



2018

Runners Manual

July 20-22, 2018

Part 1 Runner Information

Silverton, Telluride, Ouray, Lake City
Clockwise Direction

Rocks whereon greatest men have ofttest wreck'd.
- John Milton

Executive Rules Summary

We hope you read this manual in its entirety. But here is a summary of what we think are the important points! It is our goal to provide you a safe, well-organized and spectacular running experience. In order to do this we ask that you help us by abiding by these guidelines.

1. No Whining.
2. The Run Director has final authority on any question that may arise during the HRH.
3. You must leave each aid station by the posted cutoff time. If you return, it will be assumed you have abandoned your run attempt.
4. No littering.
5. No stashing of supplies along the course and no accepting aid except within 400 yards of a designated aid station.
6. You have agreed to be pulled for medical and safety reasons if it is determined that such action is in your best interest.
7. Aid Station Captains have the authority to act on behalf of the HRH run management.
8. Enjoy yourself!!!!
9. Pacers may meet their runner at **CREW ACCESS AID STATIONS ONLY** with two exceptions 1) for the CW direction, pacers are allowed to start pacing at Maggie if they hike in to the aid station on their own. 2) for the CCW years, pacers are allowed to start at KT if they hike in to the aid station on their own.
10. Parking restrictions apply. See [Section 4.2](#) of this manual.
11. You must kiss the **HARDROCK** upon your successful completion of the run.

Hardrock Hundred Runners Manual

2018

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Table of Contents

Part 1

1. Introduction and Run Organization

2. Runner Information

- 2.1 Other Reading
- 2.2 The Course
- 2.3 The Weather
- 2.4 Training
- 2.5 Service Requirement
- 2.6 Route Finding
- 2.7 Runner Tracking
- 2.8 Fauna and Flora
- 2.9 Dropping Out
- 2.10 Cutoff Times
- 2.11 Sacking Out

3. Preparing for Run Weekend

- 3.1 Schedule of Events
- 3.2 Accommodations
- 3.3 What to Bring

4. Crew and Aid Station Protocol

- 4.1 Do You Want a Crew?
- 4.2 Parking
- 4.3 4WD Basics for the Novice
- 4.4 Giving Your Runner Aid
- 4.5 Runners in Vehicles
- 4.6 Drop Bags
- 4.7 Pacers
- 4.8 "Muling"
- 4.9 What to Bring: Crew
- 4.10 Aid Station Menu
- 4.11 Drones and Aerial Devices

5. Medical Hints for Your Crew

- 5.1 Recognize Your Limitations
- 5.2 Hydration Challenges and Hyponatremia
- 5.3 Thermal Related Problems Injury
- 5.4 Gastrointestinal Issues
- 5.5 Acute Kidney Injury
- 5.6 Altitude Sickness
- 5.7 Exercise Associated Collapse (EAC)
- 5.8 Musculoskeletal Injuries
- 5.9 Blisters
- 5.10 Injuries From Falling/Steep Snow/
Rockfall/Swiftwater

6. Search and Rescue Considerations

7. Run Week Guidelines

- 7.1 Detailed Timeline
- 7.2 Aid Station Locations & Cutoff Times
- 7.3 Solar and Lunar Data

8. Contact List

- 8.1 Run Management
- 8.2 Area Information
- 8.3 During the Run

9. Course Marking Schedule

10. Directions to Crew Access Aid Stations

- 10.1 Chapman
- 10.2 Telluride
- 10.3 Ouray
- 10.4 Grouse
- 10.5 Sherman
- 10.6 Cunningham

11. Hardrock Etiquette

- 11.1 Crew Rules at HRH Aid Stations
- 11.2 Hardrock Hundred 10 Crew Commandments
- 11.3 Keeping the Hardrock Hundred Green!

12. Joel Zucker Memorial Scholarship

Part 2

Course Description, Profile, Cutoff Times

Part 3

- A. 2016 Hardrock Results and Splits
- B. Hardrock Finishers All Time Listing
- C. Hardrock Fact Sheet
- D. Finisher Awards and Analysis
- E. 2018 Hardrock Lottery Results

Hardrock Hundred Changes for 2018 (and some important reminders from previous years)

- [Cutoff times](#) at Chapman and Telluride have been adjusted to be more rigorous.
- Crew access to Chapman will be by shuttle only. Crews MUST park in designated parking area in Ophir and take the shuttle to the aid station. No parking or drop-offs of any kind will be allowed along Ophir Pass Road. We are serious, and penalties including suspension from the lottery in future years can be applied for non-compliance.
- Parking will be especially observed this year. We have not taken a heavy hand in enforcement in past years, but the growth of the run and some blatant violations by vehicles associated with the run in recent years necessitate a response to prevent risk to our permit. Please review and abide by the parking rules in [Sections 4.2](#) and [10.1-10.6](#). Violations can result in suspension from the lottery in future years, revocation of media credentials, etc. Any penalties will be decided by the Run Director.
- Crews visiting the Ouray Aid Station are requested to park in the RV parking lot on the south side of the aid station, accessible off of 9th Avenue. See [Section 10.3](#) for more details.
- In the interest of runner and pacer safety, all pacers must check-in with aid station personnel and sign a waiver at the respective aid station where they intend to join their runner. This can also be done in advance at runner check-in in the Silverton Gym. Upon signing the waiver, pacers will receive a wristband. This wristband must be worn while on course with their runner. Please note, any pacers under the age of 18 will be also be required to have a parent or adult legal guardian sign their waiver. Read the full [Hardrock Pacer Policy](#).
- [Section 5](#), Medical Hints for Your Crew, has been significantly expanded upon.
- Runner tracking will be done in conjunction with [MAProgress](#).
- No drones will be permitted unless you have secured a permit through the Bureau of Land Management AND Hardrock Hundred Endurance Run ([Section 4.11](#)).
- Hardrock will not supply electrolyte capsules at aid stations for runners and pacers.
- SPOTs must be worn and located so the satellites can read them. To ensure correct locating, please bring your hydration vest or whatever you plan on wearing while running with you when you check in.

