Vail Pass Winter Recreation Area Season Report 2015-2016

The following report is an in-depth review of the use activities and management operations that took place at the 55,000 acre Vail Pass Winter Recreation Area (VPWRA) during the 2015-2016 winter season. Comments included in this report are directed towards improving the overall management of the area. Also included in this report are statistics and use patterns observed at Vail Pass throughout the winter season as well as recommendations for achieving a high quality and sustainable recreational experience into the future.

For 22 weekends, the Vail Pass trailhead was staffed by the Forest Service to sell day passes, manage parking, provide law enforcement, and to disseminate backcountry information to the public. The Forest Service staff plowed snow at the trailheads, restocked passes and maps, collected fee's and performed compliance checks at the Vail Pass trailhead 7 days a week throughout the season.

Fees were collected from November 27, 2015 until April 23, 2016. Day use passes were \$6.00 per person and season passes were sold for \$40.00 per person. Season passes were available for purchase at the Dillon Ranger District, the Eagle/Holy Cross Ranger District in Minturn, the Vail Pass fee collection booth, and through self-pay fee envelopes at three trailheads. Self-pay envelopes were available at all trailheads when Forest Service personnel were not present.

The US Forest Service staff for the VPWRA for the winter 2015-2016 was comprised of program manager Ken Waugh, lead backcountry snow ranger Jon Hare and backcountry snow rangers Marcus Dreux and Teddy Wilkinson. The VPWRA volunteer program continued this winter with 4 volunteers – Keegan Axtell, Robbie Layman, Joe Napolitan, and Andy Russo.

• Signage

Signs, groomed and poled routes, informational trailheads, and separation of use are of the utmost importance in managing multiple user groups with competing interests on public lands at the VPWRA. The signage plan for the area has been continually updated over the years to address areas of common motorized trespass, to engineer the best methods to deter trespass, and to enforce the boundaries throughout the season. Though it is impossible to sign all non-motorized boundaries, the staff has found the VPWRA signage plan is a strong deterrent for motorized trespass into non-motorized areas.

With staff having a heavy workload at the trailhead, in the shop, and administratively – backcountry patrols have become less frequent and the signage allows for most users to stay in areas open to snowmobiles. The signage plan puts visible boundaries in place over the snow using 6 foot orange poles, 6 foot orange poles with "no snowmobile" signs on them, blue snow fencing, "stay on designated route" signs, and large 2' x 2' wooden "no snowmobile" signs on 6 foot posts,

A signboard with a fee schedule and map is located at each entry point trailhead (Vail Pass, Pando, Camp Hale, Camp Hale South, and Red Cliff, Uneva Peak CDOT Sandshed, and Uneva Peak Exit 190 trailhead). Signboards with a map can also be found at Shrine Pass, Lime Creek Road, the bottom of Wearyman Road, and the beginning of Shrine Pass Road.

The use of "No Snowmobile" signs at critical non motorized closures to discourage snowmobile encroachment has been effective in certain locations, yet other locations continue to see motorized

encroachment. These closed areas provide buffers for 10th Mountain Division huts, protect hybrid skiing terrain and ski area boundaries, historic ski routes, and preserve wildlife corridors.

Signage is posted throughout the area but mostly concentrated to these specific locations - the northeast portion of Wilder Gulch, Commando Meadows, the Cat III road, the "steep shot" below Pete's Express lift at Vail Mountain, the "Pinch" (S-SW of Shrine Mountain Inn), lower Machine Gun Ridge, Ptarmigan Pass, Boss Basin hybrid area, Shrine Ridge, Smith Gulch, Tele's, and Black Lakes Ridge.

In addition to area signage, the USFS rangers have also created signage for the Vail Pass trailhead to delineate "overnight hut user parking", "day use non-motorized parking", a search and rescue area for when incidents occur, and motorized parking on Black Lakes Road. Signage and directions for where to park at the Vail Pass trailhead does have room for improvement in the future as many users struggle to understand the parking strategy, unless a ranger is present to give them direction.

The USFS ranger's posted and maintained approximately 750 orange poles, 90 signs, and 5 snow fences across the 55,000 acre area this winter.

Maps

Over 5000 VPWRA pocket maps were distributed free of charge to area users during the winter of 2016. Maps are provided to users as a key method to provide information about boundaries, services, and emergencies in the area. Maps were offered for free at all fee collection points. Maps are purchased by the US Forest Service with funds generated by the user fees in the area. At the end of the 2016 winter there are approximately 5000 maps in the program inventory.

