



Mill Creek Community Collaborative

Recommendations for Mill Creek Canyon

2021



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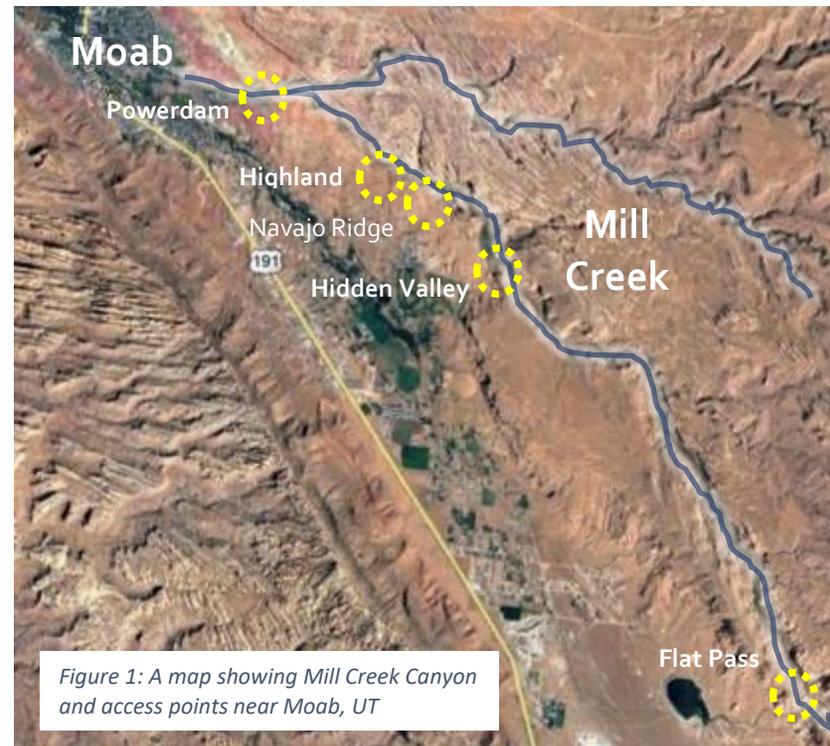
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Introduction and Intention

Mill Creek Canyon in Moab, Utah has seen a dramatic increase in people visiting in the last few years, with a significant number interested to visit the Powerdam and North Fork Waterfall areas. The Bureau of Land Management (BLM) figured that 32,393 visitors came to the Powerdam area in 2004, estimated by counting vehicles and using a multiplier of 2.52 persons per vehicle. Using that same metric for the 57,000 vehicles counted on Powerhouse Lane in 2020, the estimate is 143,640 visitors. That number does not include people who parked on Potato Salad Hill or on private property near the trailhead. This increase has resulted in damage to natural and cultural resources, highlighted public safety hazards, and impacted the watershed. As one of the only major trailheads in the region located in town it has also impacted nearby neighboring residents. While most of the canyon is managed by the BLM, the Canyon and its busiest trailhead are adjacent to the City of Moab and private property in Grand County.

The Mill Creek Community Collaborative (MCCC) was formed in 2018 after several years of interagency communication failed to find a clear path to address issues in Mill Creek, especially at the Powerdam. It is a group of about 40 people representing 18 entities including City of Moab, Grand County, BLM, local non-profits, private landowners, and interested citizens, working together to address issues facing Mill Creek, particularly at the busy Powerdam access area. The purpose of this process was to create a series of recommendations for management actions both in the canyon (primarily BLM-



managed) and in nearby surrounding areas (City and County areas of mostly private land) to address the impacts from the increases in visitor numbers. The collaboration has been mediated by a facilitator from the National Park Service Rivers, Trails, and Conservation Assistance program with notes taken and distributed by Rim to Rim Restoration.

The MCCC seeks to:

“Collaboratively address impacts from increasing recreational use in Mill Creek Canyon by providing access to a quality experience for canyon visitors in a way that protects the natural and cultural resources of Moab’s backyard and addresses impacts to nearby neighborhoods.”

Goals

Early in the process, the MCCC drafted goals related to protecting natural resources, improving public safety and managing social resources and access. They are as follows:

NATURAL AND CULTURAL RESOURCE PROTECTION

- + Preserve, restore, and maintain the ecosystem, habitat, plants and wildlife of the canyon.
- + Protect water quality and quantity in the creek.
- + Protect the rock art, historical sites, and other cultural resources in the canyon.



Figure 2: Cliff jumpers at the North Fork Waterfalls. Photo: Brian Murdock

PUBLIC SAFETY

- + Improve search and rescue (SAR) and emergency medical services (EMS) access for the area, and ensure access at other critical points to facilitate operations.
- + Improve communication with visitors to make informed decisions, navigate and describe their locations to Search and Rescue (if needed).

PROTECTING SOCIAL RESOURCES & ACCESS

- + Maintain a trail network that is sustainable, connected within the canyon and to trails around the canyon, and sensitive to natural and cultural resources.
- + Improve access points and trailheads to accommodate visitor use but also address the increasing numbers of people visiting the canyon and the degradation that is occurring as a result of these increases.
 - ... Officially designate a trail system on BLM managed land.
 - ... Determine what improvements are needed for currently established trailheads.
 - ... Identify potential future access points and determine whether use may need to be accommodated or discouraged.
- + Limit impacts to the environment and the private property in nearby neighborhoods.
 - ... Address traffic congestion.

Definition of Project Area

In order to better understand and address the Mill Creek Canyon project area, the MCCC defined three main use zones in the Canyon: the Front Country Zone, the Middle Country Zone and the Backcountry Zone. Stakeholders defined these zones based on how people use these areas, what kind of experiences they have, and what conditions they expect in each area. The group also discussed thresholds and identified indicators to trigger implementation of protective actions.

A fourth identified zone, the Urban Creeks Zone, is surrounded by private land almost entirely in the City of Moab, and is a very urban creek area. A Parkway has been established along the creek that serves as a transportation corridor through town, as well as a link between city parks. This zone is not addressed in this document other than as a location to access the creek.

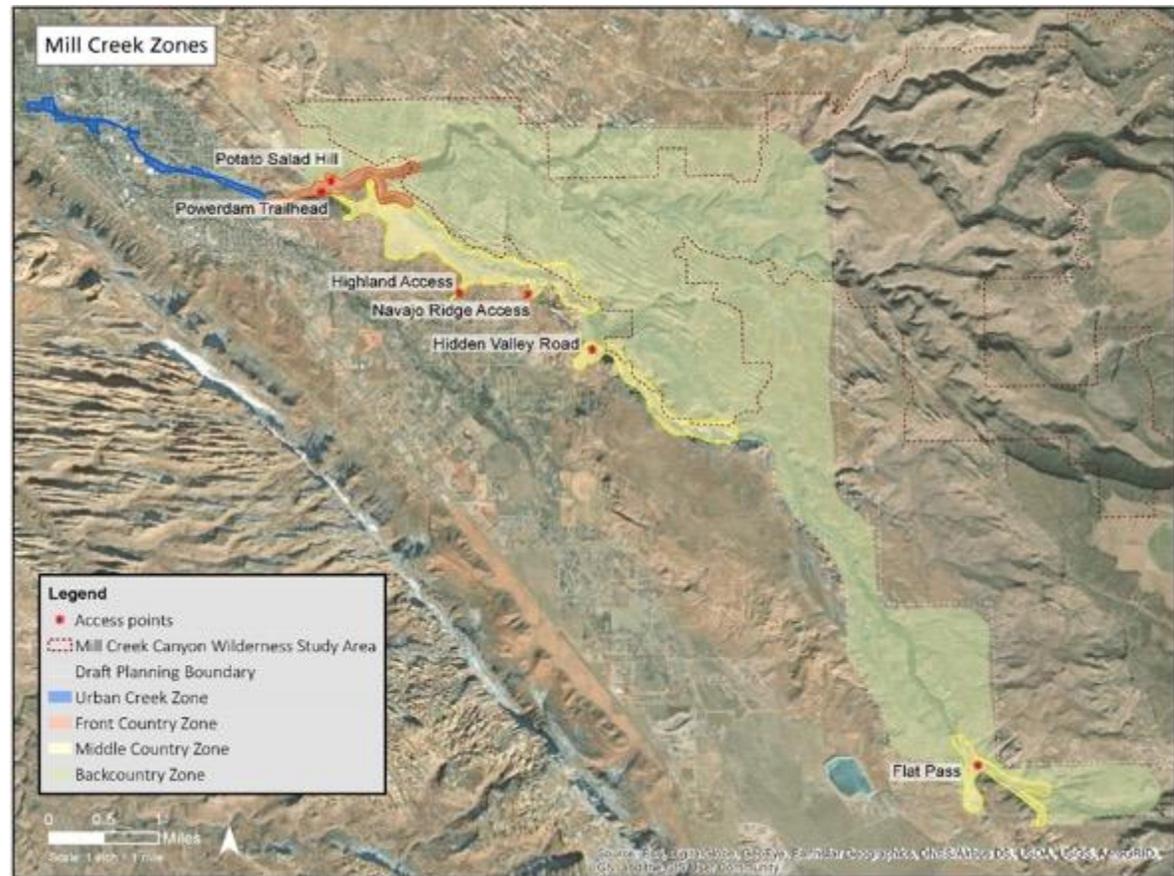


Figure 3: A map of the Mill Creek zones identified by stakeholders.

