



File Code: 1950

Date: March 15, 2013

Dear Forest User:

What's Going On?

The Helena District Ranger on the Helena National Forest is proposing to implement the ***Red Mountain Flume Chessman Reservoir Project***, in the Upper Tenmile Watershed-the municipal watershed for the city of Helena. Treatments would occur along the Red Mountain Flume and adjacent to Chessman Reservoir. The Red Mountain Flume is a man-made channel that includes lined and unlined ditch sections as well as sections of wooden trestle-supported steel conduit for transferring water from Banner Creek to Chessman Reservoir. Proposed activities include cutting dead and dying trees, thinning live trees, removing large downed fuels, and prescribed burning on public lands. Proposed actions would be similar to the activities implemented by the City of Helena. (See included map)

What's the Current Situation?

Decades of fire suppression and recent bark beetle-caused mortality have resulted in uncharacteristic fuel loadings in the Tenmile watershed. Fuel accumulations are of concern in dead and dying lodgepole pine stands which will fall to the forest floor over time, creating conditions in which a fire could burn intensely, with long duration, and would be difficult to suppress. A wildfire in this watershed has the potential to pose risks as well as degrade water quality and supply.

A landscape-scale evaluation is being conducted for the Upper Tenmile Watershed evaluating options to help ensure a high quality and quantity of water to its users. However, there is an immediate need to compliment ongoing work being accomplished on private lands by the city of Helena, which were designed to address forest conditions adjacent to the flume. These conditions include abundant dead and dying trees, dense small diameter trees, and high levels of surface fuels. If a wildfire were to occur in the area, these conditions could have a direct influence on the functionality of the infrastructure. Specifically, wildfire would pose a direct risk of ignition to the wooden portions of the flume structure. A wildfire could also potentially lead to accelerated erosion, sedimentation, ash deposition, and/or or physical damage related to debris torrents that could impair the functionality of both the flume and Chessman Reservoir, and ultimately the water treatment plant. Further, dead and dying hazard trees near the flume pose a risk of physical damage to the structure (trestles, ditches, and gates) as trees fall over time.

What's the Purpose and Need for the Project?

The purpose of this project is to remove hazards and fuels from around the Red Mountain Flume and Chessman reservoir to reduce the likelihood and potential severity of damage to the municipal watershed infrastructure in the event of a wildfire.

The project would contribute to the Helena Forest Plan (HFP) goal for the Upper Tenmile watershed to "Maintain high quality water to protect...municipal water supplies..." (HFP II/1, April 1986). Further, HFP

guidance comes from the Management Areas (MA) direction within this project area to “provide a quantity and quality of water which will, with adequate treatment, result in a satisfactory and safe domestic water supply” for the city of Helena (HFP MA H1 p. III/17 & H2 p. III/20, April 1986).

In evaluating the above purposes and in light of the current conditions, it has been determined that the concerns for the flume and reservoir should be addressed now. In focusing on the immediate concerns of the flume and reservoir there is a need to:

- Remove standing vegetation and high fuel loadings adjacent to the Red Mountain Flume to lower the risk of damage from falling trees, potential fire, and post-fire effects.
- Remove dead/dying trees, reduce surface fuel loading, and/or reduce density of live trees near Chessman Reservoir to reduce risk of an uncharacteristic, severe wildfire which could lead to severe post-fire erosion, sedimentation, and ash flow to the reservoir.

Trees along the flume would be removed to reduce the risk of physical damage to the infrastructure and minimize potential ignition sources adjacent to the flume, in the event of a wildfire. Removal of vegetation along the flume and reservoir would greatly reduce the probability of high-severity fire impacts to soils in these areas, which in-turn would reduce the probability of both post-fire erosion and ash and sediment transport to the adjacent infrastructure. Proposed treatments would substantially enhance fire suppression capabilities and public/firefighter safety.

