Landscape Assessment GIS (Geographic Information Systems) Optimization Mapping Project that was developed by Dr. Jason Sibold (Colorado State University) to aid the United States Forest Service with their management decisions. Specifically, this project will focus on the landscape of the upper San Miguel River basin and the places and processes that are important to this landscape and community. The study area will encompass the peaks above Telluride and Ophir north to the Leopard Creek drainage.

Interactive maps will be created to provide a visual story of current forest conditions and models of potential forest adaptation in the context of climate change. Stakeholder input is vital to guiding the direction of the landscape assessment. Community stakeholders worked together to identify the following community values as well as locations on the landscape that are of concern to help inform the optimization process:

- Aesthetics
- Safety
- Recreation
- Non-Recreation Economy
- Ecosystem Health
- Wildlife
- Community Infrastructure
- Clean Air and Water

Higher awareness of natural disturbance and potential change in the forest landscape due to climate change will help the community and public land managers make more informed, ecologically-based decisions. Specific land use recommendations or forest health treatments are beyond the scope of this project. The maps will be developed as a

tool to help inform those public processes.

Summary of Stakeholder Meetings:

January 26, 2017	Working Group meeting: Inventory available data, management plans and goals for the assessment
February 27, 2017	Stakeholder meeting: Develop community questions and values to inform the assessment; present preliminary map
April 24, 2017	Stakeholder meeting: Tweak draft maps
June 12, 2017	Stakeholder meeting: Final map presentation and site visit options, discussion of how the maps can inform the upcoming field season and future of the stakeholder group
August 15, 2017	Stakeholder field trip: Site visit to Boomerang Road and next steps for the stakeholder group

Stakeholders

- Alpine Arborist
- Colorado Division of Fire Protection and Control
- Colorado Parks and Wildlife
- Colorado State Forest Service
- Landowners and HOAs
- Mountain Village HOA
- San Miguel County
- San Miguel County Sheriff's Office & Emergency Mgmt
- Sheep Mountain Alliance
- Telluride Arborist
- Telluride Foundation
- Telluride Ski & Golf
- Telluride Fire Protection District
- Town of Mountain Village
- Town of Ophir
- Town of Telluride
- United States Forest Service
- West Region Wildfire Council

Project Team

The San Miguel Watershed Coalition provided project coordination. Responsibilities included working group and Stakeholder meeting organization, stakeholder outreach, and in-kind tracking. Mountain Studies Institute provided facilitation for stakeholder meetings.

Biogeologists, climate scientists and GIS experts from Colorado State University, led by Dr. Jason Sibold, provided the GIS modeling and optimization work.

Team Members:

- Aaron Kimple & Marcie Bidwell, Mountain Studies Institute
- Elizabeth Stuffings, San Miguel Watershed Coalition
- Jason Sibold, Colorado State University
- Hilary Cooper, San Miguel County

Budget \$55,000

\$25,000 Colorado State University

\$30,000 Mountain Studies & San Miguel Watershed Coalition

Funding \$55,000

\$12,500 Telluride Ski & Golf Co

\$12,500 Mountain Village HOA

\$12,500 Town of Mountain Village

\$12,500 Town of Telluride

\$5,000 San Miguel County

In-Kind Contributions

Colorado State University (\$25,000)

San Miguel County

US Forest Service

Co State Forest Service

West Region Wildfire Council