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ENVIRONMENTAL ASSESSMENT FOR THE TOWN OF MOUNTAIN VILLAGE WATER LINE EXTENSION PROJECT

Prepared for:
U.S. Forest Service
Grand Mesa Uncompahgre and Gunnison National Forests

Prepared by:
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Chapter 1 – Need for the Proposal

Background

This environmental assessment (EA) describes the Town of Mountain (TMV) Village Waterline Extension Project and presents an analysis of effects related to the project. The Forest Service's intent is to furnish enough site-specific information to demonstrate consideration of environmental consequences of the proposed action, with a focus on the issues identified by the public and the interdisciplinary team. Additional documentation is located in the project file (i.e., a compilation of documents prepared for this project), which can be reviewed upon request. This document, as well as the Notice of Proposed Action and other project information, is available on the Forest web site at www.fs.usda.gov/projects/gmug/landmanagement/projects.

Based on information in this EA and the project file, the Responsible Official can decide to take no action, to defer activities, or to implement all or part of the proposed action. In his decision, the Responsible Official will determine selection and site-specific location of treatments.

The Forest Service has prepared this EA in compliance with the National Environmental Policy Act (NEPA), the National Forest Management Act, and the 1991 Amended Grand Mesa, Uncompahgre, and Gunnison National Forests Land and Resource Management Plan ("Forest Plan"). The project proposal is consistent with Wetlands and Floodplains Executive Orders, the Clean Water Act, and other relevant Federal and State laws and regulations.

