



August 27, 2020

Contact: Brian Sargeant, Development and Communications Manager

Office: (303) 278-7650

Mobile: (303) 720-9868

FOR IMMEDIATE RELEASE

Email: brian@14ers.org

AN ESTIMATED 288,000 PEOPLE HIKED COLORADO'S 14ERS IN 2019 MASSIVE SPRING SNOWPACK CUTS HIKING USE BY 18.4%

(Golden, Colo.) The number of people climbing a 14,000-foot peak in Colorado last year plunged by 18.4 percent due to the record snowpack in the spring of 2019, according to the most recent hiking use report released today by the Colorado Fourteeners Initiative (CFI). Lingering snowpack and avalanche debris-choked roads resulted in 65,000 fewer hiker days on Colorado's 14ers last year as compared to the 2018 season (288,000 vs. 353,000). Reduced hiking use also lowered the estimated statewide economic impact of hiking 14ers from \$95.7 million in 2018 to \$78 million in 2019 based on past 14er hiking use expenditure studies.

"Last year many 14er trails did not clear until mid-July due to the massive spring snowpack and avalanche debris that blocked many trailhead access roads—especially in the hard-hit San Juan Mountains," said Lloyd F. Athearn, executive director of CFI. "That start is more than a month later than normal. The drop in hiking use between 2018 and 2019 was even more dramatic when you consider that 2018 was a drought year in which some trails were snow-free in May, allowing 14er hikers to get out earlier than normal."

Year-on-year comparisons between 2019 and 2018 showed June hiking levels down by 55 percent and July by 20 percent. In the second half of the climbing season (August 1-October 7), hiking use increased by 16 percent, suggesting that hikers sought to make up for the lost early season opportunities by hiking in greater numbers during late summer and early fall. The decline was greatest in the Elk Mountains, which saw a 44 percent drop, as well as the Sangre de Cristo Range (38%) and San Juan Mountains (33%), which were in the harder hit southern part of the state. The Colorado SNOTEL report for May 31, 2019 noted a statewide "snow water equivalent" figure 437 percent greater than average, though some of the readings in the western and southwestern areas of the state were as much a 768 percent of average. The Colorado Avalanche Information Center determined over the summer of 2019 using satellite imagery that there were nearly 5000 avalanches in the 2018-19 winter. On a scale of D1 (low intensity) to D5 (exceptionally high intensity), the state experienced 87 avalanches of D4 or D5, the most severe. These avalanches created debris fields that were obstacles to accessing several 14er trailheads.

Hiking use on the 14ers is concentrated on the peaks closest to the Denver metro area. Fifty-seven percent of statewide hiking use occurred on the 11 peaks closest to the Front Range. The top two 14ers—Quandary Peak and Mount Bierstadt—had seasonal use totals near 35,000 person days. The route

– more –

encompassing Mounts Democrat, Lincoln and Bross had total use close to 24,000 days, while the route up Grays and Torreys Peaks saw closer to 22,500 days of hiking use. Close to half of hiking use occurs on weekends, with Saturday use (25.7%) higher than Sunday (19.9%) and Friday (13.7%). Hiking is lowest on Wednesday (9%), Tuesday (9.2%) and Monday (9.5%).

For the second year in a row Quandary Peak near Breckenridge edged out Mount Bierstadt as the most-climbed Colorado 14er. CFI's two Quandary trail counters—one on the standard "East Slopes" route and a second on the less-climbed "West Ridge"—had an observed count of 35,055 hiker days between May 29 and October 7, 2019. This level of use slightly eclipsed Bierstadt, which is located near Georgetown, the peak that had been the most-climbed peak in estimates from 2015-17. Estimated seasonal use on Bierstadt was close to 34,740 hiker days. The Forest Service's Bierstadt trail counter was stolen mid-season, so most of the 2019 data have been modeled. The busiest single day recorded last year for hiking on any 14er was August 3, when 1,090 people climbed Quandary.

