2020 / 2021 WINTER DATA COLLECTION INITIATIVE

WESTERN COLORADO UNIVERSITY
& THE CENTER FOR PUBLIC LANDS

WHAT IS THE WDCI?

- A visitor use database and visitor use report of the Upper Gunnison Valley, primarily focused on backcountry users and winter recreators.
- The winter trailheads observed in the WDCI are currently under the regulation of the United States Forest Service's Winter Travel Management Plan, which was created over 20 years ago.
- The goal of this study is to increase knowledge of winter travel patterns and enhance stakeholder's ability to aid the USFS's Winter Travel Management Plan.

COMPONENTS OF THE WDCI

- An annual quantitative dataset (the spreadsheets and numbers of users).
- A qualitative winter backcountry user survey.
- A 4-year comprehensive report.
- Final report for each season.

METHODOLOGY

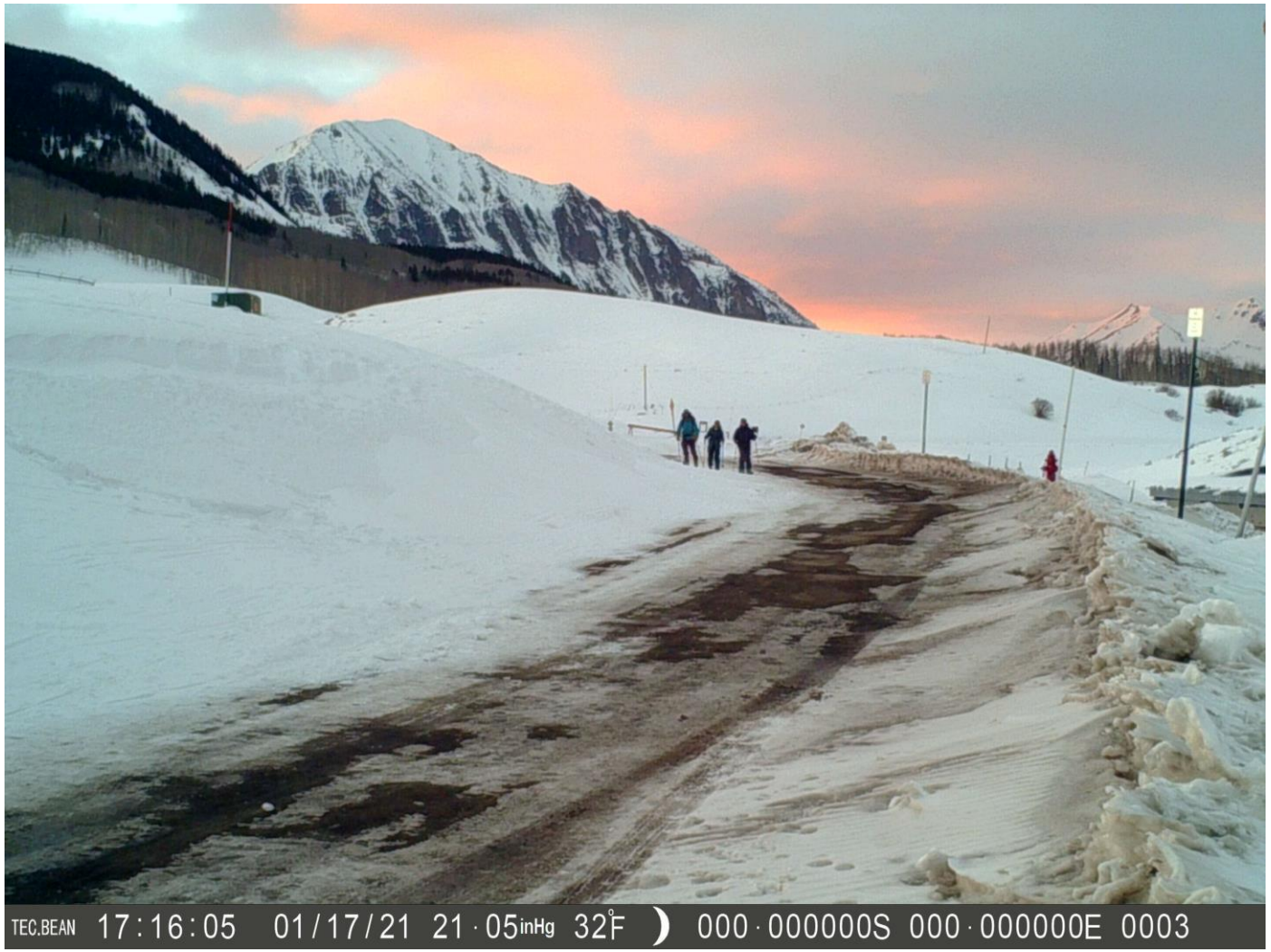
- Methods and design have been repeated with minimal variation since Doug Shaw's initial study.
- 8 cameras were placed at trailheads in the six major drainages in the Upper Gunnison Valley.
- Users were counted from December through April and were categorized into 4 groups: **non-motorized, motorized, hybrid,** and **mechanized.**