This document outlines recommendations for each zone or use area and includes a summary of the zone as described by the group as well as the impacts that have been cataloged in each location. The intention of the recommendations is included in each section to clarify what we are seeking to protect. The recommendations include suggested management actions for each of these zones, related to trail treatments, the riparian corridor, and ways to monitor user numbers.

PROCESS SUMMARY

Working Group Formation

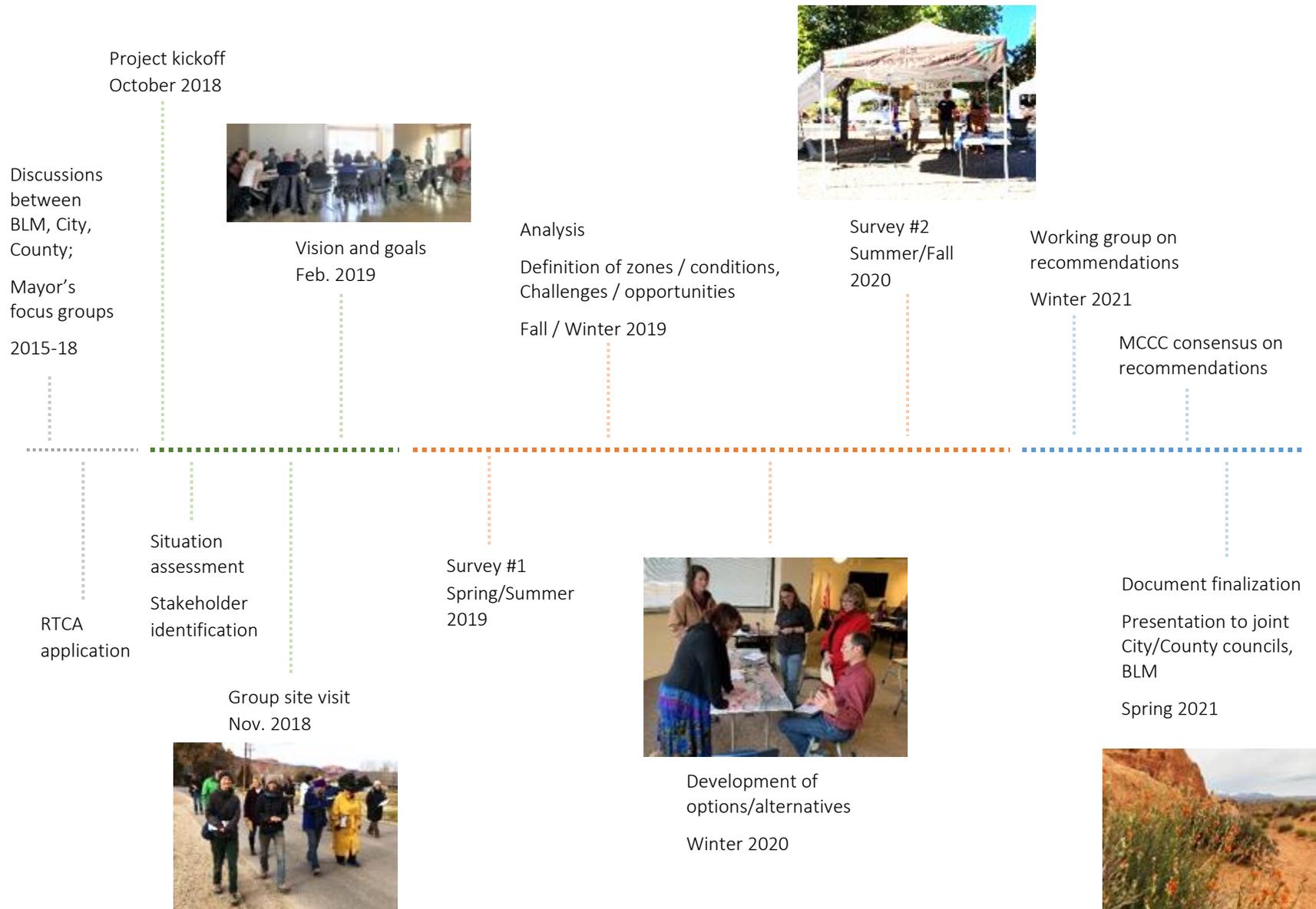
In 2018 Moab's Mayor called focus group meetings with individuals and entities concerned about congestion and resource impacts at the Powerdam area after meetings in 2017 and 2016 did not yield a clear path forward to address the impact of increased recreation at the Powerdam. In early 2018 the City of Moab, Grand County, Bureau of Land Management, Rim to Rim Restoration and the Mill Creek Village POA applied for assistance from the National Park Service Rivers, Trails, and Conservation Assistance (RTCA) program which was approved in late 2018. By October 2018, the City of Moab, Grand County, Bureau of Land Management, Moab Solutions, Rim to Rim Restoration and the Mill Creek Village POA began meeting. Together, this group identified stakeholders to invite to meetings and formed the Mill Community Collaborative. The group has worked together to accomplish the following:

- + Clarify vision and goals for the process.
- + Develop and promote two surveys.
- + Work to define the zones of Mill Creek Canyon based on use levels and conditions.
- + Develop alternative options for management strategies.
- + Refine recommendations based on community and group feedback.

Mill Creek Community Collaborative

- City of Moab
- Grand County
- Bureau of Land Management
- Grand County EMS
- Grand County Search & Rescue
- Grand County Trails & Active Transportation
- Sand Flats Recreation Area
- Moab Area Travel Council
- Moab Valley Fire Department
- SE Utah Health Department
- Grand Conservation District
- Grand & San Juan Watershed Coordinator
- School and Institutional Trust Lands Administration (SITLA)
- Rim to Rim Restoration
- Moab Solutions
- Ride With Respect
- Mill Creek Village POA
- Nearby property owners

Mill Creek project timeline



Community Input

2019 Input Survey

In June of 2019 the MCCC developed a survey to gather information about how Moab residents use the canyon, what values are most important to them, what impacts were of highest concern, as well as any ideas or solutions people had for managing the use of the canyon. 297 people took the survey and from the results it was apparent that Moab residents value the riparian habitat, peace and quiet, beauty, and appreciate Mill Creek as a local hangout close to town. Respondents voiced a wish that things didn't have to change, but also expressed a strong theme of understanding that the time has come to make some hard decisions about managing use in the canyon as visitor numbers in our area skyrocket.

Generally speaking many people expressed concern about use levels increasing further, and while many were supportive of fees (like Sand Flats) being charged to support management efforts there were community members who expressed concern about pricing out low income or local residents.

In Their Own Words:

"Mill Creek is clearly being loved to death and that calls for radical action like fees and limits, as much as I hate that reality."

"Plan official trail alignments so that social trails can be reclaimed."

"Offer greater educational information in the form of rangers and signage - and regulate via law enforcement."

"Protecting cultural heritage in this sensitive area is very important! Providing information and education to visitors about how to be respectful is a start."

"Thank you for doing this. Mill Creek is one of my favorite places in the world, and I appreciate any efforts to address these issues."

How would you protect the values of the canyon and creek?

69% of responses involved limits to use, such as limiting daily access or establishing a fee system (many mentioned a free or reduced price for locals)

59% of responses gave suggestions for management actions such as better signage, patrols by volunteer stewards, or education about Leave No Trace principles

What do you think is important about Mill Creek?

- #1 Riparian habitat/ wildlife
- #2 Beauty
- #3 Primitive, undeveloped nature

What are your biggest concerns when it comes the canyon?

- #1 Too many people
- #2 Danger to the environment/resources
- #3 Social (unplanned) trails causing erosion/damage

What do you like to do when you come to Mill Creek?

- #1 Enjoy solitude or quiet
- #2 Enjoy nature
- #3 (tie) Swim/get wet
- #3 (tie) Hike

How do you access the canyon?

- 73% - Powerdam
- 46% - Kayenta Heights/Highlands/Cedar Hills
- 24% - Sand Flats into Left Hand

2020 Community Survey

During September and October of 2020, the Mill Creek Community Collaborative encouraged the Moab community to participate in a second survey to help further inform the recommendations being developed by the MCCC.

The survey presented four different potential management options with elements relevant to the BLM, the City, the County and adjacent landowners. Participants were asked to review maps and a package of strategies for each of the four options, which ranged from continuing existing efforts much as they currently are, to major changes like shifting parking and primary access to the Potato Salad Hill side of the creek, or building large parking areas between the creek and Sand Flats Road to accommodate large numbers of people. In addition, the survey tested a number of specific ideas focused on trails, parking and access, fees, amenities, and management strategies for the canyon beyond Powerdam.