1. Introduction and Run Organization

Welcome to the twenty-fifth running of the Hardrock Hundred! The Hardrock was thought up by Gordon Hardman as a tribute to the old time miners who followed their mules and instincts, prospecting the San Juans for gold, silver, and other metals. These miners endured cold, snow and avalanches, hunger, mining accidents, and a host of other hazards that we, today's Hardrock runners, have difficulty imagining. The miners enjoyed the immense beauty of the San Juans regardless of the risks. Now, in 2018, more than 140 years after the San Juan mineral quest began, we have the opportunity to enjoy the beauty and, compared to the old timers, experience a small amount of risk and effort. Enjoy it and respect it.

This manual provides Hardrock Hundred runners and their crews with information to help in preparing for the 2018 run weekend and the run. We want to improve all aspects of the run, so please make notes (possibly mark up your manual and return it to [Charlie Thorn](#)) so that it can be improved for next year.

At the center of all run organization is the Run Director (RD), [Dale Garland](#). He has authority for all activities during the run and will work to ensure it goes smoothly. At all times during the run, he or his designee can be reached via the Amateur Radio Network or in person at the Start/Finish in the Silverton High School gym, located at 12th Street and Reese near downtown Silverton.

Travel in the mountains is difficult - please try to solve problems locally, but contact the RD immediately when local solutions don't seem to be working. The RD has final authority on any question that may arise during this event. Prior to the run you can contact him at the addresses or numbers found in the [Contact List](#).

2. Runner Information

The following are some general notes to help runners prepare. However, nothing can prepare you as well as getting out on the course and becoming familiar with the terrain and run conditions. This manual, as well as the [course description](#), [images of the course](#), [profiles](#), [runner list](#), and other information are also available on the [Hardrock Hundred Home Page](#).

2.1 Other Reading

Apart from carefully reading this manual, other recommended sources of information are listed below. Also, [Part 3](#) of this manual is some historical information about finishers and course conditions.

1. [UltraRunning](#) magazine articles in the years 1992 to 2017.
2. Photos and reports from previous years' runs on the [Hardrock website](#).
3. [Colorado's Fourteeners, 3ed.](#) by Gerry Roach (Fulcrum, 2011). This climbers' book contains much information on the mountains and mountain safety.

2.2 The Course

The course is closed. That means that runners are required to follow the specified route. The course starts and finishes in Silverton. The start and finish will be at the Silverton High School Gym, located at 12th Street and Reese Street near downtown Silverton. The run will go clockwise this year. There are now scores of ultrarunners who have a good working knowledge of the course. Many of them are more than willing to lie about the course details and difficulty.

The 2018 course is similar to that of 2017 except run in the opposite direction. The detailed course description and course log is provided in [Part 2](#) of this manual.

All sections of the course are subject to change because of snow, avalanche damage, rockslides, politics, or other occurrences. These changes may not be known until the course briefings. It is the runners' responsibility to understand and follow any changes.

2.3 The Weather

The weather is a dominant factor for this run and can be at least as formidable as the terrain, remoteness, or high elevation. The run date is a compromise among competing weather factors. There is usually a period of a few days to weeks each year when the snow is generally gone, but the summer "monsoon" has not yet gotten into full swing – we've tried to hit this window.

The usual "monsoon" pattern is a daily weather cycle, starting in the morning with blue skies. As the day warms up, thunderheads build up and around noon intense electrical thunderstorms may commence, continuing until late afternoon or evening, at which time the thunderstorms abate until the next morning.

The Colorado Mountain Club advises climbers in Colorado's mountains to be off the peaks by noon. Since this may not fit in with your position on the course, you must use extreme caution. Always remember that the time limit is 48 hours. The long time limit is not only in recognition of the difficult terrain, but also allows runners to wait out thunderstorms or other life-threatening weather. You can hunker down in a valley for 2-4 hours and still finish. However, if you get fried by lightning, your running career may end on the spot. Discretion is the better part of valor.

Take comfort in the fact that these thunderstorms are widespread. If you are pinned down, chances are that other runners are too. Your position in the field will probably not change. Use the time wisely - eat, drink, stay warm, and rest. You will be able to run faster when the storm has passed. At the RD's discretion, Aid Station Captains can hold runners if weather conditions are considered too dangerous and prevent runners from continuing if not carrying gear appropriate for conditions.

It is our general opinion that the first fatality we may have will be from lightning! Several runners in past years have had direct contact with lightning and there have been several more near misses. We would rather that there never be a fatality or injury. In general, if caught in lightning, head to lower terrain as fast as you can. Before the start we will continue to give you warnings, cautions, updates, and suggestions regarding the exposure you must face when attempting this run.

Prepare for any amount of snow! We could even have snowfall just before the run. In 1992 we went back to Handies Peak in August, just a month after the run, and found six inches of new snow on the ground! In 1997 we had an ice and snowstorm during the run. Remember, there have been avalanche fatalities in Colorado in every month of the year except September.

2.4 Training

You are responsible for being trained well enough to endure these mountains safely. That is why we impose [entry qualifications](#) on runners. This is definitely a "post graduate" run, and not just a harder or higher version of some other trail hundred miler. It is up to you to devise a training program that will get you to Silverton in condition to participate in what can be a very enjoyable experience.

If you can only manage a limited amount of time on the course, we would suggest you pre-run one of the sections with more "exposure" (sharp drop-offs or snow). This will allow you to calibrate your ability to handle heights against this year's actual conditions. Charlie Thorn and others will be in the area ahead of time, finalizing and marking the course. A good way to learn about this year's course is to participate in this process. See the [Course Marking Schedule](#).