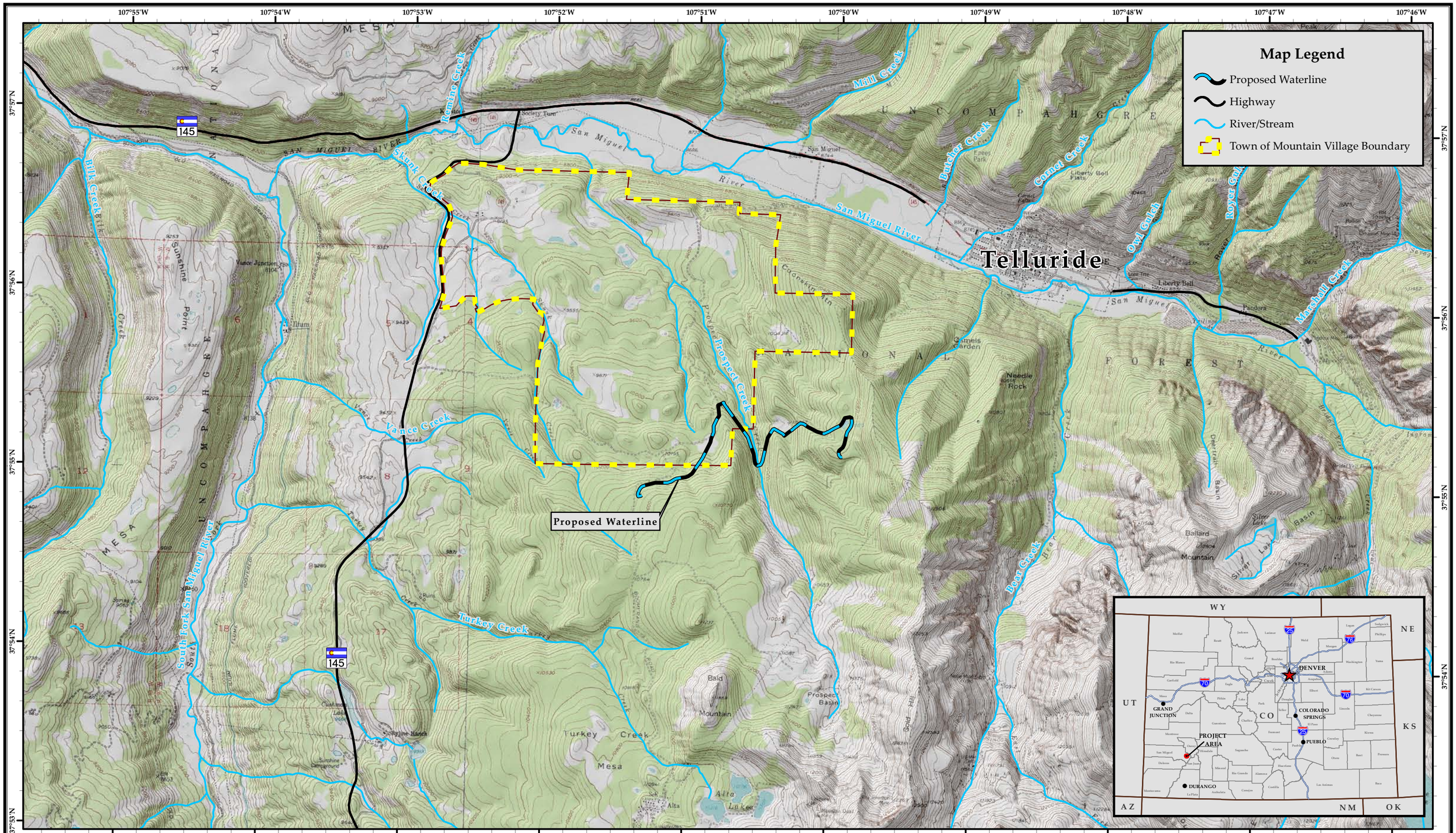
Purpose and Need

TMV provides water service to residents and commercial entities within its service area, including the Telluride ski resort and golf course (owned by TSG Ski & Golf, LLC (TSG)). The TMV water system includes facilities located on land owned by TMV and facilities located on National Forest System (NFS) lands in the Norwood Ranger District of the Grand Mesa, Uncompahgre, and Gunnison National Forest (GMUG). The facilities and their operations on NFS lands have been authorized by a special use permit since October 21, 1976. TMV is proposing to extend an existing waterline to connect two water tanks in separate pressure zones. This project will result in better water flow, which is needed for domestic and fire protection purposes. A secondary purpose is to utilize the flow of water in the pipeline to generate electricity through the use of micro-hydro generators.

The proposed project is located in San Miguel County, Colorado (Figures 1 and 2).

Proposal Development

This project was first listed in the GMUG Schedule of Proposed Actions on August 27, 2014. The proposal was provided to the public and other agencies for comment during the formal public comment period from August 27, 2014 to September 26, 2014. Two written comments were



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N

0 1,400 2,800 5,600 8,400 Feet

1 inch = 3,000 feet

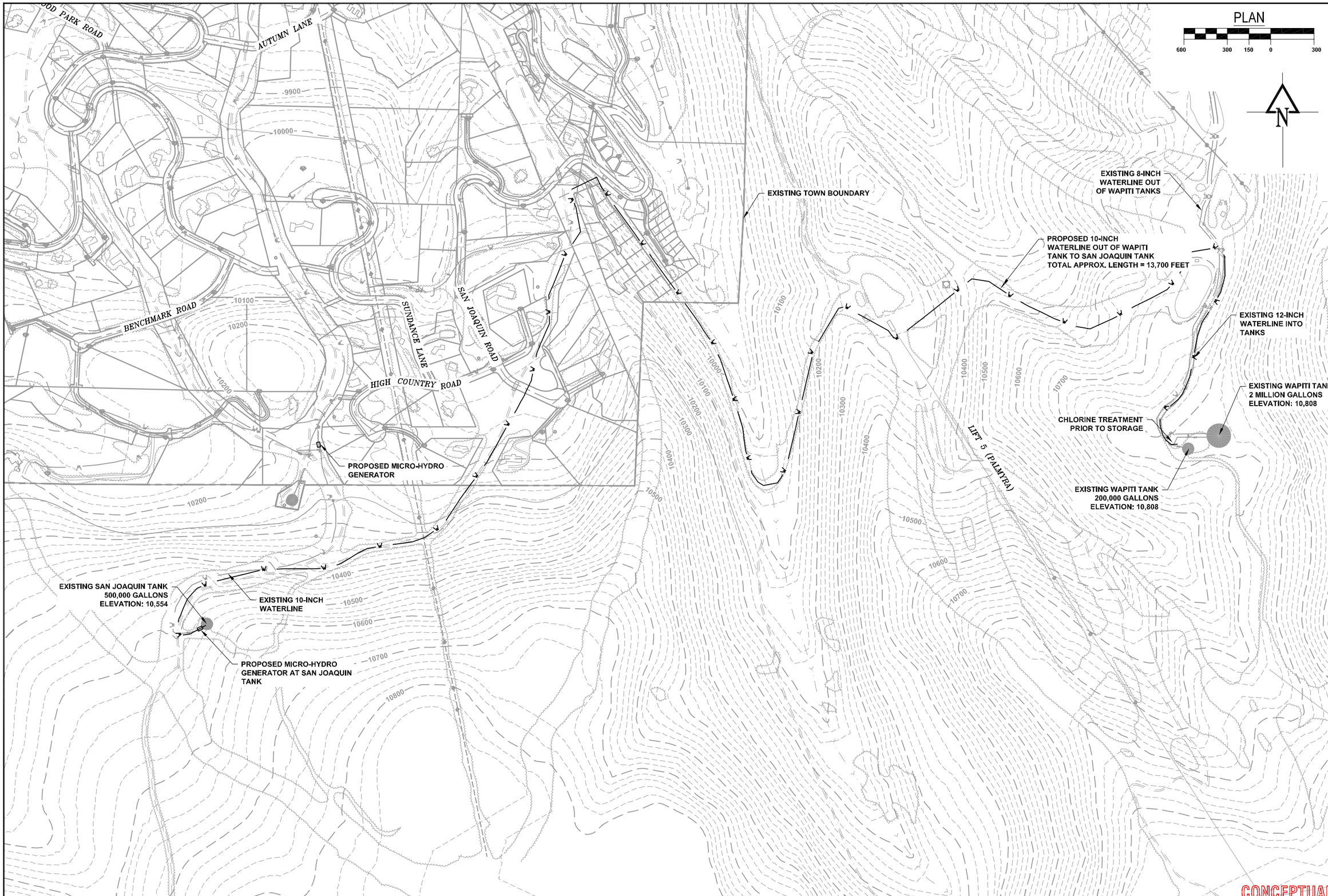
Map Sources:
Background - USGS 24k Topo - Telluride and Gray Head Quads
Rivers and Streams - Colorado Division of Wildlife and USGS
Highways - Colorado Department of Transportation