Almost 400 people responded to the survey with over half of them providing free form answers as well. Many of these free form comments reinforced themes that came up in the first survey, such as the recognition that the time had come to make serious changes at Powerdam, the support for fees, and the desire to care for this special place.

To view the information presented to survey participants as well as the full survey results, please visit the Mill Creek Community Collaborative’s [website](#).

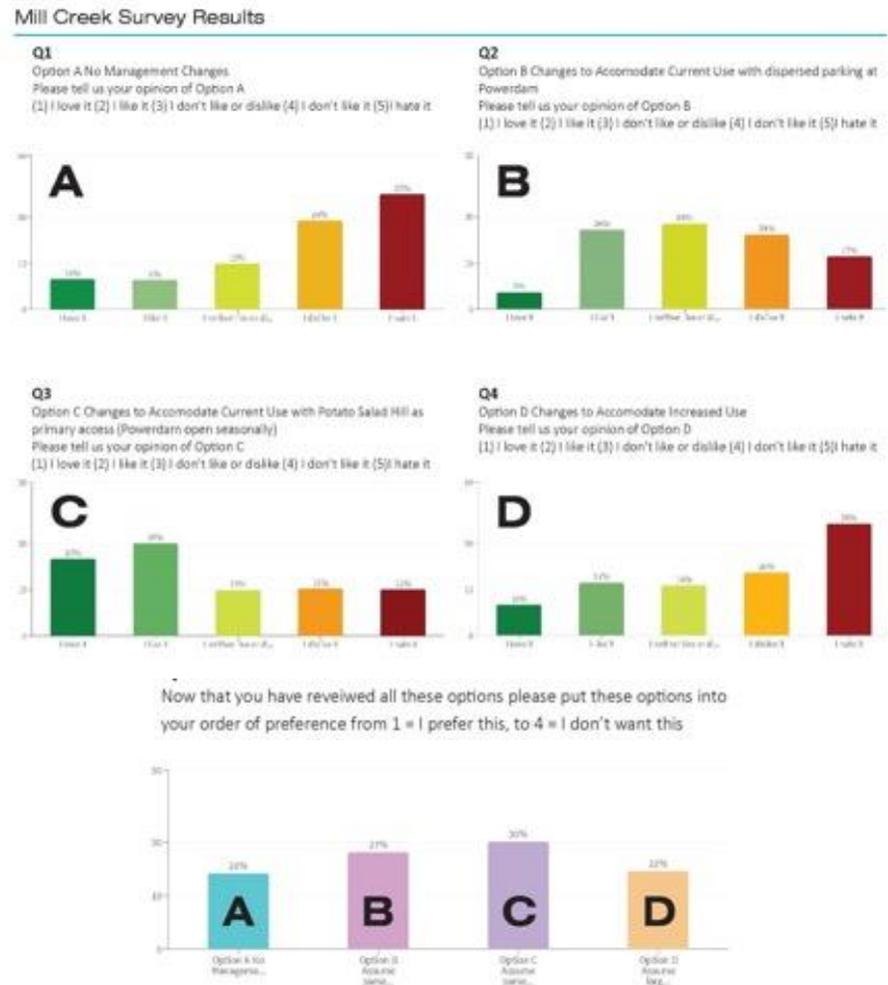
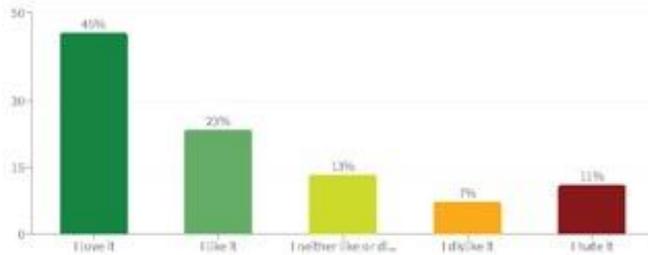


Figure 4: Survey results showing which package of options for Powerdam (A-D) people preferred. See website for more information.

The graphs on this page represent a few of the results from the 2020 survey that helped inform discussions and recommendations. Please see [website](#) for full results.

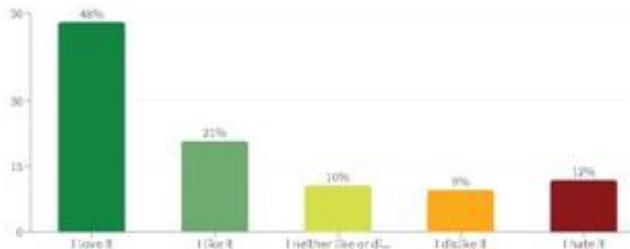
Q6

Build bike/pedestrian path connecting Rotary Park to Powerdam.



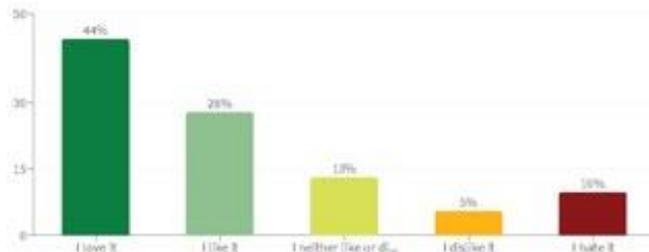
Q10

Close Powerhouse Lane spring-fall to vehicular traffic, open to walking/biking access and SAR/EMS vehicles.



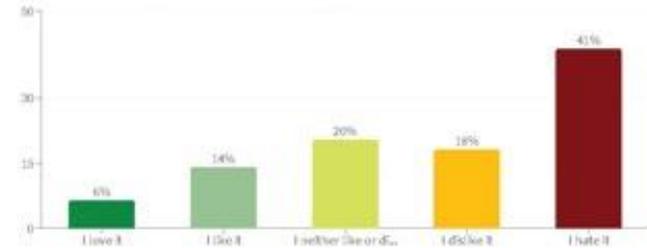
Q15

Implement fee system similar to Sand Flats model (annual pass for locals paid for w/cash or in kind w/volunteer labor).



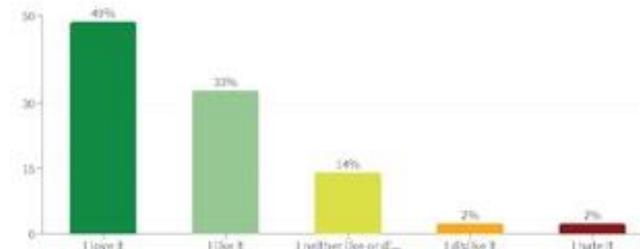
Q21

Establish a well-developed picnic area destination between the parking lot and along the creek to the Powerdam that includes the following: increased parking and paved paths, picnic tables, shade structures, and benches near the dam.



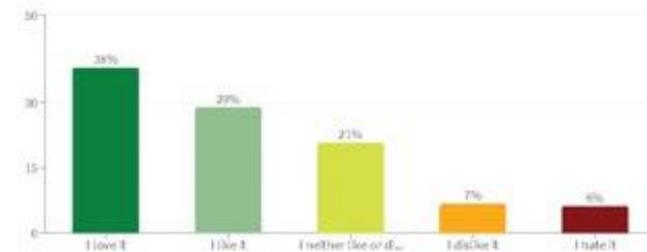
Q28

Monitor other access points for increased levels of use.



Q29

Designate a trail system in the canyon and maintain it, removing user made social trails.



RECOMMENDATIONS

The MCCC has sought to look towards the future of Mill Creek Canyon (the Canyon) in a holistic and comprehensive manner because collaborators understand that the way things are today do not protect or preserve the natural and cultural aspects of the Canyon that locals hold dear as visitor numbers to our region continue to grow. No longer a "local's secret," the Canyon, particularly the Powerdam trailhead and trails to the North Fork waterfall, needs locals' input to plan for and implement changes in a relatively small area to protect the cultural and natural resources of the whole Canyon. MCCC members recognize it is important to provide for the safety of our visitors, and to anticipate changes in visitor numbers to other parts of the Canyon so that land managers can carry out other actions necessary to protect the Canyon in a timely fashion.

The recommendations that follow are directed to the BLM, the City, the County and in some cases adjacent private landholders with the understanding that each of these entities will go through their own public processes to determine what happens on the ground.

Recommendations that apply to the entire canyon regardless of Use Zone are described first, with any additions to these recommendations included in the Use Zone specific sections. Fee related recommendations are discussed last; these recommendations are oriented to efforts to manage visitor numbers in as much as may be possible, and while they are most relevant to the Front Country Zone, potentially apply to

all zones. Recommendations are outlined in the following order (this is a hyper linked list):

[Riparian Corridor Recommendations](#)

[Trails and Signage Recommendations](#)

[Backcountry Zone Recommendations](#)

[Middle Country Zone Recommendations](#)

[Front Country Recommendations](#)

[Fees Recommendations](#)



Figure 5: Members of the MCCC work in small groups to discuss options for Mill Creek. Photo: Betsy Byrne

RIPARIAN CORRIDOR

The riparian corridor in Mill Creek Canyon is a central feature of the canyon. In addition to scenic waterfalls, swimming holes and bedrock cut features, the creek corridor supports a diverse and vibrant vegetation community that supports all manner of wildlife. And there is the water - the perennial stream that runs through it is intricately connected to Moab's water supply and is why Moab exists.