COMMUNITY SURVEY

- Based on previous surveys from the 2017/18 and 2019/20 WDCI.
- 20 questions that cover things like type of use, duration/location of recreation, their perceptions on both current and future management, and basic demographics.
- Open March-April 2021 and gathered **143** responses.

RESULTS

- From December 3rd, 2020, to April 15th, 2021, there were at least **44,293** recreational visits on winter trails in the UGV.
- **Large increase in both totals and averages** noted from 2019/20 study and every trailhead recorded its highest number of users since the implementation of the WDCI.



RESULTS

Trailhead	Days with Data	Total Users	Non-motorized	Motorized	Hybrid	Mechanized
Brush Creek TH	134	1,998	1,974	1	0	23
Brush Creek RD	89	1,542	1,473	22	17	30
Cement Creek	134	4,615	3,777	595	71	230
Gothic	129	4,445	4,113	47	9	276
Snodgrass	126	10,364	9,968	14	3	379
Washington Gulch	131	4,781	4,120	383	242	36
Slate River	130	4,726	3,919	101	656	50
Kebler Pass	116	11,822	504	10,499	768	51
Totals	989	44,293	29,848	11,662	1,766	1,075

RESULTS

- Kebler Pass was the busiest trailhead, with close to 12,000 visitors counted, averaging just over 100 users per day. A large majority of these users were categorized in the “motorized” user group - (89%).
- The other 7 trailheads were primarily used by non-motorized recreators, with just over 1,000 motorized visits at these remaining basins through the duration of the study. Around 98% of the non-motorized visits that took place in the UGV throughout this study were in the remaining 7 trailheads.
- The camera with the lowest number of users counted was at Brush Creek Road, with a total of 1,542 visits. 5 of the trailheads had between 4,500 and 5,000 users for the winter season (Slate River, Washington Gulch, Gothic and Cement Creek). Snodgrass Trailhead received the 2nd greatest number of visitors, totaling over 10,100 users. Snodgrass also saw the most amount of mechanized use, with 375 fat-tire bikers counted across the season.