The precision of CFI's estimates continues to increase with each report. Last season two peaks had 100 percent of their estimate coming from collected trail counter data: Pikes Peak (Barr Trail and Devil's Playground counters) and Mount Elbert (Northeast Ridge, East Ridge and Black Cloud route counters). At least 92 percent of data used in the estimates for Quandary (93%), Huron (92%) and La Plata (92%) Peaks came from trail counter observed data, with the multi-factor modeling program filling in early and late season data, as well as any mid-season data gaps. More than 72 percent of data came from trail counters for the estimates of hiking use on Mounts Democrat, Lincoln and Bross (87%), Grays and Torreys Peaks (77%), Mount Sherman (77%), Mount Lindsey (76%), Blanca Peak and Ellingwood Point (75%), Handies Peak (73%), and Redcloud and Sunshine Peaks (73%). This was the first season in which there were no major gaps in data collected from the Grays Peak and Mount Democrat counters.

Longs Peak and Mount Sherman saw significant reductions in their estimated hiker use due to more accurate data collection and estimates. A recent studyⁱ assessing climbing use on Longs Peak provided a more accurate estimate, which was 5,000 use days lower than CFI's estimates for the past two reports (10,000-15,000 days vs 15,000-20,000 days). Prior estimates had been pegged to an earlier NPS figure that was scaled up by the roughly five percent annual increase in 14er hiking use. The trail counter on Mount Sherman was moved to a location near that summit after concerns that the prior cairn location used may have been utilized as a windbreak by hikers, leading to inflated use estimates. This correction resulted in a reduction of more than 7,000 hiker use days (from 15,000-20,000 days to 7,000-10,000 days).

"While most of the decline in hiking use last year came from early season snowpack, roughly 12,000 days came from these more accurate hiker counts. Each year CFI continues to optimize the accuracy of the data collected and have more confidence in the estimates we release," added Athearn.

In 2019 CFI placed 22 trail counters, but only used data collected from 21 counters. Data from the

Challenger Point counter was not used due to concerns that trail work in the area may have caused hikers to miss the counter when climbing the peak, thereby reducing the number of people assumed to be climbing Challenger Point and nearby Kit Carson Peak. Data from the Mount Shavano counter was used through mid-season when a tree fell over the trail and caused hikers to avoid passing by the counter. Data for the last half of the season was modeled.

Colorado was the fourth-fastest-growing state between 2010 and 2019, growing its population by 14.5 percent. The Denver metro area has grown nearly 15 percent during the same period. In-migration was highest for those aged 24-32, the prime age for fit, outdoor-oriented people to be exploring Colorado's high peaks.

CFI's estimate of hiking use suggests a statewide economic impact of more than \$78 million directly attributable to hiking 14ers based on economic expenditure studies performed by Colorado State University economists John Loomis and Catherine Keske. Their 2009 study found that climbers of Quandary Peak near Breckenridge spent an average of \$271.17 per day for gasoline, food, lodging, equipment and other retail purchases.ⁱⁱ This expenditure estimate has not been updated in almost a decade, so it is likely understated.

"While growth in 14er hiking on some peaks has been dramatic during the past few years CFI has been tracking use, that does not necessarily translate into increased on-the-ground resource impacts," said Athearn. "In many places our investments in trail construction and maintenance mean the summit trail is in better condition despite significantly increased hiking use."

For example, the condition of the main Quandary Peak summit trail increased from a C+ grade in CFI's 2011 baseline assessment to an A- in the 2018 secondary assessment. Despite accommodating many more hikers in 2018 than 2011, the investment of more than \$223,400 in seasonal staff wages and 1,322 volunteer days actually improved the on-the-ground trail condition according to CFI's 2019 "14er Report Card."

"The challenge is building out and maintaining the network of sustainably designed, durably constructed summit hiking trails—CFI's top priority—before hiking use impacts make this harder and more expensive to do," said Athearn. "If we can provide a robust network of 14er hiking trails that protects the fragile alpine tundra ecosystems through which these trails pass we can protect these signature Colorado peaks while helping foster recreational enjoyment and economic development for years to come."