While the riparian corridor is not a distinctive use zone in the Canyon, it runs through all zones and there are common intentions and suggested actions that are consistent throughout the corridor.

Impacts to the riparian corridor include:

- Erosion at high traffic stream crossings
- Erosion on steep slopes leading to the creek
- Denuded and compacted areas, particularly in the Front Country trailhead area
- Exotic species in the canyon, including Russian olive and Ravenna grass
- Low stream flows, particularly in spring and summer months, when diversions from Mill Creek reduce flows in the lower areas of the canyon
- Multiple trails to find the "trail to the Falls" where people are confused

The intentions of riparian corridor recommendations:

- To provide well-marked clear trails in designated locations to protect existing vegetation and crusts,



Figure 6: Grand County Search and Rescue uses the creek crossing to Left Hand during a rescue. Photo: GCSAR

provide opportunities for revegetation of disturbed areas, and to avoid damage to archaeological and other sites.

- To improve and regenerate vegetation where it has been damaged or removed by hikers or impacted by low stream flows.
- To allow for SAR and EMS access for emergency medical and rescue work; improve signage and trails in the Canyon, particularly in the Front Country Zone to reduce the need for SAR as much as possible.
- To work collaboratively to improve the condition of the riparian corridor.

There are two main categories as focus areas: vegetation management and erosion control. Due to the high use, especially in the Front Country areas, education and outreach materials to help ensure visitors to the canyon understand how their actions can impact the area should be developed and used.

By its very nature, the riparian corridor requires collaboration between entities to achieve successful outcomes. Current efforts include work by the BLM and private landowners, and work by entities with current active MOUs and Cooperative Agreements with the BLM including but not limited to Trail Mix, Moab Solutions, Rim to Rim Restoration, neighbors, volunteers and other agencies like Department of Natural Resources and Department of Water Quality. Signage at trailheads and in key locations along the trail are a tool that can improve the riparian corridor.

The lack of a designated trails system hampers protection, conservation, and improvements in the riparian corridor. A critical recommendation to the BLM is to designate a trail system in Mill Creek Canyon so that the riparian corridor and the upland areas around it can be improved (see Trail Recommendations section).

VEGETATION MANAGEMENT RECOMMENDATIONS

Vegetation management recommendations apply mostly to BLM areas, but also may apply to private lands along the riparian corridor and are focused on reducing the spread of invasive species and actively encouraging native plant regeneration where it is not occurring passively.



Figure 7: Planting can be necessary to help ensure riparian plant survival. Photo: K. Dohrenwend 2003

- Develop long term vegetation plan including invasive plant (Russian olive, Ravenna grass) control by mapping vegetation and prioritizing work areas moving from areas of native plants with a few invasive plants working into more dense areas of invasive plants. Include retreatments when needed and a revegetation plan for areas that do not passively regenerate. Monitor vegetation by mapping treatment areas, and regularly mapping invasive plants and areas of disturbance.
- Once a trails system is designated, work to reestablish native vegetation in denuded areas first by discouraging use through resilient trail delineation methods, integrating vertical mulch and other measures to reduce visibility of old trails.
- Monitor vegetation response in exotic plant removal areas and plant in areas where native plants are not

passively regenerating. Replant, seed native plants in disturbed areas when passive plant regeneration does not occur.

- Monitor beaver dams or install beaver dam analogs where needed. Locations will evolve over time. There may be areas, like near hardened stream crossings, where beaver dams may need to be discouraged so that the trail is not rerouted by users around beaver ponds, creating new impacts in undisturbed areas.

EROSION CONTROL RECOMMENDATIONS

Erosion control recommendations apply mostly to BLM managed areas, but also may apply to private lands in the riparian corridor. Erosion control efforts are tied to vegetation management in many areas, and to trail alignment and designation. Once archaeological and other environmental clearance is complete and a trail system designated these projects can be planned and implemented.

- Designate a trail system
 - Harden designated trails and block social trailing using rock work, vertical mulching and fencing when needed (depending on the intensity of the disturbance and the use levels). Front Country and trailheads may need fencing, whereas that would not occur in backcountry.
 - Designate trails that are sustainable at a variety of use levels, integrating reroutes, switchbacks, or planned rock features where appropriate to minimize long-term erosion issues.

- Reduce disturbance to soil productivity by controlling social trailing or other unauthorized activities.
- Identify locations where constructed erosion control structures are needed in heavily disturbed areas or areas with accelerated erosion (including uplands and streambanks) and implement actions when needed.
 - Pursue archaeological clearance and trail designation as immediate needs.
 - All trail work needs to be approved and monitored by the BLM to ensure sustainable trail standards are being used for construction.
 - Develop a monitoring plan to evaluate erosion at stream crossings and other locations in the canyon.



Figure 8: Example of erosion control with wattles and brush fences. Photo: K. Dohrenwend 2003



Figure 9: Directional signage on trail leading up the canyon. Photo: B. Byrne

TRAILS AND SIGNAGE

The lack of a designated trail system officially designated by BLM in the Canyon as a whole, and particularly in the Front and Middle Country, poses significant challenges to addressing many of the impacts of increased visitor use. A primary recommendation of the MCCC is to designate a trail system in Mill Creek Canyon in the Front and Middle Country Zones as soon as possible.

Impacts to the Canyon due to the lack of designated trails are:

- Social trailing and erosion when people cannot find the trail and get lost looking for their destination (whether it's the North Fork Falls or the parking lot as they leave the Canyon).
- Lack of signage, leading to confusion for new visitors which increases the need for SAR activity

- Lack of clarity about where work can and cannot happen in the Canyon to stabilize damaged areas, and challenges coordinating trail work or restoration efforts between different BLM partner organizations and volunteers.
- Inability to construct appropriate hardening or other trail features at stream crossings.

Intention of trail and sign recommendations:

- To provide well-marked clear trails in designated locations to protect existing vegetation and crusts and provide opportunities for revegetation of disturbed areas.
- To improve and restore vegetation where it has been damaged or removed by social trailing and other damaging use patterns.
- To allow for SAR and EMS access for rescue and emergency medical work.
- To improve signage and trails in the Canyon, particularly in the Front Country Zone, to educate users on conditions, minimum impact practices, and reduce the need for SAR as much as possible.
- To protect archaeological sites by providing information about the resource and possibly rerouting or eliminating some trails, if appropriate.

GENERAL TRAIL RECOMMENDATIONS

Designating a trail system in the canyon is a high priority recommendation of the MCCC to the BLM. There has been some concern that designating trails in the Canyon will lead to more use when trails appear on maps. The following is

intended to clarify the implications of designating a trail system:

- Trails can be designated but left un-signed.
- Designated trails will appear on BLM maps (it should be noted that a trail to the North Fork Falls and some “backcountry” trails in Left Hand currently appear in some apps, and none of these are designated.)
- Benefits of designating trails include completing environmental surveys that are in accordance with the National Ecological Policy Act (NEPA), access to grant funding, and consistent, legal, and coordinated trail maintenance efforts.
- Trails do not restrict use, since it is legal for hikers to walk anywhere; they funnel use.

While trails are present in all use zones in the Canyon, there is a need for trails that can withstand higher use numbers in areas with higher use pressure to both keep visitors on the trail and to protect nearby vegetation, biocrusts and soils. Different levels of trail development should be used depending on the zone and the level of use and recreation experience that the zone is being managed for. This document refers to [National Trail Management Classes](#) for suggested trail classes in the Canyon.

Multiple trailing can be caused by compromised access due to creek water level changes in the spring and summer and the presence of ice and snow in the winter. Constructed trails should take this into consideration to provide access in most conditions. In general there is a preference for natural surface or gravel trails that are lined with rocks or in other ways to



Figure 10: Upland trail, 2003. Photo: K. Dohrenwend

funnel hikers onto a single trail and contain use without distracting from the natural surroundings. Zone specific trail and signage recommendations are included in zone specific sections.

GENERAL SIGN RECOMMENDATIONS

- Trailheads should have a kiosk and signage explaining elements such as: erosion, soil crust, and water quality; tips on how to stay safe in the canyon; protective measures visitors can take including staying on the trail, leashing dogs, not carving in rock walls, not playing music (especially by trailheads); or other interpretive elements.
- Provide signage and other information for visitors to explain the importance of watershed health, how it relates to Moab's drinking water, how their actions can contribute to or harm watershed health including vegetation, fishes, and other wildlife.

- In the Middle and Backcountry zone, signs in the canyon should be minimal and used for the following: protect archaeological sites; alert visitors to hazards including cliff jumping; provide visitors with the information they need to safely find their way to trailheads; reduce social trailing.