2.5 Service Requirement

The Hardrock Hundred has a service requirement for all starters. This can be satisfied by performing 8 hours of work in either 1) organization of an ultra, 2) service at an ultra (e.g. working an aid station), or 3) work on a trail used by an ultra. Note that generic trail work is not acceptable - it must be a trail on which an ultra is run, and it must be coordinated with the Race Director of that ultra.

2.6 Route Finding

This is not an orienteering event. We intend that you be able to concentrate primarily on running. However, remoteness, weather, animals, and people problems on the course make this problematic at best. We will mark the entire course before the run. However, long road sections and maintained trails may not be marked at all. Cross-country sections will be marked more intensely. We will continue our trend over the past few years of less intense course marking with fewer flags along all course sections. The flags should be readily visible, even to those with red/green color blindness. The markers have reflective tags for night visibility. On some portions of the route we may also place colored engineer tape. Chalk may be used to mark other sections, particularly roads in towns. Runners are responsible for knowing the prescribed course and following it whether or not markers are present.

As required by our permit and for environmental reasons, the Hardrock is a closed course run. It is up to you to stay on course. If we have lots of snow (a distinct possibility every year), it is difficult to place some markers so that they remain visible. This is because the run is often at the time of maximum rate of snowmelt, perhaps as much as 6-12 inches per day! If we mark across a snowfield one day, by the next, the markers may have capsized and sunk below the surface due to softening of the snow.

2.7 Runner Tracking

[GPS Tracking](#) is required for all runners. This will facilitate our efforts to locate and access you more efficiently in a Search and Rescue operation, and recognizes the burden such efforts place on our multiple cooperating agencies across the vastness of the San Juan Mountains. It is by no means imagined to mitigate your risk or personal decision-making. The actual device will be chosen for its relatively small size, weight and simplicity of use. Your crew and others will be able to follow your progress through the web-based interface provided by [MAPprogress](#). By accepting entry into Hardrock, you are agreeing to carry the tracking device. We are developing options to assist you with attaching the device to your running belt, vest, pack and possibly upper arm for optimal GPS reception. Please look for updates to our ongoing efforts. There is no cost to the runner. You will be issued the tracking device at check-in and will be required to return it after you have finished or withdrawn from the run. You are encouraged to write [Dr. Stephen Halvorson](#) with questions, comments, suggestions about your gear decisions and other aspects of incorporating the use of a GPS tracking device.

2.8 Fauna and Flora

The elevation range of this run (7,700 to 14,000+ feet) takes the runner through several climate zones. At lower elevations, forests of aspen, pine, and spruce are common. Timberline is locally at about 11,800 feet, though this can vary greatly. Above timberline is alpine tundra and low vegetation interspersed with krummholz (low, stunted spruce, fir, and willow).

In the summer, animal life is abundant. You will almost certainly see elk in the high meadows, possibly with their young. Stay clear of elk: they can be ornery at times. Bears (black, not grizzlies) are present, though seldom seen. Mountain lions may also be encountered. The rule with these critters is to back off slowly, stand tall and raise your arms to appear larger. Try to avoid getting between any animal and its young. If you are attacked, defend yourself - a sharp whack with a stick might discourage the animal - after all, there is plenty of smaller prey out there.

2.9 Dropping Out

While no one likes to contemplate it, there may come a time when it is smarter for you to drop out than to continue. Also, you may miss the cutoff times or be pulled for a medical reason. While you are likely to be upset at that time, **you must inform the nearest Aid Station Captain** because they are the only people authorized to cut off your bracelet.

Depending on your location, it may be very hard for us to arrange transportation from your dropout point to the finish. You may have to wait many hours, as we may have to coordinate a vehicle via radio. All we can promise is a best try effort.

2.10 Cutoff Times

Cutoff times will be strictly enforced. They are provided in [Section 7.2](#) as well as in the course description, [Part 2](#) and will be posted at each aid station, so there will be no ambiguity. The Aid Station Captain has authority to enforce the cutoff times.

YOU MUST LEAVE THE AID STATION BEFORE THE CUTOFF TIME

If you want to go and lie on the ground outside the designated aid station boundary, it's up to you, but be advised that your chances of reaching (and hence leaving) any subsequent aid stations before their cutoff times are almost nil. If you "check out" and then come back into the aid station after the cutoff time, you are considered to have abandoned your attempt at the run. We do not like splitting hairs so finely, but wish to prevent past problems from recurring. These rules are being made clear to all, so that our aid station personnel (who also get tired and confused late at night) can concentrate on helping runners and not on sharpening their debating skills.

You are all experienced ultrarunners. We have developed these cutoff times based on previous years' results, and they are quite generous. If you miss the cutoff time your chances of finishing are low. Please try to be mature enough to recognize this. For those aid stations without cutoff times, you are responsible to get to and depart the next aid station within its cutoff.

Do not debate cutoff times with the aid station personnel! Even if you badger one of them into letting you go on, the Run Director still has the authority to deny listing you as a finisher. In addition, we may bar from future runs anyone who disobeys rules and threatens their safety or the safety of the Hardrock personnel. We have to convince the search and rescue organizations of four Colorado counties, as well as the administrators of five different tracts of federal land, that we are doing what is reasonably possible to make this a controlled event (note, we don't say "safe" event). If they are concerned that we are not taking reasonable steps, we may lose our ability to put the run on in future years.

2.11 Sacking Out

If sleeping is part of your strategy for completing the run, you are responsible for providing your own equipment. The sleeping bags and other facilities at the aid stations are brought by the aid personnel for their own and emergency use only. At many aid stations shelter is limited or non-existent. All available space is required for conducting essential aid station operations - do not occupy badly needed tent space while taking your siesta.

3. Preparing for Run Weekend

You will be able to concentrate better on having fun on run weekend if you have made all your preparations beforehand. The following notes may help.

3.1 Schedule of Events

Please be aware of what is expected of you at all times. See [Section 7](#) for a detailed schedule. If you have any questions about the schedule, please contact Run Director [Dale Garland](#).