CFI's hiking use projections are based on the combination of several data sources. 1) CFI collected hour-by-hour data during the 2019 hiking season using compact infrared trail counters that were placed at 19 locations adjacent to summit hiking trails servicing 20 14er peaks. Hiking use is estimated for the period between May 27 and October 7. Missing data were modeled using a linear model incorporating week number, day of the week, holiday and use levels on other similar peaks, which has shown to be statistically accurate. 2) Hiking use projections for all other 14ers were based on crowdsourced "14er checklists" submitted to the 14ers.com website by more than 17,000 individual hikers. Estimates for peaks without trail counters were calculated using a trend line calculated by the relative frequency of reported hiking use on all peaks using data points as anchors for peaks that

had trail counters in 2019. 3) A trail counters used by the Forest Service on Mount Bierstadt for part of the 2019 season before it was stolen.

CFI began deploying compact infrared trail counters as part of a pilot program in 2014 at five locations: Grays/Torreys, Castle, Quandary, Redcloud/Sunshine and Handies Peaks (American Basin). The program was expanded in 2015 to five additional locations: Mounts Elbert (3 locations), Democrat and Handies Peak (Grizzly Gulch). Additional funding in 2016 allowed CFI to add 10 new monitoring locations: Mounts Sneffels, Sherman, Princeton, Antero and Shavano, La Plata, Huron and Wilson Peaks, Challenger Point/Kit Carson Peak and Blanca Peak/Ellingwood Point. In 2017 the Antero counter was moved to the Winfield approach to La Plata Peak. In 2018 two new counters were deployed on Pikes Peak (Barr Trail and Devil's Playground), while the La Plata (Winfield) counter was moved to the West Ridge of Quandary and the Princeton counter was moved to Mount Lindsey.

Hiking use is being monitored at 23 locations during the 2020 summer/fall hiking season. The counter from the West Ridge of Quandary was moved to a new location on Mount Princeton. The Forest Service allowed CFI to place a trail counter on Mount Bierstadt, though it was placed in a different place from the Forest Service's prior counter placement. Otherwise counter locations being used in 2020 are identical to those used in 2019.

CFI uses the term "person days" to report hiking use on the 14ers. This represents one person hiking one peak on one day. Anecdotally we know that individual enthusiasts may hike multiple 14ers over the course of a given year, including climbing the same peak multiple times. Using "person days" reports the number of days of hiking use that occurred but does not represent the number of individual people who hiked 14ers that year.

About Colorado Fourteeners Initiative. CFI was founded in 1994 to preserve and protect the natural integrity of Colorado's 14,000-foot peaks through active stewardship and public education. To date CFI has constructed 31 sustainably designed, durably built summit trails on 28 14er peaks. CFI has engaged almost 19,300 days of volunteer stewardship since 2001 in the construction and maintenance of these peaks. A multi-pronged educational strategy has contacted more than 153,500 hikers in the field through paid crews and volunteer Peak Stewards, while CFI's YouTube channel contains more than 70 educational videos that have been viewed more than 211,000 times. Learn more at www.14ers.org and obtain frequent updates on Facebook.

- 30 -

ⁱ Pettibone, David and Ashley D'Antonio, Abigail Sisneros-Kidd and Christopher Monz, "Modeling visitor use on high elevation mountain trails: An example from Longs Peak in Rocky Mountain National Park, USA," *Journal of Mountain Science*, Vol. 16, 2019, pp. 2882-2893.

ⁱⁱ Loomis, John and Catherine Keske, "Did the Great Recession Reduce Visitor Spending and Willingness to Pay for Nature-Based Recreation? Evidence from 2006 and 2009," *Contemporary Economic Policy*, Vol. 30, No. 2, April 2012, pp. 238-246.