Designed by: DSS
Checked by: DBM
Date: 11/25/2014
Scale: 1:8,509,042

Town of Mountain Village Proposed Waterline Vicinity Map

Figure 1

P:\Project Files\040-06 Russell Planning & Engineering\Mapping\ArcMaps\2014\Task 05-Waterline Extension\Fig 1 Vicinity Map.mxd



CALL 811 TWO WORKING DAYS BEFORE YOU DIG

811 Know what's below. Call before you dig.

REVISIONS:

TOWN OF MOUNTAIN VILLAGE PROPOSED WATERLINE

FIGURE 2

Russell Planning & Engineering, Inc.
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Drawn: BF
Drafted: BN
Checked: BF

Date of Submittal
10/27/2014

1 OF 1

File Name: R:\Current Projects\Land Projects 3\Mountain Village Waterline Design Project\ACAD\Exhibits\SITE PLAN FOREST SERVICE Plotted: 12/4/2014 4:02 PM Plot Style: HALF.STB Plotted By: BRIDGET NASH

received on the proposed project from TSG and citizen, Romey Glenn. TSG supports the project and requested coordination and use of best management practices (BMPs) so the project does not interfere with their activities, including operations and maintenance activities. The letter from Romey Glenn raised concerns generally outside the scope of this project and this Environmental Assessment, related to the presence of real estate development in the project area.

Issues

Based on comments from the public, local governments and the USFS, no key issues were identified that would lead to the development of alternatives. Non-key issues that were analyzed in detail but did not lead to a modification of the proposed action are:

- The need to coordinate the construction of the project so as to not interfere with other activities in the ski area including recreation, special events, and planned construction and maintenance activities.
- The need to implement BMPs for erosion and sediment control.

Chapter 2 – Proposed Action

In order to meet the needs of TMV, the USFS is proposing to authorize the proposed waterline extension project described above by issuing a construction permit and amending the existing Special Use Permit (SUP).

The project would expand TMV's current water system by:

1. Constructing approximately 13,910 linear feet (LF) of 10-inch welded steel (or HDPE) buried waterline to connect two existing water tanks (the San Joaquin and Wapiti tanks) which are part of the existing public water system. Approximately 10,190 LF of the waterline would be constructed within TMV's existing 50-foot wide permit area on NFS land (Figure 2). The remainder of the pipeline (approximately 3,720 LF) would be on land owned by either TMV or TSG. An agreement exists between TSG and TMV to allow TMV to use land owned by TSG.

   The waterline will be constructed using traditional trenching or boring techniques. Boring techniques may be used in the vicinity of Lift 5 and the Prospect Creek crossing to avoid wetlands. Rock hammering or blasting may be needed in certain, limited areas.
2. Installing two underground micro-hydro generators to produce electricity at the following locations:
   a) Directly adjacent to the San Joaquin tank on NFS lands, and
   b) Downstream of the San Joaquin tank as the supply line enters the TMV boundary on land owned by TSG. This generator, located on private land, is not connected to or dependent on the new waterline or the generator being installed on NFS

lands. It is an independent action and is mentioned in this EA for the sake of completeness.

