

Castle Creek Working Group Data Management Plan 2.19.15

I. **Purpose:** The data management plan is intended to produce estimates of the volume and types of recreation visitation to Pitkin County and the White River National Forest. Pitkin County and the U.S. Forest Service will coordinate the collection of consistent and complimentary data and produce descriptive information about that visitation to provide improved understanding of the existing conditions, the demand for the resources and infrastructure, and to determine trends in the different types of visitation that may inform the future management and planning efforts of the Castle Creek Working Group. (see map for specifics)

II. **Objectives:**

Data collected will be used to:

- a. Identify **existing or sampling use** throughout the Castle Creek corridor in the winter and summer to include, motorized and mechanized vehicles, hikers, skiers, etc.
- b. Quantify the **demand** for existing infrastructure (trails, trailheads and parking) as it relates to the natural, recreational, cultural and educational resources in the valley.
- c. Identify infrastructure and/or resource issues and potential user conflicts
- d. Create a centrally located, baseline database, with current and historical data that may be easily updated and accessed by both agencies.

Share information on permitted activities, to establish a baseline on levels of use by groups and permittees, and improve coordination of organized activities and events.

III. **Data Collection Types:**

- a. Traffic counts
- b. Trail counts
- c. Parking / Overflow parking counts
- d. Trailhead register and permit data: may provide data for Conundrum, Cathedral Lake, and American Lake trails including trip duration and overnight vs day use.
- e. Permitted activities / Commercial operations / Events
- f. Updates on approvals (County)
- g. Crowd source/web based surveys (County)

Data collected will focus at nodes (defined as an area where use transitions from one type to another, i.e. parking lot/trailhead) identified by the CC Working Group.

IV. **Data Collection Methodology:**

a. **Traffic Counts:**

Traffic counters (vehicle counters and cameras) will be used to establish motor vehicle and bicycle traffic use at pre-identified nodes throughout the valley. Counters will be set up over high-use weekends to identify high use in the winter and summer. Counters will also capture “typical” use by bookending the peak weekends. (i.e. Thursday and Tuesday before/after MLK weekend capture typical seasonal use). Traffic counters will be used to capture vehicle

traffic, as well as other motorize traffic on other “local” and “recreation” county roads in Castle Creek Valley. Cameras may be used to ground radar counts.

County traffic counters used capture one-way traffic. Future counters which capture round-trips should be specified. <Identify if the ability to extrapolate one-way or round trips>
Data from Forest Service Special Use Permits may also be incorporated on an annual basis.

WINTER

- In the winter, counters will be placed at the following:
 - Midnight Mine Node
 - Little Annie’s – just beyond the parking area
 - Ashcroft Gate (beginning President’s weekend)
 - Express Creek road and access (hut users?)
- Priority days in the winter include MLK weekend, Presidents Day weekend, Wednesday in February and during the week of March XX for spring break.
- Snowmobile use will be captured with cameras or TRAFx magnetic vehicle counters.

UPDATE: Counters were located at Midnight Mine and Little Annie’s over MLK holiday. Location and angle of counter need some refinement. Little Annie’s captured 9 trips (one-way). Will mount again on President’s Day weekend, and to expand to Ashcroft.

SUMMER

- In the summer, traffic counters will be placed at the following:
 - Past the hospital
 - Just after Midnight Mine
 - Just after Conundrum
 - Pearl Pass Road
 - Express Creek Road
 - Cooper Basin
 - Cathedral Trail Road
- Map B – Counter Locations depicts additional locations that may be prioritized. The above locations are the regular locations for the County Road & Bridge department.
- Priority days in the summer include 4th of July, Labor Day, as well as a weekend in August and during peak colors in September. As with the Winter methods, “typical” use will be captured by the bookends of high-use weekends. As resources allow, counters may be left in place to determine periods of high and low use.
- Counters may be ground-truthed with cameras to measure accuracy of capturing vehicles and bicyclists. Locations to be determined.
- Counters along Castle Creek Road only capture one-way trips. Additional counters that are used may or may not capture round-trips and should be specified. Appropriate counters will be placed to capture multi-modes (vehicle and bicycle)

- Additional traffic counters at other points of interest (as depicted in Map B) may be a combination of Pitkin County and USFS traffic counters. Create a map

USFS and County staff will upload identifying information in the Google Drive spreadsheet at the time of installation/removal as a means for communicating counters so the Working Group is apprised of when counters are live and taken down.

b. Trail Counts:

Cameras and infrared trail counters will be used to capture quantity of users at trailheads and non-vehicle traffic such as hikers and skiers. USFS has four trail counters available, three will be set up to monitor use on the Conundrum Trail, American Lake Trail, and Cathedral Lake Trail. The fourth counter will be used for sample counting at various locations where sample data is needed.

WINTER

At this time there is limited availability of OST counters, as they are typically mounted season-long and unable to move locations. There may be old OST counters available, but they are only able to capture volume.

USFS will monitor use at the three trails identified above and move the fourth counter to Ashcroft gate or elsewhere as data needs are identified. If winter use is deemed low or stable at one of the three identified trail location, counters may be moved to gather additional data at other locations.

SUMMER

During the summer, USFS will monitor use at the three trails identified above and move the fourth counter as needed to sample visitation at various locations. That will be a start and Pitkin County may add additional trail counters as resources allow.

USFS and County staff will upload identifying information in the Google Drive spreadsheet at the time of installation/removal as a means for communicating counters so the Working Group is apprised of when counters are live and taken down.

c. Parking / Overflow Parking Counts

Parking and overflow parking counts will be captured by anecdotal/ad-hoc surveys by USFS and County staff, in addition to volunteers, interns and regular stakeholders in the area. Data/notes collected may be filled into the Google Drive spreadsheet. Volunteers and stakeholders will populate data through brief survey OR data notes. Pitkin County may collect data relevant to the county through crowd sourcing web based methods.

Key collection information includes:

- number of cars
- parking overflow?
- range and primary users

- conflicts observed
- other

d. Type of Use

Similar methodology to the parking lot, but ability to track and capture field notes of observations of use beyond the nodes (i.e. what is observed on the trails, on the jeep roads, etc.)

e. Permitted Activities

County and USFS will coordinate and populate the Google Drive spreadsheet to keep both parties apprised of permitted activities, including Special Use Permits (County and USFS, identifying when, location and number of people. Concessionaire reports will be compiled at the end of seasons (when reports are due to the USFS) to quantify the use driven from these groups/outfitters/permittees.

f. Approvals

County and USFS will coordinate and populate the Google Drive spreadsheet to keep both parties apprised of potential requests/pending/ and completed approvals by private entities.

V. Data units: Data will include identification what has been counted (vehicles, people, bicycles, events, number of people, etc). Explanation for correction of raw data such as for one way or round trips will be included with data.

- a. Map A – Study Area and identified nodes
- b. Map B1 – Castle Creek Data Sites (SUMMER)
- c. Map B2 – Castle Creek Data Sites (WINTER)
- d. Google Sheet – Field Note Collection
- e. Attachment 2A – Future Data Collection Template (Draft)
- f. Attachment 2B – PitCo Traffic Counts (Historical)

VI. Reporting/sharing of data

Data will be uploaded to the Google Sheets. Reporting to be completed by Data Management Team at the quarterly meetings