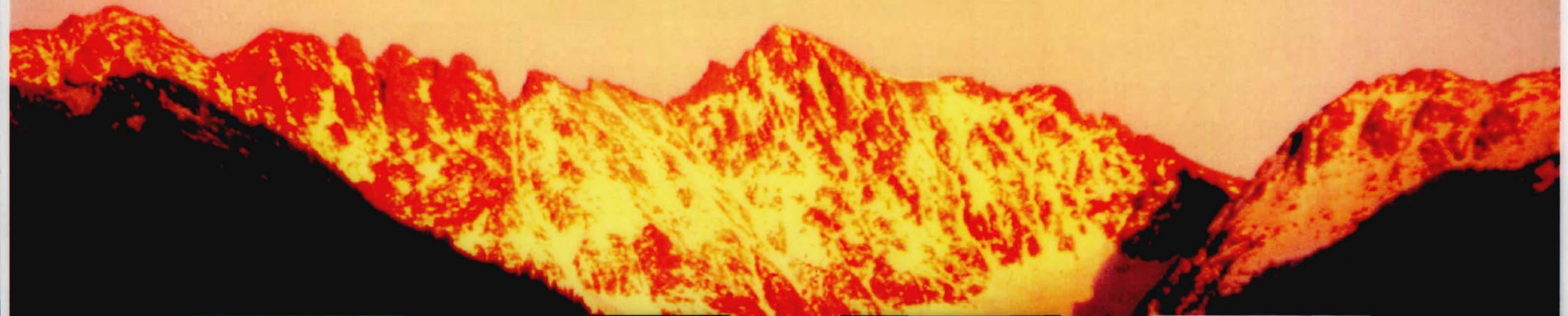


# APPENDIX

- 1994 Open Lands Plan
- Status of Action Plan Parcels and Trails from the '94 Action Plan
- Summary of Action Items
- Summary of Real Estate Transfer Tax Ordinances
- Designated Open Space procedures
- USFS Process
- Trail Types and Standards
- Conceptual Trails Plan/Trails Dropped from Consideration
- Colorado Parks and Wildlife - Wildlife in the Gore Valley
- Colorado Parks and Wildlife - Wildlife Influence Area Maps
- Trail Scoping Session Minutes - September 2017
- Summary of 2018 Wildlife Forum

# Town of Vail

---



Comprehensive Open Lands Plan

Prepared by:  
**DESIGNWORKSHOP**  
 1660 17th Street, Suite 325  
 Denver, Colorado 80202  
 (303) 623-5186

Design Workshop Team

Carol Adams  
 Mary Dewing  
 Marty Zeller

Open Lands Steering Committee

Peggy Osterfoss, Mayor of Vail  
 Tom Steinberg, Vail Town Council Member  
 Cybill Naoas, Vail Town Council Member  
 Jim Shearer, Vail Town Council Member  
 Larry Grafel, Acting Town Manager  
 Diana Donovan, Planning and Environmental Commission  
 Kathy Langenwalter, Chair  
 Planning and Environmental Commission  
 Greg Amsden, Planning and Environmental Commission  
 Jeff Bowen, Planning and Environmental Commission  
 Bill Wilto, Vail Board of Realtors  
 Rich Phelps, USFS  
 Mack Hodge, Vail Board of Realtors  
 Rob Robinson, Director - Vail Recreation District  
 Joe Macy, Vail Associates

Town of Vail Staff

Kristan Pritz, Director of Community Development  
 Russ Forrest, Project Manager, Community Development  
 Greg Hall, Acting Director of Public Works  
 Todd Oppenheimer, TOV Landscape Architect  
 Mike Mollica, Community Development  
 Jim Curmutte, Community Development  
 George Ruther, Community Development

Photo Credits

David Lokey  
 Scott Martin  
 Jeff Andrey

**TABLE OF CONTENTS**

<b>Executive Summary</b> .....	2
<b>Introduction</b> .....	3
Purpose/ Mission Statement	
History of Vail	
Current Trends	
<b>Inventory</b> .....	4
Open and Undeveloped Lands	
Land Zoned Open Space	
Outdoor Recreation Inventory	
Trails Inventory	
Environmentally Sensitive Land	
<b>Needs Assessment/ Public Input Process</b> .....	7
Open Space and Recreation	
Public Facilities/ Land Reserve	
<b>Concept Plan</b> .....	11
Environmentally Sensitive Lands	
Activity Centers and Connections	
<b>Action Plan</b> .....	11
Protection Techniques	
Priorities for Action	
Comprehensive List of Recommended Actions	
Recommendations for TOV Owned Parcels	
Trails and Trailheads	
<b>Land Management</b> .....	24
Forest Service	
Vail Associates	
Town of Vail Property Management	
<b>Implementation</b> .....	25
Funding Sources	
Phasing	
Next Steps	
Five Year Plan	

**LIST OF TABLES**

Table 1 Real Estate Transfer Tax History and Budget .....	3
Table 2 Ownership of Zoned Open Lands in Vail .....	4
Table 3 Park Facilities .....	6
Table 4 Existing Trail Facilities .....	6
Table 5 VA and USFS Trails .....	7
Table 6 Assessment of Previous Plans/ Documents .....	9
Table 7 Priority Actions .....	14
Table 8 Action Parcels .....	20
Table 9 Protection and Management Techniques for Action Parcels .....	21
Table 10 Six Year Plan .....	27

**LIST OF EXHIBITS**

Exhibit 1 Existing Open Lands Map .....	5
Exhibit 2 Hazards and Sensitive Areas .....	8
Exhibit 3 Concept Plan .....	12
Exhibit 4 Priority Plan .....	15
Exhibit 5 Action Plan .....	19
Exhibit 6 Trails Plan .....	23

**APPENDICES**

Appendix 1: Land Ownership Adjustment Process .....	31
---	----

Table of Contents





**EXECUTIVE SUMMARY**

The objectives of the Comprehensive Open Lands Plan are:

- To identify citizen and visitor needs and preferences for a comprehensive SYSTEM of open space uses such as parks, recreation, protection of environmental resources, trails, and reserve lands for public uses;
- To prioritize available open lands for acquisition or protection;
- To identify creative strategies to implement the acquisition and protection program; and
- To define a management system to appropriately manage Town-owned open space lands.
- To buffer neighborhoods with open space

An Open Lands Committee provided direction for the project and consisted of representatives from the Vail Town Council, Planning and Environmental Commission, U.S. Forest Service, Vail Associates, Vail Recreation District, Board of Realtors, and Town Staff.

The public involvement process consisted of four well-attended public meetings between August of 1993 and January of 1994. These meetings, along with a thorough review of all relevant planning and survey documents for the Town, resulted in a priority ranking of needs and uses for open space lands and recreational opportunities. This input led directly to the Comprehensive Open Lands Plan which identifies specific parcels and activities that should be pursued by the Town in order to realize the goals stated in both the public forum and previous community input on related plans.

The priorities for open space and recreation needs communicated by the citizens of Vail are, in order of priority:

1. Acquisition, preservation and protection of natural open space;
2. Improvement of the trail and bike path systems in and around the Town; and
3. Creation of additional recreation opportunities in a regional context including a swimming pool, athletic fields and a recreation center.

The concepts presented in this plan, developed as a result of this public input, describe connecting existing trail systems that are either incomplete or not interconnected, adding an extensive new trail system that essentially surrounds the Town and better interfaces with the National Forest System Lands and Vail Mountain, and protecting sensitive lands that are either along Gore Creek or part of the forest that extends into the Town. Extension of the streamwalk from the Village Core into Lionshead is desired by the community but objectionable to the adjacent property owners who fear loss of privacy and degraded views.

The Comprehensive Open Lands Plan is an action-oriented plan that identifies specific parcels of land that require some kind of action for either protection of sensitive lands, for trail easements and critical trail connections or for future public use, such as a West Vail fire station. Over 350 parcels were evaluated with fifty-one parcels of land on which actions are recommended. Recommended actions range from acquisition by the Town, trade with the U.S. Forest Service, acquiring trail easements, or purchasing development rights. In many cases, several options are available on a specific parcel, allowing flexibility in negotiations for both the landowner and the Town.

The objective has been to provide the Town with a menu of potential open space protection techniques at the least cost and management burden to the Town. For example, if an easement can be obtained from the landowner for a trail or to protect a site from development, generally this has been proposed as an alternative to outright acquisition. As a result, the land stays on the tax rolls and the Town is not responsible for general property management and maintenance. These "reduced rate" transactions can be beneficial for landowners since they can provide certain tax and estate planning benefits which meet a landowners financial objectives. A careful tailoring of transactions between landowners and the Town can produce mutually beneficial results.

Specific criteria were developed to evaluate these recommended actions in order to determine the areas of highest priority. Generally, actions received a high priority if they met the stated objectives of the Town and its' citizens and were an integral part of the open lands system. Within these fifty one parcels, there

are five priority areas made up of a number of recommended actions. These priority areas, shown on the Priority Plan in Exhibit 4 are (in order of priority):

1. Protect sensitive natural habitat areas, riparian areas, and hazard areas;
2. Extend the Vail Trail to East Vail and add several trailheads to access the trail;
3. Add a new trail on the north side and western half of Town to connect existing trailheads and neighborhoods;
4. Add three "trailheads" in the core areas to access Vail Mountain trails and inform visitors of trail opportunities and provide better access to Gore Creek;
5. Add bike lanes to the north and south frontage roads (the entire length of Town) and add paved shoulders to Vail Valley Drive.

For the past 13 years, the Town has had the use of tax funds generated from a Real Estate Transfer Tax (RETT) for the purchase of open lands and development and maintenance of parks and trails. This fund can and should now be better leveraged to take advantage of the opportunities of both GOCO ("Great Outdoors Colorado") and other State funding and mutually beneficial negotiations with property owners.

The Town should now enter into a new cooperative management system with the U.S. Forest Service and Vail Associates Inc. to provide outdoor recreation and open space preservation. With adoption of this plan, there will be added management and maintenance requirements for the Town. The maintenance fund from the RETT Tax will need to grow in response to these new management requirements. Additionally, open space protection must go beyond zoning to ensure long-term protection. Options for this longer term protection may include requiring a public vote to change uses on open space lands or the use of a land trust to hold conservation easements on lands.



**INTRODUCTION**

**HOW THE DOCUMENT IS ORGANIZED**

This document is a result of a comprehensive look at the Town of Vail and its citizens and visitor needs in terms of open space, parks, and recreation issues and public facility needs. The resulting Action Plan, which is described in detail in this document, includes specific recommendations for trails, trail-heads, open lands and protected parcels, and parcels intended for other community needs (such as an additional fire station).

The document first describes the identified needs of the Town, the overriding concept or framework for addressing these needs in a comprehensive manner, and then specific prioritized actions to meet these needs.

**PURPOSE OF THE PLAN**

The purpose of this plan is to identify and develop strategies for acquiring or protecting key remaining open lands in Vail that would be valuable for recreation, protecting sensitive environmental resources, extending or connecting trails, providing adequate neighborhood open space, and creating a small amount of contingency land for unforeseen needs (e.g. employee housing, public facilities). These "public needs" lands, while included in this Plan, would be purchased from sources other than the RETT fund.

This Plan pulls together a variety of activities that the Town has been working on. The Town is in the process of creating an inventory of its land; revising the zoning language for existing open land zones; working on a Land Ownership Adjustment Plan (LOA) with the U.S. Forest Service (USFS) to cooperatively develop a desired ownership pattern and readily identifiable common TOV and National Forest System boundary; developing an inventory of environmentally sensitive open lands with the cooperation of the Colorado Natural Heritage Program; and proposing zoning changes for public and private open land parcels. This plan is intended to integrate these efforts and provide a framework for decision making to identify, acquire, and manage open lands in the Town of Vail.

This Plan identifies existing open lands in and around Vail and determines the current need for obtaining land for recreation, conservation, trails and public use. The plan also identifies and analyzes specific parcels of land that can meet these needs. Options for acquisition or protection are also examined along with management strategies for these properties.

Acquisition can include outright purchase of property, purchase of easements or development rights, donations, condemnation, etc. Since resources are limited to obtain open lands, priorities have been established for recommended actions. These priorities are based on a number of criteria including demonstrated need, potential threat, opportunities with specific land owners, etc. Rough costs are included with the priority actions.

**HISTORICAL BACKGROUND**

In the early 1900's, miners began settling along the Gore Creek to mine silver, lead, and zinc around Battle Mountain. After the Great Depression sheep herders came to the valley. In the late 1930's, a state highway extended into the Gore Creek Valley under the direction of Highway Engineer Charlie Vail. During WWII, the 10th Mountain Division trained at Camp Hale, 20 miles south of the Gore Valley. After the war, two soldiers that had trained at Camp Hale, Pete Seibert and Earl Eaton, came back to establish a ski resort in Vail.

In 1959, a land use permit was issued to an investment group that had been formed for the Vail ski resort. The Vail resort opened on December 15, 1962 with 876 acres of skiable terrain making it the third largest ski resort in the United States. In 1966, the Town of Vail was incorporated and in 1969 Lionshead was annexed into the Town.

The Vail Town Council has placed a high priority on identifying and acquiring additional open space because of the rapid pace of development and the relatively limited number of vacant parcels. The general public has consistently said through surveys and public forums that preserving open space is a major priority for the community.

The Town began to develop a fund to protect open space when the Town of Vail implemented a 1% Real Estate Transfer Tax (RETT) in 1980. Funding for the Real Estate Transfer Tax is summarized in Table 1. Eight parks have been established with a portion of this revenue and include athletic fields, an outdoor amphitheater, ponds, play equipment, paths, and picnic facilities. In addition, a Park Superintendent was hired to ensure that these parks are well maintained.

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1993
	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Actual	Budget	Actual
January	63,999	98,089	106,981	119,972	78,053	80,733	101,374	131,916	96,119	309,233	162,954	165,141	88,238	106,440	179,188
February	40,595	69,018	105,024	132,220	86,289	170,052	64,906	44,040	109,873	140,192	133,085	71,413	110,980	89,280	141,960
March	69,886	126,935	109,533	137,820	62,693	63,831	92,557	38,791	68,104	145,957	77,995	183,698	116,626	89,040	178,032
April	76,855	94,653	85,900	103,526	173,321	90,396	182,743	95,554	179,671	151,069	152,027	108,040	213,245	114,240	107,475
May	42,738	84,324	54,683	90,599	96,006	228,673	98,651	120,984	99,736	220,299	167,972	96,994	142,817	105,360	189,742
June	62,239	125,433	54,488	140,638	76,467	49,513	79,915	73,509	101,364	122,466	136,364	141,863	138,852	90,720	112,847
July	49,367	186,110	104,262	68,539	157,598	88,523	70,441	47,949	126,537	125,675	75,189	132,042	95,373	93,000	168,959
Subtotal	405,679	784,562	600,851	793,314	730,427	771,726	690,587	552,743	781,404	1,214,891	905,566	899,191	906,111	688,080	1,078,203
August	79,859	115,499	71,282	97,806	58,937	32,860	100,182	61,137	109,315	86,347	77,486	99,820	91,695	78,480	145,035
September	59,800	113,992	49,332	96,746	64,671	48,516	108,167	78,819	116,557	143,306	75,745	85,645	132,330	79,080	195,685
October	108,510	154,000	42,498	122,546	88,732	109,633	93,860	124,291	177,360	241,393	118,986	258,974	179,094	124,800	180,475
November	102,623	107,768	81,698	91,385	105,109	74,909	89,047	114,839	241,888	165,964	102,210	268,394	240,933	112,080	176,174
December	142,662	133,867	110,911	56,533	81,890	333,139	106,695	95,495	192,947	192,737	107,880	95,742	441,833	117,480	202,004
<b>TOTAL</b>	<b>899,133</b>	<b>1,409,688</b>	<b>956,572</b>	<b>1,258,330</b>	<b>1,129,786</b>	<b>1,370,783</b>	<b>1,188,538</b>	<b>1,027,324</b>	<b>1,819,471</b>	<b>2,044,638</b>	<b>1,387,873</b>	<b>1,707,786</b>	<b>1,991,988</b>	<b>1,200,000</b>	<b>1,977,576</b>

Table 1  
Real Estate Transfer Tax History and Budget



**CURRENT TRENDS**

There are a number of trends that will have an effect on the future of the Vail Valley, specifically related to recreation and open space. Vail is largely a developed island within the White River National Forest and will increasingly depend on the surrounding public lands to provide a variety of recreational opportunities. Relevant trends that are outlined briefly in the Northwest Colorado Council of Governments white paper on environmental trends effecting Vail include:

- Increase in the number of commuters into Vail as more workers are moving down valley
- Shift in population base down valley due to rising property values
- Increase in number of second home properties within the Town
- An aging population
- More active use and increased recreational demand on National Forest System lands (down hill skiing, biking, hunting, hiking, etc).
- Increase in environmental awareness and concern for environmental quality and protection

Another trend effecting the recommendations in the Plan is the popularity of hiking, biking, skating, etc., on linear recreation systems (trails, bikeways, greenways) as opposed to recreating solely in developed parks. This national trend is evidenced in the Vail Valley through the strong support of new connections in the trail system and the level of use on the current system. Vail is positioned to take advantage of this new focus by improving and extending the existing trail system, as discussed further as part of the recommendations of the plan.

**INVENTORY**

**OPEN AND UNDEVELOPED LANDS**

An inventory of open lands within the Town of Vail was completed in June of 1993. This inventory is displayed on the Existing Open Lands Map (See Exhibit 1) which shows lands currently zoned open space and vacant lands not yet developed. Maps provided by the Vail Valley Consolidated Water District (VVCWD) were useful in describing the number and location of developable parcels still available in the Town of Vail. This information was then updated using building permit records.

The 1986 Town of Vail Land Use Plan indicated that 12% of the land within the Town of Vail was subdivided and undeveloped and 23% was unplatted and undeveloped, resulting in a total of 35%, or 1,179 acres not developed. Parks and zoned open space accounted for another 17%, (or 555 acres) of land.

Since 1986, zoned open space has increased to 952 acres and the acres of undeveloped buildable lots has significantly decreased. Projections from VVCWD indicate that Vail is 90% built out and that approximately 950 more dwelling units could be developed. This includes additional guest accommodations, multi-family units, duplexes, and single family units. As of October 1993, there are approximately 270 undeveloped, buildable lots remaining in the Town of Vail.

**LAND ZONED OPEN SPACE**

There are two open space zone districts in Vail; Agricultural and Open Space (AOS) and Greenbelt and Natural Open Space (GNOS). There are approximately 651 acres of AOS zoned land (Table 2). The primary function of the AOS district is to provide

open space for recreation and agriculture. However, this district does allow for a wide variety of uses (e.g., churches, schools, single family dwellings) that are not compatible with an open lands zone district. In addition, agriculture is no longer a viable land use in Vail.

The Greenbelt and Natural Open Space (GNOS) District consists of 326 acres and is the most restrictive open space zone district. Development in GNOS areas is essentially prohibited except for pedestrian and bicycle paths and golf courses as a conditional use.

The Town of Vail owns a significant amount of the zoned open lands within the Town: 62% of GNOS

and 75% of AOS lands (Table 2 - Ownership of Zoned Open Lands in Vail). Most of the privately owned lands zoned GNOS and AOS are on very steep slopes or have other environmental constraints (e.g., hazard area, floodplain, wetland).

At the time the plan was adopted the Town was working on the first of a two phase project to change open lands zoning in Vail. Phase One involved changing the zoning language in the GNOS and AOS zone districts. These changes reflect recommendations from the 1991 Development Code Revision Report and additional

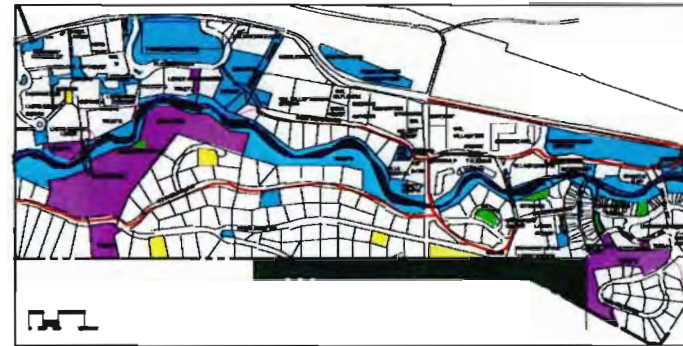
changes that the Planning and Environmental Commission and TOV staff have identified. Phase Two of this project involved making zoning changes to specific parcels of land.

The TOV staff has proposed changes to the names, purpose statements, allowed uses, and conditional uses for both the AOS and GNOS districts. The proposed changes are designed to create a pure "Natural

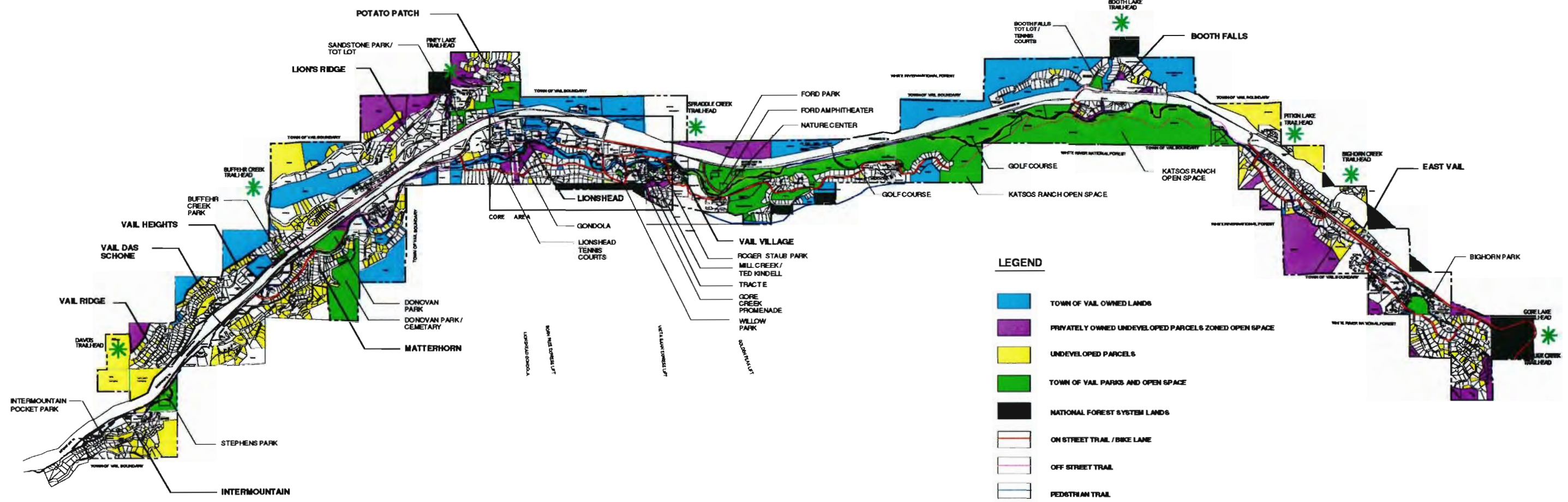
Greenbelt	Number of Parcels	Acres
Town of Vail	8	210
Vail Associates	0	0.00
US Forest Service Corporation	5	71.87
Individuals	6	40.83
Individuals	0	0.00
Colo. Dept. of Transportation	2	4.07
<b>Total</b>	<b>21</b>	<b>326.77</b>

Ag. & Open Space	Number of Parcels	Acres
Town of Vail	36	501.70
Vail Associates	17	57.17
US Forest Service Corporation	0	0
Individuals	16	39.4
Individuals	10	53.2
Colo. Dept. of Transportation	0	0
<b>Total</b>	<b>79</b>	<b>651.47</b>

Table 2  
Ownership of Zoned Open Lands in Vail



CORE AREA ENLARGEMENT



**LEGEND**

- TOWN OF VAIL OWNED LANDS
- PRIVATELY OWNED UNDEVELOPED PARCELS ZONED OPEN SPACE
- UNDEVELOPED PARCELS
- TOWN OF VAIL PARKS AND OPEN SPACE
- NATIONAL FOREST SYSTEM LANDS
- ON STREET TRAIL / BIKE LANE
- OFF STREET TRAIL
- PEDESTRIAN TRAIL

Exhibit 1  
Existing Open Lands

Inventory



PARKS	Area	PARK FACILITIES																					
		Play Equipment	Open Grass Fields	Play Fields	Trails/Walkways	Tennis Courts/Volleyball Ct.	Benches	Restrooms	Picnic Tables	Shelters	Parking	Ponds	Nature Center	Amphitheater	Alpine Garden	Nordic Ski	Ice Skating	Golf	Fishing	Bike Path Connection	Pedestrian Path Connection	Adjacent to Creek	Adjacent to Mountain Base
Bighorn Park	7.3 ac	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Booth Creek Park	3.0 ac	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Bullehr Park	.9 ac	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Donovan Park	54.0 ac	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Ford Park	36.4 ac	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Golden Peak	2.5 ac	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Gore Creek Promenade	.3 ac	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Intermtn. Pocket Park	.2 ac	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Katsos Ranch	172.0 ac	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Lionshead Tot Lot	.4 ac	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Meyer's Park	.2 ac	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Mill Creek/Ted Kendall	.3 ac	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Roger Staub Park	.2 ac	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Sandstone Park	17.7 ac	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Stephan's Park	13.8 ac	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Pirate Ship Park	3.7 ac	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Willow Park	.4 ac	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Golf Course	96 ac	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
<b>Total</b>	<b>409.4</b>																						

Table 3  
Park Facilities

Area Preservation" District (NAP) and a "Recreational Open Space" (ROS) District. Changes are recommended to the permitted and conditional uses in these districts to ensure consistency with their purpose statements. At the time of this report, the proposed zoning changes were being reviewed by the Town of Vail Planning and Environmental Commission.

Work has begun on Phase Two which involves making zoning changes to specific parcels. Site visits have been made to all AOS, GNOS and PUD (Public Use) zoned parcels and specific recommendations have been made for classifying each parcel. Further action to change parcel zoning will occur after changes in the zoning language have been approved.

**OUTDOOR RECREATION INVENTORY**

An inventory was completed in June of 1993 of the current TOV parks. This survey included a review of recognized parks, open spaces, pedestrian

and bike trails, and National Forest System trailheads. The inventory includes park size, type of play equipment, number of trails and walkways through the site, open fields, immediate surroundings, and proximity to other recreation areas, as well as a number of other features.

In the Town of Vail there are approximately 313 acres of designated parks, not including the Town of Vail public golf course. The Vail Recreation District and the Eagle Valley School District offer a broad range of programs, services and facilities, many of which take place on these park lands. Other public areas which are not considered formal parks but provide usable open space include: the Nature Center which provides interpretive nature trails and presentations; the Vail Library which has stream access and well used open space; and the publicly

owned portions of the Gore Creek stream tract which provides access to Gore Creek for fisherman and other recreational activities.

As a resort community, Vail also has many private recreational facilities including tennis courts, swimming pools and fitness centers. Although many of these facilities are primarily for visitor use, they are often open to the general public. Public recreation facilities in other communities in the Valley, such as Eagle-Vail, Avon, Minturn and Edwards, are also available to Vail residents.

Seventeen parks within the Town were inventoried in detail(See Table 3.). This inventory indicates that seven of the parks are open green spaces in an otherwise developed area, ten have at least one facility (i.e. a picnic table, tennis court), ten are next to a recognized bike path, seven have playground equipment, and seven are within a short walking distance of the Village area. Two of these parks (Pirate Ship Park

and the Lionshead Tot Lot ) are on land owned by Vail Associates.

Vail is surrounded by the White River National Forest, which provides opportunities for hiking, horseback riding, and mountain biking directly accessible from the Town. White River National Forest is approximately 1.9 million acres with over 891,493 acres of protected wilderness areas. In addition, Vail Mountain located to the south of Town on NFS property, provides over 3,800 skiable acres in the winter and a network of hiking and cycling trails in the summer.

**TRAILS INVENTORY**

Vail completed a Recreation Trails Master Plan in 1988 that identified trail users and their needs, and included deficiencies with the current trails system. A major recommendation in this plan was to obtain additional lands to interconnect existing trails and to create new trails. Eighteen existing trails were inventoried for their trail length, what the trail connects, type of trail, surfacing, description of signs, and general condition (See Table 4).

Not included in this survey is the Vail Pass recreation trail. This is a paved trail, primarily used for cycling that extends from East Vail over Vail Pass and down to Frisco and Breckenridge. Eagle County has recently completed a bicycle master plan which suggests extending a cycling trail from Vail to the west to

Name of Trail	Trail Connects	Approx. Length	Comments	Type of Trail					
				Asphalt	Gravel	Dirt	On Street	Off Street	Blue Line
Frontage Road South	Conoco station to Main Gore Creek Dr.	.2 miles		•	•	•	•	•	•
North Frontage Road	Safeway parking lot to Red Sandstone Elementary School	1.7 miles	From just east of the post office until just east of Bullehr Creek Park, the trail becomes a bike lane adjacent to the street.	•	•	•	•	•	•
Main Bike Path	Donovan Park to Library	2.8 miles		•	•	•	•	•	•
South Frontage Rd.	Rec. path connection @ South Frontage to West Lionshead Ct.	.3 miles	The path changes from a bike lane on road (West) to a rec. trail (East) at Forest Road	•	•	•	•	•	•
Old Highway @Bighorn Rd.	East end of Bighorn Rd. and beginning of the Vail Pass bike path	.6 miles	Follows old Highway 6 - very little vehicular traffic	•	•	•	•	•	•
Forest Road	South Frontage to Rec. Plan Trail	.2 miles		•	•	•	•	•	•
Dobson Arena	Dobson and West Meadow Drive	.25'	Exclusively bike and ped traffic except for occasional buses. There is a conflict between pedestrians, rollerbladers, and buses.	•	•	•	•	•	•
West Meadow Drive	Rec. plan path and Vail Road	.25 miles	Although not signed, this is a major route for all types of traffic	•	•	•	•	•	•
Frontage Road South	4-way stop at Frontage and Vail Road to Vail Valley Drive	.3 miles		•	•	•	•	•	•
Downtown Pedestrian Areas	N/A	N/A	Need to determine feasibility of lighting on streamwalk between Westin and Lionshead.	•	•	•	•	•	•
Gore Creek Streamwalk	Ford Park to Covered Bridge & Library to Westin	2.5 miles		•	•	•	•	•	•
Main Ford Park Trail	Tennis Center/Parking lot to Covered Bridge	.9	There is a short side trail up to Vail Valley Dr. - paved; approx. .2 miles; This short trail also leads to nature trails at southern side of park;	•	•	•	•	•	•
Vail Valley Drive - Sunburst Drive	East Vail parking structure to W. end of Katsos Ranch Trail	.2 miles	Needs paved shoulder for biking to reduce congestion and conflict between cyclists, pedestrians, and cars.	•	•	•	•	•	•
Vail Trail	Gold Peak tennis area to golf clubhouse	.5 miles	This trail is a wonderful natural trail that was created for local runners.	•	•	•	•	•	•
Aspen Lane - Aspen Court	Frontage Road and Katsos Ranch Trail	.2 miles		•	•	•	•	•	•
Katsos Ranch Trail	East Vail interchange to Sunburst Drive at Bridge Street	2.2 miles	Winter activities include sledge rides and x-country skiing	•	•	•	•	•	•
Bighorn Rd.	East Vail interchange to Main Gore Drive	1.9 miles	Beginning of trail at W. end is gravel for about 1/10 mile then becomes paved. E. end is connected to Main Gore	•	•	•	•	•	•
Main Gore Drive - Juniper Lane - Streamside Circle East	Both ends are on Bighorn Drive	1.3 miles	Dr.-part of the rec. plan trails. W. end connects to Bridge St-the beginning of the Katsos Ranch Trail.	•	•	•	•	•	•
		16 miles							

Table 4  
Existing Trail Facilities





V.A. Hiking Trails		V.A. Biking Trails		NFS Trails	
Name	Length	Name	Length	Name	Length
Berry Picker	4.6 miles	Upper Fireweed	1.2 miles	Two Elk Trail	11 miles
Gore Range Loop	1.1 miles	Lightning Lookout	1.2 miles r.l.	Pitkin Creek Trail	5 miles
Ridge Route	2.8 miles	Village Trail	6 miles	Bighorn Trail	3.6 miles
Kinnickinnick	2 miles	Blackjack Loop	2.4 miles r.l.	Booth Creek Trail	6 miles
Lower Fireweed	1 mile	Kloser's Klimb	2.4 miles	Deluge Creek Trail	4 miles
Parmigan Loop	1.2 miles	Lion Down	5.5 miles	Vail Pass Trail (biking/hiking)	30 miles
Sunlight	1.5 miles	Grand Traverse	9 miles	Buffehr Creek Trail	2.5 miles
Eagle View	4 miles	World Cup Race Course	11 miles	Spraddle Creek Trail	3.5 miles
<b>TOTAL</b>	<b>18.2 miles</b>	<b>TOTAL</b>	<b>38.7 miles</b>	<b>TOTAL</b>	<b>68.1 miles</b>

Table 5  
Existing V.A. and NFS Trails

connect with the Glenwood Canyon recreation trail. A major hurdle to this plan has been creating a trail through Dowd Junction. In 1992, the Town secured partial funding from the Colorado Department of Transportation and using budgeted funds, the Town of Vail proposes to build a trail through Dowd Junction and across the Eagle River to connect to Highway 6&24 west of the Minturn interchange. Both V.A. and the U.S.F.S. provide an extensive network of trails (Table 5). Together, there are 122 miles of trails provided by V.A. and the U.S.F.S. that are accessible from Vail. Vail Associates is in the process of preparing a mountain bike master plan for Vail Mountain.