3.2 Accommodations

You will need to arrange accommodations for yourself and crew for run weekend. There are adequate hotel, motel, bed and breakfast, and camping accommodations in Silverton and the other San Juan Mountain towns, but the choice is limited so make your plans early. See [Section 8.2](#) for the list of Chambers of Commerce.

3.3 What to Bring

Based on your experience and how you intend to run (solo or with crew), you will need to figure out what to bring with you. The weather is variable, and you are at high elevation. A good rule is to always take at least one more warm item than you think you will need. The start and some of the aid stations are at a relatively low elevation (7,700-9,000 feet) and in sheltered valleys, while most of the run takes place above 11,000 feet in exposed areas above timberline. Temperatures and wind conditions can be markedly different up high and the temperature can suddenly and dramatically drop. Think in terms of being stuck. If you are forced to spend extra time out in the weather, you will be much better off having carried extra clothing or a space blanket to help you keep warm. Don't take the attitude that "I won't get stuck" - it could be beyond your control, such as an avalanche or rockslide blocking the trail. A misstep resulting in a twisted ankle could mean a long, slow painful limp into the nearest aid station, possibly in a hailstorm. Hypothermia can be a killer, especially on tired bodies with no reserves left for generating heat.

PARTIAL GEAR CHECKLIST

Wind/rain suit	Sunglasses	Running pack	Emergency blanket
Whistle	Flashlights	Gloves	Water bottles
Running hat/cap	Spare batteries	Sunblock	Extra drop bag gear
Clothing for rain and snow and temperatures below freezing			

4. Crew and Aid Station Protocol

We are guests on National Forest, BLM, and private land through which we run. We have to share this land with other users so that we may all safely enjoy our weekend in the mountains. The following guidelines were prepared to help your crew if you decide to have somebody meet you around the course.

4.1 Do You Want a Crew?

Before deciding on a crew, you must understand that runners are responsible and accountable for all the actions and behaviors of their crew and pacers before, during, and after the run. Please consider carefully if you really want to have a crew for this run. It is different from all the other 100 milers, as travel in the San Juan Mountains may be difficult and dangerous, even in daylight and under good conditions. At night, in a snowstorm, even an experienced 4WD driver may be risking their life on some of the aid station access passes. Avoiding 4WD sections means that your crew is in for some long drives (over 100 miles to get from Ouray to Sherman, for example). Also, crew access is not allowed at some aid stations - this is part of the challenge of the run. Finally, runners are not allowed to accept aid between aid stations. Any runner who

takes aid where they should not may be disqualified. We will try to make sure that, with the available aid station supplies and your drop bags, you will be able to compete without worrying about a crew.

This is not to say that we don't want your crews to enjoy the mountains - far from it. Part of the reason for coming to the area is to get up into the high country, but we would prefer that crews do it without the pressure of trying to beat runners to the next aid station, trying to meet schedules, etc.

4.2 Parking

Our permitting agencies (the BLM and USFS) have suggested that we reduce our impact on other users of the San Juans by limiting the number of vehicles accessing some of our aid stations - complaints have been received that crews were blocking or restricting the flow of traffic on some popular routes. Please remember that there are those traveling in the San Juans who may not know that Hardrock is going on. Please encourage your crews to be good ambassadors of our run and interact with these people in a positive and informative way."

Runners will be issued a single crew pass, allowing one vehicle to park at the Grouse Gulch and in the Ophir shuttle lot for the Chapman Gulch aid stations. Similar passes will be available to the media. The restricted area will be flagged, and each of these aid stations will have a traffic director. Any vehicle can transit the area, but vehicles without a crew pass may be required to park multiple miles away from the aid station.

Crews are encouraged to share rides and carpool to the aid stations. We will designate pickup locations where crews or spectators in extra vehicles can await rides, and we will encourage crews that do have passes to pick them up. Pacers are not allowed to leave vehicles at Grouse Gulch, Maggie Gulch or Cunningham Gulch to be picked up after the run.

Parking will be especially observed this year. We have not taken a heavy hand in enforcement in past years, but the growth of the run and some blatant violations by vehicles associated with the run in recent years necessitate a response to prevent risk to our permit. Please review and abide by the parking rules in [Sections 10.1-10.6](#). Violations can result in suspension from the lottery in future years, revocation of media credentials, etc. Any penalties will be decided by the Run Director.

We ask all members of the "Hardrock Family" to be aware of and try to minimize their impact on other users of the "Alpine Triangle". This includes picking up after your pets. This is critical to our being able to hold the Hardrock Hundred in the future. For more details, see [Section 11.3](#), Keeping Hardrock Green.

4.3 4WD Basics for the Novice

4WD off-road vehicles are a necessity for reaching some parts of the course, and in any event much safer on mountain roads. They may be rented at a number of locations in the area. Advanced reservations are recommended. Also, please consider the smaller 4WDs because they are definitely easier to drive and park.

If you are unfamiliar with 4WD in general or your particular rental vehicle, make sure you get adequate instructions from the rental agency before venturing out into the backcountry. In particular, check the location and operation of all equipment needed to change a flat.

4.4 Giving Your Runner Aid

Runners may receive aid from their crew **ONLY** within 400 yards either side of those aid stations at which crew access is allowed. If your crew gets to an aid station early, we suggest they locate your drop bag, open it and check the contents, and set it out ready for use. Keep in mind that your crew must not interfere with the aid station volunteers and this means that crews are not allowed in the central core of an aid station unless their runner is present.

4.5 Runners in Vehicles

Runners are not allowed to take a ride in a vehicle where it advances their progress or compensates for runner error. If they do, they are considered to have abandoned their attempt at the run. They will not be allowed to continue, and if they do, they will not be listed as finishers, and risk being barred from entry in future runs. Runners may, after checking into an aid station, rest and get warm in a **STATIONARY** vehicle. Once you have checked out of the aid station you may not get back into any vehicle. If you do so, you will be disqualified.