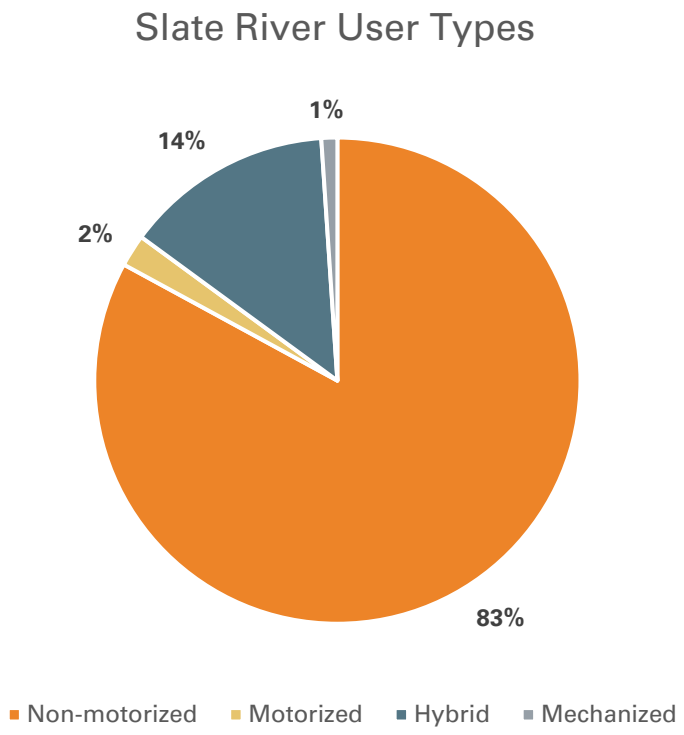
RESULTS

Consistent with the total user data, Snodgrass and Kebler Pass had the two highest daily averages at around ~80 and ~100 users respectively, while the both Brush Creek trailhead and road averaged the lowest daily average, both averaging less than twenty users per day. The remaining 4 trailheads averaged between 34 and 37 users per day.

Trailhead	Average Daily	Average Daily Non-Motorized	Average Daily Motorized	Average Daily Hybrid	Average Daily Mechanized
Brush Creek TH	14.91	14.73	0.0075	0	0.17
Brush Creek RD	17.33	16.56	0.25	0.19	0.34
Cement Creek	34.44	28.19	4.44	0.53	1.28
Gothic	34.46	31.89	0.36	0.070	2.14
Snodgrass	80.33	79.11	0.11	0.024	1.08
Washington Gulch	36.50	31.45	2.92	1.85	0.27
Slate River	36.35	30.15	0.78	5.047	0.38
Kebler Pass	101.91	4.34	90.6	6.62	0.44

RESULTS

This season's study had the highest number of visitors recorded at the Slate River Trailhead since the implementation of the study. A noted decrease in # of motorized users, with the 2019-20 study showing around 600 motorized users, while this season's study only observed 108 motorized users. A higher percentage of hybrid use is seen at this trailhead than any other in the study.



RESULTS

- **CBLT Slate River Parking Lot Camera**

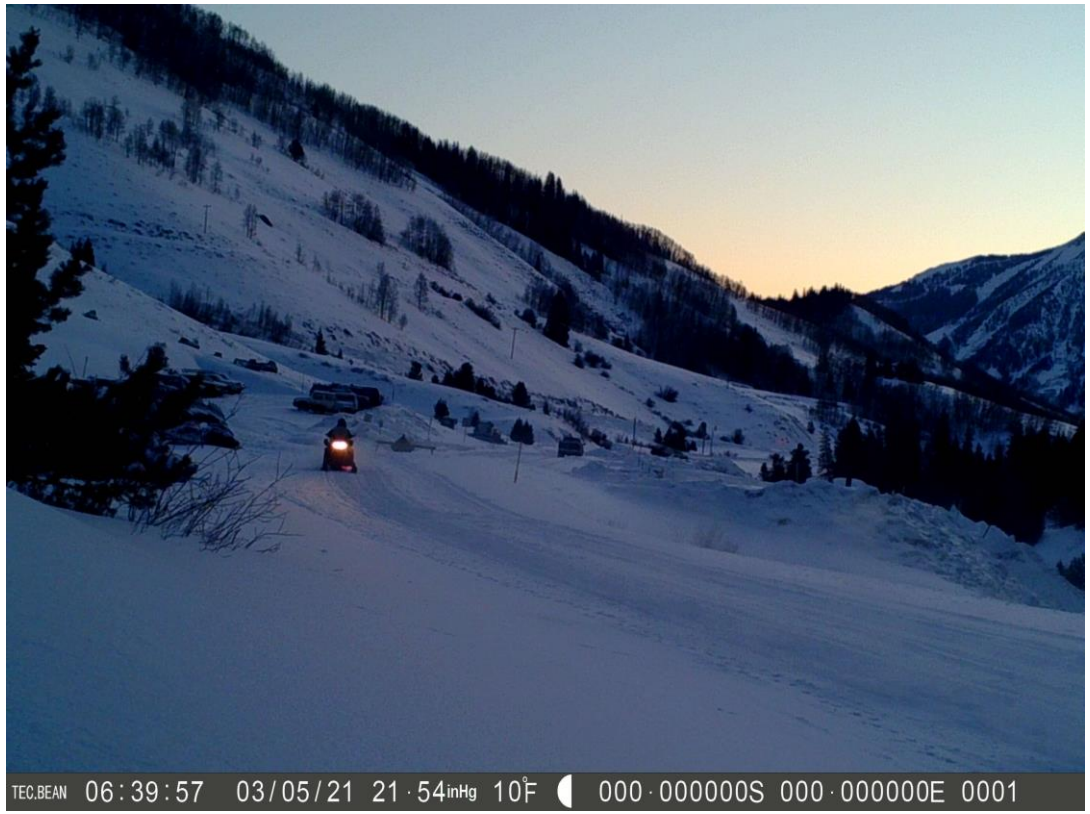
An additional camera was used in the 2020/21 Winter Data Collection Initiative with the intention of capturing the vehicle use at the Slate River Trailhead parking area. This camera captured two images at multiple time intervals each day (7AM, 11 AM, and 3 PM). Vehicles in the frame were counted and categorized into 4 groups – Trucks/SUVs, Mid-Size/Compacts, Vans/RVs, and Vehicles with Trailers (any type of vehicle with an attached trailer).

