



United States Department of Agriculture

## JOINT CHIEFS' LANDSCAPE RESTORATION PARTNERSHIP

# We're In This Together

### TENMILE WATERSHED PROJECT



Red Mountain

The city of Helena, capital of Montana and home to 32,000 people, sits in the Tenmile Creek watershed. Mountain bikers, hunters and hikers alike enjoy the rugged terrain, incredible views and opportunities to spot moose, elk and deer. Although tourism revenue is an important part of the local economy, there's even more at stake when it comes to the benefits provided by natural resources. Most of the city's water comes from the historic Red Mountain Flume, a wood-and-metal structure that carries water down the mountain to the Chessman Reservoir. It is located within the Helena-Lewis and Clark National Forest. The forest and surrounding public and private lands are suffering from a century of natural fire suppression and a recent mountain pine beetle infestation that killed 80 percent of lodgepole and ponderosa pine trees. Local leaders understand the threat wildfires pose to maintaining healthy, affordable municipal water sources. This Joint Chiefs' Landscape Restoration Partnership (JCLRP) project removed fuel that otherwise would feed damaging wildfires.

### Tenmile Watershed Project

## GOALS



A moose wades in a lake. © Adobestock



**Reduce wildfire threats to communities and landowners:** Partnerships were strengthened, and the project funded fuel-reduction work on more than 900 acres of private land, substantially exceeding the original goal of 300 acres.



**Protect water quality:** Vegetation burned at high temperatures die, which results in increased sediment flowing into mountain streams and the flume. By reducing the severity of wildfires, water quality is better protected.



**Enhance wildlife habitat:** Managing the amount of fuel on the ground enhances wildlife habitat. Fires will be less intense, making better opportunities for iconic species like elk to find refuge during a fire and plants they need for food throughout the year.

### PROJECT IMPACT

**\$790,000  
INVESTED**

Total award from the JCLRP from 2014-2016: \$726,000

The City of Helena and local partners invested \$790,000 to protect water quantity and quality in the Tenmile watershed over the course of the project.

USDA's Forest Service and Natural Resources Conservation Service are working together to improve the health of forests where public forests and grasslands connect to privately owned lands. Through the Joint Chiefs' Landscape Restoration Partnership, the two USDA agencies are restoring landscapes by reducing wildfire threats to communities and landowners, protecting water quality and enhancing wildlife habitat.

The USDA is an equal opportunity provider, employer and lender.

# TENMILE WATERSHED PROJECT



Partners explore Red Mountain Flume. © USFS

Built in the 1880s, the Red Mountain Flume winds through 4.5 miles of mountain forests, carrying water that eventually reaches homes and businesses in Helena.

The people of Helena have access to two water sources, but they definitely have a preference for water that comes from the Tenmile Creek watershed. Water from the Missouri River is about five times more expensive to treat.

Over decades, invasive pests and the buildup of dead material in the surrounding forests have taken their toll, and the potential impacts on the water supply have been mounting. "Loss of vegetation in the upper Tenmile watershed would have a devastating effect on the treatment plant," said Helena City Manager Ron Alles. "What that means to Helena's families and businesses is increases in our water rates."

A collaborative effort by the project's partners to collect and take dead material out of the forests has been no small task on the dangerous, steep terrain. "We know a fire is going to happen out there," Alles said. "Our intention is to minimize the intensity of that wildfire, not only to our flume, which collects the water, but to the general landscape in the upper Tenmile." Removing this material minimizes the risk of the flume catching fire and limits the potential water quality issues that can result when wildfires occur. Those results mean safer conditions for firefighters and long-term cost controls for residents.

"We cannot just let it go," said Don Clark, Helena's Water and Wastewater Superintendent. "We have got to be proactive and we have got to stay with it until this watershed is in the shape it needs to be so that we protect this valuable asset."



Bitterroot, state flower of Montana.

## Key Partners

City of Helena

Jefferson County

Lewis and Clark County

Montana Department of Natural Resources and Conservation

Tri-County FireSafe Working Group