Conduit will be installed in the same trench as the waterline to connect the generators to the existing grid.

3. Installing necessary connectors to connect the waterline to the existing water tanks and the micro-hydro generators.

Alternatives

For relatively small projects with fairly minor permanent impacts and when there are no unresolved conflicts with alternative uses of resources, it is only necessary to analyze the proposed project and proceed without consideration of additional alternatives (36 CFR 220.7(b)(2)(i)). In the case of the proposed waterline, measures will be implemented to address all issues.

The effect of taking no action is considered in the effects analysis by contrasting the impacts of the proposed project with the present condition and the expected future condition if the proposed project was not implemented (36 CFR 220.7(b)(2)(ii)).

Design Features

The following measures will be implemented to minimize adverse impacts from the temporary disturbance associated with the proposed project on NFS lands and resources:

- Land which has been previously disturbed by construction of ski runs, roads, or utility lines will be used for the waterline to the extent feasible. The total disturbance footprint on NFS lands is expected to be approximately 11.7 acres, depending on topography and required construction techniques to achieve the required burial depth for the waterline.
- All staging areas will be on land owned or acquired by TMV. There will be no separate staging areas on NFS lands outside of the 50-foot wide area of disturbance (permit area).
- Any wetlands or watercourses in the project area will be identified and clearly marked prior to construction so that they can be avoided.
- A Stormwater Management Plan (SWMP) will be prepared consistent with the USFS Operating Plan Town of Mountain Village Waterline Extension Project (Operating Plan).
- All areas disturbed by construction will be revegetated by seeding with a USFS-approved seed mix and mulching as soon as possible after being disturbed. No areas will be left in a disturbed state through the winter if construction takes longer than one season.
- Construction will be scheduled, to the extent possible, to avoid periods when soils are excessively wet.

In addition, TMV will coordinate the construction with TSG to avoid conflicts with ski area standard operations, construction and maintenance projects, special events (e.g., weddings, mountain bike races) and recreational use of the lands, and commits to the following:

- Provide TSG with a schedule for construction of the project on land owned by TSG. This schedule will include proposed construction hours and dates, and the locations and dates of any anticipated access road closures.
- Agree to repair any damage or excessive wear to access roads caused by the project.
- Implement BMPs for construction practices and erosion and sediment control, consistent with the Operating Plan. The Operating Plan will be part of the permit documents for the project.

Chapter 3 – Environmental Impacts of the Proposed Action

This chapter summarizes the potential impacts of the proposed action, both positive and negative, as analyzed by an interdisciplinary team of District resource specialists. The analysis tiers to the Forest Plan and its Final Environmental Impact Statement (FEIS) and Record of Decision. Many of the larger-scale effects were addressed in the Forest Plan FEIS, allowing us to narrow the focus of this analysis to the site-specific effects of implementing the Town of Mountain Village Waterline Extension Project.

This chapter focuses on the issues raised during the Notice of Proposed Action formal comment period. Analyses beyond those documented here were completed to support the Responsible Official's decisions and to ensure compliance with laws and regulations such as the Endangered Species Act, the National Historic Preservation Act, the Clean Water Act, and the National Forest Management Act. Those analyses and associated references are part of the project record and available for public review at the Norwood Ranger District office or by request to the ID Team Leader.

The interdisciplinary team analyzed direct effects, indirect effects, and cumulative effects of the proposed action and contrasted those with the effects of taking no action. Direct effects occur at the same time and place in which the activity is implemented. Indirect effects occur at a later time or a distance from the site of the activity. Cumulative effects are those impacts that result from the combined effects of the alternative in addition to any effects of past, present, or foreseeable future activities. The current condition of the project area serves as a proxy for the impacts of past actions in understanding the contribution of past actions to the cumulative effects analysis for this project.

Analyses are based on a variety of information sources including field surveys, topographic maps, forest geographic information system data, forest resource information databases, relevant

available scientific literature, and professional judgment. Analyses assume that all treatments and design features will be implemented as described.

