



# CONTINUING OUR CONSERVATION LEGACY

**An integrated restoration, enhancement, and  
partnership strategy for the Eagle River Valley**

Eagle/Holy Cross Ranger District

White River National Forest

## Introduction

For over a hundred years the U.S. Forest Service has managed the national forests and grasslands adhering to our simple, yet powerful vision of “*Caring for the Land and Serving the People*”. Conservation of our immense and matchless public lands has been the passion of forest rangers since our founders Gifford Pinchot and President Teddy Roosevelt launched the greatest experiment in preservation and stewardship of natural landscapes known to man. Here on the White River National Forest, this legacy of conservation continues.

The White River is a spectacular *landscape* that holds within its boundaries a wide range of values and resources available to the American people. The terrain is rugged and challenging; with impressive peaks, powerful rivers cutting through steep valleys, and broad, wide-open rangelands that together offer some of the most extraordinary scenery in the Rocky Mountains. The land has supported human settlement for generations, and while the ecosystem remains functioning and vibrant in many places, human actions, both local and global, are causing detrimental effects out on the ground.

In the spirit of our conservation legacy, the White River is pursuing innovative opportunities to *restore* and *enhance* the landscape. Working in a strategic and *integrated* fashion, in collaboration with our partners and stakeholders, we believe we can build on the strength of our past to create a better future.



**Holy Cross Wilderness**



## A Common Understanding

What do we mean by “*integrated landscape restoration and enhancement*”? To create a common understanding, several definitions are worthwhile:

**Integrated** – A process or action that includes and is considerate of multiple natural resource areas (water, vegetation, recreation, wildlife, range, wilderness, etc). Integrated planning recognizes the inherent interconnectedness of the natural world, and seeks to maximize efficiency by considering needs and opportunities across all management disciplines. Integrated management does not require that every action include work in every resource area. Instead, it is simply a wide-view starting point for how we plan and then implement work on the ground.

**Landscape** – The White River National Forest is comprised of many distinct landforms, areas, and administrative boundaries. For this strategy, we consider the administrative boundary of the Eagle/Holy Cross Ranger District as our initial landscape, or planning area. Within that boundary, we focus on needs and opportunities at a more localized

***Collaboration is the application of common sense to common problems for the common good.***

***~Gifford Pinchot***

scale, such as a watershed or other distinct landform. To ensure our strategy takes a balanced approach to the needs and opportunities we face, we will take an even focus on our Headwaters, Mountaintops, and Rangelands to further define where we direct our common energy. As our strategy evolves, we maintain the opportunity to work in partnership with other land owners and managers to cross jurisdictional boundaries in recognition that natural resources are not bound by our administrative distinctions.

**Restoration** – Actively returning a feature, place, or facility to a previous condition. We choose a restorative course of action when we view a condition from the past as most desirable to maintain for the future. We’ll talk about restoration work most often when we have an obvious, direct human action that caused the condition we want to change.

Examples of restoration would be:

- Repairing an eroded trail
- Obliterating a road prism and reshaping the land to match the surrounding contour
- Putting a channelized river back in its original meander



- Closing abandoned mines and cleaning up tailings

**Enhancement** – Taking action to magnify or maintain a desirable condition, or removing impediments that may prevent a desirable condition from developing naturally. We choose an enhancing action when there is no single specific historic condition to target, but rather when we choose to encourage and support natural change processes.

Examples of enhancement would be:

- Harvesting timber to speed regeneration and improve wildlife habitat
- Cutting Piñon and Juniper to maintain and improve sagebrush communities
- Replacing an undersized culvert with an open pipe arch
- Placing wood in streams to improve fish habitat and stream morphology
- Fire or mechanical treatments to reduce fuels and improve wildlife habitat

There's no need to get too caught up in whether a project is "restoration" or "enhancement" – they're all probably at least a little of both. Using both words together is just a way to capture the idea that in our work we simultaneously look to the future as well as the past, and that change is inherently part of – and critical to – the functioning of any natural system. It also serves as a means to ensure caution with the idea that we always can or even should try to put the natural world back to any particular specific point in history.

