UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
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DEC 07 2018

Ref: 8EPR-N

Scott Fitzwilliams, Forest Supervisor
c/o Sam Massman, Project Leader
Dillon Ranger District
P.O. Box 620
Silverthorne, Colorado 80498

Dear Supervisor, Fitzwilliams:

The U.S. Environmental Protection Agency Region 8 has reviewed the U.S. Department of Agriculture Forest Service November 7, 2018, notice of proposed action (NOPA) to prepare an Environmental Assessment (EA) for the Copper Mountain Resort (CMR) Snowmaking and Summer Uses project in the White River National Forest (WRNF). In accordance with our responsibilities under Section 102(2)(C) of the National Environmental Policy Act (NEPA), we are providing scoping comments.

The project proposes new snowmaking infrastructure for 86 acres of coverage on existing ski trails, construction of approximately 24 miles of new biking trails and 14 miles of hiking trails and the extension of a 370-foot segment of existing mountain access road. The NOPA additionally includes development of summer camping areas in existing cleared areas near chairlift terminals. The EA estimates that the proposed project activities will result in approximately 26 acres of disturbance, an unspecified area for construction staging and log decking and approximately 2.5 acres of wetland impacts.

Key Topics the EPA Recommends Be Addressed During the NEPA Process

Based on our current understanding of the proposed project and the area, the EPA provides comments and recommendations related to the following key topics: 1) baseline environmental conditions; 2) waters of the U.S., including wetlands; 3) air quality; and general comments.

(1) Baseline Environmental Conditions

When evaluating effects of project alternatives, we recommend that current existing environmental conditions be used as the baseline for comparison of impacts across alternatives, including the No Action alternative. This is especially important when there are environmental protections in place that are based on current conditions. We are encouraged to see that pre-construction baseline surveys for streams are included in the NOPA. We recommend that baseline data is collected for all impacted resources and all data (5 years or older) are verified as representative of current conditions.

CWA Waters of the U.S., including Wetlands

We recommend the EA identify existing aquatic resources baseline conditions in the proposed project area, including wetlands (including peatlands or fens), streams and ephemeral drainages and springs. Specifically, we recommend describing watershed conditions, streambank conditions, vegetation cover, soil conditions, and wildlife and fish population health and habitat. We also recommend that the EA include a map that identifies all waters of the U.S. (*e.g.*, streams, wetland delineation) within a minimum of 500 feet from any construction activities, with dominant plant community types identified. The NOPA briefly discusses some of these topics, and the EA would benefit from more detailed analysis.

Streamflow and Water Quality Data

We recommend the EA provide a summary of available information and monitoring data on water quality for the project area and identify impaired waterbodies within and downstream of the planning area, including waterbodies listed on the most recent EPA-approved CWA § 303(d) list. It is particularly important to include any parameters of interest for impaired waterbodies within or downstream of the project area.

When defining baseline conditions, please consider the following:

- Include resources directly impacted by the project footprint within the geographic scope of analysis as well as the resources indirectly (or secondarily) impacted by the project. These indirectly impacted areas may include downstream segments, source water areas where water withdrawals will occur, and any other resource areas which may be affected by changes in water management or operations.
- Include current water quality at a critical flow condition in any affected stream reaches.
- Consider and document water quality impairments per State CWA Section 303(d) lists, draft or established TMDLs, and potentially affected dischargers, including water treatment providers.
- Identify any Source Water Protection areas and how the project will be consistent with Source Water Protection planning measures.

Water Quality and Snowmaking

Approximately 86 acres of additional snowmaking is proposed to provide reliable ski trail conditions. We recommend that the EA include the following baseline information related to snowmaking:

- A discussion of the existing snowmaking operation and why the proposed additional amount of snowmaking is necessary.
- Water quality analysis of the water to be used for snowmaking, as well as an assessment of water quality in the receiving waters to which the snow melt will flow.

Air Quality

To characterize baseline air quality conditions, we recommend that the EA include the following:

- Identification of sensitive receptors (such as population centers and Class I and Sensitive Class II areas in the vicinity) as outlined in the NOPA
- Ambient air quality data including air quality trends of any Class I areas in the vicinity over the past several years. Such data are readily available from the Colorado Department of Public Health and Environment (CDPHE) and the EPA (www.epa.gov/airdata/).
- A description of current vehicle data and trends associated with resort visitation (the NOPA briefly discusses this topic).

(2) Potential Impacts to Waters of the U.S. including Wetlands

In mountain environments cut and fills associated with grading for trail and road construction and trenching for utilities have the potential to impact streams, wetlands, and their supporting hydrologic systems. Thus, it is important to include the design details for these actions in the EA.

Given the potential for this type of project to affect aquatic resources, we recommend that the EA evaluate potential impacts by including:

- Assessment of potential impacts on baseline conditions. Impacts may include changes in surface and groundwater hydrology supporting streams and wetlands.
- A description of any wetland impacts, temporary and permanent, direct and indirect, past and reasonably foreseeable. Such impacts may include functional conversion of wetlands (e.g., forested to shrub-scrub); changes to supporting wetland hydrology even if these wetlands are outside of the construction footprint. (e.g., snow melt patterns, sheet flow, and intercepted groundwater hydrology); and wetland disturbance.

