



## Memorandum

TO: Planning and Environmental Commission

FROM: Environmental Sustainability Department

DATE: August 26, 2019

SUBJECT: Bighorn Sheep Habitat Improvement Project and offsite mitigation as it pertains to the application for a new housing development located at 3700 North Frontage Road East/Lot 1, East Vail Workforce Housing Subdivision ("Booth Heights Neighborhood")(PEC19-0018)

### I. PURPOSE

The purpose of this memorandum is to provide the Planning and Environmental Commission an update on the bighorn sheep habitat improvement work completed to date on town-owned property in East Vail, and to review the off-site mitigation plans for habitat improvement dollars pledged by Triumph Development.

### II. BACKGROUND

#### **Bighorn Sheep Awareness**

Following the World Alpine Ski Championships in 2015, the Town of Vail and its partners began a two-year process to pursue an international certification as a Sustainable Destination under the Global Sustainable Tourism Council's criteria for mountain communities. One of the requirements for this certification is protection of wildlife and environmentally sensitive sites within the destination, which includes the entire Gore Creek Watershed and all of Vail Mountain. To provide a status report to the auditors the town requested a "State of Wildlife in the Gore Valley" report from Colorado Parks and Wildlife. This report shed light on the fact that the elk, deer, and bighorn sheep in the Valley are in rapid decline due to a number of pressures including recreation, development, and loss of habitat. Since then, the town has adopted the 2018 Comprehensive Open Lands Plan which in part addresses habitat, biodiversity, land management, and trail planning. The town along with local partners have since taken steps to improve education, compliance with trail closures, funding, and small-scale habitat improvement. In 2019 the town budgeted \$70,000 for habitat improvement and any necessary permitting or consulting work and has proposed the same in the 2020 budget proposal to the Vail Town Council.

### III. 2019 BIGHORN SHEEP HABITAT IMPROVEMENT ON TOWN PROPERTY

This past spring the town submitted and received approval for both a Prescribed Fire Plan and a CDOT Right of Way Permit for a bighorn sheep habitat improvement project which involved

the burning of grasses and scattered brush to improve winter range for the East Vail bighorn sheep herd. Approximately 2 acres of grass on the Booth Creek area rock fall berm was proposed to be burned to stimulate new growth and improve forage, plus 2 acres of grass adjacent to the North Frontage Road under proper environmental conditions. However, because the bighorn sheep remained on site through the summer, conditions were not appropriate to conduct a burn. As an alternative, the Town of Vail brought the wildland fire crew on staff two weeks early in order to conduct mechanical pruning of shrubs, opening game trails, slash and piling brush on 25 acres of town property. See vicinity map, Attachment A. Additional work continues this summer.

This spring staff will re-initiate the prescribed fire option on the area below the cliffs, however, operations are dependent on environmental conditions that allow smoke to rise and disperse rather than settling onto the highway and into residential areas, and sheep occupation of the site.

### **Bighorn Sheep Habitat Improvement on U.S. Forest Service Property**

Staff has been discussing with the U.S. Forest Service (USFS) the potential to revisit a large scale (880 acres) burn project in the Booth Creek area originally proposed in 1998 for habitat improvement. According to USFS District Ranger Aaron Mayville:

- An internal USFS staff meeting was held on July 29<sup>th</sup> to discuss the Prescribed Fire in East Vail.
- Because the project is partially in Wilderness Area, there are significant hurdles to implement and will require a full NEPA Environmental Assessment (EA) – USFS has specific direction not to use prescribed fire in Wilderness areas to benefit wildlife habitat, though it can be used for fuels reduction.
  - Note - There are waivers to this requirement, but it can be controversial and may trigger a significant challenge (legal or otherwise). The recent example of allowing chainsaws in Wilderness on the Rio Grande is a good example of this. <https://durangoherald.com/articles/278111>
- There remains the possibility that smaller scale, a Categorical Exclusion (CE) may be applied to non-Wilderness Area habitat area.

### **Booth Heights Development Proposal**

Given the existing condition and limited winter range to the East Vail Bighorn Sheep herd and the environmental review criteria in the Vail Town Code, staff convened a panel of wildlife biologists to review the Wildlife Mitigation Plan proposed by the applicant. The biologists agree that development will likely impact this herd. However, given the zoning designation and development rights associated with the parcel, the biologists participated in a collaborative review and development of best-practice recommendations with the applicant, the applicant's biologist, Colorado Parks and Wildlife, and town staff. The results of this process indicated that given bighorn sheep's strong winter range fidelity and their need for rocky escape cover and mountain shrub vegetation, off-site mitigation is more than the originally proposed work on the Natural Area Preservation District area to the east of the development site. Therefore, as part of the Conditions of Approval on the Booth Heights Development proposal, Triumph Development has committed to contributing \$100,000 to the Town of Vail for off-site habitat mitigation that is the estimated quantitative equivalent of the work originally proposed on-site. Options for enhancement on up to 132 acres of bighorn winter range on town property and beyond include:

- Fertilization of the highest quality winter range

- Noxious weed control
- Research and collar study at the election and direction of Colorado Parks and Wildlife (CPW)
- Supplemental feeding of the herd in the event of a severe winter and if deemed appropriate by CPW
- Option to expand habitat work onto USFS property with their approval. Town staff does not have confirmation of forward progress on this project to date given National Environmental Policy Act (NEPA) requirements and internal USFS dialogue, but will continue to pursue.

This funded and flexible approach that can adapt to conditions in the field follows the best-practices methodology recommended by the biologists. Staff anticipates that the timing and specific actions of this alternate off-site work plan would be finalized and undertaken by the staff and its hired experts in the spring of 2020 (or year of the contribution) given the conditions in the field.

*Please see the applicant's "Booth Heights Revised Wildlife Mitigation Plan with TOV Biologist Recommendations" memo dated August 16, 2019 for the details of the proposed Mitigation Plan as well as the joint memo from the biologist roundtable for additional comments and recommendations.*

#### **IV. ATTACHMENTS**

A. Spring 2019 Bighorn Sheep Habitat Improvement Area Vicinity Map




# East Vail Bighorn Sheep Habitat Improvement

Opened overgrown game trails starting at west end moving east


Vail Mountain School


## Legend


 2019 Spring Mechanical Unit (25 Acres)

 Town Owned Parcel

## Burn Units

 Unit 1- 2.7 Acres

 Unit 2- 3.9 Acres

 Unit 3- 17.3 Acres



0 0.15 0.3  
Miles

Sources: Esri, HERE, DeLorme, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), MapmyIndia, NGCC, © OpenStreetMap contributors, and the GIS User Community, Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community