*Example of aquatic passage restoration on the White River National Forest*



**Before**



**After**



## Themes

In addition to our spatial grouping – *Headwaters*, *Mountaintops*, and *Rangelands* – three themes guide and summarize our work, and help to provide additional strategic focus. The three themes are as follows:

### **1. Connecting communities and citizens to the land**

*(Examples of activities or programs within this theme: General recreation and trails, partnerships, volunteer programs, interpretive services, conservation education)*

### **2. Enhancing resilient ecosystems**

*(For example: Landscape restoration/enhancement, habitat improvement, forest health, wilderness management, water quality/quantity, fuels mitigation, noxious weeds)*

### **3. Healthy landscapes, sustainable economies**

*(For example: Forestry (to produce timber, biomass, bio-char, wood laminate, etc), water storage, energy development, non-recreation special uses, outfitter-guide/recreation events, winter sports, and sustainable internal operations)*

## Initial Projects

Within this framework, we have identified three projects that are in initial planning stages and meet our strategic focus as well as broad goals and objectives from our Forest Plan:

### ***Headwaters*** – Camp Hale/Eagle Watershed Project



*Primary theme – Enhancing resilient ecosystems*

*Secondary themes – Connecting citizens to the land;  
Healthy landscapes, sustainable economies*

This will be a multi-year integrated resource project that includes both restoration and enhancement activities. This landscape has tremendous value for its history, as a source of clean water for communities and other users, incredible recreation opportunities, and more. Based on an assessment of current conditions, we



propose first-year priorities to focus on wetland and stream restoration, unexploded ordinance (UXO) mitigation, and Off-Highway Vehicle (OHV) management.

Proposed actions include:

- Removing the East and South Forks of the Eagle River from their channels and restoring natural sinuosity and meander, with UXO mitigation to occur as a preliminary activity
- Removal of the abandoned railroad grade in Mitchell Creek to restore wetland connectivity and function
- Replacement of road culverts that constrain streams and block movement of fish and other aquatic organisms
- Survey and mitigation of UXO hazards, including signing and education
- Development of an OHV Ranger program to patrol, monitor, educate, and enforce regulations in the Camp Hale/Vail Pass area

These actions would improve aquatic habitat, allow for natural stream function, enhance natural water storage and delivery, protect road infrastructure, improve public safety, and allow for continued motorized recreation and vastly improved management, oversight, and service for these recreationists.

Additional activities in subsequent years could include restoration of the main stem of the Eagle River through Camp Hale to allow natural sinuosity and meander, installation of a fish barrier in Two Elk Creek to restore a native Colorado cutthroat trout population, improvements to developed campgrounds, improved interpretation and signing, and reconstruction of OHV trails and roads to mitigate resource effects

### **Mountaintops – Hardscrabble Forest Health Project**



*Primary theme – Healthy landscapes, sustainable economies*

*Secondary theme – Enhancing resilient ecosystems*

This enhancement project is driven by an opportunity to provide for sustainable forest products over the long term, while simultaneously reducing future hazardous fuel loading



within two municipal watersheds and enhancing wildlife habitat by improving the diversity of tree species and age classes. Much of the lodgepole pine in this area has been affected by the Mountain Pine Beetle epidemic.

Proposed actions include:

- Commercial harvest of timber within approximately 1400 acres of lodgepole pine, mixed conifer, and aspen stands.
- Reduction in future hazardous fuel buildup by removing boles and chipping, burning, or removing limbs and tops
- Controlling dwarf mistletoe by cutting and removing affected trees

Additional actions could include:

- Improved management of system and non-system recreational trails and dispersed campsites
- Rehabilitate unneeded temporary roads to protect the headwaters of Abrams Creek which supports a native population of Colorado cutthroat trout

The project would improve conditions for the vigorous growth of the future forest, provide a renewable resource for human use, enhance the quality of habitat for a variety of birds and other wildlife as well as an important fish population, support a component of the local economy, and reduce the amount of fuel available for potential wildfire.