The City of Helena currently has a special use permit for occupancy and maintenance of the flume infrastructure and Chessman Reservoir. This proposal may incorporate a re-issuance of the permit, with some changes, to the City of Helena. Currently the flume allows for a 15’ wide right-of-way along the 2.7 mile section of the flume located on public lands. The right-of-way width may be analyzed to ensure it is sufficient enough for future maintenance and hazard tree concerns.

What’s the Proposal Detail?

This proposal was designed to reduce the risk of damage to the Red Mountain Flume and reduce the risk of high-severity wildfire effects resulting in sedimentation and ash deposition in Chessman Reservoir. The proposed actions would implement the removal of trees, dead and alive, to reduce the fuel load along the portion of the flume located on Forest Service lands. The drainages that intersect the flume would be treated up drainage from the flume, where appropriate, to reduce the probability of erosion following a wildfire. Removal or treating dead and dying forest stands adjacent to Chessman Reservoir would be prescribed in order to reduce the probability of high-severity impacts from wildfire, thereby reducing the probability of post-fire erosion and sediment and/or ash transport to the reservoir.

Treatment areas have been infested by mountain pine beetle and are generally dominated by lodgepole pine. Treatments are designed to minimize hazardous fuel conditions in the short-term and promote healthy, sustainable forests in the long-term.

- 1. Fuel Break Treatment:** Treatment units are designed to buffer the flume from potential physical damage. These units include about 100’ above the flume and about 300’ below. The goal is to remove fuels and hazard trees to create fuel breaks that lower the risk of damage from falling trees, wildfire igniting the structure, and reduce the likelihood of post-wildfire erosion,

sedimentation, and potential debris flows in the drainages crossing the flume. Treatments would complement those implemented by the City of Helena. Tree stocking is not a goal, but some healthy trees would be retained where appropriate.

2. **Clearcut with Leave Trees & Improvement Cut:** The goal is to reduce the potential for a high severity wildfire in the vicinity of the reservoir, which would in turn reduce the probability of post-wildfire erosion and ash and sediment transport to Chessman Reservoir. This would be accomplished by treating forested stands around the reservoir to reduce surface fuels, reduce ladder fuels, remove dead and dying trees, re-establish vigorous seedlings where needed, and/or maintain an open canopy of healthy trees where available. All cutting treatments would be followed a low severity prescribed burn and/or pile burning. In the fuel break areas, fuels would generally be treated with jackpot and/or handpile burning. Some units may have substantial surface area covered by fuel jackpots. Broadcast burning would occur after harvest in the Chessman reservoir units.

Prescription	Acres
Fuel Break Treatment	158
Clearcut with Leave Tree & Improvement Cut	332
Total	490

This proposal also includes temporary road construction not expected to exceed ½ mile in total length for the project and would be obliterated immediately after completion of mechanical treatments.

3. **Forest Plan Site Specific Amendment:** In evaluating the specific needs for this project, the responsible official and Helena National Forest specialists discovered that this project may result in the need for a Forest Plan site-specific amendment; specifically, we may need to exempt the project from Forest Plan big game standards 3 and 4(a) due to substandard levels of hiding cover in the existing condition. Further evaluations are needed for this determination and will be clearly discussed and displayed for the 30-day comment period.

Design Features

All projects that may have effects on the multiple resources are evaluated in determining the magnitude of those potential effects and whether or not they meet certain laws, regulations or standards. In evaluating anticipated effects, resource specialists include direction and guidance from the multiple resource laws such as the Clean Water Act, Threatened and Endangered Species Act, Clean Air Act, Historic Preservation Act, etc. as-well-as the standards outlined in the Helena Forest Plan and Regional guidance such as the Soil Quality Standard for Region 1 (USDA Forest Service, 1999) and the National Best Management Practices for Water Quality Management on National Forest System Lands (USDA, Forest Service, April 2012).

The proposed design feature specific for this project are important for the success of this project. These items can be viewed on the Helena website at www.fs.usda.gov/helena/landmanagement/projects. There you will find additional information pertinent to this project.