**ENVIRONMENTALLY SENSITIVE LAND**

Town staff initially identified 50 vacant parcels throughout Vail that have significant environmental constraints for development. These constraints range from snow avalanche, rock fall, or debris flow hazards to floodplain and wetland conditions. Forty eight of these parcels are zoned Greenbelt Natural Open Space or Agricultural Open Space.

The Town has prepared hazard maps which indicate these conditions on aerial photographs. In addition, riparian areas and sensitive natural habitat have been identified and mapped. Both riparian areas and sensitive natural habitat were identified in the summer of 1993 by biologists working for Colorado State University and the Colorado Natural Heritage Program.

The Colorado Natural Heritage Program used infrared aerial photographs and field surveys to identify sensitive natural areas that have national, regional or local significance. These areas have been combined with the hazard maps, resulting in a composite Hazards and Sensitive Areas Map ( Exhibit 2).

The Colorado Natural Heritage Program is a non-regulatory, technical support organization affiliated with the Nature Conservancy. In addition to conducting biological surveys it provides a national database of endangered and threatened species which all Federal land management agencies rely on.

**NEEDS ASSESSMENT AND PUBLIC INPUT PROCESS**

**PRIORITIES FOR RECREATION AND OPEN SPACE**

Several public and Open Lands Committee meetings were held in order to assess current recreation and open space needs and trends in Vail. In addition to these public meetings, an analysis was conducted that studied past planning documents and surveys and their recommendations for recreation and open space. Both the public meetings for the plan and an analysis of previous plans (Table 6) have indicated that the priorities are to:

1. *Preserve open space*
2. *Improve the pedestrian and bike system*
3. *Provide additional recreation facilities*

**PRESERVE OPEN SPACE**

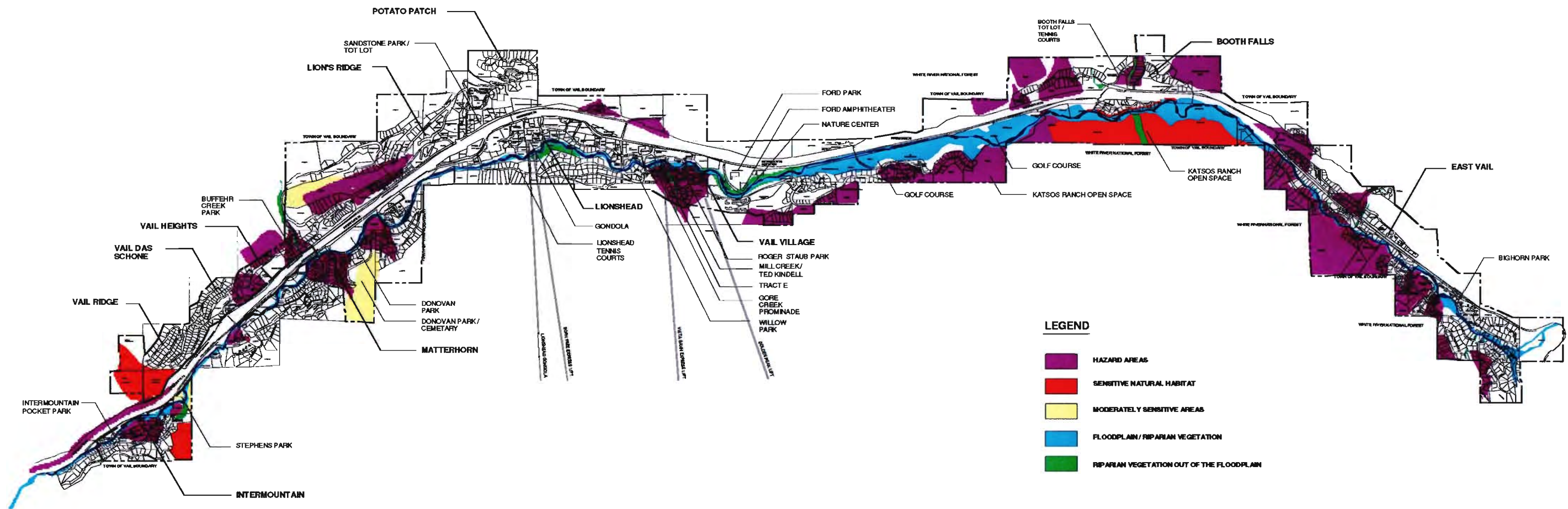
There was strong public consensus that the number one priority for open space acquisition is to protect natural open space and preserve the "mountain experience". People felt that acquiring or protecting natural open space was critical in maintaining the natural character of the Vail Valley. The public felt that protecting the natural open character of the area was more important than developing active outdoor recreational opportunities and was needed to protect water quality and natural habitat. Over half of the top 20 priorities from the first public meeting relate directly to the issue of protecting natural open space

**IMPROVE PEDESTRIAN AND BIKE SYSTEM**

The second priority includes improving the pedestrian and bike path system. Several previous plans and studies concluded that there is a need to improve and extend the pedestrian path system in order to access and connect green spaces throughout the core area. This has resulted in the Streetscape Master Plan, Vail Village Master Plan, and Master Transportation Plan which are in the process of being implemented.

Encouraging stream access by creating a continuous stream walk along Gore Creek and connecting it with the existing parks, open space and pedestrian path

**HAZARD AND SENSITIVE AREA MAP**  
**Comprehensive Open Lands Plan**  
 TOWN OF VAIL VAIL, COLORADO



SOURCE OF DATA: Town of Vail Hazard Maps  
 Colorado Natural Heritage Program  
 CSU Riparian Mapping

Exhibit 2  
 Hazards and Sensitive Areas Map



systems is a stated objective in the Vail Land Use Plan, the Vail Village Master Plan, the Vail Recreation Trails Master Plan, and the Vail Transportation Plan. The Vail Land Use Plan states that, "The stream tract extends from Ford Park in the East to Forest Road in the West and consists of a series of dedicated parcels as development progressed within the Town. The area serves as an invaluable environmental and aesthetic component to the Village Core. The primary uses in this area are linear open space and recreational paths." The Vail Recreation Trails Master Plan confirms this by summarizing that "the best opportunity for a new trail is along Gore Creek from the Lionshead base to Ford Park." Citizens did express concern that the stream walk be developed in a sensitive manner so that the natural beauty of the corridor is preserved, that impacts to adjacent uses and properties are minimized and that the use of the environmentally oriented trail be restricted to pedestrians only.

On November 9, 1993 the pros and cons of the proposed streamwalk were discussed at a Vail Town Council meeting. It was decided by the Town Council at that meeting, that instead of a streamwalk, the Town would identify stream access areas along Gore Creek and inform the public of these access areas. Also making improvements to West Meadow Drive to separate pedestrians from cyclists and cars was identified as a priority.

Separation of uses on the trail systems is an important objective in many of these same plans. The Vail Recreation Trails Master Plan suggests the implementation of a three level trails plan that would separate and extend trail routes into commuter cycling routes, multiple use trails, and pedestrian only trails. This concept is appropriate for Vail's physical linearity and provides a logical hierarchy for the circulation system. Frequently mentioned recommendations for improvements to the bike trail system include adding bike lanes on the frontage roads throughout the

entire Town, extending the bike path system through Dowd Junction and completing critical links to the trail system through the most developed parts of Town and to NFS trailheads.

Augmenting the Town's and V.A.'s existing sign program for all of the trails and trailheads was viewed as a critical component to the system. Specifically, additional signs or kiosks are needed to direct people to USFS and Vail Associates trails. These kiosks would identify alternatives to hiking in wilderness areas that are being impacted by heavy use.

Improved signs are also needed in East Vail to indicate recreational trails along Town roads. Signs should be reviewed where multi-modal conflicts are common. Additional pocket parks or natural areas were seen as needed for both the west and east ends of Town. These could also serve as "rest stops" along the interconnected trail system surrounding the Town.

Background Documents	Separate Uses on Recreation Paths	Improve Pedestrian Path/Trail System	Develop Additional Sidewalks, Pedestrian Only Walkways/Accessible Green Space Areas	Connect Streamwalk to Other Walkways and Pocket Parks/Enhance the Total Pedestrian Network	Continuous Streamwalk Along Gore Creek	Encourage Stream Access	Add Streamwalk Along Mill Creek	Interconnect Town and Mountain Trails	Improve Trailheads/Access to U.S.F.S. Lands-Take Pressure Off Trailheads/Wilderness	Improve Trail Signage/Provide Maps	Provide Winter Use of Trails in Town	Improve Bike Path System	Connect Existing Bike Paths/Add New Bike Paths	Complete Bike Path From Vail Pass to Glenwood Canyon Add Bikelanes to Frontage Road	Development of Regional Facilities	Create Recreational Facilities	Community Swimming Pool	Additional Athletic Fields	Recreation Center	Gymnasium	Running/Walking Track	Second Ice Surface	Children's Fish Pond	Fishing/Fishing Access	Equestrian Center	Picnic Areas	Golf	Create More Pocket Parks	Cross Country Skiing	Preserve Natural Open Space	Acquisition of Open Space to Preserve Sensitive Areas	Acquisition of Open Space for Recreational Activities	Maintain Berry Creek as Open Space Focus on Field and Equestrian Oriented Activities	Improve Access To Berry Creek			
VAIL TRANSPORTATION MASTER PLAN		•	•									•	•	•																							
TOV STREETSCAPE MASTER PLAN	•	•	•			•																															
EAGLE CTY. REG. PARK FACILITIES/ACTIVITIES STUDY	•	•	•	•	•	•						•	•				•	•	•																		
AVON RECREATION MASTER PLAN	•	•		•		•						•	•		•	•	•	•	•					•	•												
VAIL VILLAGE MASTER PLAN	•	•			•		•	•	•	•	•	•	•	•	•	•	•	•	•																		
VAIL METRO. REC. DISTRICT MASTER PLAN		•										•					•	•	•																		
TOV RECREATION TRAILS MASTER PLAN REPORT	•	•	•	•	•	•	•	•									•	•	•																		
PARKS & REC. EAGLE COUNTY-ACTION PLAN												•	•			•	•	•	•																		
TOWN OF VAIL LAND USE PLAN						•						•	•	•	•	•	•	•	•			•		•	•	•											
TOWN OF VAIL SPEAK UP MEETINGS	•	•	•	•	•	•	•																														
TOV COMMUNITY SURVEY	•	•	•		•							•	•	•	•																						
TOTALS	7	9	6	4	5	6	3	2	1	1	1	8	7	4	3	4	7	6	5	3	1	1	1	1	2	2	1	2	2	1	4	4	3	1	1		

Table 6  
Assessment of Previous Plans/ Documents

Needs Assessment



**PROVIDE ADDITIONAL RECREATION FACILITIES**

There was concern voiced that open space and recreational opportunities are less available at either end of Town (particularly in West Vail North of I-70) and that improvements should be investigated. This lack of facilities is supported by an analysis of the National Recreation and Park Standards. While an overall analysis shows that the Town of Vail far exceeds national standards, there are some access deficiencies in the system due to Vail's linearity and Interstate 70 splitting the valley. The recommended solution is to improve, complete, and extend the bike and pedestrian trail system. Additionally, West Vail, on the north side of the Interstate, could utilize an additional small "pocket park" to meet this need. In East Vail, the Water Tank site could provide an additional picnic area in the S.E. corner of Town as well as a new summer/fall trailhead.

The third priority also includes supporting recreational activities on a regional scale, including a swimming pool, recreation center, and additional athletic fields. Many of these items could be accommodated at the Berry Creek property in Edwards, at the new softball complex in Eagle, and at the proposed recreation center in Avon.

**U.S. FOREST SERVICE, VAIL ASSOCIATES, AND VAIL RECREATION DISTRICT INTERESTS**

Specific discussions with the U.S. Forest Service, Vail Associates and the Vail Recreation District support the general concepts of this plan. The U.S. Forest Service is interested in reducing recreational impacts on the trails that lead into the Eagles Nest Wilderness Area on the north side of Town, which can be accomplished by improving the trail system and trailhead parking in and around the Town. This would include improved bike access to the existing trailheads with bike parking and other improvements made to the trailheads. No new trails in or near the Wilderness Area are favored by the U.S. Forest Service. The U.S. Forest Service is also concerned that public access to National Forest System lands continue at existing trailhead locations. There are

several right-of-way issues that need to be addressed to guarantee continued public access. Vail Associates is also interested in an improved trail system and making better connections between the Town and Vail Mountain by improving both trails and signs.

**PUBLIC FACILITIES/ LAND RESERVE**

One of the objectives of the Comprehensive Open Lands planning process is to identify, to the extent possible, future public needs (or needs not currently being met) that will require land. The 1986 Vail Land Use Plan discusses this issue in detail. The intent here is to update that work and make recommendations for specific parcels of land that may be desired for public use. As previously mentioned, funding for land reserve parcels acquired for public use would not come from RETT funds. In order to update information regarding community needs, interviews were conducted with representatives from the Town of Vail Public Works Department, Community Development, Fire Department, Police Department, Eagle Valley Schools, the Vail Housing Authority, and the Upper Eagle Valley Consolidated Water and Sanitation District.

The following issues and needs resulted from these interviews:

1. **Vail Public Works Department**  
The Public Works Department will need to expand their current facility located on the north side of Interstate 70. Currently, the Vail Associates' owned parcel of land immediately west of their existing facility is leased as a snow storage area and is the logical place for expansion. Additionally, a West Vail snow plow and cinder storage site has long been on their needs list.
2. **Vail Fire Department**  
Over 10 years ago, the Vail Fire Department identified a need for a West Vail Fire Station. Response times from their main facility in the Village to West Vail are inadequate and continued growth has only exacerbated this problem. Because this is a health/ safety issue, finding an acceptable site has received a high priority in the development of recommendations for the Public Facilities/ Land

Reserve portion of the Comprehensive Open Lands Plan.

3. **Vail Police Department**  
The Police Department is in the process of expanding their current facility. The only need they have that is not covered in this expansion is an outdoor shooting range for recertification of officers and for "maneuvers" practice. However, this need may be accommodated at a proposed shooting range in Wolcott.
4. **Eagle Valley School District**  
The only Eagle Valley School facility in the Town of Vail is the Red Sandstone School. The District envisions utilizing this facility for the foreseeable future. They would like more play areas near the school but realize that the topography is very constraining.
5. **Upper Eagle Valley Consolidated Water and Sanitation District**  
The Sanitation District's needs mainly involve easements through several properties for either additional water tanks or new diversion structures. These needs have been discussed in this Plan. The District intends to construct a new intake and diversion system upstream from the runaway truck ramp on Interstate 70 to ensure a clean water supply. Although, the Town does not need to take any direct action, it does need to be aware of these needs and work with the District to develop a utility easement.
6. **Vail Housing Authority/Community Development Department**  
The Vail Housing Authority is interested in "employee" housing projects on the Mountain Bell Site and at Vail Commons. The Housing Authority believes that any higher density project, if located within the Town, should be in close proximity to either the core area or the West Vail commercial area or have good transportation access.



## CONCEPT PLAN

The Concept Plan provides the framework from which specific actions are recommended in the Comprehensive Open Lands Plan. The Concept Plan describes in general terms key protection areas, key activity areas, and critical connections between them. The recurring theme of preservation of natural open space and trail connections is diagrammed in a conceptual format (*Exhibit 3*).

### ENVIRONMENTALLY SENSITIVE LANDS

The National Forest System lands surrounding the Town (both forested and open) are a significant amenity for the Town as a recreational, environmental, and visual resource. Portions of the natural systems extend into Town, shown in green stripes on the diagram and are important to protect. In many cases, these lands contain steep slopes or have high hazard potential, such as for snow avalanches and rockfalls. These lands should not be developed.

The Gore Creek Corridor is the other significant natural resource enjoyed by the Town. Running through the middle of Town, Gore Creek is an important wildlife corridor, riparian and wetland resource, and recreation amenity. Protection of the Creek is extremely important as well as allowing public access to the stream corridor.

### ACTIVITY CENTERS AND CONNECTIONS

The other component to the diagram describes a series of "activity centers" shown as asterisks and connections indicated by different types of lines. These centers are activity areas where people are likely to gather or choose as a destination. Included in these centers are retail areas such as the Vail Village Core, Lionshead, and the West Vail commercial areas; bus stops; and parks and open spaces such as Katsos Ranch, Ford Park, Pirate Ship Park, and Bighorn Park. The connections then tie all of these centers together through a series of bicycle and pedestrian trails that strive to separate uses wherever possible and provide a high quality recreation and travel experience. Activity areas could include interpretive/informational centers, sitting areas, or even play equipment.

The linking together of activity centers through the hierarchy of trails provides residents and visitors with multiple non-vehicular options for reaching destinations, for recreation, enjoyment of the natural environment or commuting purposes. These connections include bike lanes on the frontage road, an improved bike path system, walking paths adjacent to the bike path, stream access, and a new south and north trail system that almost entirely encircles the Town.

## ACTION PLAN

The Action Plan is intended to be a framework for obtaining or protecting open lands as well as creating trail linkages in a logical and comprehensive manner. Parcels included in the plan were selected because they serve to meet the overall needs and vision for protecting or acquiring open lands, as well as lands for public use, trails and parks. The plan illustrates the intended use for each "Action Parcel" including public facility (e.g. fire station), open space (including trails), or park. It also illustrates the lands that will either be acquired from or traded to the U.S. Forest Service as part of the Land Ownership Adjustment Plan (LOA) (described in more detail in *Appendix 1*).

In conjunction with the Action Plan, a series of Tables describe the potential protection techniques, management system and open space or public objective for each parcel (*see Tables 8 and 9*).

### PROTECTION TECHNIQUES

There are a variety of techniques available to protect land. These techniques vary in both cost and result. Techniques have been recommended for each action parcel. A description of these techniques follows:

#### TOV Acquire-Fee

The traditional method of land acquisition is to acquire the full fee interest at fair market value. The property could be acquired through a cash purchase or over time according to a term or installment purchase. If a public entity acquires land with terms, it can pay interest, which is tax exempt, and thereby lower the purchase price of the property. In addition, there are many ways to structure a term or install-

ment purchase which meet landowner estate or tax objectives, which can extend the term of purchase. This capability to flexibly structure a fee acquisition can meet the Town's objectives of creatively leveraging its limited resources. It can also meet the landowners financial and tax planning objectives, resulting in effectively lowering land costs to the TOV. The acquisition of the full fee interest by the TOV will remove the land from the tax rolls and require that the TOV provide for the upkeep, maintenance and security of the property.

#### TOV Acquire - Tax Lien

For those properties where owners are delinquent in paying property taxes the Town has the option of acquiring the tax certificates of paying the back taxes to acquire the property. In most instances, the acquisition of property by acquiring the tax certificate results in substantial savings over the price previous owners have paid for the property. In Vail, most of these properties are steep or inaccessible (with limited development capability) which has limited the owners ability to develop or sell. This is a very cost effective way for the Town to acquire property and ensure that it is not built upon at a later date.

#### U.S. Forest Service Acquire - Fee

According to the Land Ownership Adjustment (LOA) Plan developed by the Town and the U.S. Forest Service, a number of properties will change hands in order to create the common boundary both desire. The U.S. Forest Service will acquire the fee to these lands generally through a land trade since acquisition dollars are scarce.

#### Land Trade

In order for the Town and the U.S. Forest Service to develop the common boundary defined by the LOA plan, they will need to trade a number of properties. Land trades are voluntarily entered into and can be made when properties appraised at or near the same value are traded between jurisdictions. While land trades are a desirable way to change ownerships, they generally take from two to five years to conclude and may involve a number of complicated appraisal issues.

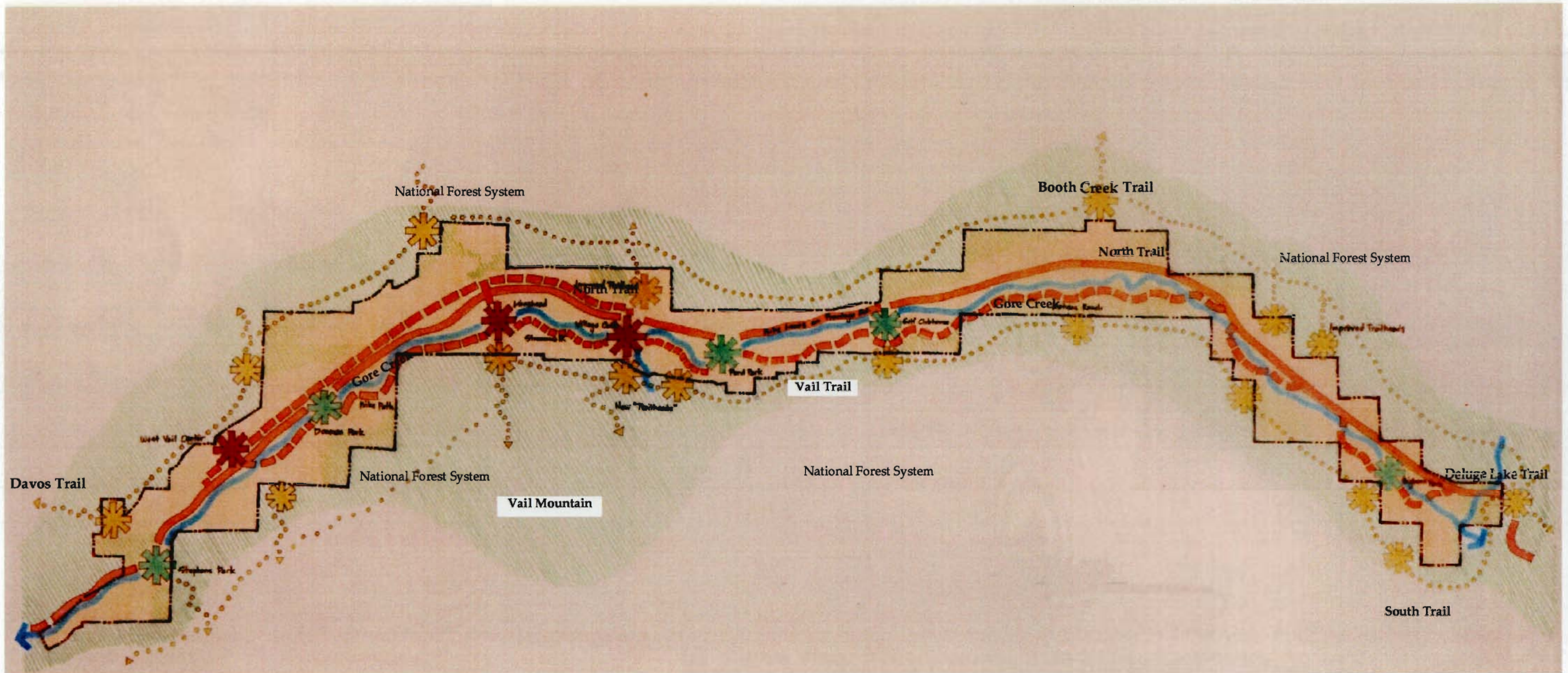


Exhibit 3  
Concept Plan



#### Obtain Development Rights

Land consists of a "bundle" of rights which the owner acquires when a property is purchased. For instance, water and mineral rights allow the owner to use those water and mineral resources attached to the land and identified in a property's deed. The value of development rights is based on the right to develop a certain number of units on a property established by a combination of zoning and market conditions. Protection of a property can be accomplished by acquiring all or a portion of the development rights while the landowner retains the open land or those development rights specified to remain with the land. The value of the development rights is determined by an appraisal which values the land in two ways. First the land is appraised at its fair market value and second, it is appraised with the development rights removed. The value of the development rights is the difference between the fair market value and the "restricted" value.

The Town can either purchase the development rights or if the owner is willing, acquire them by gift with the landowner obtaining the tax benefits of a charitable donation. These tax benefits relate to income and estate taxes and may well influence property taxes. The donation of development rights can be made to either the Town or to a qualified nonprofit land trust such as the Nature Conservancy or Colorado Open Lands. The benefit of the development rights transfer is that it is a flexible instrument which can be tailored to the desires of the landowner and the Town. The benefit to the Town of acquiring the development rights is that they cost less than full fee acquisition and also that the land stays on the tax rolls and continues to be managed by the landowner. A conservation easement is another term which is often applied to the acquisition or donation of development rights. The conservation easement is a legal restriction on a property which is designed to protect certain natural and scenic qualities of the land, while at the same time allowing the property owner to retain ownership and voting rights in a homeowners association.

#### Easements

As used in this plan, easements generally refer to an agreement for use of a property for certain uses which the land owner either donates or sells to the Town. For example, a trail easement is an agreement to permit the Town to utilize a certain width (right-of-way) for the construction of a pedestrian or bike

trail. The Town would also assume the responsibility for maintenance, safety, and liability. The value of the easement is determined by an appraisal of the property with and without the easement, much as the valuation of development rights is determined.

#### Public Use Agreement

As used in this plan, a public use agreement is a contract negotiated between the Town and the property owner in lieu of obtaining easements to allow public access. A public use agreement would involve a contract that would enable the Town to make improvements to private property (i.e. a trail). This agreement could allow the private property owner to relocate improvements, at the owners expense, to a mutually agreeable location on the property. Maintenance of any facilities would be negotiated as a part of the agreement.

#### Donation

The Town can obtain land or development rights through donation. The benefit to the landowner may be that the donation of a highly appreciated property to the Town can create significant tax benefits for the landowner. These benefits relate to income and estate taxes primarily. Many communities and land trusts acquire land and development rights through gifts which are structured to provide landowners with tax benefits.

#### Bargain Sale

A bargain sale is a combination gift and sale of land or development rights. The bargain sale works when a landowner is charitably inclined, but cannot afford to make a contribution of the entire value of a property. In this case, the landowner may sell the property to the Town at less than fair market value, say 50% of the value, and gift the remaining 50% of value to the Town. As a result, the landowner receives the benefit of the cash sale plus the charitable donation of the balance of the value. Bargain sales can be advantageous where the landowner is charitably inclined and where there are tax or estate issues which make the transaction favorable.

#### Condemnation

Condemnation can be utilized by government when a landowner refuses to sell a parcel of property to a government which needs the land to meet established public objectives, such as the creation of a road, park, or transit line. The governmental entity must pay the landowner fair market value for the

property which is determined by an appraisal process. Condemnation or the threat of condemnation can provide a landowner with certain tax benefits which a normal real estate transaction would not enjoy. Condemnation is used only in very limited circumstances when a landowner is unwilling to negotiate.

### PRIORITIES FOR ACTION

Evaluation criteria used to prioritize actions toward achieving the goals outlined in the Comprehensive Open Lands Plan were derived from input from the public, the Open Lands Steering Committee, previous planning studies and analysis, interviews with the U.S. Forest Service, the Water and Sanitation District, Fire, Public Works, and Police Departments and Vail Associates.

A two-tiered evaluation process was conducted that looked first at whether the action/ parcel meets the needs of the Town, its' citizens, visitors, and achieves the goals of the plan. The second level criteria include the availability of the land or the pressures for development of the parcel of land. Lands intended for future public use were also prioritized in terms of public need and health and safety issues, but are separated from the natural and recreation systems because RETT funds will not be used for land reserve acquisitions.

The **Level One Evaluation (Meeting Needs)** looked at four areas of community need relating to the natural resource system, the recreation system, trails system, and reserving lands for future civic/public uses.

Natural Resource Areas (All parcels meeting these criteria are a high priority)

- Riparian areas
- Sensitive natural areas
- Hazard areas

Recreation/ Parks

- Potential/ need for pocket park/ nature area
- Recreational opportunity for East and West Vail
- Recreational opportunity for community



Trails

- Interconnection with VA and USFS trails
- Separation of trail uses (bikes, pedestrians, etc)
- Alleviate pressure on wilderness area
- Complete critical connections on existing system

Civic/ Public Use

- Public health/ safety
- Meet key public objective

Level Two Evaluation - (Availability)

- Threat of development or irreversible damage
- Opportunities to leverage other funds
- Cost
- Unusual opportunity with motivated seller
- Opportunity for trade with U.S.F.S.
- Low Management requirements on Town
- Low Liability to Town

ACTION	PARCELS	Priority
Natural System	1, 6, 29- 32, 36, 38, 40-47,51	1
South Trail	23-25, 38, 41, 42, 44-47, 51	2
North Trail	1, 2, 3, 4, 15, 26	3
Stream Access	20, 21, 22, Chapel	4
Bike Lane	9,10	5

Table 7  
Priority Actions

Table 7 summarizes how the major concepts and their associated parcels met the above stated criteria. Each open lands parcel was evaluated against both the level 1 and 2 criteria. It is important to note that a systems approach was used to evaluate and rank actions. This approach, rather than an incremental look at each individual parcel out of context with the other parcels or concept plan, resulted in groups of actions or solutions that will meet the needs and objectives described earlier in this report in order to create an open lands system.

There are three priority actions discussed in this plan which include:

**High Priority:** Meets level one and two criteria and are discussed in detail in the next section.

**Medium Priority:** Meets level 1 criteria but there is no threat of loss due to development.

**Low Priority:** Open lands that do not directly meet high priority needs and are not under threat of development.

RESULTING TOP FIVE PRIORITIES

The highest priority described at each public meeting related to the protection of Natural System Lands. These lands have received the highest ranking due to their sensitivity either as habitat, hazard areas, or riparian vegetation. Thus, the Natural System Parcels are priority 1.

Following this, there are three trail system actions that stand out in the priority analysis. These include, in order of priority: the South Trail (Vail Trail extension and associated trailheads); development of a North Trail; improving stream access; and bike lanes on the frontage roads and shoulders on Vail Valley Drive.

These five priority areas have been analyzed with respect to relative expense, projected income from RETT funding, and a proposed phased approach to implementing these actions. (Table 10 - Six Year Plan).

The South Trail received priority 2 primarily because it simultaneously meets several needs including; more recreational opportunities in and near the core, separation of uses on the trail system (specifically separating pedestrians and bicyclist on the bike path to and through Katsos Ranch, and provides opportunities for a pocket park/ nature area at one of the "trailheads" in East Vail . Additionally, the U.S. Forest Service believes that the South Trail will help reduce pressure on the Eagles Nest Wilderness Area by providing an alternative, high quality alpine trail system in close proximity to the Town.

The North Trail, priority 3, can meet the needs of the West Vail community through trailhead/ nature areas much like the South Trail will for East Vail. While this trail does not directly connect to the core , it will provide additional recreation opportunities for a significant number of people who reside on the north side of the Interstate.

Stream access is still a priority, even though a formal trail is not proposed and has received a priority 4. Improving the bike system throughout Town received priority 5 and will result in much better separation of recreational uses on the entire trail system.