### **Rangelands – Sagebrush Enhancement Project**



*Primary theme – Enhancing resilient ecosystems*

*Secondary theme – Healthy Landscapes, Sustainable Economies*

This restoration and enhancement project is driven by a need and an opportunity to improve sagebrush communities in 7 different treatment areas across the District (Sunnyside, Gypsum Creek, Pipe Creek, Berry Creek, Muddy Creek, High Trail Gulch, and Cottonwood Mesa). At present, sizeable areas of existing sagebrush on the District are in poor quality, affecting the capacity to support sagebrush-associated species and remain resilient and persistent over time.

Piñon pine, juniper and Douglas-fir trees are currently expanded into sagebrush at all three levels of woodland succession: Phase I (trees present but sparse), Phase II (trees are co-dominant with sagebrush), and Phase III (trees dominate



the site and ecological processes completely). Without treatment, conversion from sagebrush to piñon-juniper woodlands would continue. This conversion increases fire hazard and fire severity, alters the soil-hydrologic cycle, reduces wildlife forage and browse, provides perches for birds of prey, and increases the hiding cover of large predators. At the closed canopy woodland state (Phase III), sagebrush and understory grasses and forbs are completely replaced by conifers and the sagebrush habitat is lost.

#### Proposed Actions Include:

- Cutting or masticating young and mature encroaching juniper, piñon pine, and Douglas-fir trees out of sagebrush (up to 3600 acres)
- Applying low-intensity, low-severity prescribed fire not to exceed 15% of the sagebrush within the project area (up to 2200 acres)
- Mowing small patches of sagebrush, not to exceed 5% of the sagebrush within the project area (up to 500 acres)
- Seeding native forbs, grasses and sagebrush, not to exceed 7.5% of the sagebrush within the project area (up to 760 acres)
- Planting sagebrush plugs, not to exceed 5% of the sagebrush within the project area (up to approximately 500 acres)

The work is expected to benefit a variety of important wildlife species including greater sage-grouse, Brewer's sparrow, sage sparrow, black-throated sparrow, Vesper sparrow, green-tailed towhee, lark sparrow, and mule deer. The project would improve the viability of sagebrush communities over the long term, reduce the ongoing and future buildup of hazardous fuels, improve conditions for various pollinator species, and improve soil conditions across the project area.

## Summary

Throughout the history of the National Forests, their vast resources have been managed to the benefit of the American people. With future generations in mind, we must continue to manage so that our children may enjoy the vast bounty our public lands have to offer.

Our objective will be enhancing and restoring ecosystems. Our goal is to move the forest towards a more sustainable and abundant future. We believe that the best way to achieve this goal is to work together with the communities, organizations and everyday citizens to ensure we are considering all values across the forest.



This document provides a vision, or roadmap on how our goals and objectives can be achieved. As part of our initial planning effort, managers of each project have identified potential partners and cooperators.

We encourage feedback from our partners and look forward to the inspiration that comes from collaboration comprised of diverse interests. We are optimistic that through our focus on *Headwaters*, *Mountaintops*, and *Rangelands*, we can encompass the lion's share of the restoration and enhancement opportunities currently present on the land. We hope that by using themes in addition to landscapes to refine our work we will further our prospect for developing an integrated restoration and enhancement strategy that can serve the district, the forest and our collaborative partners for years to come.

*"Caring for the land and serving the people"* is our promise. We believe that working together we can fulfill that promise by dedicating ourselves to ensuring that clean water, healthy and abundant wildlife, world-class recreation and pristine wilderness opportunities continue to be the mark and heritage of the White River National Forest.

This is how we will continue our legacy of conservation. We hope you will join us.