What's the Schedule and How Do I Stay Involved?

You have received this proposal because of your interest and ongoing involvement in the Helena National Forest. If you wish to stay involved, please respond to this letter as described below by April 5, 2013. You are also invited to participate in the Forest's open house meeting on March 26, 2013, from 4:00 p.m. until 7:00 p.m. at the Helena National Forest Supervisor's Office. These comment opportunities will be followed by a "30-day comment period" on the environmental document that is scheduled to be released this summer. In that document, you would be able to review the most updated information including the anticipated effects regarding the resource in and around the project area. Depending on the comments we receive, and anticipated effects from the proposed activities, we anticipate a final decision for this project to be released late fall or early winter of 2013. There is potential for the 36 CFR Part 218 "Objection Process" to become available in the near future, which may influence the timing and implementation of this process. The agency may elect to utilize the objection process in place of the existing 36 CFR 215 appeal process, at which point, we would notify the public.

Project information, photos and highlights would be shared with members of the public through a variety of methods, including media stories, community presentation, upon request, and website updates at <http://www.fs.fed.us/r1/helena/projects>.

We want to hear from you regarding this project. You are encouraged to respond to this letter and information presented on the website by providing written comments as suggested above to:

Helena Ranger District
re: Red Mountain Flume Chessman Reservoir Project
2880 Skyway Drive
Helena, MT 59602