BACKCOUNTRY ZONE

The Backcountry Zone is mostly about the journey, and includes BLM managed portions of the canyon upstream and between the canyons that see lower levels of use and are mostly located with the Mill Creek Canyon Wilderness Study Area (WSA). Much of the Backcountry is accessed from the Middle Country or from Middle Country trailheads. The area immediately above the Falls (Left Hand of the North Fork) is considered Backcountry but should be monitored for increased use. It is important to note that some private property is in the canyon bottom between the Steelbender and Flat Pass creek crossings.

The zone is characterized by an expectation for solitude or quiet, it is rare to see other people, except close to lower falls, graffiti is rare and SAR/EMS activity does occur in the backcountry from time to time. Sometimes people backpack in these areas, but there are no expectations of signed trails and while there may be a need to have designated routes (especially for roads) little trail work is expected to be needed.

As with the Middle Country, monitoring for increased impacts on the environment will drive any actions in the Backcountry. The indicators that have been identified are:

- Increase in number of people using the area
- Decrease in perceived solitude/quiet
- Increase in social trails
- Erosion increases (parking areas, streambank, trails)
- Increase in damage to rock art, graffiti
- Water quality degrades
- New user-created access areas are popping up
- Increase in camping activities

Access points to Mill Creek Backcountry are the first area where monitoring efforts should be done. These access points are part of the Middle Country Zone, and more detail on the parking areas are outlined in the Middle Country section. Access points include: X Road, Highland, Navajo Ridge Steelbender Trail, Hidden Valley, and Flat Pass (near Ken's Lake, in San Juan County).

BACKCOUNTRY TRAIL RECOMMENDATIONS

Trails in Left Hand beyond the waterfall and in Right Hand upstream of Hidden Valley and the Steelbender Road are decidedly more remote, rugged, and less traveled than trails in the Middle or Front Country areas.

- Routes should be designated to allow for stabilization and repairs, but designating these trails should not be as high a priority as the areas previously listed.
- No wayfinding signage should be put in these areas
- Trails should be minimally maintained to accommodate low use: may be intermittent and often indistinct, may require route finding, obstacles common, narrow passages, brush, steep grades, rocks and logs present (Trail Class 1).

- Monitor use impacts in the Backcountry via any standardized monitoring methods BLM has in place.
 - If these do not exist, develop monitoring metrics such as widths of trails, number of social trail intersections per ½ mile of trail, depth of trail, extent of trampling at rock art panels, etc.
 - Map the current use levels as a base line. Develop maps of access points including the extent of disturbed soil at parking locations, social trail intersections with main trails, trail entrenchment, vegetation disturbance, biocrust disturbance, vandalism and graffiti presence/absence, and other benchmarks.
 - Use these metrics and maps to check the Backcountry periodically, perhaps semiannually.



Figure 11: Creek corridor. Photo: K. Dohrenwend

MIDDLE COUNTRY ZONE

The Middle Country Zone is an experiential place for most visitors and includes access points in the neighborhoods along the edge of the canyon in Spanish Valley and at Flat Pass, as well as most of the south fork of the Canyon. This zone is mostly BLM managed but interfaces with private property in the City and County at access points.

A road and a 4x4 trail run through short sections of the canyon in upper sections of the Middle Country but generally there is an expectation for quiet and solitude. It is common to see others, usually from a distance, in these areas. Other than access from the rim, the walking is relatively easy and flat. The creek is easily accessible in most places and not deeply incised. Vegetation is dominated by native plants, but Russian olive and Ravenna grass are problematic in some areas. There are many water or rock features, rock art panels and other archaeological sites throughout the canyon.

As with the Front Country Zone, social media and internet “advertising” of locations in the Middle Country are attracting many more people than the trailheads have space for; this includes some spillover at locations like the Highland Drive access point where parking and driving is expanding the road to the trailhead.

Impact indicators identified by the MCCC that signal management changes should be implemented include:

- Increase in people using the area
- Increase in social trails
- Increase in erosion (expanding parking areas, along streambank, social trails)
- Increase in damage to rock art, graffiti

- Water quality degradation
- New user-created access areas popping up
- Increase in camping activity
- Increase in neighbor complaints about activities at access points

Over the past year there has been an increase in the number of people using the area (especially at Highland), an increase in social trails and erosion (with expanded parking areas, trails to the creek from the rim being ignored impacting biocrusts, and occasional camping at the trailhead area). In addition, use at Powerdam also increased even more in 2020, so it is likely that in 2021 there will be more pressure at the Highland Access in particular.

Intention of management recommendations:

- To protect existing vegetation and crusts, providing opportunities to revegetate disturbed areas by clearly marking and fencing areas for driving as well as clearly marking and signing trails and doing some trails work
- To provide safe parking for visitors and Moab residents
- To allow for SAR and EMS access when needed
- To prevent congestion in the neighborhood near this access point and prevent camping and other activities in the area.

GENERAL MIDDLE COUNTRY RECOMMENDATIONS

- Revisit vegetation and trails maps from the 1990s efforts, potentially mapping changes in these features as a first step towards monitoring use impacts. Once developed

this may be a way to engage nearby residents in helping care for the canyon.

- Designate trails in the canyon.
- Create best management practices (BMPs) for trail work including brush fences and matting to arrest erosion in sloped trail areas, methods for removing Ravenna grass and other protocols so that work in the canyon is consistent.
- Determine locations for wayfinding signage at critical locations to ensure new visitors take the most hardened trails out of the canyon.
- Develop a local volunteer program through existing organizations like Trail Mix and Rim to Rim Restoration to assist with impact monitoring as well as subsequent trail work and revegetation efforts.
- Coordinate with larger efforts in the region to acquire funding to assist with vegetation management efforts (this is already in process and includes BLM, RRR and Moab Solutions).
- Monitor use impacts at these access points, and on the public land accessible from them, via any standardized monitoring methods BLM has in place.
 - If these do not exist, develop monitoring metrics such as widths of trails, number of social trail intersections per ½ mile of trail, depth of trail, extent of trampling at rock art panels, etc.
 - Install trail counters at strategic locations to determine use levels over time.
 - Map the current use levels as a base line. Develop maps of access points including the extent of

disturbed soil at parking locations, social trail intersections with main trails, trail entrenchment, vegetation disturbance, biocrust disturbance, vandalism and graffiti presence/absence, and other benchmarks.

- Use these metrics and maps to check the Middle Country quarterly at least, perhaps monthly during busy times.



Figure 12: Trail in the Middle Country, 2003. Photo: K. Dohrenwend

MIDDLE COUNTRY TRAIL RECOMMENDATIONS

These recommendations are for the BLM, the primary land management agency of the Middle Country Zone. When access points are on or adjacent to private land the landowners should also be consulted and involved.

- Designate a trail system with access locations from the rim, and where to walk up from the bottom, clearly marked with small signs to reduce social trailing on the hillslope.

- It is understood that archaeological clearance must occur before a trail is designated – the MCCC requests this clearance be prioritized due to the rapid changes in use throughout the canyon.
- Once this is done, work with Trail Mix and the Grand County Active Transportation and Trails to mark the primary trails and begin the process of hardening that route, while revegetating and blocking social trails. Rim to Rim can offer some assistance with revegetation strategies as well.
- Maintain trails in this area to accommodate consistent low/medium use: tread continuous and discernable, but narrow and rough (Trail Class 2).
- Designate trails south of (or up-creek of) the Highland entrance. Maintain trails more like Backcountry trails, eliminate multiple social trailing in the same general locations, and do not sign them. This trail system should be designated to allow for trail maintenance and closures where needed.

MIDDLE COUNTRY SIGN RECOMMENDATIONS

- Any signage in these areas should be consistent with signage at Powerdam and other locations in Mill Creek Canyon.
- Install a kiosk at each trailhead with information about ways visitors can protect the vegetation, cultural resources, and wildlife habitat in the canyon. Specifically, include information about biocrust and the need to leash dogs to protect the crusts. Do not reference other access points on this sign.

- Place wayfinding signage as necessary from Highland access to prevent environmental damage or social trailing. Signs could include “Trail/arrow” and “Restoration Area”.
- Improve signage at the end of the Old Mail Trail to reduce social trailing closer to Powerdam.
- Improve wayfinding signs to the waterfall in North Fork to keep people in the Front Country and discourage exploration in the Middle Country.

MIDDLE COUNTRY ACCESS AT HIGHLAND RECOMMENDATIONS

This access point intersects with the designated mountain bike trail called “Old Mail Trail.” There is no designated trail from the trailhead down to or along the creek at this point.

- Consider fencing to define parking area and to reduce spread of parking disturbance. Include a sign at the end of the pavement indicating the need for high clearance 4WD to clear the obstacle between the pavement and the trailhead/turn around. Use boulders or other delineation methods to keep 4WD vehicles out of areas where they are not allowed.
- Gather input from immediately adjacent neighbors to the area about challenges that the trailheads present, and work on strategies for improving enforcement.
- Consider installing a trail counter to determine use levels over time.