Compliance

Over the years, it has been found that the most effective manner to educate users and enforce the rules and regulations of the VPWRA is to have USFS backcountry rangers actively patrolling the area and making user contacts in the field. Areas which see the highest level of use include Black Lakes Ridge, Wilder Gulch, Resolution Road, Ptarmigan Pass, Shrine Bowl, Shrine Pass, and the Lime Creek drainage. The entire 55,000 acre area is patrolled as frequently as possible to maximize Forest Service presence. The field patrol plan is flexible and subject to change due to weather, avalanche conditions, search and rescue operations, and availability of qualified personnel.

USFS staffing levels have fallen since 2009 while workloads and visitation have increased. This has resulted in staff devoting more time to snow removal, parking management, fee administration, and trailhead law enforcement. On several busy weekends this winter – it was observed that while USFS staff used all available resources to manage the Vail Pass trailhead – there were many user conflicts and motorized trespasses occurring in the backcountry.

This winter, three Forest Service Forest Protection Officers (FPO) Hare, Dreux, and Wilkinson wrote 15 violation notices, 22 written warnings, and made thousands of educational contacts at the trailheads or in the backcountry.

Violation notices were issued for snowmobiles in non-motorized areas on East Ptarmigan Hill, the Tele's ski terrain on the west side of Wilder Gulch, Shrine Mountain Huts non-motorized area, and Black Lakes Ridge. Again this winter, there was evidence of motorized encroachment into non-motorized areas almost every day of the season.

With many novice riders and unguided rentals in the area – quite a few instances of motorized trespass occurred because the operator did not have control of the machine or the experience to navigate the terrain. In this situation, USFS rangers do their best to determine the intent of the rider, help facilitate getting the machine back to the trail, and to educate the user about the boundaries.

According to USFS policy and direction – it is the Forest Protection Officer's discretion whether the situation mandates a violation notice, warning, or education. The safety of the employee is of the utmost importance when making law enforcement contacts with groups in the backcountry, especially when deep powdered snow makes it difficult to quickly leave an area or protect against an immediate physical threat. US Forest Service policy mandates that FPOs avoid or immediately terminate contacts with groups when personal safety is a concern, or drugs/alcohol/firearms are visible or suspected.

Violation notices were issued for failure to pay the day use fee, while many contacts were made in the backcountry with users who had failed to pay at the trailhead. When rangers encounter a user who has not paid at the trailhead – every attempt is made to determine their experience in the area and to determine if education or enforcement is the best approach. Typically users who have not paid the fee are required to pay the day use fee and are educated about how fee dollars are used in the area.

Several warnings were also issued for snowmobiles, trailers, and snow cats left on National Forest Lands without a special use permit. In some cases, equipment was left on National Forest Lands because of mechanical problems or emergencies that occurred in the backcountry, in other cases the owners were notified about the regulations pertaining to leaving personal property at the VPWRA and were asked to remove their possessions at the end of each day in the future.

The rangers make every effort to use education, boundary engineering, and/or warnings to facilitate compliance with the public and try to use violation notices when the offense is intentional, repetitive, malicious, or having a negative impact on VPWRA resources. This strategy has helped to raise the level of compliance and to foster a good relationships between the USFS, the VPWRA, and the community. Given the growing number of users that visit the VPWRA each winter – the need for education and law enforcement within the area will continue to be on the rise.

• Unguided Snowmobile Rentals

Since 2000, there have been several companies that have developed to meet the public's desire for unguided snowmobile rentals. Currently, NOVA Guides offers unguided snowmobile rental from private property at Camp Hale and Colorado Backcountry Rentals provides unguided snowmobile rental from private property in Red Cliff, while several other companies (High Altitude Moto, Rocky Mountain Adventure Tours, Fun For You Rentals, Extreme Rentals, etc.) are renting vehicles, trailers, and snowmobiles from locations across the state that allows a person to come to the area without a guide, unload rental snowmobile, ride, and load the trailer at the end of the day independently. These rentals vary from half day to multiple day rentals.

The USFS has been proactive in trying to contact these companies when made aware of their operations and to provide the companies with instructions about how to operate without providing services to their customers while the customers are on National Forest Lands. Despite this effort, several violation notices were issued to unguided rental companies for "providing services on National Forest Lands without a Special Use Permit" (16 USC 551; 36CFR 261.10(k)).

• Parking/Traffic

Over the past 5 years, the US Forest Service staff at the VPWRA has put significant effort into the relationship with the Colorado Department of Transportation (CDOT). Working with CDOT employees, an informal agreement is now in place where the USFS staffs a plow truck 7 days a week at the Vail Pass trailhead to clear snow from the parking area each morning, while CDOT arrives with heavy equipment several times each month to push back snowbanks and manage snow away from certain areas. This has

been a successful strategy for several winters – but it will be important in the future for the USFS and VPTF to cultivate relationships with CDOT management and operators to continue this partnership.