4.6 Drop Bags

Runners are allowed to provide six drop bags. We will transport them to Chapman Gulch, Telluride, Ouray, Grouse Gulch, Sherman, Cunningham Gulch, and (of course) the finish line. The American Legion building (11th and Greene) will be the drop bag drop-off site with a 1500 hours deadline on Thursday of run week.

Please weatherproof your bags as much as is reasonable. We cannot guarantee full weather protection for every bag. That can be as simple as putting your clothing in a Ziplock bag inside the main bag.

An aid station representative will pick drop bags up on Thursday after the Runners' Briefing and transport them to the aid station locations. We will do what we can to keep them dry but cannot guarantee that at any given aid station. After use, make sure any recoverable items are packed in the bag and that others are properly trashed. Place the bag at the designated location for transportation to the finish line.

4.7 Pacers

Pacers may accompany runners from Ouray to the finish. Pacers may also start or stop at crew access aid stations (Grouse, Sherman, Cunningham). Any runner over 60 years old may have a pacer for the whole distance. Pacers may meet their runner **ONLY** at crew access aid stations except for Maggie Gulch. At Maggie Gulch, pacers can pick up runners if they hike up the four miles from the parking at the Maggie toilet at the bottom. Pacers are responsible for getting themselves to and from aid stations. Vehicles and non-pacer crewmembers are **NOT** allowed at non-crew access aid stations. Pacers are not allowed to leave vehicles at Grouse, Maggie or Cunningham to be picked up after the run. Finally, a runner may have only one pacer at a time.

In the interest of runner and pacer safety, all pacers must check-in with aid station personnel and sign a waiver at the respective aid station where they intend to join their runner. This can also be done in advance at runner check-in in the Silverton Gym. Upon signing the waiver, pacers will receive a wristband. This wristband must be worn while on course with their runner. Please note, any pacers under the age of 18 will be also be required to have a parent or adult legal guardian sign their waiver.

Read the full [Hardrock Pacer Policy](#).

4.8 "Muling"

While the old hard rock miners were invariably accompanied by a pack animal to carry supplies, Hardrock Hundred pacers are more for moral support than for physical. The Hardrock was developed as a test of the individual against the mountains. Most runners do this anyway, but a few feel it necessary to carry their competitiveness to extreme levels, and try to gain an advantage by shifting some of their load to a pacer. However, "muling" is a violation of the rules and spirit of Hardrock. For safety reasons we do not disallow pacers and, because we cannot see what you do out in the mountains, we trust your honor to not cheat on this in the same way as you would not short-cut, litter, or stash supplies out on the course.

4.9 What to Bring: Crew

It is just as important for your crew to bring adequate gear for their own safety and comfort as it is for the runners. The weather is variable and you are at high elevation. Also, they may be up all night and possibly out in the open, depending on their task. We will have enough problems taking care of the runners - let's not have to evacuate crew members! Although cell phone coverage is spotty in the San Juan Mountains, a cell phone is now a valuable piece of emergency equipment. To help you, here is a partial list of items you might need.

SUGGESTED GEAR CHECKLIST FOR CREWS

Poncho or rain suit	Extra warm layer	Headlamp/flashlight
Day backpack	Spare batteries	Water bottle
Pen and paper	Sunblock	Hat
Gloves	Road maps	Dry change of clothes
Snacks/meals	Fluids	Book/magazine to read
This Manual	Sleeping bag	Insect repellent

4.10 Aid Station Menu

A typical aid station menu contains:

Coffee/Tea/Cocoa	Cookies	Soup/Miso	Fig bars
Coke/Sprite	Chips	PB&J	GU
Tailwind	Pretzels	Candies	Bananas/Oranges/Melons

Stations with vehicle access will also likely have:

Boiled Potatoes	Turkey Sandwiches	Avocados	Pumpkin Pie
Boiled Sweet Potatoes	Wraps/Quesadillas/Burritos	Bacon & Eggs	Black Beans & Rice

Hardrock will strive to have options for vegetarian, vegan, and gluten-free runners. However, the accessibility of some sites may limit selection. Runners with severe food allergies should be prepared with their own food, as cross-contamination is hard to prevent in the backcountry.

4.11 Drones and Aerial Devices

No aerial devices of any kind (drones, etc.) are allowed by any member (friend, pacer, crew, family, etc.) of a runner's team. Failure to comply with this could result in the disqualification of the runner from Hardrock.

5. Common Medical Challenges During the Hardrock 100 Endurance Run - Medical Hints for Crew

If you are out and about during the run weekend, whether supporting your runner or merely watching, you may come across a runner having difficulties. The following guidelines are similar to what we give to our aid station volunteers and may be of use to you, should the situation arise.

5.1 Recognize Your Limitations

The cardinal rule when providing first aid is to not hesitate to get help when you realize you cannot provide what is needed. Communication with medical personnel is your first priority when dealing with a sick or injured person. All aid stations are equipped with a first aid kit, medical personnel, and ham radio communications. **Common sense approaches are the best. Use your instincts and experience, but when in doubt, keep the victim warm, do not move if seriously injured and ALWAYS GET HELP FROM THE CLOSEST AID STATION AS SOON AS POSSIBLE.**

5.2 Hydration Challenges and Hyponatremia

Runners should be encouraged to adhere to a "drink to thirst" strategy during the run. This strategy helps avoid overhydration issues associated with predetermined drinking schedules that can lead to possible low sodium problems (hyponatremia). Exercise Associated Hyponatremia (EAH) or low blood sodium concentrations (hyponatremia) in ultramarathon runners have been associated with severe illness requiring hospitalization and several deaths among participants of shorter events. Generally, those individual who are symptomatic with hyponatremia have been overhydrating. Because of the release of stored water when you metabolize glycogen stores, you should expect to lose 3-5% of your body weight during the run to maintain appropriate hydration. It is important to note that hyponatremia may in fact worsen after the run, as unabsorbed fluid in the stomach can be rapidly absorbed once you stop exercising. Signs and symptoms of hyponatremia may include; mental status changes, seizures, bloating, nausea, vomiting, headache, incoordination, dizziness and fatigue. Hyponatremia may occur with weight gain and weight loss, so weight change is not helpful in making the diagnosis. If left untreated, hyponatremia may progress to seizures, pulmonary and cerebral edema, coma and death. The best way to avoid developing hyponatremia is to NOT overhydrate. If symptoms develop, one needs to assess whether they have been overhydrating. If that is the case, then stop fluid intake until you remove excess fluid through urination. If severe symptoms present, this is a medical emergency.