Additionally, community or public use parcels/ actions were analyzed separately and prioritized according to the criteria mentioned above. This analysis resulted in the West Vail Fire Station as the highest priority for public use, and the easements needed for the Vail Valley Water and Sanitation District to ensure clean water for the Town of Vail. Another high priority action is acquisition of the snow dump parcel west of the Public Works shops. All other public use actions fall below these two priorities. Any actions related to these public use items will not be funded through RETT funds which are strictly allocated to open space and recreation related activities.



**PRIORITY PLAN**  
**Comprehensive Open Lands Plan**  
 TOWN OF VAIL VAIL, COLORADO  
 DESIGNWORKSHOP  
 FEBRUARY 1994

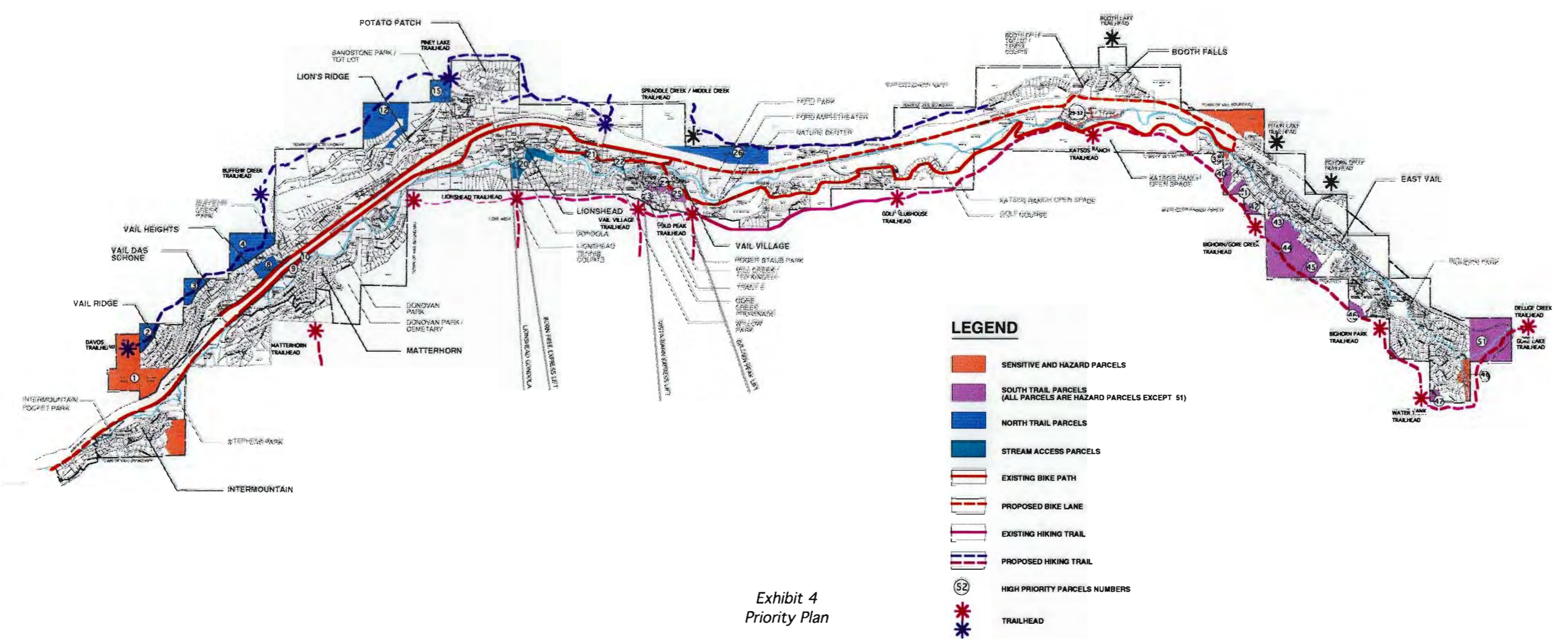
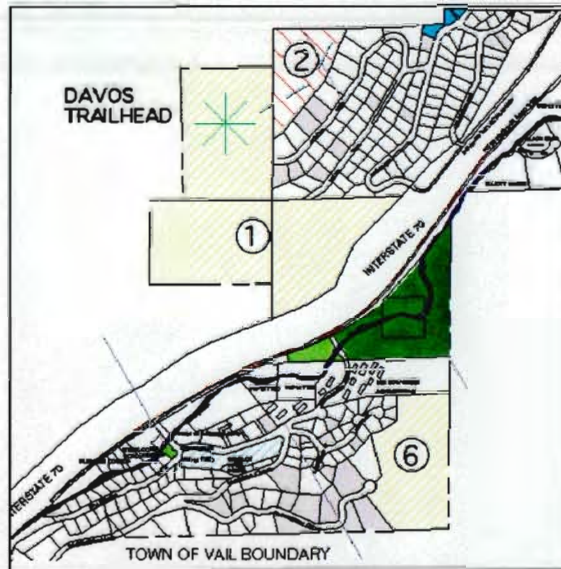


Exhibit 4  
Priority Plan

ACTION PLAN

**Comprehensive List of Recommended Actions**

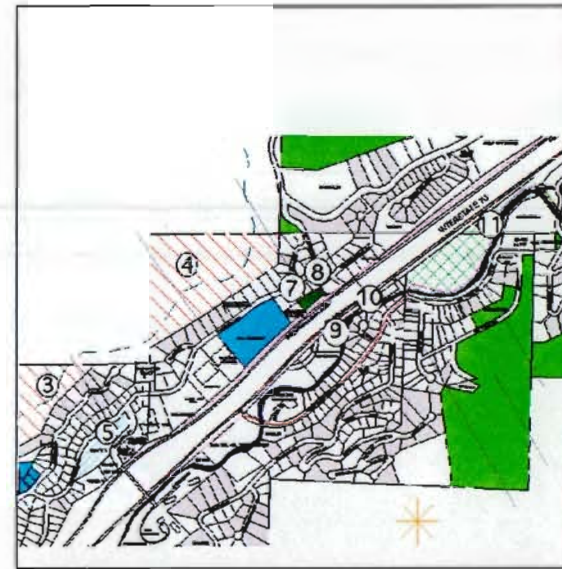
The following describes in more detail the actions recommended for each parcel. Parcels that are a high priority are highlighted in bold and have an asterisk.



**\* Parcel 1: Trappers Run, Lots 16, 19, 21**  
High priority: Identified as a sensitive habitat area by Colorado Natural Heritage 1993 survey. Proposed use - open space, trailhead, nature area, tot lot, National Forest System access. Portions or all of this parcel could be traded to the U.S.F.S. if acquired.

**\* Parcel 2: Unplated Parcel north of Vail Ridge**  
High priority: Acquire land (via tax lien) and trade to the U.S. Forest Service to simplify boundary between TOV and U.S.F.S.. Proposed use - forest land.

**\* Parcel 6: Intermountain, Lot 14, 2724 Snowberry Dr.**  
High priority: Acquisition of development rights to protect steep slopes and mature coniferous trees. Moderate to high threat of development.



**\* Parcel 3: Unplated Parcel north of Vail Das Schone**  
High priority: Town confirm ownership and trade to U.S. Forest Service to simplify Town boundary. North Trail will also go through parcel.

**\* Parcel 4: Unplated Parcel North of Vail Heights**  
High Priority: Town confirm ownership and trade to U.S. Forest Service to simplify Town boundary. North Trail will also go through parcel.

**\* Parcel 5: Hud Wirth Property, Tract D**  
High Priority: Town acquire (not with RETT funds) and use for possible West Vail Fire Station and/or locals housing and/or employee housing.

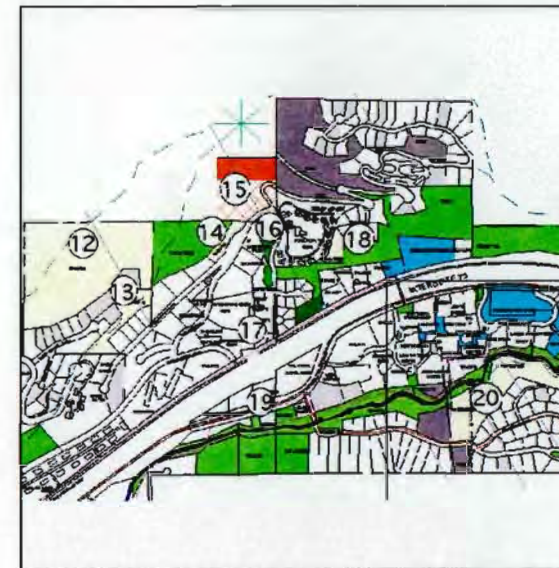
**Parcel 7: Lot 35, Buffer Creek**  
Medium priority: TOV acquire for expansion of Buffer Creek Park.

**\* Parcel 8: Lot 34, Buffer Creek**  
High priority: TOV acquire for expansion of Buffer Creek Park. Would protect riparian area on Buffer Creek. If unable to acquire, then obtain conservation easement for riparian area and trail easement.

**\* Parcel 9: Lot 1, Vail Village West, Filing #2**  
High priority: TOV acquire tax lien to protect drainage and provide access to Gore Creek. This parcel has added value for future Frontage Road bike lanes.

**\* Parcel 10: Lot 2, Vail Village West, Filing #2**  
High priority: TOV acquire to maintain access to Gore Creek. This parcel has added value for future frontage road bike lanes.

**Parcel 11: Cascade Village Tennis Parcel**  
Low Priority: Town acquire upper bench of parcel adjacent to Donovan Park. This action does not include Cascade Club Tennis Courts.



**\* Parcel 12: Tract A, Lionsridge, Filing #4**  
High priority: TOV acquire trail easement through parcel.

**Parcel 13: Tract B, Lionsridge, Filing #4**  
Low Priority: TOV acquire development rights or conservation easement.

**Parcel 14: Parcel East of Lot A3, Lionsridge, Filing #1**  
Low priority: TOV acquire development rights or conservation easement.

**\* Parcel 15: Parcel A**  
High priority: Trail easement through this LOA parcel for North Trail. This parcel is also a trailhead for the Buffer Creek trail. The Town would like to deannex the north half of the parcel and acquire the south half so that the road would be on TOV property.

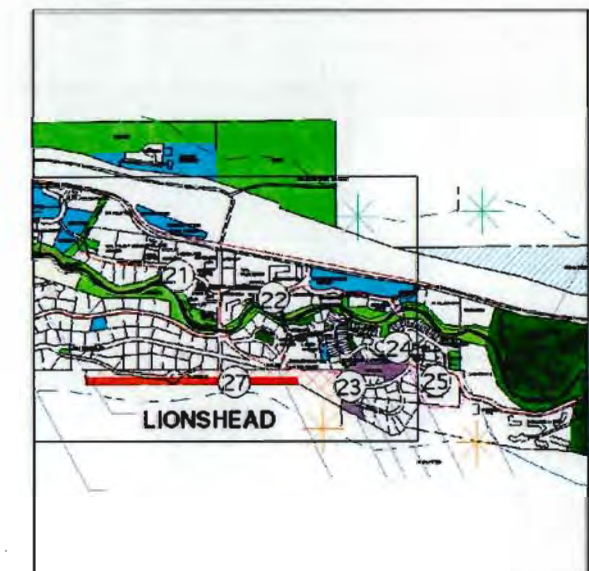
**Parcel 16: Portion of Tract D**  
Medium Priority: Upper Eagle Valley Consolidated Water and Sanitation District willing to sell or swap land. May have value as employee housing. (RETT funds would not be used if future use is employee housing)

**Parcel 17: Tract D, Lionsridge, Filing #1**  
Medium Priority: TOV acquire conservation easement for permanent open space to protect drainage on Red Sandstone Creek.

**Parcel 18: Unplated Parcel, Vail Potato Patch, 2nd Filing**  
Low priority: TOV acquire for open space.

**Parcel 19: Unplated Vail Village, 2nd Filing**  
Medium Priority: TOV acquire conservation easement on area around Red Sandstone Creek to protect trees and stream.

**\* Parcel 20: Unplated Parcel in Lionshead**  
High priority: TOV acquire or enter into a public agreement with V.A. to protect the wetlands on the site. Site does have multiple social trails which are negatively impacting the hydric soils on the site. One mitigation to consider is a path from the pedestrian bridge near Born Free lift to the Library to focus use on a wood-chip path.



**\* Parcel 21: Lot 2, Vail Village, 2nd Filing**

High priority: TOV acquire view easement to maintain view of Gore Creek from West Meadow Drive.

**\* Parcel 22: Parcel Adjacent to the International Bridge**

High priority: TOV acquire as natural area in core along Gore Creek which is a riparian area and is located in the floodplain.

**\* Parcel 23: Tract E, Vail Village, 5th Filing**

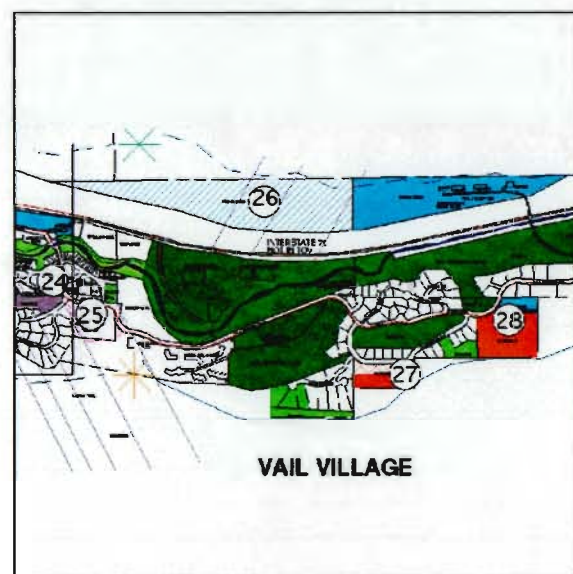
High priority: TOV acquire public use agreement with V.A. to maintain use of existing trail and to create an additional trail which connects into Mill Creek/Ted Kindell pocket park.

**\* Parcel 24: Lot D-1, Vail Village**

High priority: TOV acquire trail easement to maintain access to existing trail.

**\* Parcel 25: Golden Peak, Ski Base**

High priority: TOV obtain public use agreement with V.A. to maintain access to existing trail.



**\* Parcel 26: Unplated Parcel, West of Public Works**

High Priority: TOV acquire with Non RETT funding source for future public works facility expansion. This parcel is also where the snow dump is located. The high priority action recommended is a trail easement for the North Trail.

**\* Parcel 27: Parcel C:**

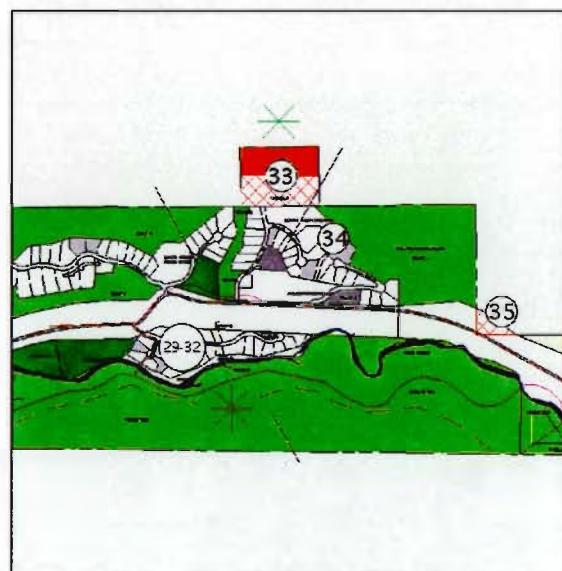
High Priority (LOA parcel): TOV and adjacent owners to acquire northwest portion and deannex the southwest portion

**Parcel 27a: Parcel D**

Low priority (LOA parcel): TOV and adjacent owners to acquire north portion and deannex south portion (to remain in NFS ownership).

**Parcel 28: Parcel E**

Medium priority (LOA parcel): TOV has acquired northern portion and needs to deannex southern portion (to remain in U.S. Forest Service ownership).



**\* Parcel 29 Tract E, Vail Village, 11th Filing**

High priority: TOV acquire conservation easement or public use agreement for riparian stream tract.

**\* Parcel 30: Tract C, Vail Village, 11th Filing**

High priority: TOV acquire conservation easement or public use agreement for riparian stream tract.

**\* Parcel 31: Tract B, Vail Village, 11th Filing**

High priority: TOV acquire conservation easement or public use agreement for riparian stream tract.

**\* Parcel 32: Tract E, Vail Village, 11th Filing**

High priority: TOV acquire conservation easement or public use agreement for riparian stream tract.

**Parcel 33: Parcel**

Medium priority (LOA action): TOV acquire the southern portion from the NFS and deannex the northern portion to maintain the existing use by the Water and Sanitation District and allow room to improve the existing trailhead.

**Parcel 34: Tract B, Vail Village 12th Filing**

Low priority: Conservation easement for existing drainage.

**Parcel 35: Parcels G-2, G-3, G-4 and G-5**

Low priority LOA parcels: TOV acquire from U.S. Forest Service. Then TOV should trade these parcels to CDOT for parcel 36 (which is now owned by CDOT).



**\* Parcel 36: Unplated Land North of East Vail Interchange**

High priority: TOV acquire development rights for open space use or trade parcel(s) 35 for parcel 36. Has potential for development.

**Parcel 37: Unplated Land North of I-70**

Medium priority: TOV acquire development rights for open space use. Has potential for development.

**\* Parcel 38: Bighorn, 2nd Addition, Lot 5**

High priority: TOV acquire parcel which is in floodplain for open space/ trail connection uses.

**Parcel 39: Bighorn, 2nd Addition, Lot 1**

Low priority: TOV acquire development rights to protect riparian area.

**\* Parcel 40: Bighorn Subdivision, 2nd addition, Lots 8, 10, 11**

High priority: TOV acquire both development rights and trail easement for South Trail extension. This parcel is in a geologic hazard area.

**\* Parcel 41: Bighorn Subdivision, 2nd Addition, Lot 16**

High priority: TOV acquire both development rights and trail easement for South Trail extension. This parcel is in a geologic hazard area.

**\* Parcel 42: Unplated land South of Lots 1-4, Block 2, Bighorn Subdivision, 1st Filing**

High priority: TOV acquire both development rights and trail easement for South Trail extension. This parcel is in a hazard area.



**\* Parcel 43: Bighorn Subdivision, Lot 11**

High priority: TOV acquire for trailhead/pocket park to access the proposed South Trail extension. This parcel is in a geologic hazard area.

**\* Parcel 44: Unplated land south of Bighorn Estates Subdivisions**

High Priority: TOV acquire trail easement and development rights. This parcel is in a geologic hazard area.

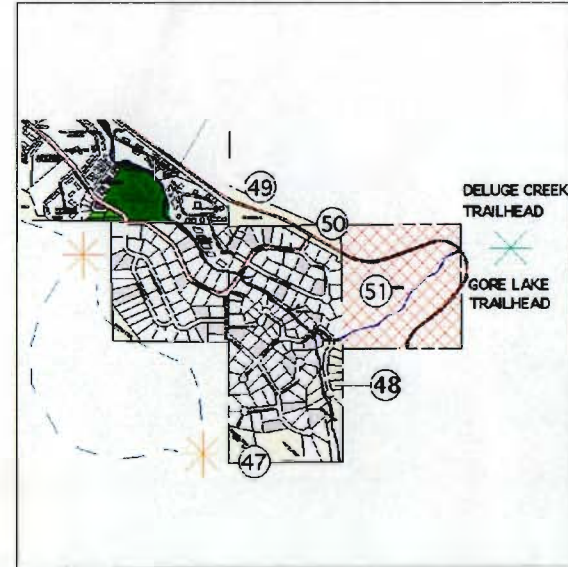


**\* Parcel 45: Unplated land south of Forest Glen Subdivision**

High priority: TOV acquire trail easement to access the proposed South Trail extension.

**\* Parcel 46: Unplated land south of Mountain Meadows Townhomes and Courtside**

High priority: TOV acquire trail easement to access the proposed South Trail extension. This parcel is in a geologic hazard area.



**\* Parcel 47: "Recreation Area" (not including water tank site)**

High priority: TOV acquire conservation easement for trail, trailhead, picnic area and continued use of water tank. This parcel is in a hazard area.

**\* Parcel 48: Lots 1-12, Vail Meadows, Filing #2**

High priority: Acquire to protect sensitive riparian area.

**Parcel 49: Parcel G**

Low priority: LOA parcel: TOV acquire from U.S. Forest Service for road access and open space uses. Southwest corner of the parcel is a wetland.

**Parcel 50: Unplated parcel between NFS Parcels G, H**

Low priority: TOV acquire from CDOT. The open space objective is to maintain access on the Frontage Road and to preserve the remainder as open space.

**\* Parcel 51: Parcel H**

High priority: TOV acquire from the U.S. Forest Service (LOA parcel). High priority for- trail connection and protection of open space and low priority for employee housing. RETT funds not to be used if future uses include housing.

**RECOMMENDATIONS FOR TOWN-OWNED PARCELS**

There are several parcels of land currently in Town ownership that have been included in this study because they have the potential to meet some of the needs identified as part of this plan. These parcels include:

**Vail Commons, North Frontage Road West**

Employee housing is a highly appropriate use for this site, along with commercial and public use facilities, as needed. This use will help meet needs identified by the Vail Housing Authority. Because this is not an "open space or parks" use, RETT funds will not be used to develop this land.

**274 Beaver Dam Road**

This lot is a buildable home site zoned primary/secondary. With the sale of this property, the Town could use the proceeds toward the open lands program identified in this plan (combine with RETT funds to further achieve the open space goals). A title check must occur to ensure that protective covenants do not preclude development on the site.

**2497, 2485, 2477, and 2487 Garmish Drive**

These four lots are located adjacent to the Town Manager's house in West Vail. There is the potential for a small pocket park associated with employee housing on this property which would help meet the park needs of this neighborhood and help address some of the community's housing needs. A trailhead accessing the North Trail is also possible at this location.

**Donovan Park**

The Town of Vail has an approved Master Plan for Donovan Park that includes a number of active recreation program elements. Comments from the public during the course of this project suggest that the Town should revisit that Master Plan to ensure that

the program developed in 1985 is relevant to today's needs.

**Tract A, Vail Village 13th Filing**

Recently, a par 3 golf course has been proposed for the site. The site has approximately .9 acres of wetlands on the site. The U.S. Army Corps of Engineers has not approved a Section 404 permit for this proposal. If the VRD does not receive a favorable vote of the people by December 1, 1994 and the receive a section 404 permit by December 1, 1995, it is this plans recommendation that the property remain as natural open space because of the wetlands on the site.

**Unplated Mountain Bell Site**

Approximately half of this property (7.71 acres) is intended for affordable housing and the remainder of the site will remain in open space.

**Berry Creek, Edwards**

This property is a logical location for some of the recreational needs identified in both this study and the Eagle County and Avon recreation studies. The joint use of this property to meet the needs of a wider population (including Vail residents) is an appropriate and cost effective way to meet recreation needs. Housing is also an appropriate use on this site.

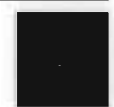
**TOV Parcel adjacent to Vail Chapel**

The north bank of the Gore Creek adjacent to the Vail Chapel provides an excellent stream access area and has been identified as a stream access area. Also, this area is desirable for an informal take-out location for kayakers. An additional bench or picnic table would be desirable at this location.

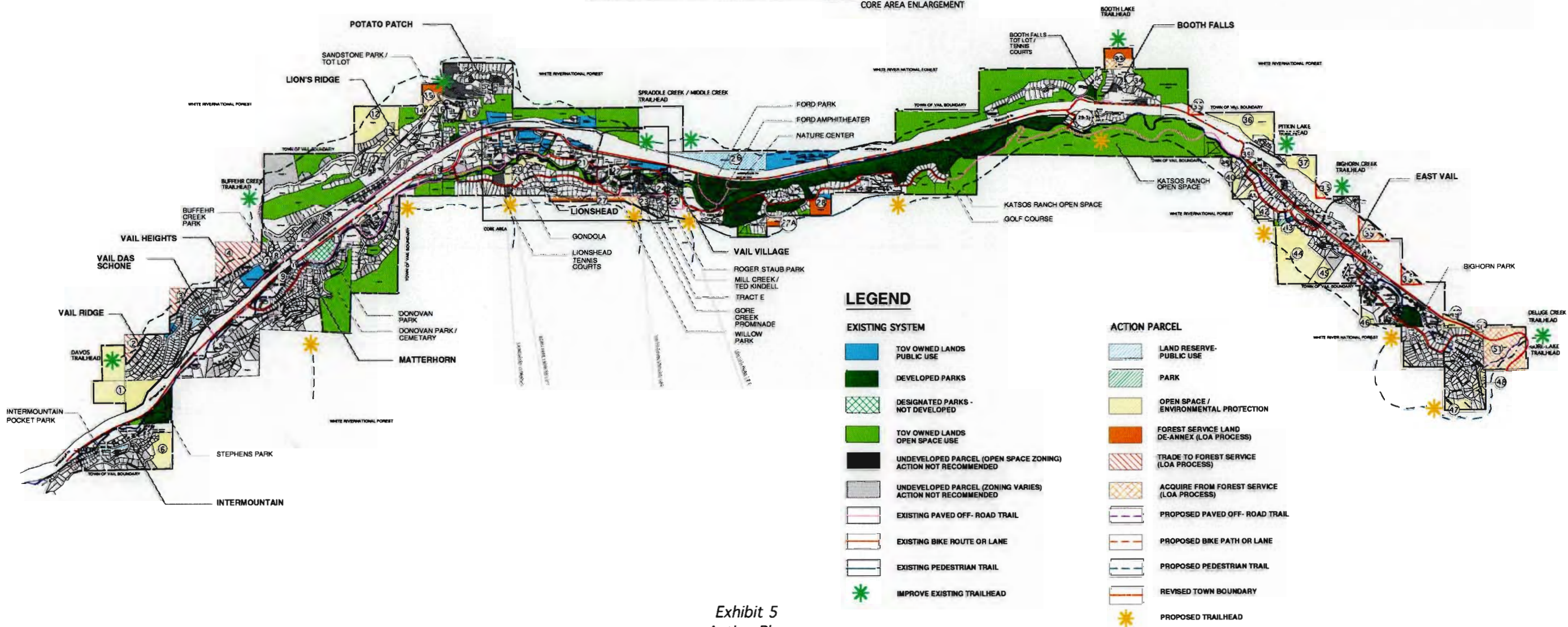
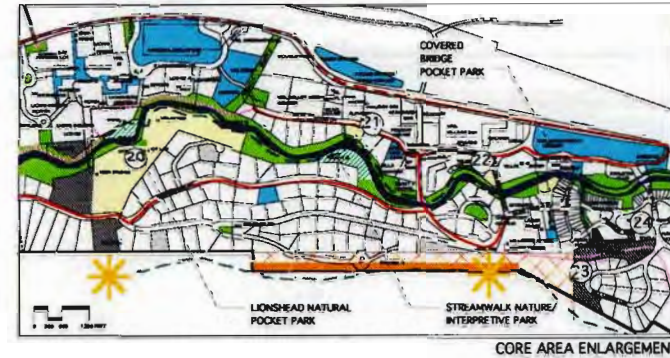
**TRAILS AND TRAILHEADS**

Improvements and additions to the trail system in Land around Vail are an integral part of the Open Lands Plan. There are numerous opportunities for interpretive education along these trails. The proposed trail system is somewhat similar to trail systems found in the Alps where interconnected trail allow hikers to move around and to mountain villages.