OTHER ACCESS POINTS IN THE MIDDLE COUNTRY AND LINKS TO THE BACKCOUNTRY RECOMMENDATIONS

Other Middle Country access points include Navajo Ridge, Steelbender Trail (east of the golf course), Hidden Valley, and Flat Pass (near Ken’s Lake). These access points, to date, have not seen as marked an increase in visitor numbers as the access at Highland, but will need to be monitored for increased use. The Hidden Valley access crosses private land and requires 4WD. It is not a popular hiking access point, yet. The Flat Pass access above Ken’s Lake, the other end of the Steelbender jeep route, is also not as heavily used to access Mill Creek.

- Identify where people are parking in these areas and roughly how many cars can be accommodated. Monitor for increases in erosion due to overflow parking. If growth in use is impacting an access point, parking areas may need to be further defined or formalized. (See General Middle Country recommendations on page 18 for more on monitoring).
- Consider installing trail counters at these access points to gather data on use.
- Middle Country access points are often access points to the backcountry, please see Backcountry Use Zone Recommendations for more information.

FRONT COUNTRY ZONE

The Front Country Zone is a destination-focused area accessed primarily through the Powerdam Trailhead. It extends about three-quarters of a mile upstream to the North Fork (Left Hand) Waterfalls. Social media and internet sites play a large role in “advertising” the area. In particular, social media highlights the North Fork Falls as a destination to reach expressly for photographs. Map apps show a “Waterfall Trail” despite no officially designated trail in the canyon.

In addition to the Waterfall destination, many locals and visitors frequent the “teacups” and creek downstream of the Powerdam to cool off in the water. Activities are destination driven and include picnicking, socializing, swimming, hiking to the falls, and looking for rock art. There is easy access to water, which is a big draw for visitors. In the spring and early summer months the parking lot overflows down the gravel road, along Powerhouse Lane and to Mill Creek Drive. At times it is estimated well over 150 cars are parked in the area.

Potato Salad Hill is located on the north side of the creek in the Powerdam Trailhead Area. It is a 4WD destination with high use levels during spring break and Easter Jeep Safari. The area also includes two large flat areas currently used for parking.

In 2020 visitor numbers for Mill Creek were even higher than in past years and it is expected that there will be more visitor pressure in 2021. Overflow parking on Powerhouse Lane, Mill Creek Drive, and private property continues to be of concern and the group realizes it is a critical issue to address as

Traffic Count Data

Located adjacent to established and new neighborhoods, Front Country access locations have a heavy impact on residential areas.

BLM counters on the road to the Powerhouse Lane parking area as well as to Potato Salad Hill have some data gaps due to vandalism. In 2020 over 114,000 vehicle trips were counted on the gravel portion of Powerhouse Lane – meaning that more than 57,000 cars traveled up and back on Powerhouse Lane to get to the Powerdam. 2019 data is available only for September–December, showing 16,946 trips in that three months.

In contrast, 28,472 vehicles drove the Potato Salad Hill Road in 2019 (14,236 round trips) with a few days in spring seeing about 1,100 vehicles in a day.

Potato Salad Hill is accessed via the Sand Flats Road. Currently the Sand Flats Road primarily serves the Sand Flats Recreation Area and connects to the La Sal Mountain Loop Road. In the near future traffic volume will increase due to development of the Lionsback Resort. In 2020 the Sand Flats Road saw 147,481 vehicles enter Sand Flats (data for 2019 is not available but is expected to be higher). This counter did not count vehicles travelling to Potato Salad Hill or accessing the walking trail along the edge of Sand Flats.



Figure 13: Cars parked down the gravel portion of Powerhouse Lane.
Photo: Brian Murdock

management actions are finalized. Shifts in access to the canyon to currently less-used trailheads is also of concern.

There are two developments that will soon be constructed that will impact access to Mill Creek. The Abbey Subdivision is planned for the intersection of Mill Creek Drive and Powerhouse Lane and will consist of around 100 units next to the existing Mill Creek Village. The Lionsback development is planned on Sand Flats Road, near the access road that leads to Potato Salad Hill. The first phase of this development will construct 34 homes, and eventually the development may include around 188 units and a hotel. Both developments will impact traffic and use in the area and need to be considered when making decisions for the Front Country access.

In the Front Country, there is a low expectation for solitude much of the year, high SAR/EMS activity, and extreme congestion at certain times. Impacts include graffiti, overflow parking in residential neighborhoods, and lots of people. Confusion due to lack of signage leads to trampling vegetation and crusts, medical emergencies, SAR rescues, illegal parking, and traffic congestion.

Impacts to address in this area include:

- Public safety issues due to congestion that prevents SAR and EMS vehicles accessing the area for rescues or fire suppression in the neighborhoods and canyon
- Trampled vegetation and biocrusts due to lack of clear paths and signage
- Parking overflows down the road into the adjacent neighborhoods
 - Roadside parking further crushes vegetation and crusts

- Neighbors cannot park or access their homes at times
- Parking is occurring illegally on private property
- Dust from vehicle traffic on the road impacts local neighborhoods and the larger Moab community
- Graffiti on sandstone, archaeological sites, and trailhead infrastructure

Intention of Front Country recommendations:

- To provide well-marked clear trails in designated locations to protect existing vegetation and crusts, provide opportunities for revegetation of disturbed areas, and to avoid damage to archaeological and other sites.
- To provide safe parking for visitors and Moab residents with clear access to the Powerdam area and the trail to the North Fork falls.
- To allow for SAR and EMS access when needed for rescue work.
- To reduce congestion in neighborhood areas by improving pedestrian and bicycle access for people wanting to hike in the Canyon.
- To reduce overflow parking in nearby neighborhoods and minimize the spread of this and other impacts to other locations if use is displaced.

Recommendations in this zone focus on the trails and signs leading to the North Fork Falls and on the Powerdam trailhead area.

The Front Country Zone is the most complex area of the canyon in terms of land ownership, uses, and opinions of how to address them, especially in the Powerdam Trailhead Area. The MCCC was unable to reach full consensus on some recommendations in this zone and opted to use majority voting to reach agreement on these recommendations. The majority of the group approved the recommendations included in this document either in a meeting (18 members) or by email. Two members either did not vote to approve or indicated that they would approve as long as their concerns were articulated here.

Yellow text boxes in this section include concerns expressed by the two MCCC members who could not come to consensus.

CONNECTION TO TOWN AND THE SAND FLATS ROAD

The Front Country is close to town, and there are two main routes into the Powerdam Trailhead Area. One road into the area is Powerhouse Lane, a small residential road that connects to a gravel road to the parking lot. The other route is the Sand Flats Road, which is a larger road that brings people to Sand Flats, and provides access to a gravel road down to Potato Salad Hill.

There is a need to connect the town and the Mill Creek Parkway to Sand Flats in a way that separates bike and motorized traffic on Sand Flats Road, which has a steep grade

and switchbacks with blind curves. This connection would improve safety by removing cyclists from a dangerous section of road and is currently in the Grand County Non-Motorized Master Plan. There are two alternatives: creating a bike lane on the Sand Flats Road, or designating a route up Powerhouse Lane, across the creek to the Potato Salad Hill access road and connecting to Sand Flats Road. This second alternative would require a pedestrian and bicycle bridge across the creek.

A bridge across the creek would also connect the Potato Salad Hill parking area with the parking area at the end of Powerhouse Lane. This would provide access across the creek to the existing vault toilet facilities and would improve easy trail connectivity for pedestrians with families or visitors and residents on bicycles.

One MCCC member is concerned that a bridge could damage the sensitive riparian area and may bring more mountain bikers to a canyon that is hike-only, and that already receives a high volume of use.

An appropriately placed bridge will funnel and focus travel by bikes and pedestrians to direct them where they should go and cut down on social trailing across the creek. Further study is needed on the location.

The MCCC supports the plans currently proposed by the Lionsback developers to establish a bike lane on Sand Flats Road. This facility would be desirable for many cyclists focused on getting to the Slickrock Bike Trail. The BLM, City, and

County should also consider exploring ideas about a pedestrian and bicycle bridge across Mill Creek. This idea requires more community input and careful consideration of the location of the bridge so that it will cause the least amount of disturbance and direct people to the best crossing.

At the time of this plan writing in spring 2021, the City of Moab and the Utah Department of Transportation (UDOT) are studying the implementation of a shuttle system in the near future. The system may involve a route out Mill Creek Drive to Spanish Valley, which could serve residents and visitors seeking access to Mill Creek if a shuttle stop is included at the intersection of Powerhouse Lane and Mill Creek Drive. From this proposed stop, users could walk the 0.75 mile to the trailhead. This opportunity could play a significant role in helping people access the area without needing to drive and park, reducing vehicular congestion and related conflicts. The MCCC considers the shuttle system proposal to be complementary to their recommendations for changes to the trailhead area.