5.3 Thermal Related Problems Injury

Hypothermia (cold) and heat stroke are the two most serious temperature related problems encountered in the Hardrock. HYPOTHERMIA: Due to the high mountain elevation and frequency of afternoon and evening storms, ill-prepared runners can easily get themselves into trouble with cold related problems. The risk is exacerbated if the runner stops exercising (producing heat) for whatever reason and has little or no weather protection. Assisting the runner with getting out of the

environment, replacing wet clothing with dry, adding additional insulation, taking in calories, and hydrating, and once stabilized allowing the awake and alert runner to exercise to produce heat is all that is needed.

HYPERTHERMIA: For life-threatening heat related issues (heatstroke), the runner (with altered mental status or unconscious) must be cooled immediately. Use whatever is available to cool the runner. Safe cold water immersion is best. This is a medical emergency and immediate evacuation should be implemented.

5.4 Gastrointestinal Issues

GI distress (including nausea, abdominal cramping, vomiting, and diarrhea) is relatively common for some runners during the Hardrock. Most of the time GI symptoms resolve with reduced exercise intensity. Most runners will have anecdotal approaches to feeling better by changing nutritional and hydration strategies to get through their hard time.

5.5 Acute Kidney Injury

Cases of renal shutdown (acute renal insufficiency or failure) have been reported in other ultramarathons and have occurred in varying degrees in the Hardrock 100. Renal shutdown occurs from muscle tissue injury which causes the release of myoglobin, a protein material, into the blood plasma. Myoglobin is cleared from the blood stream by the kidneys and will look brownish-colored in the urine. Adequate hydration will help flush myoglobin through the kidneys. Overwhelming amounts of myoglobin may clog the filtering system of the kidneys. One Hardrock runner and three Western States runners have required a series of dialysis treatments, and others have been hospitalized several days with controlled IV fluids to correct renal insufficiency. **If not treated, acute renal failure can cause permanent impairment of kidney function. IT IS CRUCIAL TO CONTINUE HYDRATING FOR SEVERAL DAYS FOLLOWING THE RUN OR UNTIL THE URINE IS LIGHT YELLOW AND OF NORMAL FREQUENCY. The Terrible Three:** Research involving the Western States 100 has demonstrated that starting the run with a pre-existing injury, low training miles due to the injury, and masking the injury during the run using anti-inflammatories such as ibuprofen, could very well earn the runner a trip to the hospital with acute renal failure. The lesson is simple; if a runner is determined to start the run with an injury and low training miles, then they should NOT attempt to mask the pain with ibuprofen (or other NSAIDs).

5.6 Altitude Sickness

High altitude plus exertion can produce various degrees of high altitude sickness. Although rare, this has the potential to progress to severe pulmonary edema and/or brain swelling, possibly resulting in death. A headache not relieved with rest, adequate hydration and acetaminophen (Tylenol) will typically be a common thread with acute mountain sickness. If the runner remains symptomatic (difficulty breathing, headache, altered mental status, difficulty walking), medical team members should not allow the runner to ascend to higher altitudes, until asymptomatic. For severe cases, the treatment is rest, oxygen, appropriate medications, and rapid transportation to a lower altitude.

5.7 Exercise Associated Collapse (EAC)

Most cases of runner collapse are benign and occur after a runner has come into an aid station or crosses the finish line and immediately stops exercising. Athletes who collapse during exercise are more likely to have a more serious underlying problem. Athletes who are awake, alert, and oriented after collapse are less likely to have serious problems. In evaluating a collapsed athlete, check vital signs (rectal temp if heat stroke is suspected), assess fluid status (intake and urine output); dehydration vs. fluid overload. The most common benign cause of collapse is a drop in blood pressure due to pooling of the blood in the legs after cessation of exercise (as in postural hypotension, heat exhaustion, or syncope). This condition is easily treated by quickly laying the athlete flat (supine) on their back with the pelvis and legs elevated until symptoms improve.

5.8 Musculoskeletal Injuries

The most common musculoskeletal injuries include injuries to the knee, ankle, and hip. These are typically over-use problems and are not life threatening. Treatment for many of these injuries is limited to creative taping, splinting, massage, and stretching. NSAIDS (ibuprofen) should be used very cautiously or not at all during the run to prevent renal function problems. If someone is injured, but is able to safely get to the next aid station, either assist them or tell the next aid station crew where the person is and their status so that help can be arranged. If the person's injuries are such that they cannot be moved, do your best to keep the person warm and get help from the nearest aid station as soon as possible.

5.9 Blisters

Blisters are the most common medical problem that we see at the Hardrock. Although typically minor in nature, they can have a significant effect on run performance. For painful (non-bloody) blisters, carefully drain taking care to preserve the overlying skin. Blister care is the most effective if done before serious issues develop. Tape, pad, and reduce friction to prevent and minimize further damage.

5.10 Injuries From Falling / Steep Snow / Rockfall / Swiftwater:

Falling is an ever-present danger on the Hardrock course, with potentially serious consequences and difficult access. Much of the trail is narrow, uneven and rutted and may have sections of steep alpine ice and snow. If not careful, sliding out of control on steep snow is a real possibility on some sections of the course. Rockfall is another objective hazard that can occur on the course. Be aware and careful about causing unnecessary rockfall on the course if you are above other runners. Numerous stream and river crossings present an obvious hazard with high water levels. These sections must be approached with thoughtful care and caution by the runner. Specific high risk water crossings will receive risk mitigation before the run.