Action Plan



**ACTION PLAN**  
**Comprehensive Open Lands Plan**  
 TOWN OF VAIL VAIL, COLORADO  
 DESIGN/PROPOSAL  
 FEBRUARY 1984



**LEGEND**

**EXISTING SYSTEM**

- TOV OWNED LANDS PUBLIC USE
- DEVELOPED PARKS
- DESIGNATED PARKS - NOT DEVELOPED
- TOV OWNED LANDS OPEN SPACE USE
- UNDEVELOPED PARCEL (OPEN SPACE ZONING) ACTION NOT RECOMMENDED
- UNDEVELOPED PARCEL (ZONING VARIES) ACTION NOT RECOMMENDED
- EXISTING PAVED OFF-ROAD TRAIL
- EXISTING BIKE ROUTE OR LANE
- EXISTING PEDESTRIAN TRAIL
- IMPROVE EXISTING TRAILHEAD

**ACTION PARCEL**

- LAND RESERVE-PUBLIC USE
- PARK
- OPEN SPACE / ENVIRONMENTAL PROTECTION
- FOREST SERVICE LAND DE-ANNEX (LOA PROCESS)
- TRADE TO FOREST SERVICE (LOA PROCESS)
- ACQUIRE FROM FOREST SERVICE (LOA PROCESS)
- PROPOSED PAVED OFF-ROAD TRAIL
- PROPOSED BIKE PATH OR LANE
- PROPOSED PEDESTRIAN TRAIL
- REVISED TOWN BOUNDARY
- PROPOSED TRAILHEAD

Exhibit 5  
 Action Plan

ACTION PLAN

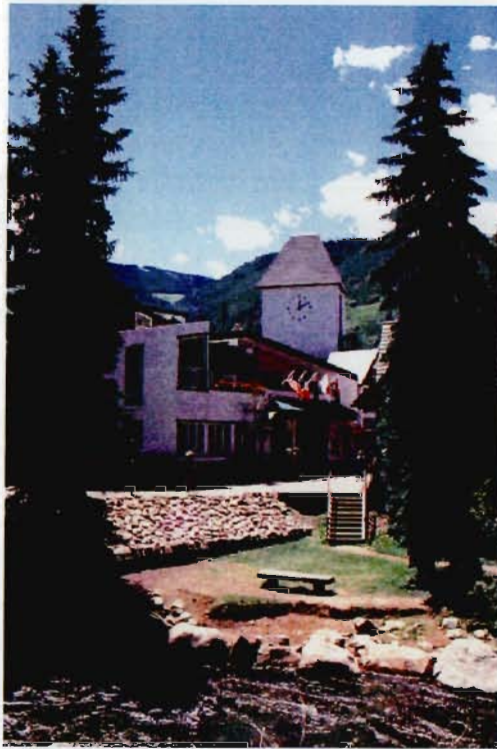
Parcel #	Parcel Description	Property Owner(s)	Zoning	Open Space Objective	Proposed Use	Priority
1	Trappers Run, Lots 16, 19, 21	John Ulbrich	Hillside Residential	Environmental Protection, Forest Access	Open Space, Park, Trail, Trail Access	H
2	Unplatted Parcel north of Vail Ridge	L. Ladner, Inc.	Resource, Eagle County	Trade Parcel to Forest Service	National Forest	H
3	Unplatted Parcel north of Vail Das Schone, Filing # 2	Town of Vail (needs confirmation)	Resource, Eagle County	Trade Parcel to Forest Service	National Forest	H
4	Unplatted Parcel north of Vail Heights	Town of Vail (needs confirmation)	Resource, Eagle County	Trade Parcel to Forest Service	National Forest	H
5	Wirth Property, Tract D	Hud Wirth	Two Family Primary/ Secondary	Land Reserve	Housing	H
6	Intermountain, Lot 14, 2724 Snowberry Drive	George B. Miller	Two Family Primary/ Secondary	Environmental Protection	Open Space	H
7	Lot 35, Buffer Creek	Kasparitis Roman Otij	Two Family Primary/ Secondary	Park	Addition to Buffher Park	M
8	Lot 36, Buffer Creek	Kasparitis Roman Otij	Two Family Primary/ Secondary	Park	Addition to Buffher Park	H
9	Lot 1, Vail Village West, Filing #2	Vail Valley West	AG-OS	Environmental Protection	Retain Natural Drainage	H
10	Lot 2, Vail Village West, Filing # 2	Aldrote J. Antonio	Two Family Primary/ Secondary	Environmental Protection	Bike Path, Creek Access	H
11	Coldstream	Cascade Club	SDD	Community Park	Addition to Donovan Park	L
12	Tract A, Lionsridge, Filing # 4	Lionsridge Homeowners Association	GB-NOS	Trade Parcel to Forest Service	National Forest	H
13	Tract B, Lionsridge, Filing # 4	Lionsridge Homeowners Association	GB-NOS	Environmental Protection	Open Space, Trail	L
14	Excepted parcel east of lot A3, Lionsridge, Filing # 1	A. L. Shapiro Co.	AG-OS	Environmental Protection	Open Space	L
15	Parcel A, Lionsridge Filing #1	US Forest Service	AG-OS	Road Access, Trail Access	Road Access/ Trailhead	H
16	Tract D, Lionsridge Filing #1	Upper Eagle Valley Consolidated W&S Dist.	Public Use District	Land Reserve	Employee Housing	M
17	Tract D, Lionsridge, Filing # 1	Sandstone Creek Condo Association	GB-NOS	Environmental Protection	Retain Natural Drainage	M
18	Unplatted parcel, Vail Potato Patch 2nd filing	Jack Camie	Residential Cluster	Open Space	Open Space	L
19	Unplatted Vail Village, 2nd filing	Holy Cross Electric	Arterial Business District	Land Reserve	Public Use	M
20	Unplatted Parcel south of Gore Creek and north of Forest Road	Vail Associates, Inc.	AG-OS	Parks and Trails (?)	Park, Trail	H
21	Lot 2 VV 2nd Filing, 122 West Meadow Drive	Weist Otto	Two Family Primary/ Secondary	Gore Creek Access	Gore Creek, Streamwalk Access	H
22	Parcel near International Bridge, Vail Village 1st filing	Vail Associates, Inc.	Public Accomodation	Open Space, Gore Creek Access	Open Space	H
23	Tract E, Vail Village, 5th Filing	Vail Associates, Inc.	AG-OS	Trail/ Environmental Protection	Retain Natural Drainage/Trail	H
24	Lot D-1, Vail Village, 5th Filing	Vail Associates, Inc.	AG-OS	Trail	Trail	H
25	Golden Peak 458 Ski Base	Vail Associates, Inc.	Ski Base Rec District	Trail Access	Trail	H
26	Unplatted Parcel north of I-70 and west of TOV shops	Vail Associates, Inc.	AG-OS/ Public Use	Land Reserve/ Trail	Public Works Expansion, Snow Storage	H
27	Parcel C	US Forest Service	GB-NOS	Environmental Protection	LOA Parcel	H
27a	Parcel D	US Forest Service	AG-OS	Environmental Protection	National Forest	L
28	Parcel E	US Forest Service	AG-OS	Environmental Protection	National Forest	M
29	Tract F, Vail Village, 11th Filing	Vail Associates, Inc.	AG-OS	Environmental Protection/Recreation	Retain Riparian Corridor	H
30	Tract C, Vail Village 11th Filing	Vail Associates, Inc.	AG-OS	Environmental Protection	Retain Riparian Corridor	H
31	Tract B, Vail Village, 11th Filing	Vail Associates, Inc.	AG-OS	Environmental Protection	Retain Natural Drainage	H
32	Tract E, Vail Village, 11th Filing	Vail Associates, Inc.	AG-OS	Environmental Protection	Retain Natural Drainage	H
33	Parcel F	US Forest Service	Public Use	Water Storage/ Trailhead Access	Water Storage/ Trailhead	M
34	Tract B, Vail Village, 12th Filing	Vail Associates, Inc.	AG-OS	Environmental Protection	Retain Natural Drainage	L
35	Parcels G-2, G-3, G-4, G-5	US Forest Service	GB-NOS	Environmental Protection	Open Space	L
36	Unplatted land north of East Vail interchange	CDOT	Two Family Residential	Environmental Protection	Open Space	H
37	Unplatted land north of I-70 and Bighorn Subdivision, 3rd addition	Eagle Co. Development Corp.	Two Family Residential	Environmental Protection	Open Space	M
38	Bighorn 2nd Addition, Lot 5	Athena Buxman	Two Family Primary/ Secondary	Environmental Protection	Open Space/ Trail	H
39	Bighorn 2nd Addition, Lot 1	Athena Buxman	Two Family Primary/ Secondary	Environmental Protection	Open Space/ Trail	L
40	Bighorn Subdivision, 2nd Addition, Lots 8, 10, 11	Athena Buxman	Two Family Primary/ Secondary	Environmental Protection	Open Space/ Trail	H
41	Bighorn Subdivision 2nd Addition, Lot 16	Stanley and Martha Wilson	AG-OS	Env. Protection, High Scenic Value	Open Space	H
42	Unplatted land south of lots 1-4, Block 2, Bighorn Subdivision, 1st filing	Consolidated Oil and Gas, Inc.	AG-OS	Environmental Protection	Open Space	H
43	Bighorn Subdivision, Lot 11	H. DeBody, H. Demmalee	Two Family Residential	Trailhead/Pocket Park	Trailhead	H
44	Unplatted land south of Bighorn Estates Subdivision	Cara Beutel	AG-OS	Environmental Protection	Open Space/Trailhead	H
45	Unplatted land south of Forest Glen Subdivision	Consolidated Oil and Gas, Inc.	AG-OS	Environmental Protection	Open Space/Trail	H
46	Unplatted land south of Mountain Meadows Townhouse and Courtside	Consolidated Oil and Gas, Inc.	AG-OS	Environmental Protection	Open Space/ Trail	H
47	"Recreation Area" - not including water tank site	Assessor does not know	Public Use	Environmental Protection/ Public Use	Open Space/Trailhead/trail	H
48	Lots 1 and 2, Vail Meadows, Filing # 2	Holsten (1&2)& Vail City Corp (3-12)	AG-OS	Environmental Protection	Open Space	H
49	Parcel G	US Forest Service	NAT-OS	Environmental Protection	Open Space/Road Access	L
50	Unplatted parcel between Forest Service Parcels G and H	CDOT	NAT-OS	Road Access	Open Space/Road Access	L
51	Parcel H	US Forest Service	NAT-OS	Land Reserve/ Trail Access	Open Space/ Trail Access/Housing	H

Table 8  
Action Parcels  
Listed West to East

Parcel #	Parcel Description	Protection Techniques							Management System					Management Issues								
		Confirm TOV Ownership	TOV Acquire Fee	TOV Acquire Tax Lien	F.S. Acquire Fee	Land Trade	Obtain Development Rights	Easement (Access/Corridor)	Donation	Use Agreement	Bargain Sale	TOV	Forest Service	Cooperative	Rec. District	Landowner	Land Trust	Liability	Hazards	Forest Management	Patrol/Maintenance	Development (Park, Trailhead, etc.)
1	Trappers Run, Lots 16, 19, 21	●									●								●			
2	Unplatted Parcel north of Vail Ridge		●		●						●									●		
3	Unplatted Parcel north of Vail Das Schoe, Filing # 2	●			●						●									●		
4	Unplatted Parcel north of Vail Heights	●			●						●									●		
5	Wirth Property, Tract D		●								●											●
6	Infermountain, Lot 14, 2724 Snowberry Drive					●										●				●		
7	Lot 35, Buffer Creek	●									●								●			●
8	Lot 36, Buffer Creek	●									●								●			●
9	Lot 1, Vail Village West, Filing #2		●								●								●			●
10	Lot 2, Vail Village West, Filing # 2	●									●								●			●
11	Coldstream					●	●						●	●					●			●
12	Tract A, Lionsridge, Filing # 4					●	●	●			●								●			●
13	Tract B, Lionsridge, Filing # 4					●	●	●			●								●			●
14	Excepted parcel east of lot A3, Lionsridge, Filing # 1	●				●					●								●			●
15	Parcel A				●						●	●										●
16	Tract D	●									●								●			●
17	Tract D, Lionsridge, Filing # 1					●		●								●			●			●
18	Unplatted parcel, Vail Potato Patch 2nd filing	●									●								●			●
19	Unplatted Vail Village, 2nd filing	●									●								●			●
20	Unplatted Parcel south of Gore Creek and north of Forest Road					●		●								●			●			●
21	Lot 2VV 2nd Filing, 122 West Meadow Drive					●					●								●			●
22	Parcel near International Bridge, Vail Village 1st filing	●				●		●			●					●			●			●
23	Tract E, Vail Village, 5th Filing					●	●		●							●			●			●
24	Lot D-1, Vail Village, 5th Filing					●	●		●							●			●			●

Parcel #	Parcel Description	Protection Techniques							Management System					Management Issues								
		Confirm TOV Ownership	TOV Acquire Fee	TOV Acquire Tax Lien	F.S. Acquire Fee	Land Trade	Obtain Development Rights	Easement (Access/Corridor)	Donation	Use Agreement	Bargain Sale	TOV	Forest Service	Cooperative	Rec. District	Landowner	Land Trust	Liability	Hazards	Forest Management	Patrol/Maintenance	Development (Park, Trailhead, etc.)
25	Golden Peak 458 Ski Base																					
26	Unplatted Parcel north of I-70 and west of TOV shops	●									●	●							●			●
27	Parcel D											●										
28	Parcel E											●										
29	Tract F, Vail Village, 11th Filing										●	●							●			●
30	Tract C, Vail Village 11th Filing										●	●							●			●
31	Tract B, Vail Village, 11th Filing										●	●							●			●
32	Tract E, Vail Village, 11th Filing										●	●							●			●
33	Parcel F					●					●	●										●
34	Tract B, Vail Village, 12th Filing										●	●							●			●
35	Parcels G-2, G-3, G-4, G-5					●																
36	Unplatted land north of East Vail interchange	●				●	●												●			●
37	Unplatted land north of I-70 and Bighorn Subdivision, 3rd addition	●				●					●								●			●
38	Bighorn 2nd Addition, Lot 5	●									●								●			●
39	Bighorn 2nd Addition, Lot 1	●									●								●			●
40	Bighorn Subdivision, 2nd Addition, Lots 8, 10, 11										●	●							●			●
41	Bighorn Subdivision 2nd Addition, Lot 16	●									●								●			●
42	Bighorn Subdivision, Lot 11					●						●							●			●
43	Unplatted land south of lots 1-4, Block 2, Bighorn Subdivision, 1st filing	●									●								●			●
44	Unplatted land south of Bighorn Estates Subdivision											●	●						●			●
45	Unplatted land south of Forest Glen Subdivision											●	●						●			●
46	Unplatted land south of Mountain Meadows Townhouse and Courtside											●	●						●			●
47	'Recreation Area' - not including water tank site											●							●			●
48	Lots 1 - 12, Vail Meadows, Filing # 2	●				●					●	●							●			●
49	Parcel G											●							●			●
50	Unplatted parcel between Forest Service Parcels G and H											●							●			●
51	Parcel H					●					●								●			●

Table 9  
Protection and Management Techniques for Action Parcels



The objective of the trail system is to create a looping trail system around the Town of Vail. A feasibility analysis should be done to make a final determination where trail easements are needed.

An interpretive program could be developed in conjunction with Vail Associates, the U.S. Forest Service, and the Vail Recreation District to meet a variety of goals shared by the Town and these other entities. Additionally, a comprehensive sign program should be designed and implemented to facilitate access to, and travel on, the trail system.

Close coordination with the USFS and VA will be critical in creating this trail system. Trails on NFS lands will require design review by the U.S. Forest Service and compliance with the National Environmental Policy Act.

Trail uses will also be carefully reviewed by the Town and the U.S. Forest Service. The South Trail in East Vail should only be a summer hiking trail. However, the North Trail could be used for cross country skiing in the winter. The North Trail and trails connecting V.A. trails could also provide single track cycling opportunities in the summer.

In this plan, trailheads are intended to go beyond the traditional use of trailheads. Trailheads can be a combination of a place to access a trail system and a pocket park or nature area. This plan is intended to augment the Vail Transportation Plan and Vail Recreation Plan. Specific recommendations for improvements to the existing system and new additions are described below:

#### SOUTH TRAIL

##### EXTEND VAIL TRAIL TO EAST VAIL

There is the potential to extend the Vail Trail to East Vail and Gore Creek Campground to provide an alternative hiking experience.

##### LIONSHEAD TRAILHEAD - NEW

A trail information "kiosk" with trail maps and signs within the Lionshead core area is recommended to serve as a "Village trail head".

##### VAIL VILLAGE TRAILHEAD - NEW

A trail information "kiosk" with trail maps and signs within the Town core area is recommended.

##### GOLDEN PEAK TRAILHEAD - NEW

Provide signs, bike racks, and trail extension(s) to the existing bike path and/or parking at Golden Peak to link the Vail Trail to the Village. Formal connections are also needed between the Golden Peak Trailhead and Pirate Ship Park and the pedestrian bridge accessing Ford Park.

##### MATTERHORN TRAILHEAD - NEW

Signs and enforcement by the Town to limit on-street parking is recommended. Trail work should be done to minimize erosion currently taking place.

##### GOLF CLUBHOUSE TRAILHEAD - NEW

Provide signs and bike racks at the mid-point of the Vail Trail (near the golf clubhouse). The first 1/4 mile of the trail should be re-routed to eliminate the excessively steep portion of the trail.

##### BIGHORN/ GORE CREEK TRAILHEAD - NEW

Locate a trailhead on Willow Way in the Bighorn Subdivision on Town of Vail owned land to access the proposed Vail Trail extension. Provide a small amount of off street parking, signs, and a bike rack.

##### BIGHORN PARK TRAILHEAD - NEW

Locate a trailhead south of Bighorn Park to access the proposed South Trail extension. Provide off-street parking, bike racks and signs.

##### WATER TANK TRAILHEAD - NEW

Provide a bike and pedestrian access trailhead with signs and bike racks to connect to the proposed East Vail extension and the Gore Creek Campground trailhead. This would be a summer/fall trail only because of the avalanche concerns in this area.

##### WESTIN TRAILHEAD-NEW

There is currently a ski trail (catwalk) which allows people to ski to the Westin from the front face of the mountain. In the summer this catwalk could be used as a hiking trail to access V.A.'s network of trails.

#### GORE CREEK ACCESS AREAS

##### PARCELS 20, 21, 22 AND VAIL CHAPEL

Identify these parcels as stream access areas with signs. The purpose of these access areas is to allow public access to the Gore Creek. Parcel 20 will require some mitigation to prevent further

deterioration of vegetation and soils from the use of "social" trails on the site. Mitigation solutions will have to be discussed with Vail Associates and the neighborhood. The Chapel access would provide a convenient take-out area for kayakers. The stream tract adjacent to the Chapel is owned by the Town and is not identified as an action parcel. Another recommendation is that a map be created to identify public areas along Gore Creek and discuss the rules of a Gold Medal stream

##### MILL CREEK CONNECTION

Extend pedestrian path adjacent to Mill Creek in Ted Kindell pocket park to the south to connect with existing paved trail. (Christiania Lodge will provide as part of redevelopment)

#### NORTH TRAIL

##### UPPER RIDGE CONNECTOR TRAIL

Potential to develop a trail along the north side of Town to link existing trailheads and provide a south-facing trail that will open up in the early spring. This trail should not be located near the Eagle's Nest Wilderness Area in order to avoid further impacts there.

##### DAVOS TRAILHEAD - EXISTING

Potential to relocate trailhead onto Trappers Run if property or easements are obtained. If not relocated, bike racks and signs/ enforcement by the Town to limit on-street parking are recommended.

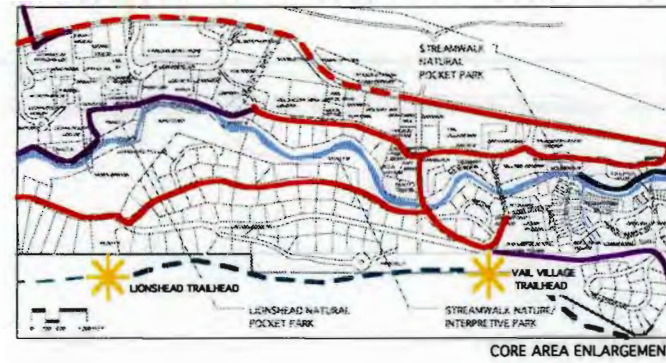
##### BUFFEHR CREEK TRAILHEAD - EXISTING

Signs and enforcement by the Town to limit on-street parking is recommended. Bike racks and safe bike access to the trailhead are also recommended. The U.S. Forest Service believes that they currently do not own the parking area and are concerned that public access to this area be permanently maintained.

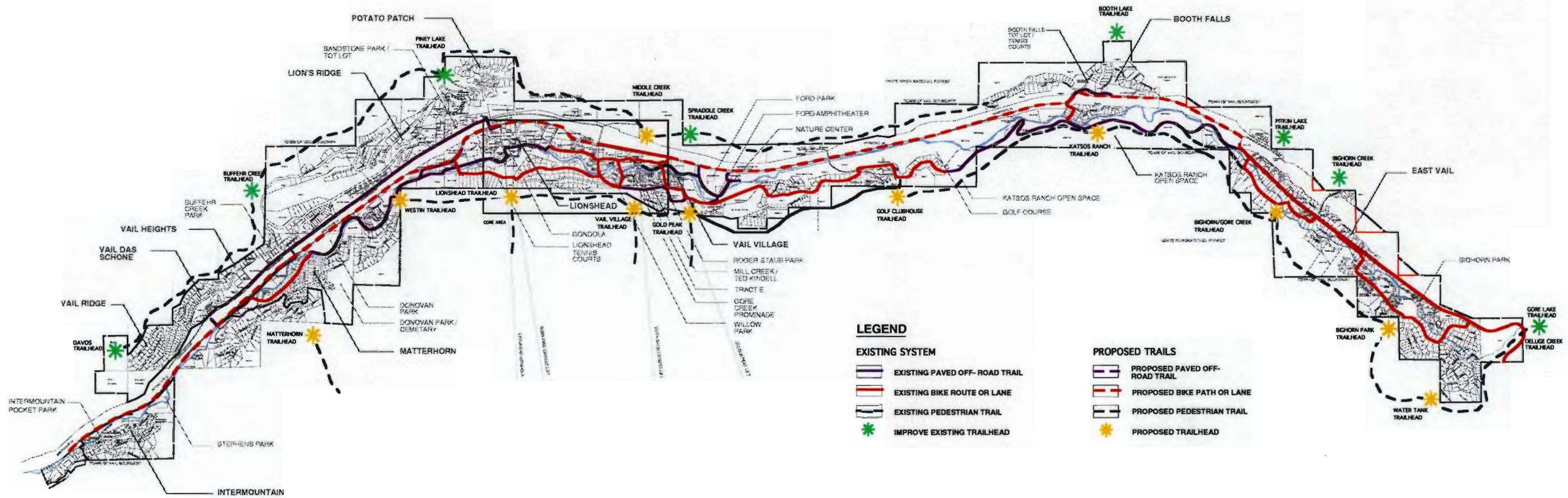
##### PINEY LAKE TRAILHEAD - EXISTING

Expand use of Piney Lake trailhead to year-round (currently functions as a winter trailhead) and relocate to Parcel 15. At the new location, provide off-street parking and a trail connection up the drainage to link to the Piney Lake Road. Also provide signs and bike racks.





**TRAILS PLAN**  
**Comprehensive Open Lands Plan**  
 TOWN OF VAIL VAIL, COLORADO  
 CONSENSUS DRAFT  
 FEBRUARY 2014



ACTION PLAN

Exhibit 6  
Trails Plan

**SPRADDLE CREEK TRAILHEAD - EXISTING**

As part of the Spraddle Creek development, provide improved trailhead at Spraddle Creek including off-street parking, signs and bike racks.

**MIDDLE CREEK TRAILHEAD - NEW**

This lower trailhead, just west of Spraddle Creek, will access trails that connect to Piney Lake and the new Tenth Mountain Trail Association huts via an off road bike path, which would greatly add to the mountain biking opportunities in this area. Include at this trailhead off-street parking, signs and bike racks.

**BOOTH LAKE TRAILHEAD - EXISTING**

Signs and enforcement by the Town to limit on-street parking are recommended. Trail is heavily over-used. Bike racks and safe bike access to the trailhead are also recommended.

**PITKIN LAKE TRAILHEAD - EXISTING**

At existing location, bike racks and signs/ enforcement by the Town to limit on-street parking are recommended. There is the potential to provide an improved trailhead with off-street parking on Parcel 33 if easements are obtained.

**BIGHORN CREEK TRAILHEAD - EXISTING**

Small, off-street parking area recommended in flat area near existing trailhead. Design solutions for parking should be reviewed by the neighborhood. Bike racks and signs/ enforcement by the Town to limit on-street parking at the cul-de-sac is also recommended.

**GORE LAKE TRAILHEAD - EXISTING**

Safety improvements for trailhead access and parking and installation of bike racks are recommended. With possible trade of parcel 51 to the Town from the U.S. Forest Service, development and management issues need to be clarified. Town development of the trailhead with U.S.F.S maintenance/ management is recommended.

**BIKE SYSTEM****FRONTAGE ROAD BIKE LANES**

Provide striped and signed bike lanes on both sides of the frontage roads the entire length of the valley. Key segments of the bike path which are already

funded include: Conoco Station to Dowd Junction and Red Sandstone School to Spraddle Creek subdivision

**PAVED SHOULDERS ON VAIL VALLEY DRIVE TO SUNBURST DRIVE**

Pave shoulders on Vail Valley Drive for a safer recreation path east of the core area. The right of way (ROW) is too narrow for complete bike lanes on either side, but paved shoulders will make the recreation path significantly safer and easier to use for both drivers and cyclists/ skaters/ pedestrians.

**BIKE PATH EXTENSION FROM WEST VAIL INTERCHANGE TO SAFEWAY**

Complete separated bike path along North Frontage Road by linking the West Vail Interchange with the west end of the bike path near Safeway.

**LAND MANAGEMENT**

Two key concepts underlie the proposed management system for Vail's open lands. First, the Town should establish a cooperative management system with both the U.S. Forest Service and Vail Associates. The need for these new management partnerships stems from the fact that a large portion of the lands which can provide recreational and open space benefit to the Town, lie outside the Town boundaries. Defining a management approach which clearly identifies responsibilities is in the interests of all parties. Second, with the addition of new open space lands and trails called for in this plan, the Town needs to develop a management capability to provide appropriate stewardship and maintenance to these properties.

**COOPERATIVE MANAGEMENT SYSTEM****U.S. Forest Service**

This plan proposes a number of improvements to National Forest System lands to improve conditions in the National Forest System and provide Vail visitors and residents with greater recreational opportunities. The trailhead and trail improvements proposed in this plan need to be constructed and maintained. The Town and the U.S. Forest Service should also discuss the desirability of toilets at heavily

used trailheads. Since these improvements will primarily benefit the Town it is important to develop a realistic sharing of the construction and maintenance costs. It is recommended that a cooperative approach be taken to development of trailheads, trails, signs, and maintenance of trail systems. All trail systems that are proposed on NFS lands must comply with the National Environmental Policy Act which will require the Town and the U.S.F.S. to cooperate in the preparation of environmental analysis for the trail system.

**Vail Associates Trails Plan**

This plan proposes that a joint system of trailheads and signs be developed for access to Vail Mountain.

- a. Trails and trailheads on Vail Mountain to be constructed by VA with possible financial participation by the Town and maintained and managed by Vail Associates with possible financial participation from the Town.
- b. Vail Associates and the Town should cooperate on providing village trailheads and informational kiosks to improve trail connections between the Town and the Vail Associates permit area.

**TOWN OF VAIL PROPERTY MANAGEMENT**

One of the goals of this plan is to accomplish the open space objectives of the TOV in a cost effective manner which tailors the protection technique to the Town's open space objectives. In a number of instances this means that instead of acquiring lands the Town may pursue alternative techniques which keep land on the tax rolls and minimize management responsibilities. As discussed earlier, this can be accomplished through the use of land trades and the purchase or donation of conservation and trail easements. The Town's ability to negotiate in a flexible and cooperative spirit will determine, to a great extent, whether it can obtain many of the interests in land that it seeks at minimal cost and management burden. There are five components of the proposed property management strategy.

- 1) **Easement and Land Negotiator**  
The TOV should engage the services of a skilled real estate negotiator that has had experience in working with landowners on easements, bargain sales, tax advantaged



gifts, installment purchases, land trades, advantages of public acquisition and donations of partial interests in property. The negotiator should work with the TOV on the priority acquisition program to structure all acquisitions, whether full fee or partial interests such as easements, in a manner which minimizes the cost to the Town and meets landowner objectives. As has been demonstrated by many land trusts, this type of creative approach to land protection can significantly reduce protection costs and also minimize land maintenance obligations. The negotiator can be either a TOV employee or a contractor, but must dedicate a significant amount of time to these negotiations if they are to save the Town acquisition funds and management expense. The negotiator must be capable of working with the Town attorney on a variety of acquisition and easement instruments.

- 2) Management, Maintenance and Liability Audit  
Prior to the time that a property is acquired by the Town, an audit will be performed of the management requirements and site conditions which require Town expense. The maintenance fund within the RETT funds could be expanded by the annual operating expenses for each parcel of land if they are significant. The services of a professional Forester may be desired to analyze the implications of maintenance and forest management on a number of the action parcels. Other areas that should be included in a audit include: previous owners & activities; existence of hazards, e.g. rockfall, debris flow; storage or release of hazardous materials on the site; and condition of any existing infrastructure that may require maintenance.
- 3) Expand Capability of Landscape Maintenance Operations & Forest Management  
This plan seeks to minimize the additional management requirements on the Landscape Maintenance Fund for the maintenance of park and open space lands that may be acquired by the Town. However, there may

be a need to expand this current capacity to manage these lands. The Town should also consider contracting or hiring on a part-time basis a professional forester to help manage Town forest resources.

- 4) Establish a Junior Ranger Program  
As the open land system increases in size, the Town should consider establishing a Junior Ranger program to assist in maintenance functions and productively engage the youth of the Town. A growing number of communities with open land systems are utilizing local high school students in the summer to perform a variety of land management tasks. Most often these tasks relate to trail maintenance, trail construction, general maintenance and supplementing ranger patrols. These Junior Ranger programs have proven to be extremely popular with the students, have served to educate them on stewardship issues and have proven to be cost effective in performing certain tasks. They do require a significant amount of organization and supervision but are worth the effort. A variety of federal and state summer employment programs might assist in supporting such a program. This program may be of interest to the VRD and could be managed through the Nature Center.
- 5) Utilize Volunteer Assistance to Build Trails and Monitor TOV Owned Lands  
There is significant precedence in Colorado for volunteer construction of trails. Both Volunteers for Outdoor Colorado and the Colorado Trail, among others, are examples of volunteer, non-profit organizations with trail design and construction expertise. One of the many benefits of utilizing volunteers is that it will connect the community to its resources and give the participants a sense of stewardship. Once a trail or other facility is constructed, volunteers can be utilized in an "adopt-a-trail" type program to help maintain the facility.

## IMPLEMENTATION STRATEGY

The Town should move in an aggressive and proactive fashion in three key areas if it is to create the open space system identified in this plan. The first is the design of the new community-wide trail system and application for funds, the second is the negotiation for those key priority parcels identified in the plan, and the third is structuring the RETT funds to meet acquisition objectives. There are options for additional funding sources, described below.

## FUNDING SOURCES

The Town of Vail is fortunate that it has a dedicated source of funding for the acquisition, development and maintenance of park, recreation and open space lands. This is the Real Estate Transfer Tax (RETT) which is a 1% tax on all real estate transfers within the Town of Vail. Over the past five years this tax has generated \$1.3 to \$2 million in revenues annually. The revenues from RETT are allocated to a variety of uses including: purchase of open space; debt service for previous open space purchases; park and trail development and maintenance; and repayment of other Town funds (i.e. Capital Improvement Fund) which were used to previously acquire open space. Due to the sizable amount of the revenue which is allocated to development and maintenance of park and open space facilities, only a portion is available for acquisition. However, the Town has the ability to borrow or bond against the future income stream which indicates a capacity to significantly leverage the funds available for acquisition. The Town Council has authority over the allocation and use of the RETT funds. The creative use and management of this fund offers the greatest opportunity for the Town to acquire the lands designated for purchase.

Other sources of funding potentially available to the Town include:

- 1) State Trail Funds from the Colorado Department of Parks and Outdoor Recreation  
Stuart McDonald, State Trails Coordinator  
Colorado Division of Parks and Outdoor Recreation, 1313 Sherman Street, Room 618, Denver, Colorado, 80203, (303) 866-3437.



- 2) Lottery and GOCO Funds  
Great Outdoors Colorado Trust Fund, c/o Kenneth Salazar, Board Chairman, Colorado Department of Natural Resources, 1313 Sherman Street, Room 718, Denver, Colorado, 80203, (303) 866-3311.

The passage of Amendment 8 in November, 1992 established the Great Outdoors Colorado (GOCO) Trust Fund. When the Colorado lottery was established in 1980, most Coloradoans thought that proceeds were going to be directed to parks, recreation and open space as specified in the referendum. However, the legislature funded a variety of capital projects with lottery proceeds so that less than half the net revenues were going to the intended purposes. The passage of Amendment 8 clearly directs all lottery proceeds to the GOCO Trust Fund and the Conservation Trust Fund. The GOCO Trust Fund is entirely funded by lottery revenues and will be phased in over the next five years as programs currently funded by the lottery are terminated.

A fifteen member, governor appointed board has been appointed to oversee the direction of the program. Eventually, GOCO may have as much as \$35 million to distribute to four program areas. These include State Outdoor Recreation, State Division of Wildlife, local parks grants, and open space grants. The board has begun meeting and expects to have an executive director by the first of the year. The first cycle of grants should begin by Spring 1994. Vail would be able to compete for funds from both the local grants and open space grants portions of the program. While the criteria for rewarding funds has not been finalized, initial indications are that those communities which established their open land and park priorities and have dedicated resources to these issues will be in a better position to compete for funds. The first year funding level is expected to be in the range of \$10 to \$12 million.

- 3) Sales or other Town Taxes  
Given the availability of the RETT funds it is unlikely that another tax would be dedicated to open space acquisition.

- 4) County Open Space Fund  
It has been proposed that Eagle County establish a funding mechanism to protect open space in the County. An Open Lands Committee has been created to determine the best way to protect open lands in Eagle County. Creating a land trust is one idea that is being explored by the committee. If a land trust was created it may serve as a vehicle for protecting lands in Vail. However, it is anticipated that the primary objective of a County land trust would be to protect agricultural open space in unincorporated areas of Eagle County.

**PHASING**

The RETT funds provide the Town with a substantial source of funds for implementing the Comprehensive Open Lands Plan. The Town Finance Department has produced several scenarios of RETT revenues which indicate the amount of funds available for existing programs and to fund new acquisition and development of park, recreation and trail facilities. In addition to the Town's scenarios (scenarios 1&2), another scenario (scenario 3) was produced assuming a higher level of revenue. The three revenue scenario that were examined are:

- Scenario 1 - \$1.2 million,
- Scenario 2 - \$1.5 million, and
- Scenario 3 - \$1.7 million.

The average of the past five years RETT revenues is slightly in excess of \$1.7 million, with two years close to or above \$2 million. Scenario number three, \$1.7 million in revenues per year, was selected to analyze the potential amount of funds available for open space acquisition and park and trail projects. As in the other two scenarios, \$1.6 million was budgeted for projects in 1993. However, because of the increase in revenues and an assumption that a fund balance of \$800,000 would be maintained annually from then on, significant increases in funds available for projects can be seen. The \$800,000 fund balance minimum has been identified as a desirable cushion

for potential changes in revenue and unanticipated short-term needs. As a result, the following amounts are projected for the six year period from 1994 through 1999.

1994	\$1,400,000
1995	\$ 300,000
1996	\$ 300,000
1997	\$ 850,000
1998	\$ 850,000
1999	\$ 800,000
<b>TOTAL</b>	<b>\$4,500,000</b>

RETT funds decline sharply in 1995 because the existing fund balance in excess of \$800,000 is utilized in 1994. In addition, after 1996 the transfers to capital projects for debt service are completely paid off so that the amount available increases by over \$500,000.