The Vail Pass Trailhead/Black Lakes Road filled to capacity approximately 10 times this winter. Efficient parking and space usage at the Vail Pass trailhead is imperative - when the Black Lakes parking area reaches capacity, users are given the option to wait for a spot to vacate (creating congestion and hazardous waiting lines), drive to Camp Hale to use an alternate trailhead, or go to a different recreation area.

After each storm cycle this winter, the USFS staff went to Camp Hale to remove snow from the 3 trailheads located on Colorado Highway 24. This was an effective strategy to get the work done yet this challenge still has room for improvement in the future.

At the beginning of the season, local CDOT employees at the Sand Shed located just west of Vail Pass exit 190 asked USFS staff at the VPWRA to prohibit recreation/skier parking at the Sand Shed for the future. The USFS staff did their best to distribute the word to recreationists who have parked at this location in the past or had intentions to do so. Distributing this message from the Vail Pass trailhead and from the USFS office front desks in Minturn and Silverthorne was very effective with CDOT reporting at the end of the season that usage of this illegal parking area had been minimal over the course of the winter.

Volunteers

The Forest Service employed 4 volunteers to assist with the duties of collecting fees, conveying visitor information, parking vehicles, and patrolling trails with the paid staff. As the VPWRA operates on a limited budget, these volunteers are crucial to the success of this program. These 4 volunteers contributed 1,111 hours of volunteer service to the program collectively this winter.

Volunteers are asked to work a minimum of 12 hours a week in exchange for a place to live in the USFS bunkhouse for the winter. Volunteer housing costs are accounted for in the Vail Pass annual operating budget and are paid for by user fees. The cost for the 4 volunteers to the program is less than \$4500.

• Safety and Incidents

A primary objective for the Forest Service has always been to manage the VPWRA for a positive backcountry experience while maintaining a high level of public safety. Furthermore, Forest Service rangers will continue with efforts to better educate the public on potential risks and dangers associated with the Vail Pass Winter Recreation Area backcountry.

During the winter of 2015-2016, the US Forest Service backcountry snow rangers working at the VPWRA assisted with one official search and rescue operation in the area – a human triggered avalanche in Shrine Bowl.

This winter, as USFS rangers patrolled the area, hundreds of users were assisted throughout the trail system. This service from USFS staff prevents 911 calls to request assistance from the volunteer county search and rescue groups. Many of the users that rangers assisted were unguided snowmobile renters who were not properly experienced or prepared for the winter backcountry environment. The increase in this type of request and rescue has created more demand on the limited USFS staff resources in the area.

As the Eagle/ Summit county border is drawn directly through Ptarmigan Pass, 911 emergency calls from cell phones within the VPWRA may be directed to Summit, Lake, or Eagle County's emergency dispatch system. For fastest response times and logistical purposes it is critical that Summit County, Eagle County, Lake County, and the Forest Service have a standard operating plan in place and open lines of communication when dealing with distress calls within the VPWRA.

Continued agency and county SAR collaboration and refinement of a standardized SOP regarding incidents in the VPWRA will improve safety and hopefully save lives in the future.

The Vail Pass staff will continue to encourage users to be prepared for self-rescue in case of emergency. However, when self rescue is not an option it is critical that multiple agencies work together in order to find and extract a patient within the VPWRA. These working relationships are vital in emergency situations and will become more important in the future as the number of users continues to increase.

• Snow, Weather, and Avalanche Observations

VPWRA rangers continued a program of submitting snow, weather, and avalanche observations to the Colorado Avalanche Information Center (CAIC) following the guidelines presented in the Snow, Weather, and Avalanches: Observational Guidelines for Avalanche Programs in the United States (SWAG). This program helps us share information with the state-wide network of professional and public observers. The CAIC is able to rely on our observations to help share specific, local information with the public, as well as to develop the daily avalanche forecast for the Vail/Summit County zone.

Additionally, these observations greatly improved the USFS staff's knowledge and understanding of local snow, weather and avalanche conditions. This information enables us to provide better first-hand information to the public and maintain a high level of safety within our crew at Vail Pass.

Forest Service personnel made a concerted effort to post current CAIC avalanche reports at the Vail Pass trailhead every weekend and most weekdays throughout the season.

Avalanche activity throughout the season occurred on all aspects and elevations within the VPWRA, including both naturally and human triggered slides.

• <u>Training</u>

Given the scope of duties and work environment, backcountry safety is the primary concern for Forest Service rangers working in the area. Training courses taken by Forest Service rangers that teach these safety concepts in the backcountry enable employees to better educate and serve the public.