6. Search and Rescue Considerations

Unfortunately, it may become necessary for you or your crew to interact with search and rescue organizations. If so, the following guidelines are provided. Regarding use of your GPS tracking device to initiate such a response, complete instructions will be provided in further correspondence and at the runner orientation during Run Week.

In Colorado, each county handles its own search and rescue missions. In the four counties we run through, each sheriff's department is responsible for any SAR call-out in their respective county. They will call out volunteers, EMTs, etc., as appropriate. Each county is responsible for its own costs of conducting such operations. If they are unable to recover the costs from the person whose life is saved, it can be quite a burden on the county.

7. Detailed Run Week Timeline – Camp Hardrock

The planned program is below. We are going to be working hard the two weeks or so before the run, finalizing and marking the course, and taking care of last minute details. If you are involved with these activities (or would like to be) coordinate with the appropriate person ([Dale](#) or [Brad](#)). The provisional trail marking schedule is in [Section 9](#) of this Runner’s Manual.

Time	What	Where	Comments
Wednesday, July 4, 2018			
0730	Silverton Blue Ribbon 2K, 5K & 10K Race	Memorial Park	\$20-30 Benefits Silverton Youth Center.
1000	4th of July Parade	Greene Street	Meet at Courthouse and dress in red, white, and blue.
Dusk	Silverton Fireworks Show	Anyplace in Silverton	An annual tradition!
Friday-Sunday, July 6-8, 2018			
0800-1700	“Cook Hardrock”	American Legion	Hardrock runners eat a lot and you can see how it all gets put together. Contact Brad Bishop if interested
Saturday & Sunday, July 14 & 15, 2018			
TBA	Trail Work	TBA	Contact Rick Trujillo or Megan Finnesy . If you don’t sign up with Megan or Rick beforehand, you may not receive any credit.
Tuesday, July 17, 2018			
1100	Veterans Panel	TBA	Join Hardrock veterans for an informal question and answer session about what it takes to finish Hardrock and become a Hardrocker!
1200	Plogging Run	In front of Silverton Gym	Join us for a 2-3 mile run around Silverton as we get to know each other as well as clean up Silverton!
1500	GU Presentation	TBA	Join GU representatives as they talk about the historical connection between GU & Hardrock and some of the new developments at GU.
Wednesday, July 18, 2018			
1000	Bill Dooper Remembrance	TBA	Please join us to celebrate the life of Bill “Super” Dooper
1100	Women of Hardrock	TBA	Come hear what lady Hardrockers have to say about our community.
1200-1600	Runner Check-In	Silverton School Gym	This is it. Come say hi to fellow runners, buy your Hardrock SWAG and visit with our great corporate partners.
1200-1600	Tracker Distribution (1/2)	Silverton School Gym	Pick up your SPOT locator . Please bring your hydration vest or whatever you will be wearing during Hardrock so we can set you up.
1300-1500	Tailwind Presentation	TBA	We’re happy to have Tailwind as our hydration partner. They have a lot of information about their products & how they can help you!
1500	“ The First Hardrocks: Gold and Silver in the San Juans ” Presented by Terry Wallace.	TBA	2018 is Hardrock’s Silver Anniversary. Join author & mineralogist Terry Wallace as he looks at Hardrock from a geophysical and historical point of view.
1630-1900	Hardrock Trail Briefing	TBA	Want to know about every turn, every stream crossing and every mountain? Here’s your chance!
1630	Hardrock Happy Hour	TBA	Join Hardrock partner Ultimate Direction as they host Hardrock’s Wednesday night tradition of libations and conversation.
1930	Trails in Motion Film Festival	Silverton School	We’re proud to bring the prestigious Trails in Motion Film Festival.
Thursday, July 19, 2018			
0800-1100	Runner Check-In	Silverton School Gym	All runners must check in by 1100 hours or lose their entry!
0800-1100	Tracker Distribution (2/2)	Silverton School Gym	See Wednesday’s schedule for details.
0800-1600	Medical Volunteer Seminar	Silverton Town Hall	Inaugural Event! Contact Medical Director Geoff Clover for more info
1200	Mandatory Runner Briefing	Silverton School Gym	The Hardrock family comes together for the first time!
1315 app	HardBlock Run	Silverton School Gym	This one’s for the kids! Open to everyone from 2 to 12.
1400	Volunteer & Medical Briefing	Silverton School Gym	Open to all volunteers; all aid stations must be represented
1500	Drop Bag Deadline	American Legion	<u>(11th & Greene) Drop off any time TWTh up until the deadline.</u>
1800-2000	San Juan County Search and Rescue Dinner	Grand Imperial Hotel	Support our friends in San Juan County S&R and enjoy a pasta meal.
Friday, July 20, 2018			
0500-0545	Mandatory Runner Check-In	Silverton School Gym	Runners not checked in by 0545 will lose their entry.
0600	Start	Silverton School Gym	
0900-1900	HardBlock Street Party	Hardrock Finish Line	We’re all here to see the finish so let’s have a good time!
Saturday, July 21, 2018			
On-going	Still busy/info available	Silverton School Gym	
Sunday, July 22, 2018			
0500	The Golden Hour	Silverton School Gym	Hardrock Finish Line
0600	Last Official Finisher	Silverton School Gym	Hardrock Finish Line
0900	Awards Banquet/Ceremony	Silverton School Gym	