**FOUR YEAR FUNDING NEEDS**

The high priority lands for the Vail Open Space System fall into three categories for protection. These are full fee purchase, obtaining trail and conservation easements, and funding trail, trailhead and park improvements. Cost estimates are only available on fee purchases since cost may vary dramatically depending on individual negotiations for easements. In the fee purchase category, the purchase of the sensitive natural areas, riparian areas and full fee trail easements total between \$2.5 and \$3.0 million. The cost of acquiring trail and conservation easements may vary widely between landowners. The objective is to obtain as many of these easements through donation as possible. If we assume that most of these can be obtained through donations and bargain sales, but that there will need to be a significant amount of negotiation and transaction time attached to obtaining these easements we can allocate in the range of \$200,000 annually to this effort over a five year period. Finally, the new trail, trailhead and park construction will require an analysis of the feasibility and design of these facilities before accurate estimates are possible.



Year	Priority Action	Negotiations and Acquisition	Design and Construction	Budget	Total Cost	RETT Revenues
1994	Environmental Protection	Land Negotiator Negotiate Easements Negotiate Purchase Begin Land Trade Negotiations (LOA)		50,000 40,000 2,200,000 20,000		
	South Trail/ East Vail	Negotiate Easements	Design Begin Construction Signage Program Neighborhood Planning	50,000 60,000 30,000 20,000 15,000		
	North Trail/ West Vail		Neighborhood Planning	15,000	2,500,000	1,400,000
1995	Environmental Protection	Land Negotiator Negotiate Purchase Negotiate Easements Continue Land Trade (LOA)		50,000 230,000 20,000 20,000		
	South Trail/ East Vail	Negotiate Easements	Construction	20,000 220,000		
	Stream access/ Core Area	Design signs and/or maps of stream access areas		10,000		
	North Trail/ West Vail	Negotiate Easements		40,000	610,000	300,000
1996	Environmental Protection	Land Negotiator Negotiate Easements Negotiate Purchase Continue Land Trade (LOA)		50,000 20,000 100,000 20,000		
	South Trail/ East Vail		Construction	50,000		
	Stream Access/ Core Area		Mitigate impacts/ Consolidate Trail on VA Property	10,000		
	North Trail/ West Vail	Negotiate Easements	Design Begin Construction	20,000 60,000 80,000		
	Bike Lanes/ Bike Improvements		Design	30,000	440,000	300,000
1997	Begin Lower Priority Parcel Negotiations	Land Negotiator Negotiate Easements Negotiate Purchase		50,000 20,000 150,000		
	Bike Lanes/ Bike Improvements		Construction	550,000		
	North Trail/ West Vail		Construction	180,000	950,000	850,000
1998	Continue Payments					850,000
1999	Continue Payments					800,000
				<b>TOTAL</b>	<b>4,500,000</b>	<b>4,500,000</b>

Table 10  
Six Year Plan

From this preliminary analysis, the following expenditures can be made:

	1994	1995	1996	1997
<b>Environ. Protection</b>	2,310,000	320,000	190,000	220,000
<b>Parks/ Trails</b>	190,000	290,000	220,000	180,000
<b>Bike Lanes</b>			30,000	550,000
<b>TOTAL</b>	<b>2,500,000</b>	<b>610,000</b>	<b>440,000</b>	<b>950,000</b>

**TOTAL FIVE YEAR PERIOD: \$4,500,000**

By committing money over a four year period and paying the commitment over a 6 year period the Town can meet the estimated costs for this plan. It should be recognized that the costs estimated in Table 10 could vary significantly based on:

- 1) Negotiations on individual parcels.
- 2) Based on zoning, Parcel 1 does have development rights and a developer is currently proposing a subdivision on this site. The RETT fund balance referenced in Table 10 will greatly hinge on the disposition of this property.
- 3) Expand the amount of time for the easement-negotiations and trail/park construction program and reduce the annual expenditure for these items. In addition, if a substantial amount of the trail and trailhead construction can be accomplished by volunteer trail construction crews, the construction budget could be reduced.
- 4) The TOV could borrow or bond against the RETT to meet the shortfall or combine borrowing with a reduction in the fund balance to meet these anticipated expenditures. The borrowing could occur in the second year after one years operation of the easement acquisition and trails/parks construction program so that the amounts allocated to these activities could be evaluated and perhaps reduced.



### SIX YEAR PLAN

The Six Year Plan to implement the Vail Comprehensive Open Lands Plan consists of a set of specific actions for a four year implementation program and a six year payment plan. The objective of this plan is to closely match the implementation actions to projected RETT revenues .

The Six Year Plan will address primarily the priority projects which have been identified through this process. These include the environmentally sensitive lands, the South Trail properties, the Stream Access in the Town core, the North Trail/West Vail properties and completion of the bike lanes on the Frontage Road (See Table 10). It is important to remember that only about one half of the properties identified for protection will be included in these priority areas. However, year four of the Action Plan will begin to address the acquisition/protection of these areas. It is expected that in year four there will be an evaluation of the program to-date to assess the process and techniques utilized to ensure that the protection process is occurring in as timely, creative and most cost effective fashion as possible.

### NEXT STEPS

The following generally describes the next steps that should be taken to implement the Comprehensive Open Lands Plan.

#### Hire or Contract the Services of a Property Manager

A property manager should be contracted to assist the Town with land negotiations. This person must be skilled in real estate transactions and negotiating easements. This person should also closely review RETT expenditures and make recommendations for the restructuring of this fund.

#### Council Review of 6 year plan and RETT Fund

Shortly after adoption of this plan, the Vail Town Council should review the six year work plan and RETT income & expenditures to decide if restructuring the RETT fund or additional borrowing is desirable to meet the objectives of this plan.

#### Begin Implementation of LOA Process

The Land Ownership Adjustment Process (LOA) has been, and will continue to be, a cooperative project between the Town of Vail, the U.S. Forest Service, and Eagle County. The goals and objectives of this

process are described in detail in Appendix 1.

Through development of this plan, several of the identified LOA parcels/ actions have received a high priority because they help meet needs identified through the priority analysis process . These are priorities for both the Town of Vail and the USFS.

Town of Vail high priority LOA parcels (lands identified during the LOA process) include:

- Parcel 1 - Trappers Run, Lots 16, 19, 21
- Parcel 2 - Unplated Parcel N of Vail Ridge
- Parcel 15 - Parcel A
- Parcel 27 - Parcel C
- Parcel 51 - Parcel H

The Town of Vail is interested in acquiring parcels 51, 15 (portion) from the U.S. Forest Service and conveying parcels 2 and 1 (portion) to the U.S. Forest Service. TOV and adjacent owners are interested in acquiring the northwest portion of 27 and deannexing the southwest portion

The next level of priorities should be to work with public entities on the issue of resolving the Water and Sanitation District or other PUBLIC facilities on National Forest System land within the Town. These parcels include:

- Parcel 33 - Parcel F
- Parcel 28 - Parcel E

In both of these cases, the transaction involves conveyance of a portion of the National Forest System owned parcel to the Town and the deannexation of the remainder (which will remain in the National Forest System). The remaining LOA parcels are considered a low priority but should be looked at first in the context of balancing land values during the trade of the High and Medium priority parcels.

The Town of Vail and the U.S. Forest Service should pursue land trades on the identified parcels. The first step in this process is to initiate separate land value appraisals for these properties. Appraisals should be sought for as many parcels as needed to acquire the high (and possibly the medium) priority parcels in order to balance the trade values. Of the high and medium priority parcels, these include Parcels 51, 28, and 27, and 27a .

### Design Trails and Seek Funding

The design of the first phase of the new South Trail needs to be completed in order to determine financial requirements and to begin fund raising. Funding for the trail will be facilitated by a clear definition of the trail system and understanding of its feasibility as well as benefit to the Town. Funding can be sought through the State Trails program, GOCO funds and through local support. The GOCO funds will begin to be dispersed later this year and it appears that those communities which have done initial planning and gathered community support will be in a more favorable position to compete successfully for these funds. The Town should also continue to look for opportunities to improve regional trail connections.

### Comprehensive Sign Program

With the addition of a number of trails and trailheads, and the improvement of existing trailheads, it will be more critical to implement a comprehensive sign program that is coordinated between the Town of Vail, the U.S. Forest Service, and Vail Associates. A sign program is currently in the process of being implemented in the Town but it has not yet been tied to the other trail systems that will, in the future, better connect to the "in-town" trails. The core area "trailheads" will serve as information "kiosks" that will let the user know exactly how and where to access the trail system.

### West Meadow Drive

Plans currently exist to improve West Meadow Drive with improved pedestrian and cycling paths and landscaping. At the November 9, 1993 Town Council Meeting, Council directed staff to move ahead with implementation of the West Meadow Drive plan as an alternative to the streamwalk between Lionshead and the Chapel Bridge.

### Institute Neighborhood Planning Process

In response to the needs identified for both East and West Vail, this plan recommends that neighborhood planning processes be initiated for East and West Vail to more fully understand the needs and deficiencies of these areas in regard to parks and recreational facilities. These needs may relate to new parks, types of park uses appropriate to the neighborhood, or to reprogramming existing parks to better meet the needs of residents and visitors. These meetings can also be used to identify undeveloped lots in a neighborhood that the neighborhood may wish to protect.



Structure Use of RETT Funds

The Town needs to make some basic determinations as to how it will utilize the RETT funds for acquisition of priority parcels. If it continues the current pay as you go approach it has limited ability, compared with other approaches which may entail some borrowing. Currently, approximately \$1.5 million is committed to existing debt service and obligations. Revenues which are received above this level could be committed to the acquisition program.

TOV acts as Vehicle for Neighborhood Scale Protection of Land

On parcels of land that a neighborhood is interested in protecting, but are not part of the open space system or do not have community-wide significance, the Town of Vail can act as a facilitator to assist in protecting these lands. This role could range from acting as the buyer (with participation from the neighborhood), to enabling the neighborhood to take advantage of tax benefits, to accepting these lands so the Town has management responsibilities. The Town could play a variety of roles in financing acquisition of lands ranging from negotiation, to providing matching funds or providing partial funding to assist in the protection of these lands. It is recommended that a portion of the RETT be designated for protection of neighborhood open space. It is recommended that a portion of the \$800,000 RETT contingency fund be used for this purpose.

Complete Zoning Changes

A critical element to open lands protection will be completing the proposed zoning changes for Greenbelt Natural Open Space and the Agricultural Open Space Districts. After these text changes are completed, Staff should recommend zoning changes to specific parcels to ensure that zoning is consistent with the Open Lands Plan, Land Use Plan, and the current land use on and adjacent to parcels.

Private Improvements to Public Land

On November 9, 1993 the Town Council instructed Town staff to identify areas where unauthorized improvements on public lands have occurred particularly on public stream tract areas. This action will take considerable staff time and should be identified in the Community

Development or Public Works work plan. In addition, it is recommended that staff develop recommendations for private property owners to decrease impacts to sensitive natural areas, such as Gore Creek, e.g. maintaining native vegetation along Gore Creek and its tributaries.

Permanent Protection of Lands Acquired for Vail Open Lands System

One of the concerns frequently expressed at the public meetings was the need to ensure that once lands are acquired for open space, parks, and trails that they be protected from conversion to other uses in the future. This desire to ensure the permanence of protection for these lands can be met in several ways. The two potential models are first, the requirement of a public vote for any change in use of these lands and second, the use of a land trust (holding an easement on these properties) as an insurance policy. The Town should move quickly to first develop an ordinance requiring a public vote to change the use or zoning of open space and then explore the viability of a land trust.

a. Public Vote to Change Use

One of the most common ways that lands acquired with public funds for parks and open space purposes can be protected from conversion to other uses is to require a public referendum for any change of use. Usually this requires a charter amendment, as is the case in Boulder and Denver. The charters of both of these cities require a vote of the people to convert open space and park land to other uses. This prevents future city councils or departments from taking actions to change uses without first obtaining permission from a majority of the electorate. This has never happened with land in Boulder and is extremely rare in Denver (the proposed sale of Winter Park by the City of Denver, for example, falls under this provision). This approach has worked extremely well in jurisdictions where it is utilized and allows future town councils limited ability to change uses. The Town should evaluate different protection techniques that have been used (e.g. Boulder and Denver) and determine what is appropriate for the Town of Vail.

b. Establishment of a Land Trust

A second option is the use of an independent land trust which would hold easements on each of the parcels acquired for either open space or parks. The choice of this option is motivated by a desire to use conservation easements on these lands to permanently protect them from changing uses or being developed. This approach is more complicated than the first option and, while it offers the prospect of permanent protection, has a number of hurdles to overcome before this level of protection is achieved.

A land trust is a nonprofit, public purpose organization which is dedicated to conserving open space lands. Land trusts range from large organizations such as the Nature Conservancy, Trust for Public Lands and Colorado Open Lands to small, locally oriented and volunteer organizations such as the Clear Creek Conservancy, Eagle County Land Trust, and Mesa County Land Trust. There are 26 land trusts operating in Colorado, most of them small and locally oriented.

The primary vehicle utilized by land trusts to protect open lands is the conservation easement. The conservation easement permanently protects a property from development and may specify various management practices which must be employed to ensure the protection of conservation values. Generally, a conservation easement is voluntarily given by a landowner to a land trust or governmental entity. An easement is a legally enforceable restriction on property which is recorded with the property deed. Many landowners prefer to give easements to land trusts as opposed to governmental entities because they fear that governmental policy and commitment to conservation may change over time.

The landowner has complete use and management of a property with a conservation easement on it. The land trust's responsibility is to monitor the use of the property to ensure that the terms of the easement are not violated. If they are violated, the land trust has the responsibility of notifying the owner of the violation and seeking compliance with

The People's Information

the terms of the easement. If the owner fails to remedy the situation, the land trust must bring an enforcement action against the owner in county court to correct the violation (i.e. building in an easement area). The responsibility of the land trust to monitor and enforce the terms of the easement is perpetual. As a result, the land trust must be a capably run and viable entity for the long term.

The placement of perpetual conservation easements on the Town owned open space and park lands could create an insurance policy that they would never be developed or used in inappropriate ways. However, there are a number of practical hurdles which must be overcome before this technique is viable. First, the Town must either work with an existing land trust or help create a new land trust in Vail or Eagle County. Several existing land trusts such as the Trust for Public Land or the Eagle County Land Trust might be willing to perform this service for the Town. In order to monitor and enforce easements, most land trusts ask landowners for payment of an endowment to cover anticipated costs. This is generally a one time payment which is placed in a stewardship fund used for monitoring and enforcement.

The establishment of a local land trust in Vail has been discussed for several years in order to encourage voluntary conservation of remaining open space lands. Land trusts are generally supported by local contributions and are active in a number of ski towns such as Jackson Hole, Crested Butte, Telluride, and Steamboat. In Crested Butte, the land trust receives support from the Town of Crested Butte's real estate transfer tax. Under Colorado law, a land trust must be in existence for at least two years before it can accept easements.

The land trust option could work well if the Town and the community are committed to ensuring the long term viability of the land trust. Since Vail is almost ninety percent built out, there may be limited conservation

potential beyond the next ten years.

Therefore, the land trust might have a larger geographical focus than just the Town of Vail. There is an Eagle County Land Trust, for instance, but it has not been very active in concluding conservation transactions. If the land trust option is to be pursued, the opportunities for collaboration with a larger or national land trust should be explored as an alternative to a purely local land trust. There might be some interesting local/national hybrid land trust alternatives which might be possible.

The land trust option can provide an independent insurance policy to keep the open space and park lands undeveloped. However, there are a number of issues related to establishing the land trust, affiliating with a national land trust, ensuring the viability of the land trust, and defining the interaction between the land trust and the Town which must be addressed before the Town can move with assurance in this direction.

#### CONCLUSION

This report presents an action plan designed to implement the public's desires for protecting environmentally sensitive lands, improving and expanding the Vail Valley's trail system, and improving recreational opportunities.

The Action Plan spells out in detail a six year plan that will achieve the highest priorities of the Comprehensive Open Lands Plan. In addition, recommendations are made to improve management of TOV lands and to better integrate these lands into an open lands system. The action plan is intended to be flexible enough to take advantage of land opportunities as they arise. This plan provides a detailed framework for creating a system of open lands and interconnecting trails which will help maintain the open character of Vail.



**LAND OWNERSHIP AND ADJUSTMENT PROCESS**

The White River National Forest is in the process of preparing a Land Ownership Adjustment Analysis (LOA) for incorporation into the Forest Plan as an amendment. This analysis will serve as a strategic guide to manage land ownership of the forest and will "classify" the forest with regard to disposal and acquisition objectives. This plan has been fully integrated into the Comprehensive Open Lands Plan.

The Vail Land Ownership Adjustment Task Force, made up of representatives for the Town of Vail (TOV), U.S. Forest Service (USFS) and Eagle County has been established for the purpose of cooperatively developing a "desired" ownership pattern and a common Town of Vail / NFS boundary. Other goals of the task force include, but are not limited to, resolving unpermitted encroachments and improvements on National Forest lands, maintaining and improving public access to National Forest lands and jointly planning and integrating Town of Vail and National Forest recreation opportunities.

Over the past two years, the LOA Task Force has reviewed a number of lots and parcels throughout the Town to determine their appropriateness for inclusion into the Land Ownership Adjustment plan. Review criteria included parcel location, Town of Vail zoning designation, geologic/floodplain hazard status, parcel acreage and other pertinent information. A LOA "code" has been assigned to each parcel which indicates the Task Force's recommended action for the property (i.e. USFS conveyance to the TOV, TOV to consider purchase, etc.).

The task force has described the "Desired Future Condition" highlighting recommended results to achieve within the next 10 years.

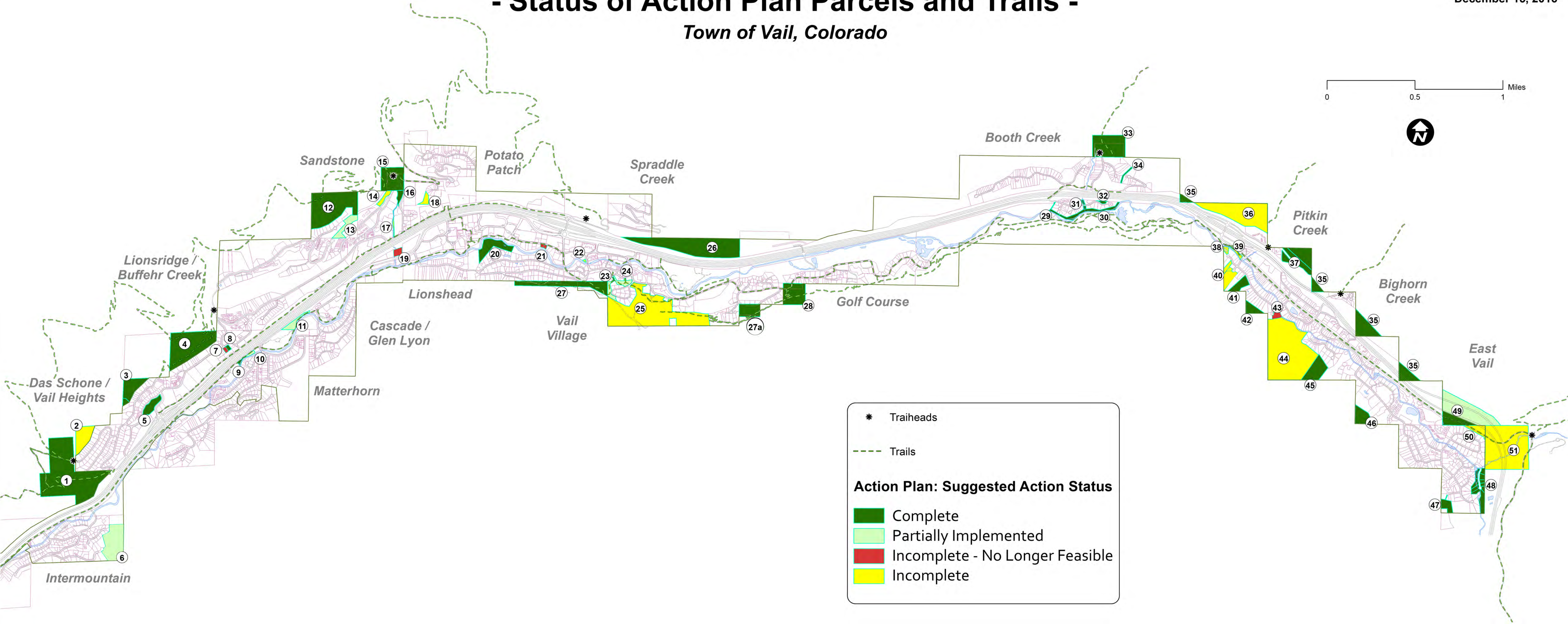
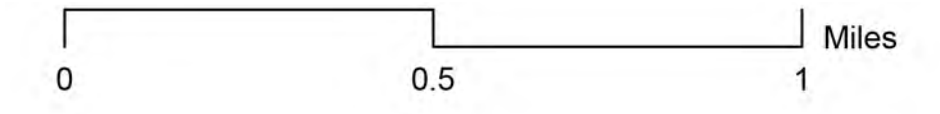
- A. That there be no National Forest System lands within the municipal limits of the Town of Vail.
- B. That the U.S. Forest Service survey, identify, and maintain the common boundary of the Town of Vail and the U.S. Forest Service and that both agencies share in the enforcement of regulations pertaining to the boundary. The boundary has been simplified where possible, irregularities have been reduced or eliminated.
- C. That all land exchanges and purchases optimize both local and national public benefit. Conflicts with local interests are recognized in the decision making process of all land exchanges and purchases, and all efforts are made to address and minimize those conflicts.
- D. That all lands acquired by the Town of Vail are used for public purposes such as open space, public housing, recreation or for the resolution of unauthorized uses.
- E. That the Town of Vail, Eagle County, or the U.S. Forest Service acquire all privately owned tracts, parcels and previously unplatted lands adjacent to, and outside of, the common Town of Vail and National Forest System boundary. These lands are transferred to the National Forest System, Eagle County, or the Town of Vail where joint objectives are satisfied.

- F. That public access to National Forest System lands be maintained or improved. New access points meet Town of Vail and U.S. Forest Service objectives.
- G. That National Forest System lands within the study area that are encumbered with abandoned uses, unauthorized uses, or infrastructure related facilities are reduced or eliminated.
- H. That the Town of Vail and National Forest recreation opportunities are jointly planned and integrated.
- I. That all unincorporated, platted residential areas within the study area are annexed within the municipal limits of the Town of Vail.
- J. That the wood fiber production emphasis management area (7E) that is adjacent to the Town of Vail as identified in the Forest Land and Resource Management Plan be replaced by a recreation emphasis prescription.
- K. That new developments are discouraged on private lands that exist outside and adjacent to the Town of Vail.

The next step in the LOA process is formal adoption of the LOA plan by both the Forest Service, in the form of an amendment to the Forest Plan, and the Town of Vail, as part of this Comprehensive Open Lands Plan. Once the plan has been adopted, the TOV and USFS will proceed with transfer and/or acquisition of lands and adjustment of the TOV/USFS boundary line according to a preestablished priority list.

Appendix 1

# Comprehensive Open Lands Plan - Status of Action Plan Parcels and Trails - Town of Vail, Colorado



\* Trailheads

--- Trails

**Action Plan: Suggested Action Status**

- Complete
- Partially Implemented
- Incomplete - No Longer Feasible
- Incomplete

**OLP Action Plan**  
**Summary of Action Items**

Action Item	Parcel Description	Parcel Number	Current Ownership	Zoning	Action Item Objective	Recommended Action	Priority
1	Lot 14, Block 9, Vail Intermountain	2103-143-01-044	EAGLE RIVER WATER & SANITATION DISTRICT	Two-Family P/S Residential	Trails	Obtain easement	High
2	Section: 14 Township: 5 Range: 81 PCLIN NE1/4NW1/4	2103-142-00-001	L. LADNAR INC	Outside Town Boundary	Protect sensitive land	Acquire parcel	Low
3	Subdivision: HIGHLAND MEADOWS TRACT C	2103-141-03-018	MPH HOMES LLC	Outside Town Boundary	Trails	Obtain easement	High
4	Subdivision: VAIL HEIGHTS FIL 1 Lot: 9	2103-114-01-042	LANNIE, PAUL ANTHONY & DONNA DEAN	Two-Family P/S Residential	Community use	Acquire parcel	High
	Subdivision: VAIL HEIGHTS FIL 1 Lot: 10	2103-114-01-029	ST MORITZ LLC	Two-Family P/S Residential	Community use	Acquire parcel	High
	Subdivision: VAIL HEIGHTS FIL 1 Lot: 11	2103-114-01-028	ST MORITZ LLC	Two-Family P/S Residential	Community use	Acquire parcel	High
5	Subdivision: BUFFER CREEK RESUB Lot: 32	2103-123-02-010	BRUCE H. ALLEN REVOCABLE TRUST - ETAL	Two-Family P/S Residential	Protect sensitive land	Acquire parcel	High
6	Subdivision: HIGHLAND MEADOWS FIL 2 Lot: 32-C	2103-123-23-003	HIGHLAND HEIGHTS OWNERS ASSOCIATION	Outside Town Boundary	Trails	Obtain easement	High
7	Subdivision: BUFFER CREEK RESUB Lot: 9 THRU:- Lot: 12	2103-123-02-001	VAIL HOTEL OWNER ESHV LLC	Public Accomodation-2	Community use	Acquire parcel	High
8	Subdivision: TIMBER VAIL Lot: 1	2103-123-29-001	RANCH CREEK DEV LLC	Single Family Residential	Wildlife	Acquire parcel	Low
9	Section: 1 Township: 5 Range: 81 PCLIN	2103-014-00-005	SHAPIRO CONST CO PENSION PLAN	Agricultural and Open Space	Protect sensitive land	Acquire parcel	Low
10	Section: 6 Township: 5 Range: 80 PCLIN	2101-063-00-002	POTATO PATCH GROUP LLC	Residential Cluster	Trails	Obtain easement	High
11	Subdivision: VAIL VILLAGE FILING 2 TRACT A	2101-064-07-011	EAGLE RIVER WATER & SANITATION DISTRICT	Outdoor Recreation	Protect sensitive land	Acquire parcel	High
12	Subdivision: VAIL VILLAGE FILING 1 Block: 5-E Lot: K PART O	2101-082-04-005	VAIL CORP	Public Accomodation	Protect sensitive land	Acquire parcel	High
13	Subdivision: VAIL VILLAGE FILING 5 TRACT E PART OF	2101-082-42-011	VAIL CORP	Agricultural and Open Space	Trails	Obtain easement	High
14	Subdivision: VAIL VILLAGE FILING 5 Block: 2 Lot: D-1	2101-082-42-004	VAIL CORP	Agricultural and Open Space	Trails	Obtain easement	High
15	Subdivision: GOLDEN PEAK SKI BASE AND RECREATION DISTRICT PARCEL PARCEL 1	2101-081-09-006	VAIL CORP	Ski Base/Recreation	Trails	Obtain easement	High
16	Subdivision: VAIL VILLAGE FILING 8 Block: 2	N/A	THE PULIS RANCH	Outdoor Recreation	Protect sensitive land	Acquire parcel	High
17	Subdivision: VAIL VILLAGE FILING 12 Block: 2 Lot: 1 PART OF BK-0228 PG-0740	2101-023-01-028	PEAK SERVICE REALTY	Low Density Multiple-Family	Protect sensitive land	Acquire parcel	Low
18	Subdivision: BIGHORN 2ND ADDITION Lot: 1	2101-111-01-001	CHLOE HELD MORAN REVOCABLE TRUST	Two-Family P/S Residential	Protect sensitive land	Acquire parcel	High
19	Subdivision: BIGHORN 2ND ADDITION Lot: 5	2101-111-01-003	CHLOE HELD MORAN REVOCABLE TRUST	Two-Family P/S Residential	Protect sensitive land	Acquire parcel	High
20	Subdivision: BIGHORN 2ND ADDITION Lot: 8	2101-111-01-022	CHATEAU-D'OEX LLC	Two-Family P/S Residential	Trails	Obtain easement	High
	Subdivision: BIGHORN 2ND ADDITION Lot: 10	2101-111-01-020	MARILYN E. COORS REVOCABLE TRUST	Two-Family P/S Residential	Trails	Obtain easement	High
	Subdivision: BIGHORN 2ND ADDITION Lot: 12	2101-111-01-021	AHCO 27 LLC	Two-Family P/S Residential	Trails	Obtain easement	High
21	Subdivision: BIGHORN SUB Lot: 19 AND:- Lot: 20-A PT OF RESUB OF LOT 20	2101-122-18-002	BIGHORN MUTUAL SANITATION & RECREATION CO	Agricultural and Open Space	Protect sensitive land	Acquire parcel	High
22	Section: 12 Township: 5 Range: 82 PCLIN	2101-123-00-006	BEUTEL, CARA	Agricultural and Open Space	Protect sensitive land	Acquire parcel	High
23	Subdivision: BIGHORN 3RD ADDITION Block: 5 Lot: 1 THRU:- Lot: 3 PT OF	2101-122-00-002	STATE DEPARTMENT OF HIGHWAYS	Outdoor Recreation	Sensitive land, comm. use	Acquire parcel	High
24	Section: 12 Township: 5 Range: 80 PCLIN BK-0216 PG-0514 WD	2101-123-00-007	TIMBER FALLS PROPERTY OWNERS ASSOCIATION INC	Low Density Multiple-Family	Trails	Obtain easement	High
25	Subdivision: DISTELHORST SUBDIVISION Lot: 2 TRACTS A & B	2101-124-34-001	FREDERICK W. DISTELHORST REVOCABLE TRUST	Medium Density Multiple-Family	Protect sensitive land	Acquire parcel	High
	Section: 12 Township: 5 Range: 80 PCLIN	2101-124-00-017	RACQUET CLUB OWNERS ASSOC	Low Density Multiple-Family	Protect sensitive land	Acquire parcel	High
	Section: 12 Township: 5 Range: 80 PCLIN SE1/4	2101-124-00-003	RACQUET CLUB OWNERS ASSOC	Low Density Multiple-Family	Protect sensitive land	Acquire parcel	High
	DESC: TRACT I Subdivision: RACQUET CLUB TOWNHOMES CONDO	2101-124-24-012	RACQUET CLUB OWNERS ASSOC	Low Density Multiple-Family	Protect sensitive land	Acquire parcel	High
26	Section: 12 Township: 5 Range: 80 PCLIN SE1/4	2101-124-00-008	MOUNTAIN MEADOW CONDOMINIUM ASSOC INC	Residential Cluster	Protect sensitive land	Acquire parcel	High
27	Section: 13 Township: 5 Range: 80 SW1/4NE1/4NE1/4 PCLIN	2101-131-00-001	DUANNE F. ROGERS REVOCABLE TRUST	Outdoor Recreation	Protect sensitive land	Acquire parcel	Low
28	Unplatted	1945-012-00-012	STATE DEPARTMENT OF HIGHWAYS	No Zoning	Road Access	Acquire parcel	Low
29	Unplatted	2203-171-00-001	USFS	Outside Town Boundary	Trails	Acquire parcel	High

**Town of Vail**  
**Real Estate Transfer Tax**

The Town of Vail Real Estate Transfer Tax (RETT) is the Town's primary funding source for park and open space land acquisitions. RETT imposes a 1% land transfer tax upon the transfer of interests in real property. RETT was adopted by ordinance 1979 and was amended in 1980, 1987, 1992 and 2006. Below is a summary of RETT and amendments that have been made since 1979.

Ordinance 26, Series 1979

- 1% Land Transfer Tax to be paid upon transfer of all real property.
- Sale or conveyance of real property for purpose of constructing low or moderate priced housing exempt from Tax.
- 1% consideration shall be earmarked for acquisition of real property located either within or without the limits of the Town of Vail.
- Funds shall be subject to appropriation only for the purposes of acquiring land for parks, recreation, open space and/or similar purposes.

Ordinance 5, 1980

- Many refinements to Ordinance 26, Series 1979
- Addition to appropriation of funds to include "paying incidental costs and principal and interest on any borrowing for the acquisition."

Ordinance 8, Series 1987

- No increase to the 1% tax rate without such tax rate increase is approved by a majority of the registered electors voting in a regular or special election.
- Appropriation of funds expanded to include the cost of construction of buildings which are incidental to park, recreation and open space land, including paying incidental costs and the principle of and interest on any borrowing of such improvement and construction.
- Appropriation of funds may be used for acquiring land located within the Town of Vail or contiguous to the town boundary.