Effects on Cultural Resources

The project features were overlaid on maps from prior cultural resource surveys completed by the USFS, including previous archaeological clearances. The waterline route and other project features on NFS lands are located on previously disturbed areas and areas previously surveyed, with the exception of one relatively short reach northeast of where it crosses Prospect Creek. The USFS boundary is unclear in this area; however, this reach is extremely steep with very low sensitivity. Four previously recorded heritage sites are in the corridor, which appear to be ineligible. Based on the previous inventories, the existing degree of disturbance, and the low sensitivity of the one reach, additional inventory is not needed. It was determined that there exists no potential to affect cultural resources

Effects on Wildlife

The area within the SUP boundary, including the land on which the proposed waterline and generators will be constructed, consists of a variety of habitats that are utilized by numerous species of wildlife. These include non-game species of birds, mammals, amphibians and insects; and species of high public interest such as Rocky Mountain elk (*Cervus canadensis nelsoni*), mule deer (*Odocoileus hemionus*), and black bear (*Ursus americanus*). Wildlife resources in the project area are more fully described in the Final Environmental Impact Statement—Telluride Ski Area Expansion (Grand Mesa Uncompahgre and Gunnison National Forests, February 1996).

Since the proposed project will not result in new disturbance, including tree removal, and impacts from the project will be temporary and only occur during construction, there will not be any permanent, adverse impacts on wildlife. The generators will be housed in underground vaults with cast-iron manhole lids and will produce little or no noise that could disturb wildlife. Post-installation access to the generators will be provided via already disturbed areas.

Threatened and Endangered Species

Potential T&E and sensitive species in the project area include the Canada lynx (lynx *Canadensis*) and boreal toad (*Bufo boreas boreas*). Potential boreal toad habitat exists within the SUP boundary. However, no specific habitat locations were recorded, and no toads observed during the field work completed for the 1996 Environmental Impact Statement. It was concluded that the proposed project will not adversely affect the boreal toad and its habitat since the toad is not be present in the project area.

The proposed project is located in the southwest corner of historic lynx range. A “lynx analysis unit (LAU)” exists near the Telluride Ski area. However, the ski area and proposed waterline project area are not included in the LAU. The USFS completed an analysis of lynx for a

waterline project on the ski area in 2013 which found no adverse impacts (personal communication with Curtis Keetch, Wildlife Biologist). The proposed project will have no effects on the Canada lynx.

Effects on Aquatic Resources

Prospect Creek will be crossed within the existing road with a trench above the culverts. There will be an approximately 100 foot boring under the narrow wetlands to the northeast of the bottom of Lift 5 (Sheridan Headwall). The boring will not result in any dredged or fill material being placed in the wetlands. The BMPs included in the SWMP will prevent runoff and sedimentation into the adjacent wetlands and water courses from the proposed construction. Slope stability will be achieved when permanent revegetation has been established.

To minimize the risk of waterline leaks, the section of the pipe that is steel will have cathodic protection to prevent corrosion. Flow measuring meters on either end of the waterline will allow for timely recognition of leaks, should they occur. Isolation valves will be installed at a maximum of 500 foot intervals to stop leaks and allow for repair of the waterline. The entire length of the waterline follows existing maintenance roads or trains, allowing for easy maintenance accessibility. The water being conveyed in the lines is potable so there would be no expected negative effects on the surrounding environment in the event of a leak.

Cumulative Effects

The proposed action will not result in any adverse or beneficial cumulative effects. The new waterline and associated structures will be underground in already disturbed areas. The waterline will not result in an expansion of the service area or the amount of water used and will not increase water depletions in the upper San Miguel River basin.

Chapter 4 – Agencies and Persons Consulted

Curtis Keetch, U.S. Forest Service
Leigh-Ann Hunt, U.S. Forest Service (Retired)
Bill Frownfelter, Russell Planning and Engineering

Finding of No Significant Impact

After reviewing the EA, I have determined that implementation of the proposed action alternative will not, individually or cumulatively, significantly affect the quality of the human or natural environment. The provisions of 40 CFR 1508.27(b) indicate that project significance must be judged in terms of both context and intensity. Based on a review of these provisions, I have determined that an environmental impact statement is not required. I base my findings on the following definitions of context and intensity:

Context

Context means that the significance of an action must be analyzed in several ways such as society as a whole (human, national), in the affected region, the affected interests, and the locality. National Forest System general recreation users and visitors to Telluride Ski Resort, a recreation destination, are mostly comprised of local and regional visitors, although it is not uncommon to have international users at times. However, the effects of the project are local in nature and confined to the immediate surroundings of the construction area operations during seasonal construction activities.