Wetlands

The wetlands typically found in mountain environments represent valuable montane wetland ecosystems performing a variety of functions and values. Impacts to the types and functions of wetlands in montane environments are difficult or sometimes impossible to mitigate due to shorter growing seasons and low temperatures at night. The EPA recognizes the challenges facing the USFS in managing wetland resources in forested montane environments and we appreciate the intent to avoid such impacts with this project. The NOPA identifies approximately 2.5 acres of wetlands that could be affected by the activities outlined in this project. We recommend the EA detail how the project will show compliance with Executive Order 11990, Protection of Wetlands, including how wetlands will be identified and avoided, and how unavoidable impacts would be minimized and mitigated.

Discharge of dredged or fill material into waters of the U.S., including wetlands, is regulated under CWA Section 404. This permit program is administered jointly by the Corps and the EPA.

We appreciate that as described in the NOPA CMR has proposed to coordinate with the Corps in its pre-construction design to determine if any activities will require a Pre-Construction Notification. We recommend the USFS consult with the Corps during the NEPA process to determine the applicability of CWA Section 404 permit requirements to any wetlands that would be impacted in the project area. We also recommend the EA include a description of impacts to waters not regulated by the Corps.

We recommend avoiding impacts to aquatic resources that are considered "difficult to replace" under the EPA's and the Corps' Final Rule for Mitigation for Losses of Aquatic Resources [33 CFR Parts 325 and 332; 40 CFR Part 230 (73 FR 19594, April 10, 2008)]. The rule emphasizes the need to avoid and minimize impacts to these "difficult-to-replace" resources, (including streams and fens) and requires that any compensation be provided by in-kind restoration, rehabilitation, or enhancement to the extent practicable. We recommend that restoration plans require soil profiles and hydrology to be re-established as much as possible to the original state. In addition, the EPA recommends the USFS consider applying the mitigation approach from the rule to protect aquatic resources even when a CWA Section 404 permit is not required.

To ensure that wetlands are protected, it may be necessary to consider exclusion of road or trail construction and mechanized vegetation and tree removal treatments in areas where wetlands or riparian areas would be adversely impacted either directly or indirectly from adjacent construction activities, changing supporting wetland hydrology. The EPA recommends the USFS reduce impacts through the use of Best Management Practices (BMPs) to protect sensitive soils, wetlands, riparian areas, meadows, stream crossings, and critical habitat. We support establishment of riparian habitat buffer zones to avoid adverse impacts to streams and riparian areas.

It can be difficult to avoid permanent impacts to sloped wetlands from placement of snow-making pipelines and other on-mountain facilities. Where wetland crossings are unavoidable, we encourage the use of the following BMPs during design and construction:

- Selecting the narrowest available crossing locations and avoiding crossings through fen-type wetlands.
- The use of bulkheads, where applicable, to minimize the disturbance width for utility line trench in wetlands.
- Placement of groundwater barriers on the downgradient side of the utility crossing to prevent wetland drainage. Site-specific engineering design details should be reviewed by the USFS and by resource agencies prior to approval of the wetland permit.
- Protection of wetland vegetation adjacent to the trench by use of construction fabric, hay layers, or wood chips to store trench soils. This can minimize or prevent damage from soil compaction and soil mixing.
- Monitoring these BMPs during construction and post-construction to ensure effectiveness and a requirement that any drainage problems be corrected.

Water Quality and Impaired Waterbodies

We recommend that the USFS: (a) analyze potential impacts to impaired waterbodies within and downstream of the planning area, including waterbodies listed on the most recent EPA-approved CWA § 303(d) list; and (b) coordinate with the CDPHE if there are identified potential impacts to impaired waterbodies (~~to~~ avoid causing or contributing to the exceedance of water quality standards). Where a Total Maximum Daily Load (TMDL) exists for impaired waters in the area of potential impacts, pollutant loads should comply with the TMDL allocations for point and nonpoint sources. Where new loads or changes in the relationships between point and nonpoint source loads are created, we recommend that the USFS work with CDPHE to revise TMDL documents and develop new allocation scenarios that ensure attainment of water quality standards. Where TMDL analyses for impaired waterbodies within, or downstream of, the planning area still need to be developed, we recommend that proposed activities in the drainages of CWA impaired or threatened waterbodies be either carefully limited to prevent any worsening of the impairment or avoided where such impacts cannot be prevented.

Water Quality Impacts of Soil Disturbance

We recommend the EA describe site-specific current soil conditions and include an assessment of potential project impacts. Such impacts may include soil loss, increased surface storm flow, and changes in water temperature associated with erosion of soils and stream banks, water channelization, reduced stream base flows from decreased infiltration to groundwater, soil compaction, and vegetation loss. We recommend this analysis assess impacts to aquatic resources, including water quality, stream and wetland processes, and fish populations and habitat, and provide mitigation measures to address such impacts.