RESULTS

- Why the large increase? COVID-19 bounce back year.. Crested Butte growing popularity.. Backcountry “sports/activities” also becoming more popular.. Colorado growing..
- Important to remember averages and totals were dropping in the most recent two seasons of the WDCI, data shows that use has been fluctuating for the duration of the study.
- Trailheads like Kebler Pass and Cement Creek showing linear growth each season.
- Gothic, Slate River Road and Washington Gulch all recorded about 2,000 more visits than last year. This season has also been the first time that a trailhead has recognized a user count of over 10,000 people, occurring at both Kebler Pass and Snodgrass trailheads.

Trailhead	17-18	18-19	19-20	20-21
Brush Creek Rd	538	ND	ND	**1,542**
Brush Creek Trailhead	1,388	911	979	**1,998**
Cement Creek Trailhead	780	2,523	2,418	**4,615**
Gothic Rd	3,427	3,132	2,402	**4,445**
Kebler Pass	5,687	7,064	9,108	**11,882**
Slate River Rd	4,130	4,042	2,880	**4,726**
Snodgrass Trailhead	5,776	5,203	3,661	**10,364**
Washington Gulch Trailhead	4,355	2,450	2,532	**4,781**
Total Days for Analysis	718	834	937	**1,029**
Total Days with No Data	71	34	197	**40**
Total Days with Data	647	800	740	**989**
Avg Users/Day	40.31	31.656	32.405	**44.541**
Total Users	26,081	25,325	23,980	**44,051**

RESULTS



- The 2021 Winter Backcountry Community Survey results showed that our main respondents were local, frequent and experienced backcountry users. 93% were full time Gunnison County residents and around 60% have taken some for of avalanche education course.
- The most common form of winter recreation that our respondents are participating in is Nordic skiing, followed closely by ski touring (alpine touring, telemarking, and split-boarding). Those that participate in skiing touring tend to be the group that gets out the most – with 40% of that group spending more than 25 days a season skiing in the UGV backcountry.

RESULTS

- Based on responses, most participants are either neutral towards or in favor of the current winter travel management plans and how those plans are “meeting the needs of backcountry users in Gunnison County”. That being said, the category with the most responses was “I agree with this statement, but there is still room for improvement in the winter travel management plan” and only around 11% of responses said they “no concerns” for the “detracted backcountry experience” question.
- When asked about situations that may negatively affect their backcountry experience, around 75% of respondents replied to the “trailhead parking congestion and/or traffic” option, followed by “sense of crowdedness just at the trailheads” at ~52%. The “trailhead improvements” question polled survey participants on what they would like to see be implemented at winter backcountry trailheads and they were in favor of “Improved and/or more parking” (~67%) and “Bags available to clean up after pets” (~66%). The categories that received the highest percentage of “No, this would detract from experience” replies were “Availability of transportation via snow cats in the major drainages around Crested Butte” (~53%) and “More drainages encouraging motorized access” (~53%).