GENERAL FRONT COUNTRY RECOMMENDATIONS

No longer a "local's secret", the falls up North Fork (aka Left Hand) and the wet-creek hiking access to it have now become one of the most iconic destinations in the Moab area. As most visitors passing through this area are focused on the falls, the trails are a central part of protecting ecological and cultural features as well as water quality in this zone. Lack of clear trail markings lead to trampling vegetation when people search for a route as well as increase likelihood of accidents and loss of direction, requiring SAR and EMS resources.

The group agrees that a critical missing management tool is a trail system officially designated by BLM in this area (see the [Trail Recommendation section](#)). Google Maps and other apps show a "Waterfall Trail" but this is neither built or signed, and it is easy for people new to the area to get confused and disoriented resulting in many social trails and off trail travel. High water and beaver activity can obscure stream crossings, resulting in further damage to stream banks and vegetation as people search for other stream crossings. As existing trails are not currently designated, work to improve them is not approved by the BLM until routes have gone through an official process to be designated.



Figure 14: A beaver dam in Mill Creek. Photo: B. Byrne

FRONT COUNTRY TRAIL RECOMMENDATIONS

- Prioritize getting archaeological clearance and designate a trail system in the Front Country and Middle Country in the next 12-18 months. The trail system will likely include:
 - Trail starting from the proposed Potato Salad Hill trailhead on the north side of the creek, most likely connecting to the old road to the North Fork Falls (Trail Class 3 or 4)
 - Trail to the creek below Powerdam (Class 2 or 3)
 - Trails that lead to the North Fork Waterfall (Class 2 or 3)
 - Trail on the south side of the creek (current Waterfall Trail from the Powerdam) (Class 3 or 4)
- Establish trail that connects Potato Salad Hill trailhead to the dam that is wide, level, clearly defined, and accessible to users of all abilities (Trail Class 3 or 4).
- Maintain the main route to accommodate high use, directing people to the Falls. The route should be continuous, clear, with minimal obstacles to prevent confusion and multi-trailing, “single lane” or wider in areas to allow passing (Trail Class 2 or 3).
- Route and mark trails with stabilized rockwork and other methods used by Trail Mix to make it easy to find the trail where necessary.
- Consider a low railing on the busiest, most traveled sections of the trail in the Powerdam Area to keep people on the trail and out of sensitive areas.

Regional Visitor Count Data

Vehicle counts to the Powerdam parking lot in 2020 totaled over 57,000. If it is estimated that each vehicle brought an average of 2.52 people, that means over 143,640 people came to the Powerdam parking lot in 2020. For comparison to other popular trail heads in the region, Grandstaff Canyon saw approximately 138,600 people (55,000 cars) and Corona Arch over 189,000 (75,000 cars) in 2020. The congestion resulting from the number of visitors has a greater impact in a residential neighborhood than it does at more remote trailhead locations. It is highly likely 2021 will see even more visitor traffic in our region.

- Install trail counters in several locations to gather data and monitor use. Use data to quantify how many visitors access various Front Country areas.
- Seed disturbed areas between the trails, and in some areas plant with desert shrubs or vertical mulch to help define them better.
- Designate stream crossings and design and maintain erosion control structures or work after flash floods as needed.
- Consider building a bridge across Mill Creek from the main Potato Salad Hill Trailhead to provide foot and bicycle access to the south side of the creek (swimming holes, the Powerdam, etc.) and other amenities (toilet,

etc.) on the Powerdam side of the creek (see additional comments below).

- As the trail is designated by the BLM, stream crossings must be considered with the understanding that beavers are in the area and may affect the trail crossings.

FRONT COUNTRY SIGN AND INFORMATION RECOMMENDATIONS

Signs in the Front Country may need to be more frequent than in other use zones in order to reduce SAR and EMS responses resulting from visitors cliff jumping or getting lost.

Recommendations include:

- Place wayfinding or directional signage in key locations to direct hikers to the waterfall and the parking area; signage should not encourage visitors to travel into the south fork (Right Hand) of Mill Creek.
- Place clear signage prohibiting bicycles off trail.
- Place signage addressing graffiti issue at the junction and safety issues at the waterfall.
- Involve local archaeologists in decisions about interpretive signage for archaeological sites, including signage about not carving into canyon walls.
- Provide signage at key road intersections to direct people to the primary parking area. There will be a need for signage at the junction of Mill Creek Drive and



Figure 15: Sign warning of the dangers of cliff jumping placed near the Left Hand Falls in 2020. Credit: BLM

Powerhouse Lane advising that there is no public parking or motorized access to Mill Creek from Powerhouse.

- Provide visitors with information on other places to access or be near water recreationally, such as Mill Creek Parkway in town, Rotary Park, Lions Park, Ken’s Lake, and the Colorado River. Work with entities that provide information to visitors to direct them to those places.

FRONT COUNTRY ACCESS: THE POWERDAM TRAILHEAD AREA

The Powerdam trailhead is the primary access to Mill Creek Canyon. The area around the Powerdam trailhead at the mouth of Mill Creek Canyon extends over both sides of the creek, encompassing the current Powerdam parking area on the south side of the creek and Potato Salad Hill on the north side (see map below).



This area of the Canyon sees the most visitor activity and the highest concentration of visitor impacts. Powerhouse Lane, the road that dead ends in the Powerdam Parking lot, starts in the City of Moab, enters Grand County at the end of the pavement crossing private land, and less than three-quarters of a mile later enters BLM managed land and the parking lot. The road accessing the north side of the creek crosses a City parcel, County owned land, and then enters School and Institutional Trust Lands Administration (SITLA) land before entering BLM managed land at the top of Potato Salad Hill.

There are a wide range of opinions on the best courses of action to take to reduce congestion in the Powerdam trailhead area, and this topic is the one area where the group failed to reach full consensus, with two people unable to fully support all of the recommendations. The concerns (or counter opinions) of those two have been included with the overall recommendations in the yellow text boxes.

POWERDAM TRAILHEAD RECOMMENDATIONS

The majority of the MCCC agreed on a recommendation to shift the primary parking area to the Potato Salad Hill side of the creek to address the following concerns:

- The primary trailhead into the Front Country of Mill Creek Canyon needs to be addressed holistically, taking both sides of the creek into consideration and designing parking and access solutions that allow for management that can limit use at appropriate levels for the canyon, mitigate impacts on adjacent neighborhoods, take traffic congestion into account, and minimize user group conflicts.

- Access from this vantage gives visitors a birds-eye view of the Powerdam area with potential for clear signage and direction to find their way to the Falls or creek.
- Powerhouse Lane is a small dead-end agricultural/residential road, and while it is used for recreational access to Mill Creek it is currently not well equipped to handle large visitor traffic volumes. The road also crosses steep sidehills which preclude widening the road. The new subdivision in process on either side of Powerhouse Lane further increases the impact of trailhead traffic.
- The Sand Flats Road, while already heavily traveled, has always been a minor thoroughfare, and can be designed to handle larger traffic flows, which may be necessary with the new Lionsback development being built. The gravel road to Potato Salad Hill, while it is a small side

Shifting the primary access to Potato Salad Hill will increase traffic on the Sand Flats Road accessing Sand Flats Recreation Area. Traffic will further increase once the Lionsback development is built. Two MCCC members don't agree that Sand Flats/Potato Salad Hill road is a better access route than Powerhouse Lane given the road types and proposed subdivisions that will impact each.

A traffic assessment is needed for Sand Flats Road to determine capacity and what changes may be needed to accommodate future traffic.

Any changes to old dump road to Potato Salad Hill need to be done in collaboration with County road engineers.

road, does not cross current or future residential areas. This access road will likely require improvements if it becomes the primary access to Mill Creek.

Recommended Changes to Potato Salad Hill Area

Establishing Potato Salad Hill as the primary trailhead location will require some changes to the access road, and some parking design and delineation. The following outlines MCCC recommendations for this area:

- The access road from Sand Flats Road follows an easement across SITLA land and the right of way currently belongs to Grand County. The MCCC suggests that BLM, SITLA, and Grand County consider the following:
 - Move the fences along the access road to Potato Salad Hill closer to the road to prevent overflow parking along the road.
 - Sign this road as “no parking any time” and periodically patrol it.
 - Place signage at the turnoff from Sand Flats Road.
- The proposed trailhead parking area is all located on BLM managed land, and the BLM will need to work through their design and public processes to finalize plans. The MCCC makes the following recommendations:
 - Establish a place on the Potato Salad Hill side of the creek as the hiking trailhead parking lot. BLM will determine the final location, layout, and size based on a determined carrying capacity for the canyon.

- Include facilities at the trailhead for visitor use such as an information kiosk, toilets, trash receptacles, and a bike rack.
- Work with Tread Lightly, Ride with Respect, Red Rock Four Wheelers and other 4WD groups to determine the best way to manage the Potato Salad Hill 4x4 Hill Climb and minimize user conflicts.

If a parking lot and trailhead are established on Potato Salad Hill, there is a concern about safety and conflicts between hikers, Powerdam area visitors, and 4WD use. Trailhead changes must be designed to minimize conflict with both vehicles and spectators who use the 4x4 hill climb to make it safe for all users.