#### Ordinance 10, Series 1992

- Appropriation of funds within the Town of Vail or within one mile of the boundaries of the Town of Vail.
- Funds shall be appropriated for the following purposes:
  - Acquiring, improving, maintaining and repairing real property for parks, recreation, open space and similar purposes,
  - The construction, maintenance, and repair of buildings which are incidental to park, recreation, and open space land,
  - Landscaping parks and open space,
  - The construction, maintenance, repair and landscaping of recreation paths set forth in the Town of Vail Recreation Trails Plan, and
  - Paying incidental costs and principle of and interest on any funds borrowed for the purposes set forth above.

#### Ordinance 31, Series 2006

- Appropriation of funds expanded to include supporting sustainable environmental practices as determined necessary for the environmental health and welfare of the Town of Vail.
- Intent of amendment that appropriation of funds for acquisition of lands, construction and maintenance of incidental buildings, landscaping and construction and maintenance of trails to be satisfied prior to appropriation of funds for sustainable environmental practices.

## **NEPA and EIS process for new trails located on USFS lands**

The following steps generally outline the National Environmental Policy Act (NEPA) and the Environmental Impact Statement (EIS) process, which new trails located on USFS lands would be analyzed under.

### **1. Official “Project Proposal Letter” (PPL) containing proposals from the Conceptual Trails Plan submitted by Town of Vail to USFS**

- PPL submitted by Town of Vail to the USFS.

### **2. USFS Evaluation of PPL and Proposal Acceptance**

- PPL reviewed for consistency with the Forest Plan, USFS Direction, and Open Lands Plan.
- Based on predicted environmental impacts, the USFS determines the level of NEPA that would be necessary to analyze the proposal (including a Categorical Exclusion (CE), an Environmental Assessment (EA), or an EIS).
- An EIS is the highest level of site-specific NEPA review and would be anticipated for a proposal containing numerous trails as outlined in the Conceptual Trails Plan. Individual trail proposals, re-routes, or maintenance may fall under a CE or EA.
- Project proposal accepted by USFS.

### **3. Proposed Action Development**

- USFS Interdisciplinary Team (ID) Team resource specialists work with the Town of Vail to develop Proposed Action, project design criteria, and mitigation and monitoring measures to minimize environmental impacts.

### **4. NEPA Process Begins: Public Scoping Period (Public Comment Opportunity)**

- Scoping Notice, including project purpose and need and description mailed to the public and agencies.
- Scoping period initiated when the Notice of Intent is published in the Federal Register.

- Public has opportunity to present comments on the project specific website and/or in writing, by fax, by email, or in person.
- Public Open Houses are held during scoping period (the opportunity for the public to be informed of the project proposal, ask questions, and submit comments).

## **5. Preparation of Draft EIS**

- Based on comments received during the scoping period and review by the ID Team, a “reasonable range of alternatives” as required to NEPA is Developed to be analyzed in the Draft EIS.
- Studies and analysis, including field surveys, are conducted to prepare the Draft EIS
- Technical reports are prepared, including Biological Assessment submitted to U.S. Fish and Wildlife Service (USFWS) for Endangered Species Act (ESA) Section 7 Requirement.
- Draft EIS is comprised of the Purpose & Need for Action, Description of Alternatives, Affected Environment, and Environmental Consequences, as well as mitigation measures to minimize impacts to resources.

## **6. Draft EIS Comment Period (Public Comment Opportunity)**

- Draft EIS is delivered to EPA to publish the Notice of Availability for public comment in the Federal Register, which initiates comment period.
- Document provided to federal, state, and local agencies and organizations, and interested members of the public for a 45-day public comment period.
- Comments received during Draft EIS comment period by agencies and the public help further refine and strengthen the analysis.

## **7. Response to Comments and EIS Finalized**

- USFS drafts responses to public comments and issues the Final EIS.

## **8. Preferred Alternative Determined by USFS**

- Preferred Alternative is chosen by Decision Maker.
- Preferred Alternative can be any alternative in its entirety, including the No Action, or a combination of alternatives.

## **9. Publication/Issuance of Final EIS and Draft ROD**

- USFS completes Final EIS and Draft Record of Decision (ROD)
- If objections are received, a 45-day objection review period begins. If no objections are filed, issue decision on or before fifth business day after close of objection period.
- If objections are filed, decision issued after all objections have been responded to in writing.
- Implementation possible of proposed trails from the Conceptual Trails Plan possible after decision is signed.

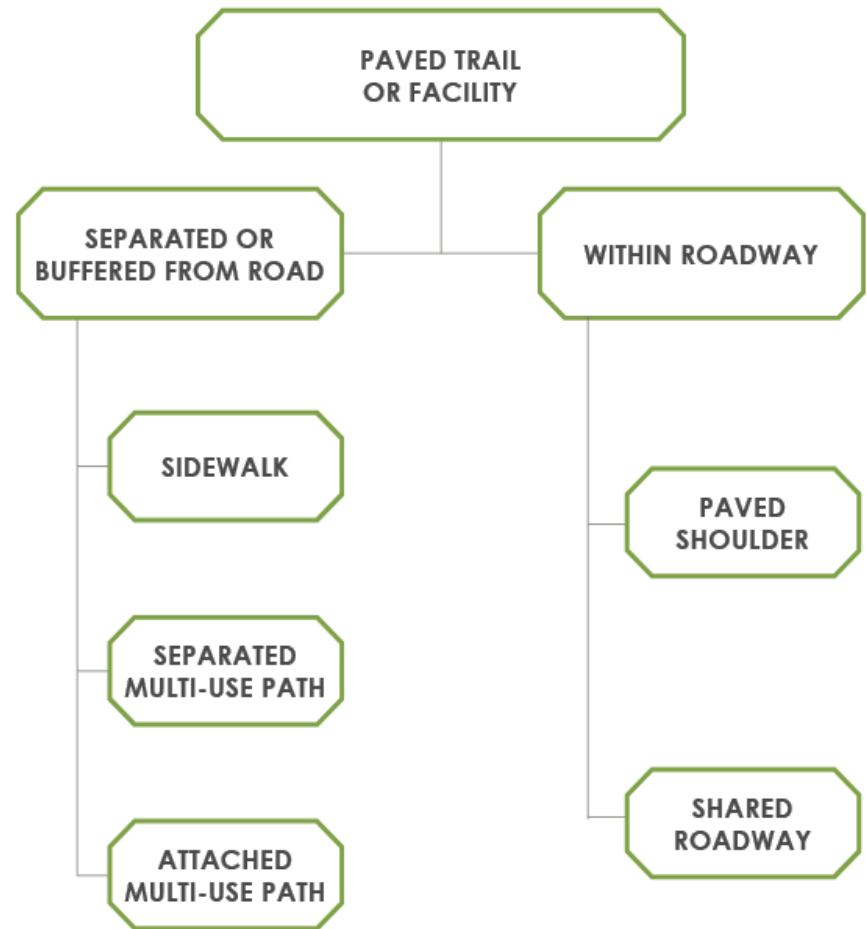


## Trail Types and Standards

The trails included in this plan are designed for a variety of user experiences and purposes. Each type of trail is therefore subject to a different set of standards and practices that will best accommodate the users on that trail. Multi-use trails should be wide enough to accommodate the many users and user types sharing the trail, while soft surface trails should be designed to provide natural experiences. There are a different set of standards for bicycle facilities that share the road or have a dedicated space separated from the road. This section describes each facility type so that readers can get a clear understanding of each term. It also describes the standards Vail uses for that facility type and in what context it is appropriate.

### Hard-Surface Trail Types

The Town of Vail has many hard-surface or paved facilities for pedestrians and cyclists. These facilities provide safe routes along roadways and between homes and local destinations. The hard-surface facilities are categorized as either separate/buffered from the road or within the roadways. Separated facilities include sidewalks, separated multi-use paths (Gore Valley Trail through Katsos Ranch), and attached multi-use paths (Gore Valley Trail along the frontage roads). Paved shoulders (along the Frontage Roads) and shared lanes (residential areas) are considered within the roadway. The Town of Vail follows the American Association of State Highway and Transportation Officials' 2012 Guide for the Development of Bicycle Facilities which offers guidance on facility widths, pavements and layout of the system.



## Sidewalks

Sidewalks are pedestrian facilities located along roadways in both residential and commercial areas. They separate pedestrians from the roadway, creating pedestrian safety and comfort. They are most common in areas with heavy vehicular traffic. Sidewalks can be attached - separated from the roadway by the curb, or detached - separated by a landscape planting strip or buffer zone. Sidewalk widths are between 5-10'. Wider walks are encouraged in busier areas.



*Sidewalks and Attached Multi-Use Trails are typically curb-separated or gutter-separated with a minimum width of 5' and up to 10'.*

*Image source: FHWA Small Town and Rural Multimodal Networks Guide*

## Attached Multi-Use Trails

Similar in design to a sidewalk, attached multi-use trails are used in areas with limited right-of-way or space for a separated trail and where the town's recreation trail system runs along the roadway. Attached multi-use trails are paved and between 8'-10' wide. They are typically curb-separated from the frontage roads. Though they look similar to sidewalks, they are wider and open to cyclists like a separated multi-use trail.

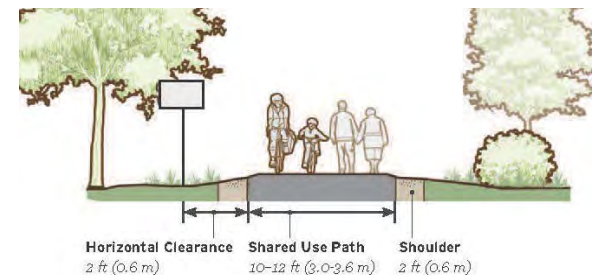


*Vail's Attached Multi-Use Trails are attached at the back of a 6" curb with a width of 10'. A widened shoulder adjacent to the curb/gutter is typical.*

*Image source: FHWA Small Town and Rural Multimodal Networks Guide*

## Separated Multi-Use Trails

Separated multi-use trails provide safe routes away from motor vehicles and are common in Vail's paved system. Multi-use trails are used by pedestrians, cyclists, dogwalkers, strollers, commuters, as well as fat bikers and Nordic skiers in the winter. Typically paved with asphalt or concrete, the trails offer an accessible recreational experience. In Vail, these trails connect neighborhoods to local destinations such as Vail Village, the library, and local parks. The Town of Vail requires these trails to have a 10' wide paved surface with a 1' gravel shoulder on either side. In heavily trafficked areas, the trail may be up to 12' wide.

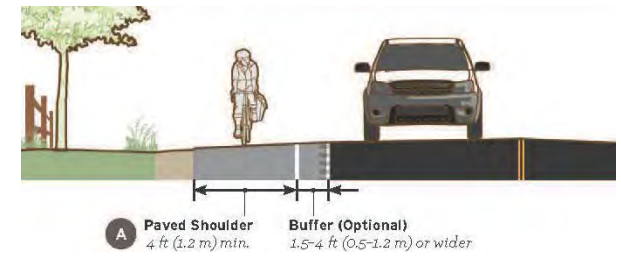


*Separated Multi-Use Trails are typically between 10-12' in width with 1' gravel shoulders on each side*

*Image source: FHWA Small Town and Rural Multimodal Networks Guide*

### Paved Shoulders

Paved shoulders are used on Vail’s frontage roads to safely accommodate pedestrians and cyclists in the roadway. They also extend the maintenance life of a roadway and provide additional space for parked vehicles. In Vail, these shoulders are 3’-6’ wide and carry pedestrians and cyclists in the same direction as motor vehicles. Share-the-Road signs may be used to protect users. Adding striped shoulders to some of Vail’s residential areas could help accommodate pedestrians and cyclists and calm traffic.

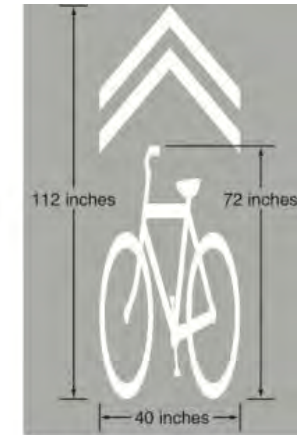


*Paved shoulders have a 4-6’ recommended minimum width but with an outside curb may be narrowed to 3’.*

*Image source: FHWA Small Town and Rural Multimodal Networks Guide*

### Shared Lanes

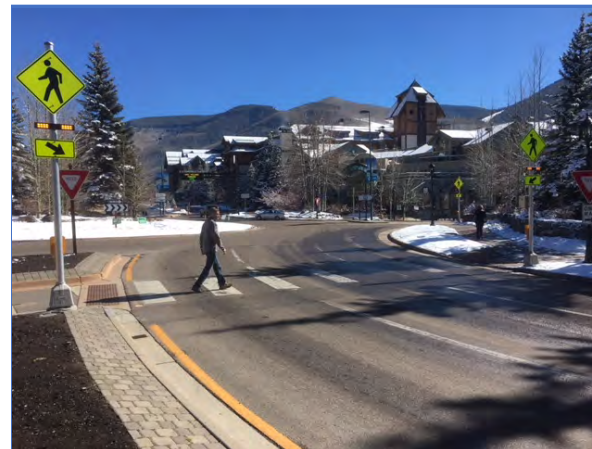
All streets and roadways, unless prohibited by law, permit use by both bicycles and motor vehicles. Cyclists generally prefer to ride on lower volume roadways. On busier roadways or designated bike routes, a bicycle with chevrons (commonly known as a sharrow) is stamped on the roadway to welcome cyclists and improve safety. The placement of sharrows depends on the street’s parking arrangement – on the edge of the roadway for wider streets with parallel parking and closer to the center on narrow streets with angled parking.



*Typical “sharrow” layout per MUTCD*

### Roundabout Safety

Roundabouts present a challenge for pedestrians and bicycles. Appropriately placed crosswalks and Rectangular Rapid Flashing Beacons (RRFBs) can safely assist users through the roundabout. Placing crosswalks at the access roads to the roundabouts avoids the limited view drivers have through the roundabout. RRFBs further alert drivers to crossers and have been shown to improving driver’s yielding compliance. Signs that encourage cyclists to “Take a Lane” as a vehicle help improve visibility and let drivers know cyclists may be present.



## Soft-Surface Trail Types

Soft-surface trails are naturally-surfaced, narrow trails that generally follow the natural contour of the land. In Vail, soft-surface trails can be found on the valley floor, along the lower reaches of mountain-sides and up into the higher elevations that surround the Town.. Soft-surface trails should be designed to be sustainable with gentle grades and a natural contour that limits the impact to the environment.

Most existing and proposed soft-surface trails in the greater Vail network are on Forest Service land. As such, these trails are subject to USFS trail standards. The Forest Service publication *Trail Fundamentals and Trail Management Objectives* provides trail definitions, classes, recommended design parameters (widths, grades, clearances, etc.) and management objectives. The publication can be found on the U.S. Forest Service website ([www.fs.fed.us](http://www.fs.fed.us)).

In general, non-motorized Forest Service trails are considered multi-use (hiking, equestrian, biking). Trails within designated wilderness areas, such as the Eagles Nest Wilderness, are designated for hiking and equestrian use only. In non-wilderness areas, trail design can be used to encourage use by specific user-groups. For example, narrow, steep trails are more likely to be used by hikers whereas trails with banked turns or technical sections may be preferred by mountain bikers.




When looking to improve or expand Vail's trail system, efforts should be made to provide trails for all user types and abilities using general standards as outlined below.

## **Trail Design**

When designing new trails, adopting non-sanctioned trails or recommending maintenance on existing trails, trail design standards should be used based on the proposed use of the trail. Per the USFS, the following general trail standards are recommended. The standards would be further refined by trail difficulty.






## Soft-Surface Trail Design Standards

Trail Use	General Standards	
<p><b>Hiking Trails</b></p> <p>In Vail, hiking-only trails are found in the Eagles Nest Wilderness and within the Vail Mountain trail system. Hiking-only designations are recommended for several trails in the Conceptual Trails Plan.</p>	<p>Tread width: 12-36"  Corridor width: 48-72"  Ave grade: &lt;10%  Max grade: 15-20% for less than 100'</p>	
<p><b>Multi-Use Trails</b></p> <p>In the Vail area, all trails on Forest Service land are designated as multi-use unless otherwise indicated by a Wilderness designation or a resort Special Use Permit. Many of the proposed trails are also expected to accommodate multiple user groups. These trails should be wider than hiking-only trails to accommodate passing.</p>	<p>Tread width: 28-48"  Corridor width: 60-84"  Ave grade: &lt;10%  Max grade: 15-20% for less than 100'</p>	
<p><b>Mountain Biking Trails</b></p> <p>In Vail, the mountain biking-only trails are exclusively within the Vail Resorts Special Use Permit on USFS lands. While not part of the Plan recommendations, it is possible that some new trails, in the Lost Lake Loops for example, could be designed as more favorable to mountain bike use.</p>	<p>Tread width: 18-48"  Corridor width: 60-84"  Ave grade: &lt;10%  Max grade: 15-20% w/ frequent grade reversals and potential banked turns</p>	

### Trail Difficulty Rating System

The U.S. Forest Service regards trails as Class 1 through 5, with Class 1 as highly variable and unimproved (difficult) and Class 5 as highly improved with little variability (easy) and varies the Classes based on the "Trail Designed Use" such as hiking, biking, motorcycling, etc. The International Mountain Biking Association (IMBA) uses a system based on the International Trail Marking System used by ski areas rating trails as green-blue-black-double black.

Since most trails in the Vail network would be considered non-motorized and multi-use, this Plan recommends a rating system based on Easy, Moderate, Difficult trails by combining aspects of both the USFS system and the IMBA system. As Vail is a ski destination, it is recommended to follow the ski Trail Marking System to rate trails as green, blue, black or double black. Considerations when rating a trail will include surface type, stability and smoothness, tread width and grade and trail length.

	Surface	Tread Width	Platform Width	Average Grade	Tread Smoothness
Easy	 Paved, compacted gravel or compacted natural material. Firm and stable.	>36"	>48"	<5%	No obstacles or obstacles less than 2" tall.
Moderate	 Natural compacted material, some rock surface. Mostly stable slightly variable	24-36"	>48"	<10%	Avoidable and unavoidable obstacles less than 6" tall
Difficult	 Natural material, rock, loose gravel. Variable stability	12-24"	24-48"	<15%	Avoidable and unavoidable obstacles up to 18" tall

Additional standards should be applied according to trail use type as shown on the previous page..

## Other Trail Uses

### **Electric Assisted Bicycles**

Electric Assisted Bicycles (EABs) or “E-bikes” are growing in popularity across the country and are used by both commuters and recreationalists. In Colorado, e-bikes are allowed anywhere that a traditional bike is allowed, including paved recreation trails, unless otherwise restricted by the local municipality. Currently, e-bikes are not allowed on soft-surface USFS trails unless the trail allows motorized vehicles. In Vail, e-bikes are encouraged as a way to reduce vehicle traffic, promote healthy outdoor activity and to provide opportunities for less-fit or older bikers who might otherwise have difficulty with the steep terrain and high altitude. As their popularity increases, Vail should remain vigilant in regards to safety and over-crowding on the recreation trail system.

### **Trails on Snow**

Vail’s trails are covered in snow throughout the winter. There are opportunities for skiing, snowshoeing, and fat biking on the snow-covered trails. Conflicts between user groups such as fat bikers and cross-country skiers arise when there is discord in speed between users, limited trail width to accommodate user “footprints,” and the varying desires of grooming standards for snow covered trails. The Nordic Center trails will be opened to fat biking during the winter. The Gore Valley trail between Donovan Park and Lionshead is open but not maintained during the winter. The Gore Valley Trail between Sunburst Lane and East Vail is part of the Nordic Center.



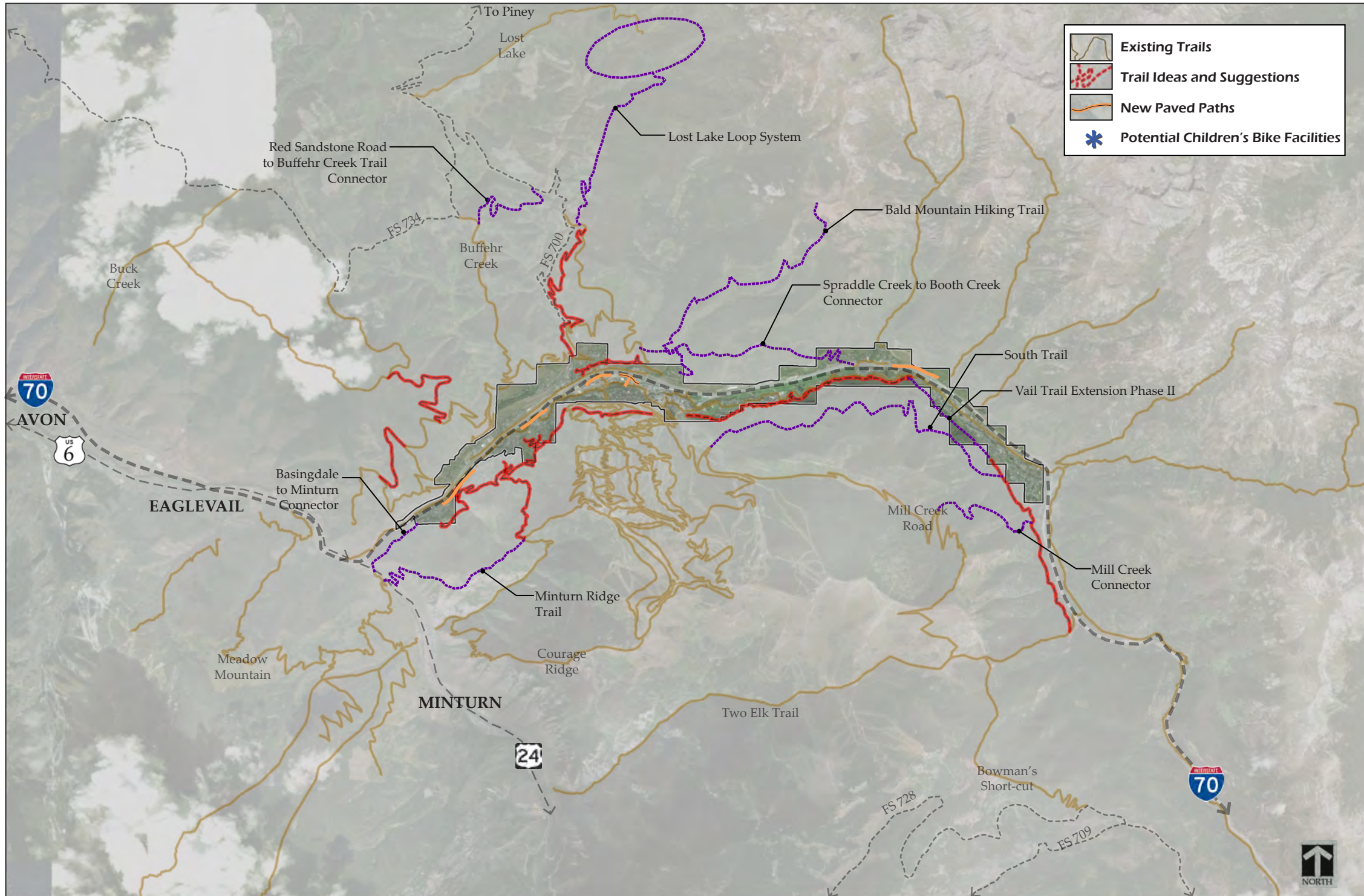
### **Rugged Accessible Trails**

Rugged Accessible Trails are wide, accessible trails that provide natural and rugged trail opportunities to a wider range of users. These trails are accessible to handcycle and mobility assisted users, and are user-friendly for beginning mountain bikers and large group hiking. Since handcycles are powered by the riders’ arms versus legs, these recreationalists need newly adapted trail systems. The following design standards should be applied:

3'-5' tread width

6'-12' corridor width

Average and maximum grades should be lower than multi-use trails



### CONCEPTUAL TRAILS PLAN/TRAILS DROPPED FROM CONSIDERATION





## COLORADO

### Parks and Wildlife

Department of Natural Resources

Glenwood Springs Service Center  
0088 Wildlife Way  
Glenwood Springs, CO 81601  
P 970.947.2920 | F 970.947.2936

March 6, 2017

Peter Wadden  
Watershed Education Coordinator  
Community Development-Environmental  
Town of Vail

Peter,

As per your request I have put together what information the Colorado Parks and Wildlife have available to provide you with as much guidance as possible on the sustainability of wildlife populations within the Gore Valley. As we discussed over the phone it is very difficult to break out wildlife information on small areas. Using the available information I have tried to make as specific as possible to the Gore Valley. Part of the problem is the Gore Valley is covered by 2 different game management units (GMU), GMU 36 on the north side and GMU 45 on the south side.

For road kill information I have put together the information for 3 years (2014-2016). It is important to remember that road kill data is very preliminary since many animals are able to get away from the highway before dying and are never counted. Also Colorado state law allows for the public to possess certain road killed animals and often these animals are picked up before they are counted. You will also notice that many small mammals are not even mentioned as there is no data for them. This information is attached below.

The number of bears that are removed or put down by CPW due to human/bear conflicts is very dependent on weather patterns and public perceptions. I again used data from 3 year (2014-2016). I don't have the data for the number of calls the Vail PD took on bear complaints for this period but I believe you can get these from the PD.

2014 CPW put down 2 bears in Vail.

2015 and 2016 no bears were removed or put down.

I used the same years for lion conflicts. Lion conflicts have really become an issue the in the last 2 years. Prior to 2015 I might get 5-10 calls per year about the public seeing



lions in or around the Town of Vail with most of these being just the public reporting a sighting. However in 2016 I received 18 calls within the Town of Vail and 2 of these were for dogs that were killed by lions. Many of these calls were about the public encountering lions while out with their dogs and concerns that their dogs were at risk of being attacked by the lion. In 2016 CPW did remove and put down 1 lion from the Town of Vail.

#### Deer and Elk:

CPW conducts annual big-game classification flights to determine age structure, sex ratios, reproductive success, and population estimates for each data analysis unit (DAU). These DAUs cover large geographic areas, and trying to extract information at a much smaller scale drastically decreases the accuracy of the estimates.

A drawback to using historical count data to estimate impacts on wildlife is the amount of confounding variables that influence a species at the population level. Examples include weather, disease, population management at the DAU level for big-game species, and development/human disturbance. These factors can increase the difficulty of defining impacts by using animal abundance before and after development.

It is becoming increasingly apparent to wildlife and land managers that human disturbance to wildlife in the form of recreation is taking a toll on wildlife and on habitat by reducing functionality. In areas experiencing high levels of recreation, animals tend to spend less time foraging and resting and more time traveling. Mountain biking and ATV use may create the highest levels of disturbance for mule deer and elk (Naylor et al. 2008). Behavioral changes such as these occurring in summer range habitat may result in an overall decrease in animal fitness, which often negatively affects reproductive success and winter survival.

Examples of these within the Gore Valley are the request for additional biking and hiking trail from Spraddle Creek to Booth Creek, the Vail Trail expansion on the south side of the Gore Creek, the increase in summer activities on Vail Mtn., the request for the expansion of Gold Peak racing area and the overall push to make the valley a full 4 season recreation destination.

#### Elk:

Fortunately for elk we have a current study done in Game Management Unit (GMU) 45 from 1995 to 2005 that looked at impacts on elk calving/recruitment from human disturbance. For the elk populations I put together some information using baseline information we have from the elk study done in the Eagle Valley from 1995 to 2005. This study was done in GMU 45 and was to determine impacts on elk calving from human disturbance, (Phillips and Alldredge 2000, Shively et al. 2005). The study done

at Beaver Creek and Vail demonstrated that calf/cow ratios for elk declined by approximately 40% (from 64.6 calves per 100 cows to 39.8 calves per 100 cows) as a result of human induced disturbance during the calving season (Phillips and Alldredge 2000, Shively et al. 2005). Reproduction levels during the treatment period were determined to be insufficient to maintain a stable elk population. The second half of the study involved removing the human disturbance component. With the human disturbance removed the calf/cow ratios rebounded to their pre treatment levels.

We used the radio collared elk and age and sex ratio counts done from helicopter to determine the elk population in GMU 45. The baseline years were 1994, 1996, 1997 (1995 counts were not used because the flight time was reduced by approximately 50%). These are the 3 years that we have Lincoln indexes, which provides us with 3 years of data to obtain an average on the % of the population we actual count during a flight. The average % of the population we counted based on these 3 years is 41.8%. During this period (1994 to 2015) we have had the same observer (except for 2013) and have had relatively the same number of flight hours each year (from 3.5 to 4 hours).

The average population for the 3 years of baseline (1994, 1996, 1997) was 1771 elk.

The average population for the last 3 years is (2012, 2013, 2014) was 604 elk.

That is a 63% drop in population levels (1167 less elk). From 1998 to 2015 there has been 13 years that we have been below the baseline population level. The classification counts for 2013 and 2014 (162 elk) and 2015 (149 elk) were the lowest counts since 1975.

Deer in GMU 45 and 36.

We are not as fortunate with deer as we don't have any current studies to provide Lincoln indexes for the % of the deer population we count during aerial age and sex ratios. So I used harvest data. The Data Analysis Unit (DAU) for deer is D8 and it covers Units 35, 36, and 45.

Harvest GMU 45

From 1955 to 1962 the harvest went from 205 deer to 500 deer respectively with 1962 being the highest harvest (500) ever in GMU 45. The harvest has never again hit 500 deer.

From 2010 to 2014 (I am missing 2013) the harvest went from 60 deer to 127 deer respectively. This is confounded by the fact that we now have totally limited deer licenses now.

**Harvest GMU 36**

From 1955 to 1962 harvest went from 553 deer to 1947 deer respectively, with 1962 again having the highest harvest of 1947 deer. The harvest has never again hit 1947 deer.

From 2010 to 2014 (I am missing 2013) the harvest went from 157 deer to 318 deer respectively. Again like GMU 45 this is confounded by total limited deer limited licenses.

But if you compared those periods there has been greater than a 3 fold reduction in deer harvest in BGU 45 and up to a 6 fold reduction in deer harvest in GMU 36 since 1962.

The DAU plan for D8 has shown a steady decline in population since the 1980's. For most of the 1980's the DAU population objective was 26,000 deer, in 1988 it was reduced to 21,000 deer and in 2008 it was reduced to 13,500 to 16,500 deer. These population objectives were reduced based on several factors (loss of habitat, increased recreation pressure, weather, predators and quality of habitat).

In the early 1970's Colorado Division of Wildlife researcher Dale Reed completed a study looking at the impact of I-70 on deer migration at Mud Springs (just east of Dowd Jct.). There was a concrete box culvert placed under I-70 to provide a migration route for deer. The study on the Mud Springs deer underpass showed about 39% of the Mud Springs deer population failed to pass through the underpass.

Below is some information from a 1975 report on deer impacts from the start of Vail.

Land use changes in the form of rapid increases in human in-habitation, activity and the construction of I-70 in the Eagle Valley have contributed to a substantial decline in deer numbers. The extent of this reduction is best expressed by changes in numbers of deer harvested in the two periods, 1959 to 1963 and 1969 to 1973 and comparison of these changes with those of the state as a whole.

The percentage decrease in the annual deer harvest in Eagle County between the two time periods was greater than that for the State as a whole, 52.8% and 47.8%, respectively. During this time, the Eagle County contribution to the State's deer harvest declined from 6.2% to 4.6%, and Eagle County's ranking dropped from an average of 5th place to 6th. It is also interesting to note that the decline in the number of deer harvested was greater in Game Management Unit 45, 63.7%, than for any other unit in Eagle County. GMU 45 includes Vail Village, the Vail Ski Area and many related developments, nearly all of which have been developed subsequent to the 1959-63 comparison period.