RESULTS – 4-YEAR COMPARISON

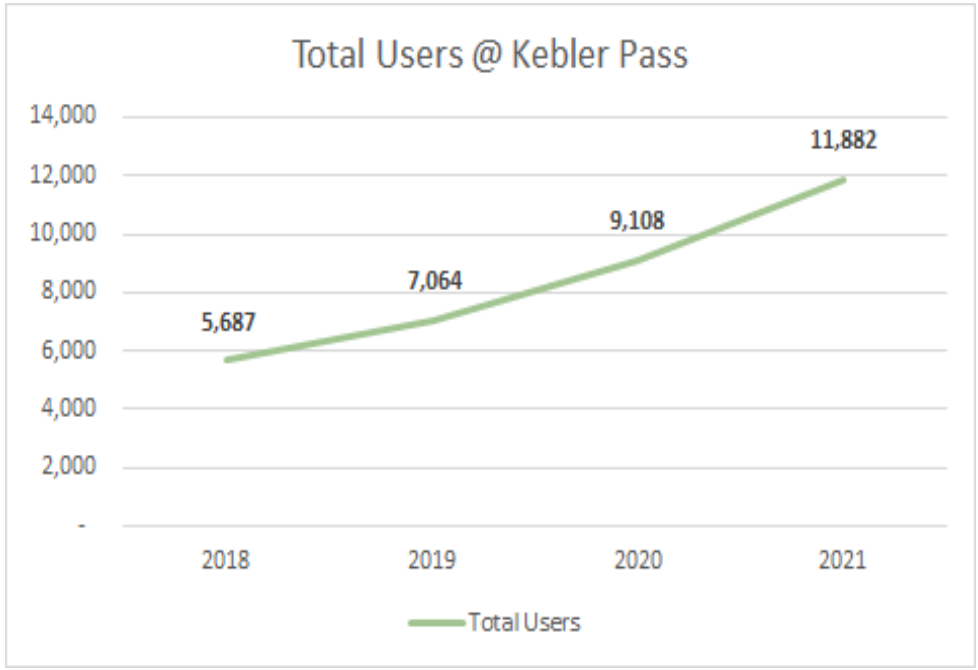
Trailhead	2017-18	2018-19	2019-20	2020-21	TOTAL
Brush Creek TH	90	108	112	134	444
Brush Creek RD	41	*	*	89	130
Cement Creek	44	120	114	134	412
Gothic	84	121	117	129	451
Snodgrass	103	94	58	126	381
Washington Gulch	113	129	105	131	478
Slate River	112	118	108	130	468
Kebler Pass	60	110	126	116	412
TOTAL	647	800	740	989	3,176

	2017/18	2018/19	2019/20	2020/21	Total
Trailhead					
Brush Creek TH	**15.42**	**8.44**	**8.74**	**14.91**	**11.88**
Brush Creek RD	**13.12**	*	*	**17.33**	**15.22**
Cement Creek	**17.73**	**20.02**	**21.21**	**34.44**	**23.35**
Gothic	**40.8**	**25.88**	**20.53**	**34.46**	**30.42**
Snodgrass	**56.08**	**55.35**	**63.12**	**82.25**	**64.2**
Washington Gulch	**38.54**	**18.99**	**24.11**	**36.5**	**29.53**
Slate River	**36.87**	**34.25**	**26.66**	**36.35**	**33.53**
Kebler Pass	**94.78**	**64.21**	**72.29**	**101.91**	**83.3**
TOTAL	**313.34**	**227.14**	**236.66**	**358.15**	**291.43**

KEBLER PASS

		Days with Data	Total Users	Non-motorized	Mechanized	Motorized	Hybrid
2018	Kebler Pass	60	5,687	372	10	4,640	366
2019	Kebler Pass	110	7,064	260	24	6,358	422
2020	Kebler Pass	126	9,108	885	36	7,233	954
2021	Kebler Pass	116	11,882	504	51	10,499	768
	Totals	412	33,741	2,021	121	28,730	2,510