Fencing, boulders, and other methods could be used to physically separate parking for hiking and Powerdam access from the 4x4 climb.

One MCCC member is concerned trailhead infrastructure on the Potato Salad Hill side could cause considerable environmental disturbance if vegetation needs to be cleared or significant engineering or expansion is necessary.

- Any new parking lot should be designed to minimize disturbance, manage runoff, and encourage plant regeneration.
- New disturbance could be offset by restoration efforts in the Powerdam area as use patterns change, including reclaiming parts of the current Powerdam parking lot if it is closed.

Recommended Changes to Powerdam Parking Lot (Powerhouse Lane Access)

Moving the trailhead access to the Potato Salad Hill side of the creek opens up opportunities for revegetation and other conservation work on the Powerhouse Lane side of the creek. The following outlines the MCCC recommendations to the BLM, City and County for this area:

- Close Powerhouse Lane to vehicles at the transition from paved to dirt road and install a gate allowing for administrative and emergency use of the parking area. Gate would need a lock or combo for the last property owner to get through to their property. To accommodate lost visitors looking for the trailhead at Potato Salad Hill, construct a paved turnaround or a traffic circle on the City property at the end of Powerhouse Lane. No parking should be established on the City parcel as it would be a way for people to circumvent the proposed fee.
 - Alternate option: Close Powerhouse Lane seasonally (spring through fall) and allow vehicle access only during low-use winter months.
- Establish a foot and bicycle path from the Mill Creek Drive intersection up Powerhouse Lane to the trailhead. If the recommendation to close the road with a gate is accepted, the gravel road could serve as the pathway. If the road remains open to vehicles, a separate path will need to be established to separate users from vehicles.
- Close the existing Powerdam parking area to vehicles and convert to administrative use only with access for SAR/EMS/emergency vehicles. Toilet can remain open for use, maintained by the BLM.

A couple of MCCC members are concerned that closing the current Powerdam parking lot would result in the loss of parking spaces needed to meet the demand. They support keeping the Powerdam lot open so that a lot on the Potato Salad Hill side of the creek wouldn't have to provide 100% of the parking supply. If the Powerdam lot remains open, any parking fees could go toward mitigation measures like dust suppression and patrols. For people walking or biking in, a separate path could be constructed adjacent to Powerhouse Lane. Before constructing the bike path or closing the road, "resident only" parking could be instituted in the neighborhoods and a parking lot could be developed on the Potato Salad Hill side of the creek, then the Powerdam parking lot could be evaluated.

- Designate Powerhouse Lane, the Abbey subdivision, and possibly other nearby streets as "resident only" parking using a permitting system that includes stickers for resident cars and placards provided to residents in the area for their guests to use on a temporary basis. Strictly enforce parking restrictions in this area, particularly during the spring and summer months when visitor levels are high. Dream Drive is already a private road closed to the public; the Mill Creek Village POA could consider adding a gate.

ENFORCEMENT

Throughout the RTCA led process, and during the discussions that led to the RTCA application, the need for coordinated law enforcement across administrative boundaries has been considered. While many of the recommendations refer to BLM managed lands, there is a need for coordination of enforcement at critical trailhead locations, particularly the Powerdam area. The MCCC recommends the following:

- BLM, City of Moab, and Grand County should coordinate law enforcement to patrol the Front Country trailhead. Parking out of authorized areas, graffiti, and overnight camping can be reduced with effective enforcement actions.
- The County funding for trail ambassador program coordinated with the BLM can begin to address some safety and resource damage concerns. The 2021 pilot program should be used to develop a long-term outreach and monitoring program for this area.
- Monitoring use impacts in the Front Country, with effective reporting to relevant agencies, should be a part of the enforcement process to help focus limited resources to areas of greatest need and impact.



Figure 17: Mill Creek Canyon as seen from the cliffs to the north. Photo: B. Byrne

USER FEES

The MCCC and many community members responding to the surveys are concerned about the level of use in Mill Creek Canyon. Fees and permits have been discussed as a means to contain or manage visitor numbers, and also raise funds to help implement many of the other recommendations contained in this document. Fees are one of the only ways to fund work that needs to be done to mitigate for visitor numbers as high as they have grown in the Canyon. Surprisingly, a fee was also somewhat well received by those that took the Mill Creek Survey where 72% of respondents either “loved” or “liked” the idea of charging a fee to assist with management of the area.

Implementing a fee system in any area can be difficult, time consuming and requires physical and staff infrastructure and security measures to implement. Implementing fees at the Powerdam Trailhead to Mill Creek could also have the unintended consequence of pushing more visitors to use other trailheads like Highland that cannot absorb the volume. However, with the Falls as a primary driver of visitor numbers entering the canyon at Powerdam, if fees are kept low enough there may be ways to implement a collection system that requires minimal infrastructure.

It may be confusing to have two fee collection entities (Sand Flats Recreation Area and Mill Creek) so close to each other, but that may be necessary due to the different use patterns and the existing partnership between Grand County and the BLM. How these systems interact is important to consider, and while a fee booth is not currently recommended, if a fee

booth is ever built for parking at Potato Salad Hill congestion and traffic back up onto Sand Flats Road needs to be taken into account.

At this time a permit system to use the Canyon, with so many potential entrance points and no mechanism to ensure patrols, is not being recommended by the MCCC.

FEE RECOMMENDATIONS

- The MCCC recommends that the BLM collect fees for parking at Potato Salad Hill via a system similar to parking for hiking at BLM sites on Cedar Mesa in San Juan County or camping along the River Road. At the trailhead parking area kiosk a pipe safe or “iron ranger” would be installed where people can deposit their parking fee, leaving a receipt on their dashboard. This would require that the parking lot and trailhead be constructed for a certain “carrying capacity” for vehicles and that unauthorized parking along the access road be discouraged through engineering, education, and enforcement. A pipe safe could be implemented at every trailhead where it is deemed necessary. While the MCCC is recommending the pipe safe mechanism, the group recognizes that these parking areas and trailheads are located on BLM managed lands, and the BLM will determine the best mechanism to collect fees as they move through their planning processes.
- Hikers and bikers would not be charged a fee. This might encourage less vehicle use in the immediate area. To

reduce desire to avoid the fee by parking on Powerhouse Lane or Mill Creek Drive and then walking up Powerhouse Lane to the Powerdam area, the roads near the junction of Mill Creek/Powerhouse should be signed as closed to parking except to residents. This has been done in other areas within the city (Swanny Park, South Fourth East and portions of Mill Creek Drive). This will require increased enforcement from the City when it is implemented and may require a sticker/placard system to mark resident vehicles. Note that if the proposed shuttle system is implemented (see page 23), this would allow visitors to use transit and then walk in, instead of parking.

- Alternate option: a pipe safe could be installed on Powerhouse Lane for walkers and bikers for a “suggested donation” rather than a required fee.
- Use fees collected for hiring seasonal rangers to patrol the area, assist in enforcing regulations, educating the public and maintaining infrastructure in the area. Revenues should be spent on site as much as possible.
- Provide an annual pass similar to the one in place at Sand Flats Recreation Area, to reduce per-visit costs of residents using the area on a regular basis.
- Implement a volunteer program to allow users to trade volunteer hours for a free or reduced-price annual pass.



Figure 18: Desert flower. Photo: K. Dohrenwend

CONCLUSION

No longer a local's spot, the Mill Creek Canyon area is well loved for its beauty, peaceful atmosphere, and access to water in the desert. Mill Creek is why Moab was established here, and has grown up around it. The community has expressed sadness, and anger at times, that things have changed. But there is also an understanding that the time has come to make difficult decisions to better address impacts of increasing visitor numbers in our area to protect what the community values: the natural and cultural resources in the Canyon.

Developing recommendations for management actions is complex and considers a wide range of factors from delicate ecosystems to patterns of human use. The MCCC did its best to approach these recommendations in a holistic and comprehensive manner examining the whole canyon. The group agrees on recommended actions such as riparian restoration; designated trails; improved trailhead access; informational, warning, and directional signage; and ways to monitor and identify impacts in the future in an effort to better handle use by visitors. While the group did not achieve

full consensus regarding all recommendations related to the Powerdam Trailhead, every member does understand that the Canyon cannot sustain the visitor numbers to our area. Most of the recommended actions impact relatively small parts of the planning area, protecting cultural and natural resources and creating a higher quality experience and safe visit to the whole area.

It is now in the hands of the Bureau of Land Management, City of Moab, and Grand County to carry out the recommendations. Some may be relatively easy to implement, while others will require further analysis and engagement with the community to determine a final course of action. Hopefully this document provides a road map for positive change in Mill Creek.

The MCCC would like to thank everyone in the Moab and Grand County community for sharing information, feedback, and their passion during the planning process. Local engagement in efforts like this are crucial to develop long term strategies to protect the beauty and ecological integrity of our public lands.