This winter USFS volunteers received American Institute for Avalanche Research and Education (AIARE) accredited Level 1 avalanche training and backcountry snow ranger Teddy Wilkinson completed the AIARE Level 2 course. For the second winter, Lead Ranger Jon Hare and Minturn Mountain Sports Administrator Max Forgensi gave an accredited AIARE Level 1 course to 16 Forest Service employees and volunteers saving funds and providing education for a large group of USFS employees.

The VPWRA staff routinely practiced and studied the basics of snowpack formation, avalanche character and dynamics, and current rescue techniques throughout the winter. These training opportunities are critical for the crew safety and to relay accurate, concise information to the public regarding snowpack, avalanche conditions, and self rescue techniques within the VPWRA.

Future training opportunities are mandatory for the professional development of Forest Service staff working in this dynamic environment.

Registrations

Colorado Resident and Non-Resident snowmobile registrations were available November through April on weekends at the Vail Pass fee collection booth and weekdays at the Dillon Ranger District office. A total of 89 resident registrations and 42 non-resident registrations were sold from the Vail Pass trailhead. This generated \$3962.75 in registration funds for the State of Colorado during the season, as well as insuring the registration compliance of 131 over the snow motorized vehicles. Snowmobilers appreciated the availability of registrations and the Vail Pass staff will continue to work with the state to provide this service for future seasons.

• Passes, Budget, & Registrations

The US Forest Service collected fees for 22 weeks during the 2015-2016 Winter Season. Over the course of those 22 weeks – 7613 visitors paid to use the area through the envelope system, while 5425 VPWRA day use visitors were able to purchase a day pass over the counter at the Vail Pass Trailhead. 564 season passes were purchased and issued throughout the winter season – it is estimated that each season pass holder visits the area 6-7 times on average to recoup the cost of the season pass. Day passes, season passes, and envelope sales have all increased from last winter and based on the five year trend the area will continue to add larger user numbers each winter for the future. Outfitter Guide usage is anticipated to increase this year – user numbers from these companies will not be available until June 2016.

Fee collections from over the counter day pass sales, fee envelopes, season passes, and unguided rentals totaled \$120,609 for the winter 2015-2016 before administrative percentages are deducted by the US Forest Service Washington and Regional offices. Once all numbers are reported and billing is completed— the fee income for the 2015-2016 winter season at the Vail Pass Winter Recreation Area will total close to \$196,000.

This report was compiled by U.S. Forest Service Lead Backcountry Snow Ranger Jon Hare

User Days By Billing Group FY=Fiscal Year

Billing Group	FY02	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY 11
Users From									
Fee Envelopes	1854	2056	2306	3472	3443	4264	6209	7205	6400
Users From									
Daily Passes									
Sold at Vail									5335
Pass Booth	5350	4833	4810	4399	5212	4508	5502	4703	0000
Season Passes	204	198	224	203	407	367	400	380	473
Hut Users	3918	7543	8504	8500	8750	9000	8000	5563	8709
NOVA - Guided									
visits									
(Snowmobile									
and Snowcat)	1000	2138	2883	3000	3250	3300	3000	2550	2803
NOVA -									
Unguided	2500	5040	4574	5000	5000	6000	5000	0000	2500
visits	3500	5042	4571	5068	5800	6000	5000	2900	-
Outfitters/ Guides	900	930	730	800	850	900	800	675	1267
241400	300	300	7.00	300	300	300	300	373	
Total users	16,726	22,740	24028	25442	27712	28339	28911	26538	27487

Billing Group	FY 12	FY13	FY14	FY 15	FY 16
Users From Fee	6450	4196	6376	6190	7613
Envelopes					
Users From Daily	3890	3425	3136	3821	5425
Passes Sold at					
Vail Pass Booth					
# Season Passes	350	378	428	556	564
Sold					
Hut Users	8598	6173	7832	9405	*?
NOVA-Guided	2200	>3500	2931	2906	*?
Users					
NOVA-Day Pass	<1500	2500	4000	4500	6500
Sales					
Outfitter/Guides	<1000	>1000	1331	1293	*?
Total Users	24,000	21,172	26,034	28,671	20,102*

^{*}Outfitter Guide user numbers will be reported in June 2016

2015 Outfitter Guide User Numbers and Revenue*

	# of users	Day Fee's collected
10th Mountain Huts	9405	\$51,727.50
Nova Guides (Guided)	2906	\$15,583
Vail Powder Guides	418	\$2508
Colorado Mt College Edwards	340	\$2040
Vail Nordic Center	233	\$1398
Paragon Guides	172	\$1032
SnowOps	94	\$564
Colorado Mt College Glenwood	36	\$216
As of 7.22.15	=(13,604)	=(\$75,068.50)

^{*}Outfitter Guide user numbers are reported in June, 2015 numbers provided for baseline.