Water Quality and Impacts of Additional Snowmaking

We recommend that the EA include the following information related to snowmaking impacts:

- An assessment of whether snowmaking water is likely to adversely impact streams, soils, plants or wetlands on or below the ski area.
- An assessment of water quantity issues (including as it relates to water quality) associated with the snowmaking and municipal withdrawals to serve the project area.

The EPA appreciates the NOPA's inclusion of details regarding the water quantity necessary to implement the project's snowmaking requirements and its identification of existing diversion structures on Tenmile Creek. To address water quantity concerns associated with snowmaking, the EPA recommends the EA discuss the timing and magnitude of withdrawals, the ability to maintain critical instream flows, and potential adverse impacts to aquatic habitat from an additional diversion of 246 acre feet and changes in water yield due to snowmaking.

If the project will alter in-stream flow quantity or quality, we add the following detailed recommendations for assessing impacts:

- Comparison of pre- and post-project water usage and impacts to stream flows, which include the maximum, minimum and mean or median values for each month for the proposed snowmaking source water.
- An analysis of additional spring runoff to streams in the project area resulting from increased snowmaking and the potential for stream bank erosion and spawning habitat degradation resulting from increased flow.
- An analysis of the extent to which withdrawals for snowmaking will result in reduced flow for dilution of stream pollutants downstream of the withdrawal point (e.g., metals, wastewater effluent) and whether that loss of dilution flow will contribute to or exacerbate water quality concerns.
- Quantification of the cumulative total diversions as the proportion of average monthly or daily streamflow diverted in areas where impacts from water withdrawal are occurring from multiple past, present and future diversions.
- An analysis of impacts to resident fish species and invertebrate assemblages.
- Comparison of current and post-project water quality at a critical flow condition and expected impacts to assimilative capacity or permit limits, which account for applicable water quality standards, water quality impairments per State CWA Section 303(d) lists, draft or established TMDLs, and potentially affected dischargers.

We appreciate the NOPA's identification of mitigation by way of an instream diversion to capture snowmelt from additional snowmaking in McKenzie Gulch just above the confluence with Wheeler Gulch (which the USFS has classified as having "diminished" stream health in its lowest reaches). We recommend that the details of this diversion system and the associated adaptive management plan should be further detailed in the EA regarding the in-stream flow quantity and quality impacts assessment recommendations above.

We also recommend the EA analyze and disclose the potential impacts of less availability of water during drought years on viability of the proposed project. The EA should consider whether continuation of recent snowpack trends could result in the need for expanded snowmaking to maintain the same level of existing snow coverage.

Water Quality and Road Impacts

Road and trail stream crossings can cause sedimentation loading and possible pollutant delivery. For road construction including realignment of current and development of new roads, in addition to wetlands and sensitive ecological areas being avoided or bridged (as described in the NOPA) wherever possible, the EPA's general recommendations include:

- Avoid or bridge wetlands and sensitive ecological areas where practicable;
- Minimize road and trail construction and road density to reduce adverse impacts to watersheds;
- Locate roads and trails away from difficult to replace alpine resources, such as alpine meadows, streams and riparian areas as much as possible;

- Locate roads and trails away from steep slopes or erosive soils;
- Minimize road and trail stream crossings;
- Stabilize cut and fill slopes according to BMPs developed by the USFS that are applicable to sensitive alpine areas;
- Provide adequate road and trail drainage and control surface erosion with adequate waterbars, crowns, and ditch relief culverts to promote drainage off roads or along roads and trails;
- Consider road and trail effects on stream structure and seasonal spawning habitats when determining alignment; and
- Allow for adequate large woody debris recruitment to streams and riparian buffers near streams.

(3) Potential Impacts to Air Quality

Though the NOPA identified that air quality effects would be negligible, we recommend the EA include a qualitative discussion of the potential for impacts from project activities due to CMR's proximity to Class I and II areas and the I-70 corridor. The NOPA does not identify if burning is one of the potential options for tree disposal (only removal of trees by logging trucks is identified). If burning will be utilized, fire activity may cause periodic degradation of air quality and visibility in the region. If necessary, we recommend the EA include information on the type of proposed burning and the amount of burning potential (e.g., number of piles if pile burning removed trees). We also recommend that the EA describe how the fire plan will be used to avoid adverse impacts.

(4) General Comments

The EA would benefit from including more detailed information on project activities. For example, the NOPA is not clear on how much of the 26 acres of disturbance for snowmaking developments will involve tree removal. In addition, construction staging, and log stacking and decking are not delineated in the overall impacts. The NOPA also does not provide significant detail on the acreage of disturbance associated with the development of new biking and hiking terrain and trails in addition to the 370 feet of new road construction. We recommend that the USFS provide additional details on these activities and develop estimated totals of tree and vegetation removal that are anticipated to result from project activities to better describe the project impacts.

Closing

We appreciate your consideration of our comments at this early stage of the process. These comments are intended to facilitate the decision-making process.

If further explanation of our comments is desired, please contact me at (303) 312-6704, or your staff may contact Matt Hubner at (303) 312-6500 or hubner.matt@epa.gov.

Sincerely,

Philip S. Strobel
Director, NEPA Compliance and Review Program
Office of Ecosystems Protection and Remediation