Bighorn Sheep:

There is only one population of bighorn sheep in the Gore Valley. An important part of the winter range for this herd is within or adjacent to the Town of Vail and I-70 in the east Vail area. This herd is considered a native herd although there was a transplant of 7 sheep done in 1948. In the 1950's the population was estimated to be 30, in the 1990's the population was estimated to be 80-100; the current population estimate is 40. The population has not recovered since the hard winter of 2007-2008. The reasons for the lack of recovery are not clear cut. There are numerous factors that could cause this; disease, lack of winter habitat, poor quality habitat from the lack of habitat management (no fires), predators and increased recreation pressure. We have not detected any increase in disease. Whatever the cause, the populations has been unable to rebound from the winter 2007-2008.

#### Mountain Goats:

There is only one population of goats in the Gore Valley. This herd spends its time far above the boundaries of town really does not use habitat adjacent to the town of Vail. However the population for this herd has been in decline for the last 4-6 years.

#### Moose:

The moose population in the Gore Valley (and all of Eagle County) has been increasing. Moose started showing up regularly in the Gore Valley around 1983. This increase was a result of moose moving from the North Park area. Moose have the ability to winter in much greater snow depths than do deer or elk, plus moose are able to utilize forage of a larger diameter. Moose also are not as prone to being disturbed by human activities as are deer and elk. Moose are more willing and able to stand and even defend their turf from human disturbance than are deer and elk. These factors combined have allowed the moose population to increase. However these same factors may be the same reasons that the moose population is close to reaching its "political" capacity as calls on moose in yards, town, or on recreation trails increase and there is a greater push by some to reduce the moose population because of these conflicts.

#### Peregrine Falcon:

Peregrine falcons have established at least one nest site within the Gore Valley in the last decade. The nest site has been fairly well buffered from human activities that could impact its success. However the increase in hiking, biking trails along with the increasing pressure to further develop the ski area for summer recreation could impact the success of this nest.

#### Black Bears:

Black bears have seen an increase in their population over the last 2 decades. The development of the Gore Valley has resulted in an increase in food sources and limited the impact from fall berry crop failures on the recruitment of bear cubs. Human trash, pet food, bird feeders, and planting of fruit producing landscaping have significantly increased the available food sources for black bears especially during critical periods. Some would consider this to be a success while others would not. The increase of human induced food sources has resulted in numerous bear/human conflicts. Although the conflicts have not resulted in any serious human injuries they have resulted in the death of numerous bears over the last 20 years (this includes road kill).

#### Mountain Lions:

Mountain lions have seen an increase in their population levels over the last decade. As with bears part of this increase in lion population can be linked to an increase in available prey species caused by the development of the Gore Valley. The same food sources mentioned in the section on black bears play a role in providing food for lions. The populations of raccoons, red fox, marmots, and various species of small mammals have increased from this boost in food availability due to human development. Along with the increase in human population, the population of household pets (cats and dogs) has increased. Lions have utilized household pets as another food source. This has resulted in an increase in human/lion conflicts. Although the conflicts have not resulted in any serious human injuries they have resulted in the death of several lions over the last 10 years (this includes road kill).

#### Gore Creek:

I think you have a fairly good picture of Gore Creek from all of the recent studies the town has been doing. As a fishery the lower half of Gore Creek is holding its own and still has all four species of trout. However as the studies the done by the town on Gore Creek show the creek is in trouble and without significant improvements in the overall health of the creek the fishery could easily decline. The upper section of Gore Creek and Black Gore Creek are not doing as well and could be further impacted from proposed improvements to I-70 on Vail Pass.

The possibility of the greater impact to Gore Creek is probably more related to weather patterns and the need for additional water for human use and snowmaking. Changes in weather patterns and runoff events could easily have the most significant long term impact on the watershed. The push to increase recreational events on Gore Creek and to manipulate the stream channel to allow for additional recreation activities or to extend the season of use could all have significant impacts on the ability of Gore Creek to function as a quality fishery.

Is the Gore Valley sustainable for wildlife?

I am sure there are other species that could be discussed but the data to provide defensible comments on these species is lacking.

You first have to define what sustainable is when it comes to wildlife. Is it having a token population or is it having a robust population? Does a population in decline qualify? If the human/wildlife conflicts continue and wildlife is always the loser even on public lands is that sustainable?

I don't see the wildlife populations in the Gore Valley as sustainable with the current level of development, recreational, and conflict pressure placed on wildlife. The species that are increasing generally have adapted to living next to people. These same species also generate extensive complaints from the public about human/wildlife conflicts or damage to property. Recreation is a driving economic force in Gore Valley and the surrounding communities. These recreational activities occur throughout the year and there is a push to increase recreational activities within the Gore Valley. As these demands for recreational opportunities continue to grow they result in higher impacts on natural resources, and potential increases in habitat fragmentation. Quality wildlife habitat includes food, water, shelter, space, and connectivity, which is critical to maintaining healthy wildlife populations. Large blocks of contiguous habitat are most likely to promote the long-term sustainability of a species. Habitat becomes fragmented as land use changes break the landscape into smaller more distinct "patches." These patches may not provide fundamental habitat requirements resulting in a diminished carrying capacity for the species across the landscape. Wildlife living within fragmented habitat is more vulnerable to stochastic population declines stemming from disease, increased rates of predation, or habitat loss or modifications.

Most wildlife managers agree, with support from the scientific literature, that recreation has the potential to impact wildlife distribution and abundance (Goldstein et al 2010, Naylor et al. 2008, Keller and Bender 2007, Taylor and Knight 2003, Papouchis 2001, Joslin and Youmans 1999, Valdez and Krausman 1999). The "zone of influence" (ZOI) of recreational activities for wildlife may extend for some distance beyond the actual activity and will vary depending on habitat composition, topography, and a species' tolerance of human disturbance. I have attached an example of an analysis CPW did for the Town of Avon showing the impact from the development of a biking and hiking trail. As you can see from Figure 1 the development of 3 trails in the Metcalf drainage results in the loss of the entire drainage as effective mule deer habitat with just a 100 meter buffer on the trails. When you look at Figure 3 & 4 for elk at 500 and 1500 meter buffers you see the impacted area is substantial. You could run a similar analysis on the trails within the Gore Valley.

When you review the discussion on deer, elk and bighorn sheep populations in the Gore Valley there is nothing on the horizon that is going to allow us to significantly increase those populations. These populations have been in decline for at least the last decade and often longer. The ability to do large scale habitat improvement projects for big game is becoming increasingly difficult. Part of the issue is often the best habitat project is a controlled burn. As the residents in East Vail showed in the mid 1990's they have no stomach to have a controlled burn done behind their homes. The project to improve and increase the winter range for bighorn sheep was killed because they were unwilling to consider a controlled burn no matter how many fire trucks were available to protect their property in the event of the fire coming down hill.

The demand within the Gore Valley for federal lands is overwhelming, whether it is to acquire them for employee housing, develop recreational trails in every drainage, add new commercial recreational events or to develop a four season resort with every type of recreational activity imaginable. All these uses impact wildlife and there is very little thought on how it will impact the available wildlife habitat or wildlife populations. The desire to manipulate the natural conditions in order to extend the ski and rafting season has a significant impact on wildlife. As we discussed in the Avon analysis, stress and behavioral changes are often not considered when looking at wildlife impacts. Just having habitat is not enough the habitat must be available and useable for wildlife.

With the continual decline in most big game species within the Gore Valley over the last 36 years there is little reason to assume that this pattern will change to the point where you would consider these populations to be sustainable and/or robust in perpetuity.

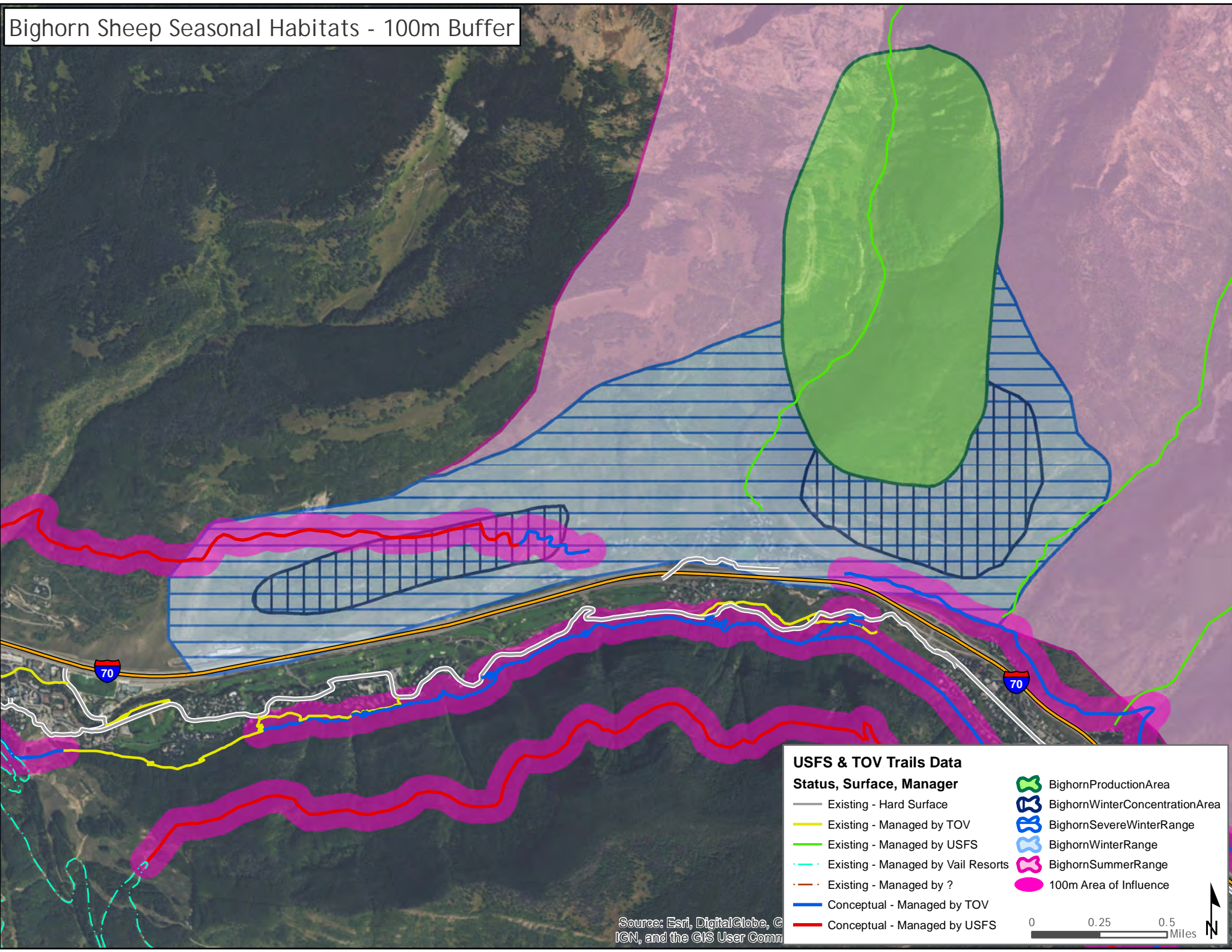
If you need anything else please feel free to let me know.

Sincerely,

Bill Andree  
District Wildlife Manager - Vail



# Bighorn Sheep Seasonal Habitats - 100m Buffer



**USFS & TOV Trails Data**

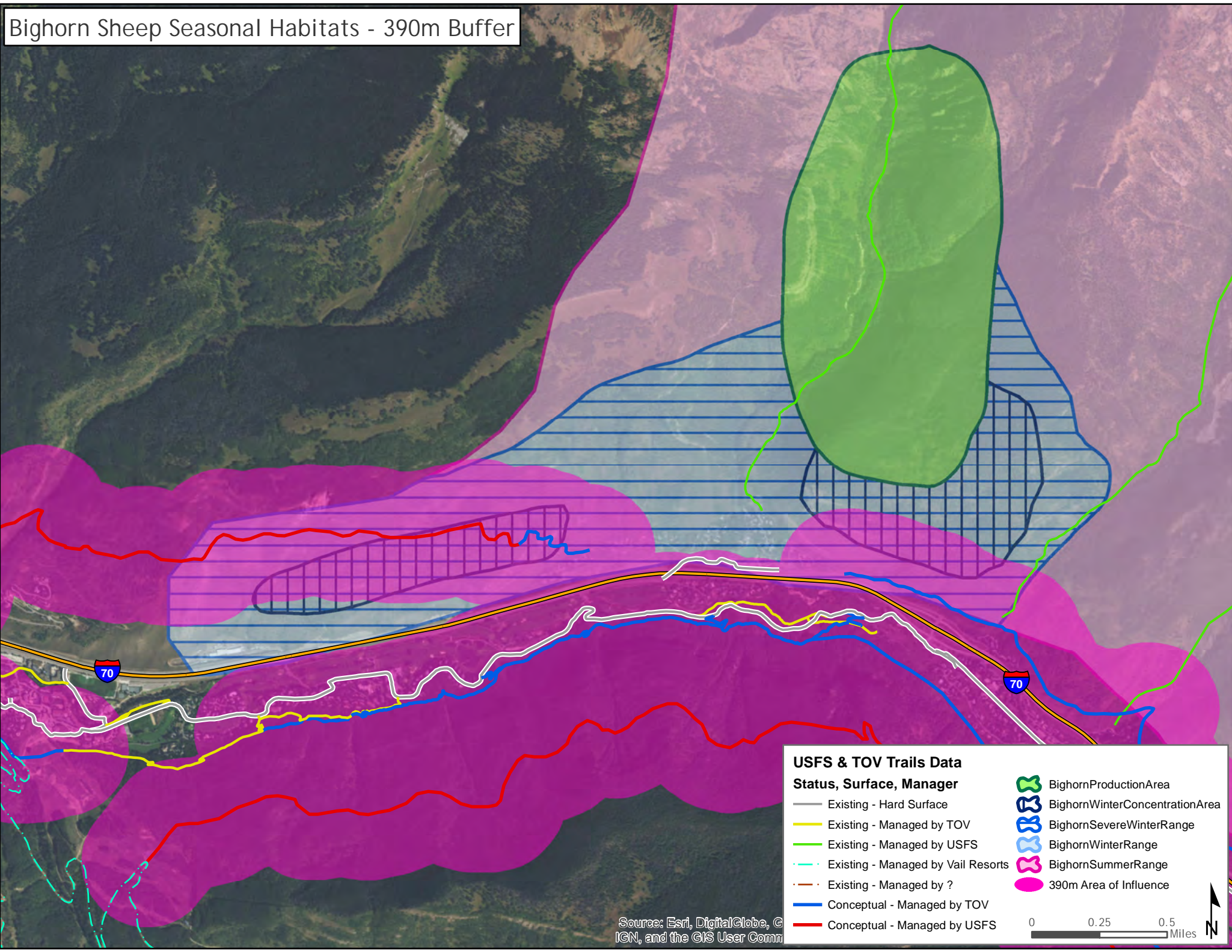
Status, Surface, Manager		
—	Existing - Hard Surface	BighornProductionArea
—	Existing - Managed by TOV	BighornWinterConcentrationArea
—	Existing - Managed by USFS	BighornSevereWinterRange
—	Existing - Managed by Vail Resorts	BighornWinterRange
—	Existing - Managed by ?	BighornSummerRange
—	Conceptual - Managed by TOV	100m Area of Influence
—	Conceptual - Managed by USFS	

0 0.25 0.5 Miles

Source: Esri, DigitalGlobe, © IGN, and the GIS User Comm



# Bighorn Sheep Seasonal Habitats - 390m Buffer



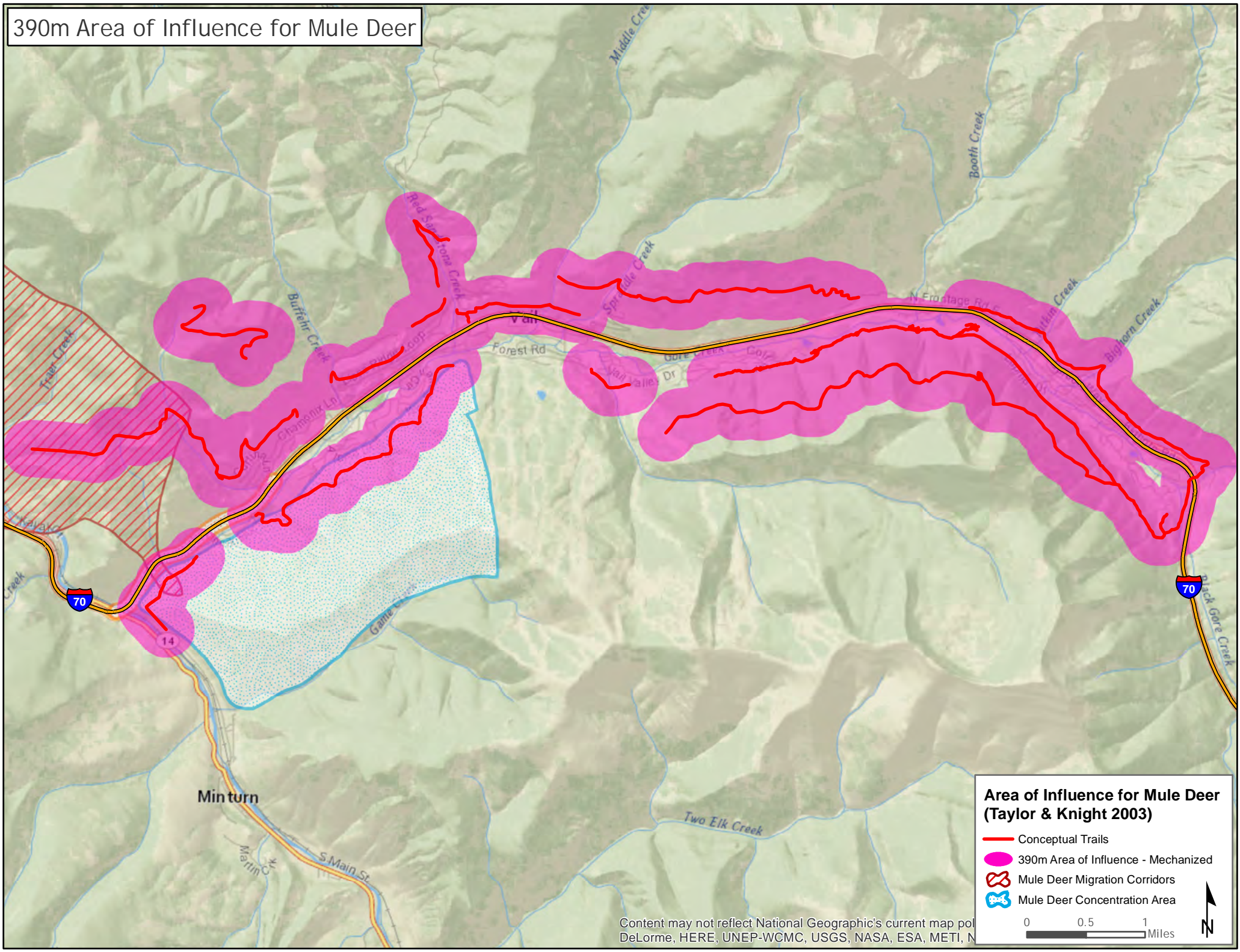
**USFS & TOV Trails Data**

Status, Surface, Manager		
—	Existing - Hard Surface	Bighorn Production Area
—	Existing - Managed by TOV	Bighorn Winter Concentration Area
—	Existing - Managed by USFS	Bighorn Severe Winter Range
—	Existing - Managed by Vail Resorts	Bighorn Winter Range
—	Existing - Managed by ?	Bighorn Summer Range
—	Conceptual - Managed by TOV	390m Area of Influence
—	Conceptual - Managed by USFS	

0 0.25 0.5 Miles

Source: Esri, DigitalGlobe, © IGN, and the GIS User Comm

# 390m Area of Influence for Mule Deer



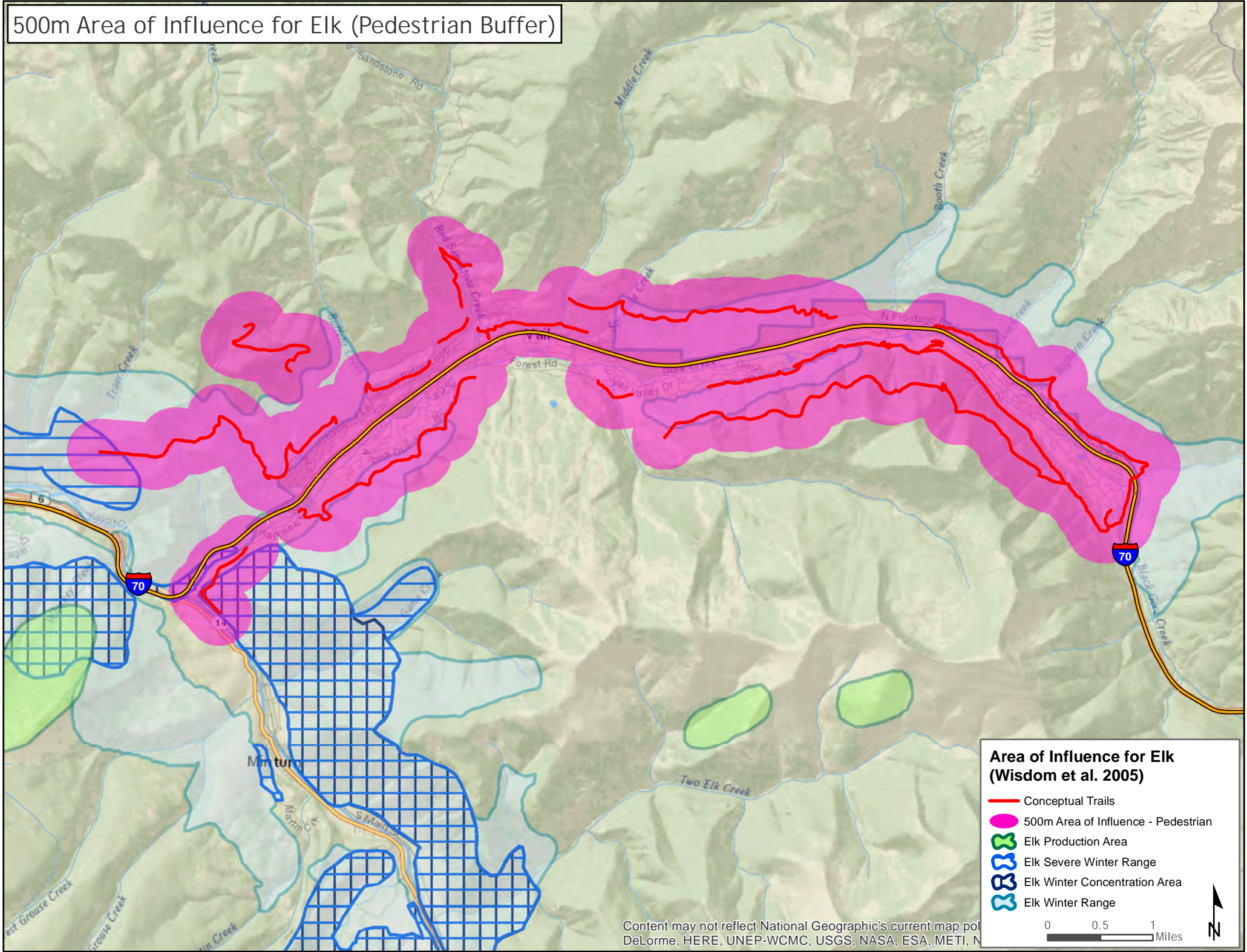
## Area of Influence for Mule Deer (Taylor & Knight 2003)

- Conceptual Trails
- 390m Area of Influence - Mechanized
- Mule Deer Migration Corridors
- Mule Deer Concentration Area



Content may not reflect National Geographic's current map policy. Data sources: DeLorme, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, N

# 500m Area of Influence for Elk (Pedestrian Buffer)



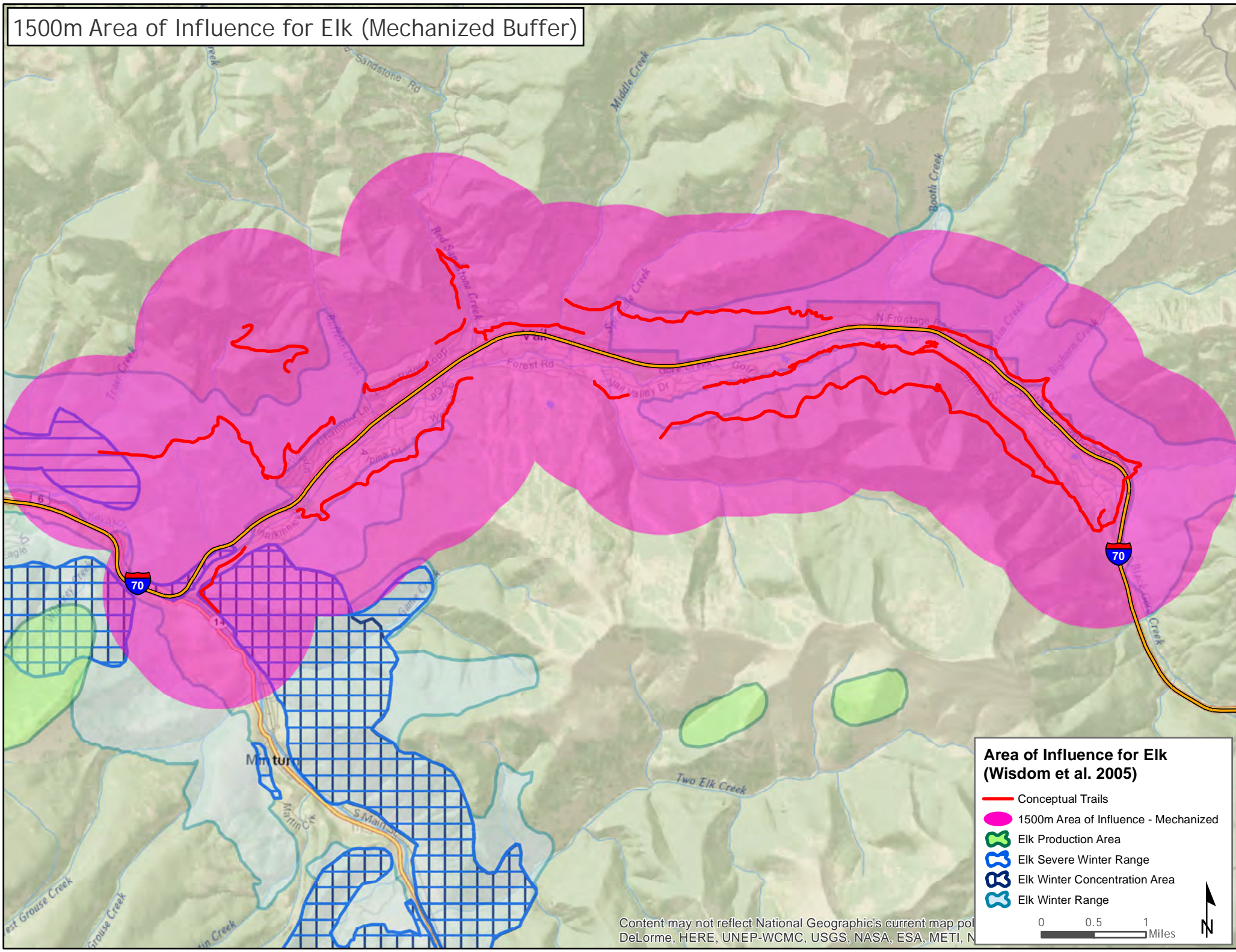
**Area of Influence for Elk (Wisdom et al. 2005)**

- Conceptual Trails
- 500m Area of Influence - Pedestrian
- Elk Production Area
- Elk Severe Winter Range
- Elk Winter Concentration Area
- Elk Winter Range

0 0.5 1 Miles

Content may not reflect National Geographic's current map policy. Data sources: DeLorme, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, N

# 1500m Area of Influence for Elk (Mechanized Buffer)



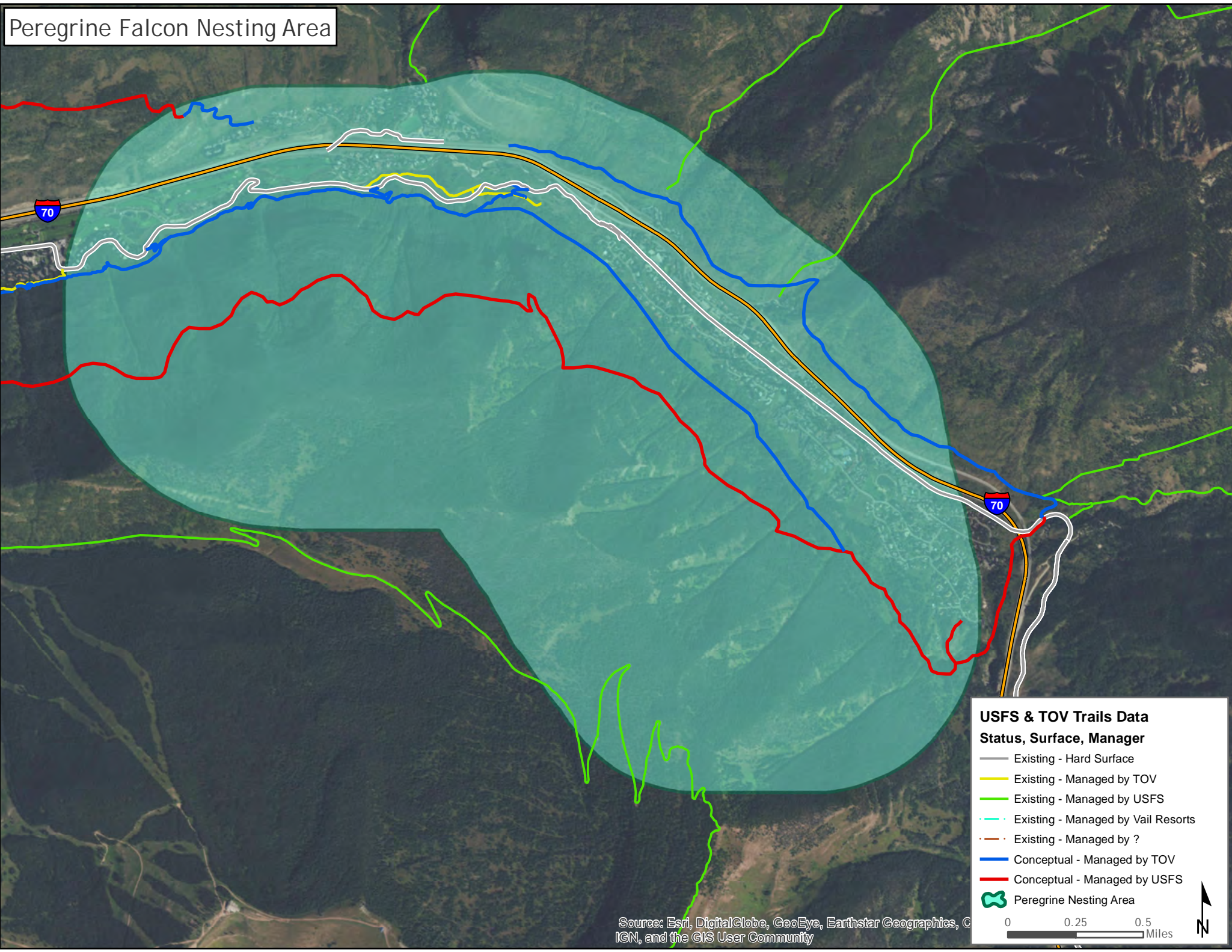
**Area of Influence for Elk (Wisdom et al. 2005)**

- Conceptual Trails
- 1500m Area of Influence - Mechanized
- Elk Production Area
- Elk Severe Winter Range
- Elk Winter Concentration Area
- Elk Winter Range

0 0.5 1 Miles

Content may not reflect National Geographic's current map policy. Data sources: DeLorme, HERE, UNEP-WCMC, USGS, NASA, ESA, METI, N

# Peregrine Falcon Nesting Area



**USFS & TOV Trails Data**  
**Status, Surface, Manager**

- Existing - Hard Surface
- Existing - Managed by TOV
- Existing - Managed by USFS
- Existing - Managed by Vail Resorts
- Existing - Managed by ?
- Conceptual - Managed by TOV
- Conceptual - Managed by USFS
- Peregrine Nesting Area

0 0.25 0.5 Miles

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNIGN, and the GIS User Community



## MEETING MINUTES

PO Box 2729 | 323 West Main St. Suite 201 Frisco, CO 80443

Office: 970.668.3398 | [www.segroup.com](http://www.segroup.com)

DATE: 09/07/17

PROJECT: Trails in Vail

SUBJECT: Community Scoping Session #1

LOCATION: Vail Community Development Building

### ATTENDEES:

<i>Name</i>	<i>Role</i>
Tom Vucich	Community Member
Blondie Vucich	Community Member
Pete Seibert	Community Member

### A Vision for Trails in Vail:

The participants seek a deliberate, limited trails plan for Vail. They want to improve the connectivity, congestion, and diversity of the existing system but don't believe that Vail can be all things to all people. The group envisions combining modest updates to the trail system with increased reliance on the regional network of trails. They suggest constructing a pilot trail in a non-controversial location before embarking on phase 2 of trail building.