Intensity

Intensity is a measure of the severity, extent, or quantity of effects, and is based on information from the effects analysis of this EA and the references in the project record. The effects of this project have been appropriately and thoroughly considered with an analysis that is responsive to concerns and issues raised by the public. The agency has taken a hard look at the environmental effects using relevant scientific information and knowledge of site-specific conditions gained from field visits. My finding of no significant impact is based on the context of the project and intensity of effects using the 10 factors identified in 40 CFR 1508.27(b).

1. **Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effects will be beneficial**

My decision has considered both the beneficial and adverse impacts associated with the action alternative as presented in Section 3.0 of the EA. Authorizing the action alternative will improve water transmission efficiencies and generate power. With implementation of the proposed action identified in Chapter 2 of the EA, these impacts are determined to be non-significant. Impacts to aquatics, wildlife, and cultural resources are summarized in Chapter 3 of the EA and are documented in individual reports in the project record. My finding of no significant environmental effects is not biased by the beneficial effects of the action.

2. **The degree to which the proposed action affects public health or safety**

The action alternative will be a benefit to public health or safety by improving the water supply for domestic and fire purposes. Similar activities utilizing similar design criteria have not significantly affected public health and safety in a negative way.

3. Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas

The primary feature of concern is a buried waterline and generator. The affected area will appear as a linear feature until it is fully reclaimed and vegetation matches the surrounding vegetation. It has been determined that there will be no effects to cultural resources. There are no wilderness areas, Colorado Roadless Areas, parklands, prime farmlands, or wild or scenic rivers within the affected area; thus, no effects to these resources are expected.

Wetland habitats may be present within the project area, and the potential effects to those habitats have been adequately analyzed and design measures have been included in this decision to protect sensitive habitats. Therefore, based on the analysis and the application of project design criteria developed to protect wetland habitats, I have determined that there will not be significant effects to wetland habitats within the geographic area.

4. The degree to which the effects on the quality of the human environment are likely to be highly controversial

The effects on the quality of the human environment are not likely to be highly controversial. Limited public interest, in the form of two comments, has been expressed with respect to this project.

5. The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks

The analysis shows the effects are not uncertain, and do not involve unique or unknown risks. All resources potentially impacted by the action alternative have been adequately analyzed and design features have been identified and included in this decision. Therefore, based on the Forest Service's experience with implementing these types of activities, as well as the application of BMPs to minimize effects, I have determined that there will not be significant effects on the human environment.

6. The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration

The activities are within the scope of the Forest Plan and are not expected to establish a precedent for future actions (EA page 1).

7. Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into smaller components

The analysis does not identify any cumulatively significant effects that are anticipated to result from the implementation of the action alternative.

8. The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources

The TMV Water Line Extension Project will not adversely affect or cause loss or destruction of significant scientific, cultural, or historical resources. Four previously recorded heritage sites are in the corridor, which appear to be ineligible for inclusion on the National Register of Historic Places. They are not within the area of potential effect and will not be affected by project activity. The Cultural Resource Clearance Report is part of the project record.

9. Consideration of the degree to which the action may adversely affect an endangered or threatened species or its critical habitat

Based on my review of the determinations from biological analysis for this project and summarized in the Environmental Assessment, I have found that my decision to implement the proposed action will result in no effect to any federally listed species.

10. Consideration of whether the action violates Federal, State, or local laws or requirements imposed for the protection of the environment

The activities of this project will not violate applicable federal, state, or local laws enacted for the protection of the environment. The decision is consistent with the goals and objectives as stated in the 1991 Revision of the Land and Resource Management Plan for the Grand Mesa, Uncompahgre and Gunnison National Forest (Forest Plan); the Federal Land Policy and Management Act of 1976, as amended; the Clean Air Act (1990); the Clean Water Act (1972); Endangered Species Act of 1973; the National Environmental Policy Act (1969); and the

National Historic Preservation Act of 1966, as amended. Other applicable laws and regulations are considered below:

- Effects of Alternatives on Social Groups: There will be no overall differences between alternatives in effects on minorities, Native American Indians, women or the civil liberties of any American citizen.

- Environmental Justice: In accordance with Executive Order 12898, I have determined that implementing this project will not have a disproportionately adverse health or environmental effect on any low-income or minority populations, and will affect all persons who visit the area equally.

Irreversible and Irretrievable Commitments of Resources: The physical and biological effects are limited to the project area. There are no known significantly irreversible resource commitments or any significant irretrievable losses of vegetation resources, wildlife habitats, soil productivity, water quality or other renewable resources.

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