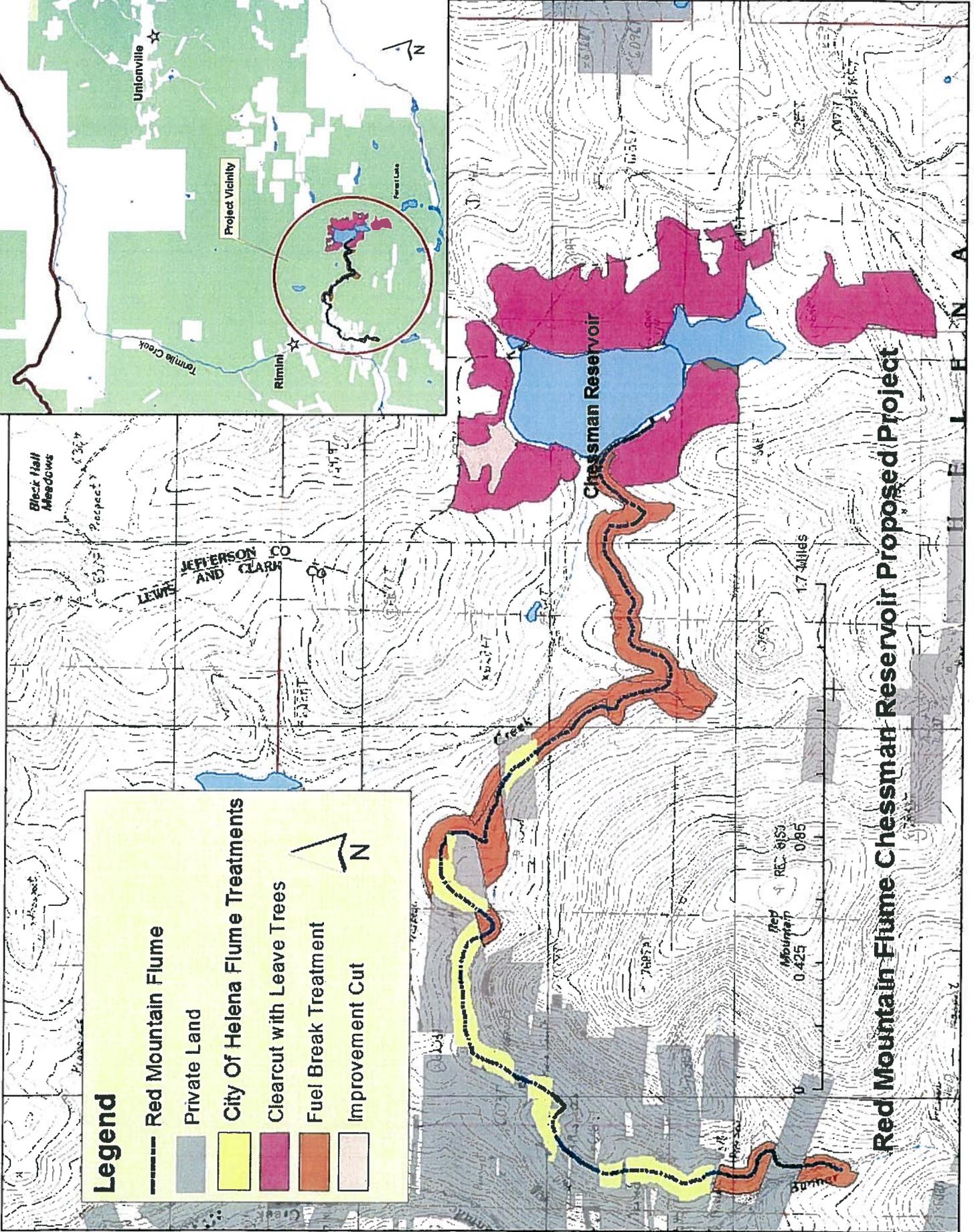
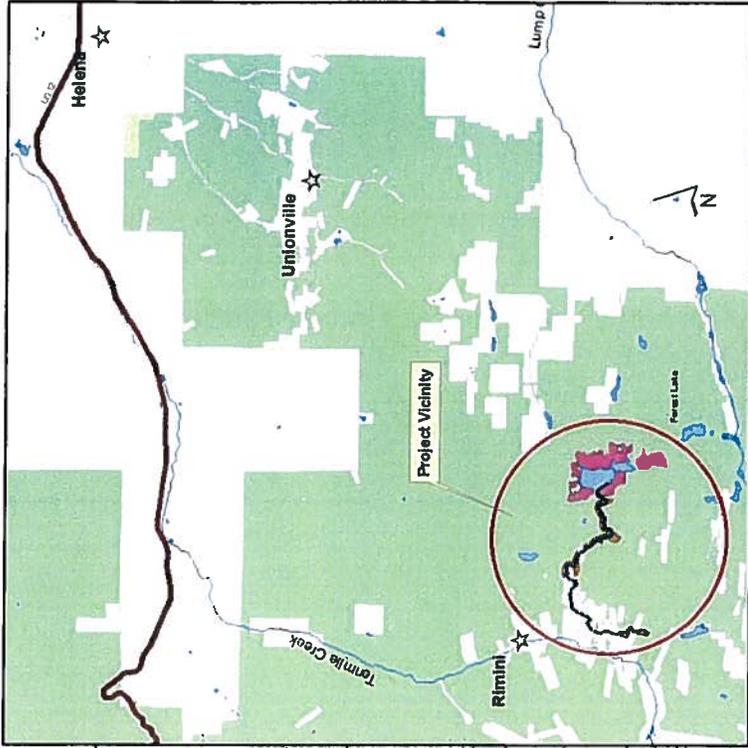
Your input is most helpful when you have specific concerns regarding the proposed activities described above. If you prefer, you can send electronic comments in rich text format (.rtf), Word or Word Perfect format (.doc) to comments-northern-helena-helena@fs.fed.us. The subject line should contain the words "Flume Chessman". Please submit these comments by April 5, 2013. The project contact person for this project is Heather DeGeest – Helena District Ranger or David Callery – Forest Hydrologist (406) 449-5201.

Thank you for your interest in the Helena National Forest.



Heather DeGeest
Helena District Ranger
Helena National Forest

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Legend

- Red Mountain Flume
- Private Land
- City of Helena Flume Treatments
- Clearcut with Leave Trees
- Fuel Break Treatment
- Improvement Cut

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