#### Safety

Mitigating user conflict is a large concern for the group. They worry that attracting more people to Vail with an improved trail system would increase conflict.

#### Sustainability

The participants want the trails in Vail to maintain their natural character. They are concerned that overuse on existing trails is disturbing the environment. Some participants are apprehensive about new trails that would detract from Vail's pristine natural environment. Also concerns with soft-surface trails adjacent to existing paved trails as being redundant.

#### Accessibility

The participants raise numerous issues with the accessibility of the trail system. They have concerns with trail parking, providing a wilderness-esque experience for users, and accessibility for elderly, children, and beginning mountain bikers.

#### Diversity

The participants all feel Vail needs a greater diversity in the ability level of its trails. Given that mountain biking is a popular summer activity, the town needs a novice mountain biking trail (North Trail is overly technical). For the aging population, walking trails of beginner ability level are in high demand. One participant envisions Vail as a mountain biking community, requiring a substantial expansion of the trail system.



### Connectivity

The participants desire greater neighborhood access to local trails. They suggest smaller neighborhood trails rather than a large end-to-end trail connection. In building new trails, the town should focus on areas where there are not trails to provide greater access to the trail network.

### **Work Session**

Participants mentioned the following options for trails:

- Intermountain social trail as viable soft surface option
- Supportive of Intermountain to Lionshead Trail.
- Some participants were not in favor of formalizing the Vail Trail (easements, private property, USFS land) and felt it should be left as is.
- Felt that the East Water Tank Trail was too steep as is for an "easy" trail.

### Social Trails

Some are opposed to adoption of the social trails to prevent overuse by visitors.



## MEETING MINUTES

PO Box 2729 | 323 West Main St. Suite 201 Frisco, CO 80443

Office: 970.668.3398 | [www.segroup.com](http://www.segroup.com)

DATE: 09/12/17

PROJECT: Trails in Vail

SUBJECT: Community Scoping Session #2

LOCATION: Vail Municipal Building Conference Room

### ATTENDEES:

<i>Name</i>	<i>Role</i>
Ellen Miller	Community Member
Michael Hand	Community Member
Diane Johnson	Community Member
Mike Kloser	Community Member
Amy Parliament	Community Member
Axel Wilhelmsen	Community Member

### A Vision for Trails in Vail:

The participants want to prioritize maintaining existing trails and improving signage and environmental design before embarking on new projects. They are largely concerned with poor trail diversity and connectivity but are hesitant to build new trails to resolve those problems. Most are onboard with adding soft surface trails in the Town of Vail but recognize the obstacles to building easy soft-surface trails given the town's topography.

#### Safety

Participants express concerns about user conflict on trails with hikers and bikers but recognize the difficulty in establishing many rules with a significant visitor population. Some mention needs for safer lanes along roadways for pedestrians and bikers, especially for local children (East Vail, Aspen Road crossing I-70, Piney Road).

#### Sustainability

Participant with experience in trail building stresses the unsustainability of Vail's trail system. The steep grade of the trails makes them challenging to maintain and unsuitable for many of the visitors. Participants see making the Buffehr Trail more rideable with switchbacks as an opportunity for a sustainable trail. The group wants to protect the forests' gems as Vail Resorts mountain becomes "Disneyworld."

#### Accessibility

Participants voice a great need for more signage on Vail trails. Multiple participants bring up the Gore Valley Trail as incredibly difficult to follow particularly through East Vail. Better signage could warn of potential conflicts with wildlife and other user types.

### Diversity

Participants want trails for a variety of user types, ability levels, and lengths. One participant wants to make the Vail Trail a walking only trail and suggests new, easy, soft surface walking trails to make "valuable gems" accessible to elderly and children. Others complain about lack of easy mountain bike trails in Vail and the difficulty of exposing young riders to the sport here. Some suggest that mountain biking networks are better suited for down valley towns, places with more families and more forgiving topography. Turning various trails into loops would spread out riders and allow riders to customize ride for given day.

### Connectivity

Participants are frustrated with the difficulty of accessing and connecting local trails and locations in town. They want more convenient trail access points for hiking, biking to friends' houses, and trips to the market. Many in this group favor soft surface trail opportunities adjacent to paved trails. For visitors, participants want tourists to feel connected to Vail through greater opportunities to experience its natural beauty and interpretive signs that explain the history and features of the town.

### **Work Session**

Participants mentioned the following options for trails:

- Trails with coexisting hard and soft surface
- Trail up Bald mountain that leaves right from town as hiking only
- Lost Lake area as a potential soft surface trail area
- Adjacent path next to Piney Road to access the spaces up there
- Connection to Davos Road
- Increasing public access in Spraddle Creek Ranch for trails
- Making the Buffer trail more rideable and sustainable by creating switchbacks
- The North Trail, near Sandstone, is incredibly steep, forcing people to turn around. By improving the grade, more trail users would make the loop, reducing bottlenecks.
- Creating short soft surface loops by Beaver Ponds (Katsos Ranch area) that are easily accessible from paved paths
- A spot near the berms as a great place for a small pump track or flow track and is near a bus stop
- Concerns with mountain bike activity near the Memorial Park
- This group has trail building and maintenance experience for many years and feels they can be a resource in the future

### Social Trails

Participants have conflicting attitudes on the social trails. One participant believes residents are properly taking care of the trails and does not think the Forest Service would seize them. Another hopes Vail's demand for trails could be fulfilled with other trails, leaving social trails for locals. In opposition, another thought the social trails could alleviate the overuse on official trails. Participants ask Gregg whether the town could maintain social trails and he calls it feasible.



## MEETING MINUTES

PO Box 2729 | 323 West Main St. Suite 201 Frisco, CO 80443

Office: 970.668.3398 | [www.segroup.com](http://www.segroup.com)

DATE: 09/12/17

PROJECT: Trails in Vail

SUBJECT: Community Scoping Session #3

LOCATION: Vail Municipal Building Conference Room

### ATTENDEES:

<i>Name</i>	<i>Role</i>
Alan Danson	Community Member
Pam Stenmark	Community Member
Andy Forstl	Community Member
Kim Newbury	Community Member
John-Ryan Lockman	Community Member

### A Vision for Trails in Vail:

The participants want Vail's trails to be a great town amenity to meet the hiking demand from guests and locals. Yet they recognize that Vail cannot be a trail mecca and must take advantage of regional assets. With trail improvements, participants believe that the priorities must be accessibility and connecting trails to town to alleviate parking and overcrowding issues.

#### Safety

Participants present user conflict on existing trails as a significant issue. One participant expresses an immediate need to make Vail Trail pedestrian only because "mountain bikers are scary." Participants mention dogs and electric bikes on the Gore Valley Trail as an additional concern. A participant offers Whiskey Creek Trail in Minturn as an example of a trail with minimal conflict. Lack of safe biking routes to school are also a major concern.

#### Sustainability

Participants worry about the environmental impact of new trails. They prefer improving maintenance of existing trails and keeping the trail system close to the valley floor to minimize environmental impact. Most participants deem soft surface trails parallel to hard surface trails wasteful and hard on the environment.

#### Accessibility

Participants believe increasing signage and trail information would alleviate trail overcrowding and confusion. As possible solutions, they mention readily provided detailed trail maps, information about nearby trails at frequently crowded trailheads, and better education for hotels and websites about the variety of trails in the area. Consistent signage between the town and resort could improve connectivity and disperse visitors. Additional wayfinding, educational, and trail etiquette signs are inexpensive options.

### Diversity

Participants express interest in greater trail diversity to alleviate current overcrowding. They suggest more (or greater awareness of) intermediate and accessible trails to minimize crowding on Booth Falls trail. Despite the town's steep topography, participants still feel that the town must provide greater options for families.

### Connectivity

Participants want greater connectivity between town trails, residential areas in Vail, and nearby towns. By connecting biking and hiking opportunities to bus stops, people could park centrally and access more trails, reducing congestion on trails and in parking lots. Participants suggest greater continuity between Vail Mountain trails and town trails because visitors don't conceptually separate the two. A participant working in a local hotel calls connectivity incredibly important to guests, as seen in the popularity of the Berrypicker Trail that begins in Vail Village. Multiple participants mention trail connectivity with nearby towns as practical and a potential draw like the Rio Grande Trail that connects Glenwood Springs to Aspen.

### **Work Session**

Participants mentioned the following options for trails:

- Maintenance on the Matterhorn trail, largely a skiing trail, could open it to hiking
- The Spraddle Creek trail, near the hotels, needs better maintenance to become a hiking trail
- A loop trail for hotel guests above I-70 on town land behind school as an accessible option
- Extending Bald Mountain trail to be an in-town hiking option
- Pump track at Donovan Park
- Trail for East Vail heading up the mountain

### Social Trails

Participants are in favor of adopting the social trails. They see it as an untapped resource to disperse tourists. The Water Tank Trail could be a nice place for East Vail residents to walk.



## MEETING MINUTES

PO Box 2729 | 323 West Main St. Suite 201 Frisco, CO 80443

Office: 970.668.3398 | [www.segroup.com](http://www.segroup.com)

DATE: 09/14/17

PROJECT: Trails in Vail

SUBJECT: Community Scoping Session #4

LOCATION: Vail Community Development Building

### ATTENDEES:

<i>Name</i>	<i>Role</i>
Pete Cope	Community Member
Brian Rodine	Community Member
Matt Carroll	Community Member
Siri Roman	Community Member
Nancy Rondeau	Community Member
Bill Hoblitzel	Community Member

### A Vision for Trails in Vail:

The group has a very strong pro-trails vision and great frustration with hurdles to the trail-building process. The participants are enthusiastic about the idea of a soft surface loop trail through the town to improve safety and connectivity. They envision the loop trail dramatically opening up options for midday walks, runs, and rides. Some believe Vail can be a mountain biking mecca with a well-maintained, diverse system while others recognize a lack of potential full-day opportunities.

### Safety

The group has safety concerns on all types of thoroughfares in town. Participants find roadway biking, especially in the roundabouts, incredibly dangerous. On the Gore Valley Bike Path, headphone use and dogs on long leashes are making the route a "nightmare" for commuting cyclists. Soft surface trails also have user conflict between bikers and hikers and more separation of user groups seems necessary.

### Sustainability

The group wants a sustainable trail system but has frustrations with environmental hurdles. They are interested in employing a town trail crew, like Breckenridge, to better maintain the system and minimize disturbances. They are concerned with diminishing wildlife habitat and roadkill but do not want wildlife considerations to be the sole consideration in designing a trail system. Some complain about the approval of development projects in wildlife habitats while trails, with far lesser impact, are rejected. Others suggest building wildlife corridors over/under the interstate as a trade-off for building new trails.

### Accessibility

The group has some minor concerns with the difficulty of following the Gore Valley Trail and suggest better signage and striping.

### Diversity

Participants, especially those directly involved with the tourism industry, state a serious need for more intermediate/beginner soft surface trails. Those trails could offer a natural tour of the valley for visitors wanting a mountain experience. Those soft surface trails could also offer another commuting route for locals, a route to school for kids, and easier trails for older residents.

Some believe that terrain is not the obstacle to a diverse trail network, as other towns overcame their topography with funding and commitment. Towards funding, they suggest using more town tax dollars on the trail system.

### Connectivity

The lack of connectivity of Vail's trail system is the participants' primary complaint. One threatens to leave Vail if the system did not improve. The group makes frequent comparisons to the connectivity of soft surface rec paths in other towns (Crested Butte, Telluride, Steamboat, Santa Fe). Those trails offer frequent access points to homes, schools, parks, and shops. The participants were all in favor of a valley loop trail with many feeder paths to villages. They also suggest a bike path to Minturn and more trails down from Vail Mountain to curb driving to hiking and biking excursions.

### **Work Session**

Participants mentioned the following options for trails:

- The Matterhorn Trail – needs more maintenance as it is largely washed out and could use more switchbacks
- Better connector to existing trails from Stephens Park
- New loop trail sufficiently elevated to be away from the interstate
- Rely on the mountain to build easier trail loops
- Trail down from Two Elk Trail to East Vail
- Connector trail to Booth Creek trailhead from Vail Village

### Social Trails

The group supports adopting the social trails and is frustrated with people who oppose adoption because they don't want to share their trail.



## MEETING MINUTES

PO Box 2729 | 323 West Main St. Suite 201 Frisco, CO 80443

Office: 970.668.3398 | [www.segroup.com](http://www.segroup.com)

DATE: 09/18/17

PROJECT: Trails in Vail

SUBJECT: Community Scoping Session #5

LOCATION: Vail Community Development Building

### ATTENDEES:

<i>Name</i>	<i>Role</i>
Anne Esson	Community Member
Diana Donovan	Community Member
Ernest Saeger	Community Member
Joe Hanlon	Community Member
Matt James	Community Member

### A Vision for Trails in Vail:

The participants, considering the town's financial constraints and crowding on existing trails, do not agree on whether new trails are appropriate for Vail. All participants are concerned with the environmental and wildlife impacts of new trail developments and want new trails to be sustainable and minimize such impacts. The group agrees that Vail cannot be a trails destination but a strong trail system should be an amenity for locals and visitors. The group largely believes that the Town must lead the system improvement because the resort has little incentive as the trail system does not bring in revenue. Overall, they believe that Trails in Vail must be a strategic process that fills system gaps rather than builds haphazardly.

### Safety

The group is concerned with congestion, user conflict, and potential accidents on crowded bike paths and roundabouts. They suggest better signage, public education on trail etiquette, and potential bypasses of busy intersections. The participants also have concerns about e-bikes, though none feel it is an immediate problem in Vail. They worry about e-bike riders going too fast, riding where they are unprepared, and degrading the trail surface.

### Sustainability

Sustainable trails are of prime importance to this group. Participants want the trails in the system to be at a lower grade to make it easier and cheaper to maintain trails. Considering new trails, they suggest soft surface trails given their lesser environmental impact. They believe a natural style trail design could be Vail's signature. The group also agrees that seasonal closures will be necessary for any new trails over the next 10 years. Some participants oppose new trail construction at all because of wildlife considerations.



### Accessibility

The participants had few concerns about the accessibility of the trails themselves but believe that better signage and education could improve everyone's trail experience. To make the trails accessible and enjoyable for riders and hikers, they suggest signs explaining rules of the trail and involving bike shops to educate unfamiliar riders.

### Diversity

The participants largely want to make Vail a better place to ride and walk for beginners, children and older users. Participants, especially the parents in the group, complain about the lack of easy trails for those user groups. Easier paths could also divert congestion from existing trails like the Gore Valley Trail and Booth Falls Trail. Participants express interest in a pump track as those in other towns are incredibly popular with children and families. One participant criticizes using children to justify new trails.

### Connectivity

The participants feel that new trails must be designed to improve connectivity of the system. There is interest in the loop trail from the 1994 Open Lands Plan as it connects the entire town. Given that the 1994 plan is largely unfeasible, participants suggest making smaller connections and loops in town to reduce congestion.

### **Work Session**

Participants mentioned the following options for trails:

- A diversion trail to keep people away from Memorial Park
- A connector loop trail around town
- A connector trail between Davos and Avon
- A trail for East Vail
- North side trail between Middle Creek and Booth Creek
- Improving the sustainability of the Buffehr Trail
- Soft surface connection between Lionshead and Intermountain
- Open to the idea of a novice trail loop on the upper bench of Donovan Park

## **Town of Vail Community Wildlife Forum**

Sponsored by Town of Vail and Vail Symposium

January 18, 2018

### **Panelists:**

Bill Andree, Colorado Parks and Wildlife

Rick Thompson, Western Ecosystems Inc.

Kelly Colfer, Western Bionomics LLC

Jen Austin, U.S. Forest Service

Rob Levine, Moderator

Each panelist opened with an approximately 10 minute presentation.

### **Bill Andree, CPW**

Bill Andree began with a presentation on the state of wildlife in Gore Valley. Bill described results of his experiences monitoring deer and elk populations from helicopter over his decades-long career. Bill identifies a dramatic decline in elk beginning in 2002. In unit 45, elk numbers counted from helicopter surveys dropped from close to 1000 in 2002 to 61 animals in 2016. Bill also delves into calves per 100 cows, an important number that indicates population numbers. In the 1980s and 1990s, herds had about 60 calves per 100 cows. That number dropped closer to 30-40 calves per 100 cows from 2009-2016.

Bill attributes much of these declines to human disturbance and offers results from a human disturbance study completed in Eagle County. Cow elk hunting licenses after 2012 were reduced by 75% in an effort to stop this disturbing trend, but population declines continued.

Mule deer populations in the Gore Valley have also seen declines in recent decades. Due to growth in human population, recreation and development, population objectives set by CPW were reduced from 26,000 in the early 1980s to 13,500-16,500 in 2008. Mule deer populations are currently steady at the upper end of that objective range but this still represents a reduction of about 35%.

Bill then addressed the East Vail bighorn sheep herd. The herd was about 30 in the 1950s, 80-100 in the 1990s and the population dropped after a difficult winter in 2007-08 to about 40 sheep. Even without hunting of this herd, CPW has not been able to get the herd to grow above about 40 animals. Bill attributes this to habitat loss and disturbance from humans.

Bill then addresses bear-human conflicts in the Gore Valley. Conflicts have increased steadily since the early 1990s, when bear-resistant garbage cans began to be introduced in CO. CPW received over 350 phone calls about nuisance bears or bear-human conflicts in eastern Eagle County in 2017.

Statewide bear population numbers were estimated at 8,000-12,000 in the 1980s. In 1991, CDOW estimated 10-12,000 bears. Today, CPW offers a conservative estimate of 17,000-20,000 bears statewide. This represents a near doubling of bear populations in approximately 40 years.

Mountain lion calls in Eagle County have also increased in recent years, from 11 in 2015 to 64 in 2017. The best population estimates Bill can offer on mountain lions comes from hunter harvest data. In 1980, 81 mountain lions were harvested, in 2001, 439 were harvested. Lions, like bears, have begun to see human communities and the dogs, cats, raccoons and foxes that live there as good food sources.

Gore Range mountain goats have begun declining precipitously from 120+ in 2010 to about 60 in 2017.

Moose are a success story in Vail and statewide. They first showed up in Vail around 1983. They are less prone to human disturbance than other wildlife species. Human conflicts are beginning to increase as moose populations grow and because many people do not realize what dangerous animals they can be and approach them for photo opportunities.

Finally, peregrine falcons breed successfully in Eagle County in most years, however populations have not increased above two nesting pairs in the upper Eagle Valley, one in East Vail and one in Minturn.

#### **Rick Thompson, Western Ecosystems, Inc.**

Rick Thompson steps to the microphone to discuss habitat connectivity in the Gore Creek and Eagle River drainages. Rick defines “viable connectivity” as sufficient to allow a population of wildlife” to access all seasonal habitats within its home range.” Most of his research addresses wide-ranging species like deer, elk and lions. Migration corridors designed by humans need to be of sufficient width for target species to use, for elk that needs to be 700-800 feet wide in forest, or 1,000 to 1,200 feet wide in open habitat. Rick describes a successful collaboration with Cordillera golf course designers to incorporate a wildlife corridor into that golf course which elk have been using since the 1990s.

However, habitat connectivity requires more than narrow habitat corridors. True connectivity requires resting and bedding areas along migration paths which are difficult to carve out in a valley with increasing human populations and expanding development.

Different species are impacted differently by development. Typically, larger animals with a larger range are more adversely impacted by development and direct habitat loss is only one impact of development. Animals may avoid areas where humans are present even if those areas have not been developed (trails, popular recreation areas, ski resorts). Road kill impacts wildlife populations. Displaced animals often move to other areas and compete with local animals there. The cumulative impacts of all these factors begins to explain declines in wildlife populations that Bill Andree described in his presentation.

Rick has a process for assessing wildlife impacts of developing a specific parcel and how those impacts can be mitigated. In his opinion, the ideal approach involves avoiding and minimizing impacts to wildlife and compensating for impacts that cannot be avoided. In reality, this is an ideal approach, not one that can be implemented completely on any given parcel. Rick recommends minimizing wildlife impacts by locating development in non-native or lower value habitat, closer to existing disturbances such as I-70.

He recommends increasing density of human development and concentrating impacts within existing town boundaries and already-developed areas. It's better to develop old hayfields than to develop existing wildlife habitat. There is also value to concentrating development in the corner of a parcel while leaving much of a parcel undisturbed for wildlife habitat. Local governments and town planners can also discourage tree and vegetation removal on parcels being developed. Buffers between human development and wildlife habitat and migration corridors can also minimize impacts of development to wildlife. Minimizing fencing can help preserve wildlife corridors and facilitate movement as well. Finally, Rick recommends wildlife management plans for communities that protect wildlife from disturbance from pets, include education and outreach to residents, bear-resistant trash container requirements and landscaping strategies.

Rick also encourages developers and homeowners to take responsibility for enhancing habitat to "compensate" wildlife for habitat loss through revegetation, fertilization of wildlife habitat and wildlife friendly fire management.

### **Kelly Colfer, Western Bionomics LLC**

Kelly begins by discussing the impacts of recreation to wildlife. The primary issue is energetic costs to wildlife when disturbed by humans. They burn calories when they run away and spend time fleeing rather than feeding. Disturbance extends beyond the edges of a trail or road. The estimated zone of disturbance, within which wildlife are likely to change their behavior due to human presence, varies from species to species. Factors such as frequency of human presence, time of day of human presence, type of recreation and vehicles also affect the likelihood that wildlife will be disturbed. Animals are more disturbed by unpredictable encounters such as off-trail hiking. Some animals may habituate to human presence on trails, but some studies have shown that elk, in particular, may not habituate to disturbance.

Trail and road construction can also lead to introduction of noxious weeds and reduce the value of forage in wildlife habitat. Removal of dead trees and snags can eliminate breeding habitat for cavity nesters such as woodpeckers.

Studies have come to conflicting conclusions about the different disturbances caused by bikers and hikers. Kelly sites two studies, one which concludes that bikers and hikers both disturb deer and elk in a radius of 200 meters. A second study concludes that hikers disturb wildlife out to 600 meters and bikers out to 1500 meters. Kelly argues that there is a difference in how hikers and bikers impact wildlife, but cannot offer conclusive evidence of what specifically that difference is. Dogs can also be a major disturbance to wildlife, especially in calving areas.

Winter range availability is the primary limiting factor for elk and deer, but transition ranges in spring and fall are also very important. Elk need to begin the winter with fat reserves equal to 9% of total body mass to survive the winter. Recreation in the fall can disturb grazing and impact the ability of deer and elk to fatten up. An animal's flight response, especially in the winter, can have major impacts on survival rates. Kelly recommends winter trail closures to protect wildlife from disturbance.

Hawks and owls also have a wide disturbance buffer of about 0.5 miles during nesting season. It is crucial to think of nesting habitat when locating and constructing new trails. Trail construction also impacts endangered boreal toads through habitat loss and spread of fungus.

Kelly concludes by emphasizing the importance of trail closures on winter range and in calving habitats.

### **Jen Austin, USFS**

Jen sees her role as more of a habitat manager and leaves direct management of wildlife populations to CPW.

The National Environmental Policy Act (NEPA) requires an assessment of the impacts of a project before it can begin to be implemented. Forest service staff strives to ensure that the project will be in line with state and federal regulations and the District's own management plan. The process involves an interdisciplinary team from the USFS that may include foresters, wildlife biologists, fisheries biologists and others depending on expected impacts of the project. This team looks for red flags to protect habitat and wildlife, such as whether there is an active raptor nest in the proposed project area. If data is absent, new studies may need to be done to help inform the decision-making process. The project can be contained and buffered to protect wildlife habitat, nests and other resources. The interdisciplinary team uses the best available science and public input to estimate what impacts of a given project will be on wildlife populations and individual animals.

**How are animals impacted by human interface or activity, particularly in ways that may not be evident to a casual observer? For example, if an animal doesn't immediately flee at the site of a human, are there impacts? What are they?**

Bill Andree: Generally, if an animal changes its behavior, you're too close. What is less obvious is the stress response of the animal. Stress increases heart rate and calorie output. Even if it doesn't change its behavior, you may have disturbed that animal. Some ungulate spend as much as 90% of their time resting to conserve calories. The act of standing up increases calorie output by 25% compared to lying down. Impacts increase when animals are in poor condition. This includes females in spring who are in the last trimester of pregnancy.

Kelly Colfer: Ads that animals that don't flee may show signs of habituation, especially concerning species like bears, mountain lions, moose and coyotes that may cause human conflict.

Rick Thompson: Big game on winter range are already starving. They are in a caloric deficit and depend on their fat reserves because adequate forage is not available. Elk have about 75 days of fat reserves to get through the winter. Animals are less likely to respond to disturbance (flee) when snow is deep, weather is cold, forage is scarce, or fat reserves are dwindling.

Jen Austin: Flushing a bird has impacts on nesting birds, predation, nest parasitization etc.

**What does the research show about the different impacts of urban development such as housing vs. the impacts of recreation such as the development of trails. And how do you measure those impacts? And how reliable and valid are the available studies?**

Rick Thompson: Concludes that urban development has the greater impact. Habitat is permanently lost 24/7. Recreation impacts are mostly diurnal disturbances and direct habitat losses associated with trails are generally insignificant. Wildlife avoid the disturbance, not the trail. Even if hikers and bikers have the same disturbance, bikers travel farther so they likely encounter and disturb more wildlife in a given unit of time.

- Recreationists rarely view themselves as having a degrading impact on the environment.
- Management plans attempt to allow coexistence
- Managers know what works, what doesn't and why
- When trail siting and management don't work, the trail and associated wildlife impacts generally remain
- It is rare for trails, once built, to be decommissioned even when negative effects are known and documented.

Bill Andree: Housing development has an impact on wildlife. Study from 1980 to 2010 showed that housing had a higher impact on wildlife than energy development. Mule deer populations are declining as a result of development across the west. Local study shows impacts from recreationists in Dowd Junction. Studies don't necessarily show the impacts of recreation on the scale we see in this valley, no nighttime activity, smaller groups of people etc. Studies are valuable but are not complete. Ninety-three percent of studies concluded an impact to wildlife from recreation. Fifty-nine percent showed negative impact to wildlife. Positive impacts were usually to corvids, rodents etc. "It doesn't matter how you recreate. If you're out there, you have an impact."

Jen Austen: The impact of dogs and cats must be taken into account. Cats are major predators of native wildlife. Need for more research on large landscapes and research on interactive impacts of different disturbances. Studies also focus more on wildlife behavior than on population-level impacts. Studies also often lack a "control".

**We know that the decline in wildlife populations I soften described as "death by 1,000 cuts," all these little impacts just adding up. However, is there a last straw to sustaining wildlife populations? If so, what is it?**

Rick Thompson: Rick is not sure there is a last straw for the species being addressed here. These species are not at risk of extinction or extirpation from Eagle Valley. But declines in habitat availability and habitat effectiveness are likely the biggest factors, especially if exacerbated by a harsh winter. Other major causes are habitat fragmentation, disease, predation and road kill.

Kelly Colfer: Thinks we can avoid the last straw by planning with wildlife in mind, by maintaining corridors and critical habitat.

Bill Andree: Believes there is a last straw. Habitat loss is the first that comes to mind. It's ok in our culture to pen in wildlife, but we need to begin to contain human development as well. Most big game species are in decline in this valley. Is that what we would call sustainable?

### **What tools do we have to protect wildlife from the impacts of recreation development?**

Bill Andree: The tool is avoidance. Avoid the impact when possible, minimize the impact otherwise. Mitigation is a fallback. Conservation easements and fee title are also tools, but they are expensive and not necessarily ideal mitigation techniques due to distance. Finally, seasonal closures are an important tool. The problem is that people don't follow those rules. "Place first" idea from *Outside* magazine: maybe we need to begin to set aside areas for wildlife and stay out of those areas. "What we do is a luxury, those animals are just trying to survive."

Kelly Colfer: Developers want to maximize revenue. Routt County uses a valuable planning tool to incentivize developers to set aside land for wildlife habitat.

Jen Austin: Support local corridor and connectivity planning projects, help fund these programs. USFS put a couple of wildlife cameras on the North Trail in Vail. Showed over 200 people used the North Trail in a span of 10 days during elk calving closure.

Rick Thompson: Education is the key tool, especially for planners. Wildlife should be considered early in the planning process. Any development, even optimally designed, contributes to decline in wildlife habitat. Seasonal closures must be enforced.

### **How would you rate the effectiveness of existing wildlife corridors in Vail?**

Bill Andree: The Dowd Junction underpass was one of the first developed in CO. We've learned a lot from it. It's not that effective because of its design but we're better off with it than without it. East Vail span bridges are very effective and should be recreated later.

Jen Austin: Fencing to direct wildlife to passages is crucial.

Bill Andree: Fences are really built to protect motorists, not wildlife. However, they can save 25-30 elk per year in the Edwards-Avon stretch alone. Lack of movement across the highway can have an impact on access to seasonal habitats and genetic diversity within populations.

Rick Thompson: West Vail Pass bridges are very effective for all species. It's important that eastbound and westbound bridges be adjacent as they are on West Vail Pass, as contracted to offset bridges on East Vail Pass. Vail Pass is the best example in the Southern Rockies of wildlife passages across a highway. They are very costly though.

### **What are some examples of communities that have thrived alongside wildlife populations and what can we learn from those examples?**

Bill Andree: The best thing that's worked in some places is to purchase and set aside a big chunk of private land for wildlife. Manage these areas specifically for wildlife and minimize recreation.

Concentrating animals in a location like that can increase risk of disease being spread. Animals can also have an impact on habitat and resources when concentrated in an area and concentrating prey species can also attract predators.

Kelly Colfer: Conservation easements can be effective and have not been thoroughly discussed in this forum. It's a win-win for wildlife and property owners.

#### **What caused the demise of the Minturn elk herd?**

Bill Andree: Primarily the number of people but increase in predator populations on elk calves also had an impact. Predators alone wouldn't have that impact alone, it's compounded by increased human development and recreation disturbance.

Rick Thompson: The best winter ranges are on south facing slopes at lower elevations. That leads to a natural conflict with human development. Winter ranges are the most important habitats to protect, but summer, breeding and transitional ranges are all important to protect.

#### **Winter range is a limiting factor for wildlife, but how has expanded recreation in Colorado impacted summer range?**

Bill Andree: Wildlife love the high alpine country on Grouse Mountain, Homestake and Camp Hale in the summer.

#### **What can the Town of Vail do to protect wildlife habitat in our community?**

Rick Thompson: Migration corridors within the town boundaries would be valuable. Be an active stakeholder and participant to protect bighorn sheep range in East Vail. The winter range could be better managed. There is an enormous need to protect the mud springs underpass for mule deer migrations, especially from development on private property to the north.

Bill Andree: For what's left in the Gore Valley, he's not very optimistic. Vail should look beyond its borders and seek out conservation easements and fee title purchases on wildlife range outside Gore Valley. We also need to begin to set areas aside for wildlife and stop fragmenting the small patches of habitat that remain within the town limits. And protect the mud springs underpass in Dowd Junction for mule deer migration.

Jen Austin: Conservation easements to protect remaining habitat and support for Eagle County Safe Passages Project. Finally, support for the seasonal closures.