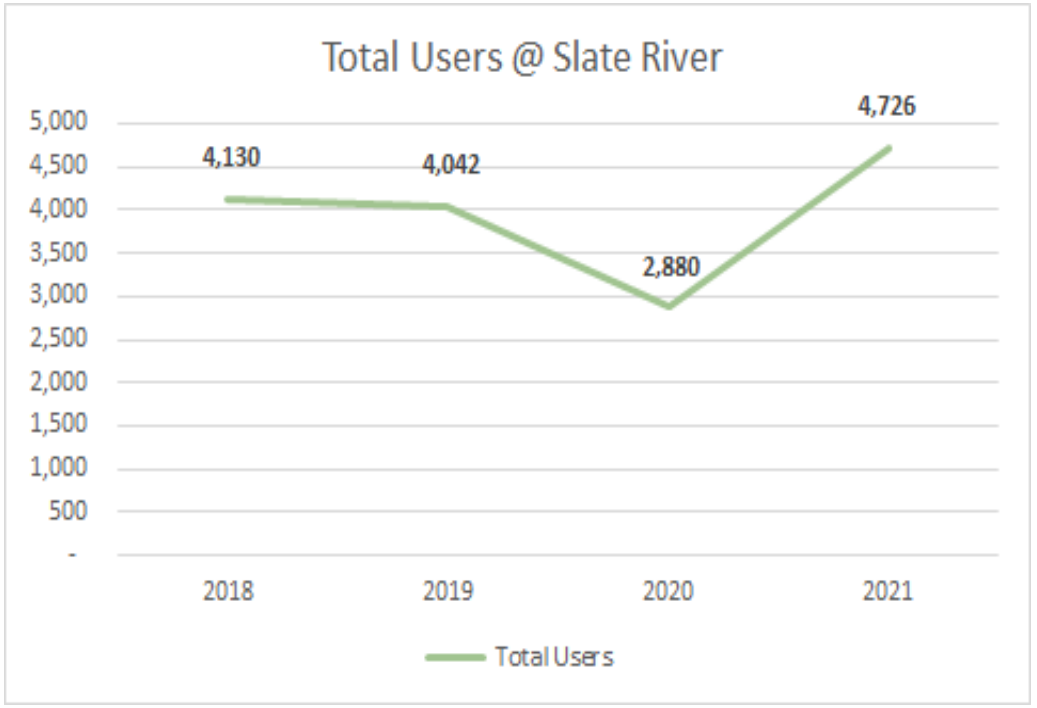
		Average Total Users	Average Non-motorized	Average Mechanized	Average Motorized	Average Hybrid
2018	Kebler	94.78	6.2	0.16	77.33	6.1
2019	Kebler	64.21	2.36	0.22	57.8	3.84
2020	Kebler	72.29	7.02	0.29	57.4	7.57
2021	Kebler	101.91	4.34	0.44	90.6	6.62



SLATE RIVER

		Days with Data	Total Users	Non-motorized	Mechanized	Motorized	Hybrid
2018	Slate River Road	112	4,130	2,486	111	868	665
2019	Slate River Road	118	4,042	2,637	24	782	599
2020	Slate River Road	108	2,880	1,726	21	608	525
2021	Slate River Road	130	4,726	3,919	50	101	656
	Totals	468	15,778	10,768	206	2,359	2,445

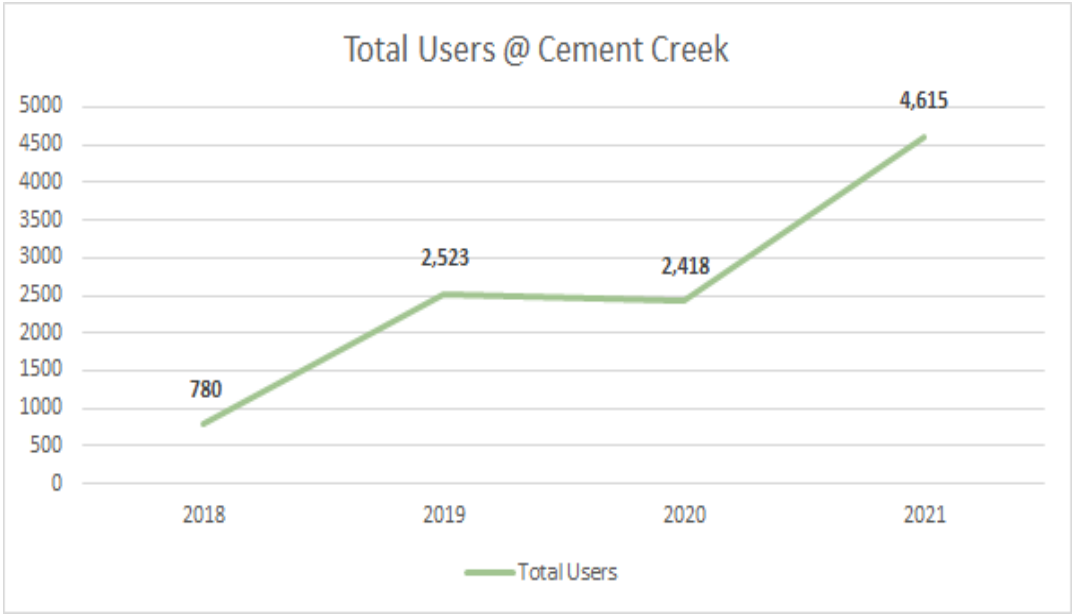
		Average Total Users	Average Non-motorized	Average Mechanized	Average Motorized	Average Hybrid
2018	Slate River	36.87	22.2	0.99	7.75	5.94
2019	Slate River	34.25	22.34	0.2	6.62	5.07
2020	Slate River	26.66	15.98	0.19	5.62	4.86
2021	Slate River	36.35	30.15	0.38	0.78	5.05



CEMENT CREEK

		Days with Data	Total Users	Non-motorized	Mechanized	Motorized	Hybrid
2018	Cement Creek	44	780	551	30	187	12
2019	Cement Creek	120	2,523	1,890	106	512	15
2020	Cement Creek	114	2,418	1,926	117	347	28
2021	Cement Creek	134	4,615	3,777	230	595	71
	Totals	412	10,336	8,144	483	1,641	126

		Average Total Users	Average Non-motorized	Average Mechanized	Average Motorized	Average Hybrid
2018	Cement Creek	17.73	12.52	0.68	4.25	0.27
2019	Cement Creek	20.02	15.75	0.88	4.26	0.12
2020	Cement Creek	21.21	16.89	1.03	3.04	0.25
2021	Cement Creek	34.44	28.19	1.28	4.44	0.53



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Brush Creek RD	538	*	*	1,542	2,080
Cement Creek	780	2,523	2,418	4,615	10,336
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Snodgrass	5,776	5,203	3,661	10,364	25,004
Washington Gulch	4,355	2,450	2,532	4,781	14,118
Slate River	4,130	4,042	2,880	4,726	15,778
Kebler Pass	5,687	7,064	9,108	11,822	33,681
TOTAL	26,081	25,325	23,980	44,293	119,679

THANK YOU!

- Thank you to the multitude of stakeholders that all play a role in making the Winter Data Collection Initiative possible. I would like to thank Western Colorado University, the Center for Public Lands and the Gunnison Ranger District of the United States Forest Service for this opportunity to contribute to their ongoing research. I also would like to thank our partners at Crested Butte Land Trust and Silent Tracks for your support and your continued goal of making recreational opportunities more sustainable, accessible and enjoyable. In addition to all the stakeholders, I would like to extend my gratitude to all the community members and winter backcountry visitors who participated in the 2020/21 Gunnison Valley Winter User Survey.

- Thank you to Melanie Armstrong and Maddie Rehn for all your support and guidance in this process. Thank you to my two research assistants, Sierra Richardson and Bridget Goddard. You both put in a lot of work helping me process/analyze images and I greatly appreciate your efforts. Thank you, Lily Richards and Kathryn Bickley, for your work on the three-year study, and the implementation guide. Thank you to all the previous research leads and assistants, and to Doug Shaw for your work designing the original study.