7.2 Aid Station Locations & Cutoff Times

Aid Station	Access	Mileage	Facility	Crew Access /Drop Bag	Absolute Cutoff Time
Silverton-Start	Auto	0.0	RDFW	Yes/Yes	Fri-0600
KT	4WD	11.5	RFW	No/No	Fri-1245
Chapman Gulch	Auto/4WD	18.1	RDFW	Yes/Yes	Fri-1530
Telluride	Auto	27.8	RDFW	Yes/Yes	Fri-1900
Kroger Canteen	Hike	32.7	RFW	No/No	None
Governor Basin	Auto	35.9	RFW	No/No	None
Ouray	Auto	43.9	RDFW	Yes/Yes	Sat-0315
Engineer	Hike	51.9	RFW	No/No	None
Grouse Gulch	Auto	58.4	RDFW	Yes/Yes	Sat-1030
Burrows Park	Auto	67.7	RFW	No/No	None
Sherman	Auto/4WD	71.9	RDFW	Yes/Yes	Sat-1630
Pole Creek	Hike	80.8	RFW	No/No	None
Maggie Gulch	4WD	85.1	RFW	No/No	None
Cunningham Gulch	Auto	91.2	RDFW	Yes/Yes	Sun-0200
Silverton-Finish	Auto	100.5	RDFW	Yes/Yes	Sun-0600

Facility key: (R)adio, (D)rop bags, (F)ood, (W)ater, Times in military (24 hour clock) time

RUNNERS MUST DEPART THE AID STATION BY THE CUTOFF TIME

Aid Station	Latitude	Longitude	Northing	Easting	Latitude	Longitude
Silverton-Start	37°48.663'	107°39.385'	4,187,970	266,150	37°48.663'	107°39.385'
KT	37° 47.531'	107° 47.555'	4,186,220	254,100	37°47.528'	107°47.553'
Chapman Gulch	37° 51.317'	107° 48.331'	4,193,320	253,350	37°51.351'	107°48.209'
Telluride	37° 56.099'	107° 48.379'	4,202,130	253,370	37°56.109'	107°48.376'
Kroger Canteen	37° 57.708'	107° 46.306'	4,204,990	256,550	37°57.706'	107°46.265'
Governor Basin	37° 58.928'	107° 45.675'	4,207,190	257,530	37°58.910'	107°45.641'
Ouray	38° 01.694'	107° 40.372'	4,212,319	265,399	38°01.694'	107°40.372'
Engineer	37° 59.156'	107° 36.277'	4,207,170	271,320	37°59.114'	107°36.230'
Grouse Gulch	37° 55.053'	107° 33.499'	4,199,590	275,170	37°55.077'	107°33.460'
Burrows Park	37° 56.218'	107° 27.642'	4,201,808	288,653	NA	NA
Sherman	37° 54.049'	107° 25.986'	4,197,400	286,270	37°54.054'	107°25.851'
Pole Creek	37° 48.180'	107° 28.400'	4,186,550	282,250	37°48.134'	107°28.396'
Maggie Gulch	37° 49.131'	107° 32.187'	4,187,950	276,810	37°48.812'	107°32.125'
Cunningham Gulch	37° 47.611'	107° 34.680'	4,185,900	273,050	37°47.649'	107°34.648'
Silverton-Finish	37°48.663'	107°39.385'	4,187,970	266,150	37°48.663'	107°39.385'

7.3 Solar and Lunar Data, Mountain Daylight Time at Silverton, CO (W107°40', N37°49')

2018	July 20	July 21	July 22
Begin astronomical twilight	0416	0417	0418
Begin nautical twilight	0457	0458	0459
Begin civil twilight	0534	0535	0536
Sunrise	0604	0605	0606
Sunset	2029	2029	2028
End civil twilight	2059	2058	2058
End nautical twilight	2136	2135	2134
End astronomical twilight	2217	2216	2215
Moonrise	1426	1526	1624
Moonset	0105	0138	0213
Fraction of moon illuminated (at midnight)	55%	65%	74%

Data source: <http://aa.usno.navy.mil/data/index.php>

8. Contact List

8.1 Run Management

The following is contact information for the run organizers. If you have questions regarding lodging or area facilities, please see the [next section](#).

Run Director

Dale Garland
195 Ball Lane
Durango, CO 81301
970.259.3693
970.769.2872 (C)
dale-hardrock100.com

Course Director

Charlie Thorn
505.662.2397 (C)
505.695.6261 (C)
thorncha@gmail.com

Pacer Coordinator

Andrea Feucht
505.920.8848
andrea-hardrock100.com

Hardrock Hundred Website:
<http://www.hardrock100.com>

Hardrock Twitter:
<https://twitter.com/hardrock100>

Aid Station Director

Brad Bishop
1461 Edora Road
Fort Collins, CO 80525
303.946.9320
brad-hardrock100.com

Trail Work Coordinators

Rick Trujillo
rstrux-rmi.net

Megan Finnesy
megan-dirty30.org

Communications Directors

Steve & Shauna Blaylock
comm-hardrock100.com

Runner Tracking Expert

Dr. Steve Halvorson
720.375.1846
stephen-hardrock100.com

Hardrock Email Listserv:
<http://groups.yahoo.com/neo/groups/HR100/info>

Hardrock Instagram:
<https://www.instagram.com/hardrock100run/>

Board of Directors President

David Coblentz
3424 Urban Street
Los Alamos, NM 87544
505.695.4829
dave.coblentz-hardrock100.com

Emergency Services Coordinator

Leo Lloyd
22 E. Animas Village Lane
Durango, CO 81301
970.799.2548
lloyd-gobrainstorm.net

Course Clearing Coordinator

Betsy Kalmeyer
falcons.14sf@gmail.com

Medical Co-Directors

Dr Steve Halvorson & Dr. Geoff Clover
720.308.8220
geoff-hardrock100.com

Hardrock Facebook:
<http://www.facebook.com/hardrockhundred>

8.2 Area Information

While you are in the area, plan on spending a little extra time enjoying the many summer activities. For help in planning your stay in the San Juans, here are some helpful contact addresses:

SILVERTON CHAMBER OF COMMERCE

414 Green St
PO Box 565
Silverton, CO 81433
970.387.5654
800.752.4494
<http://www.silvertoncolorado.com>

LAKE CITY/HINSDALE COUNT VISITOR CENTER

800 Gunnison Ave.
PO Box 340
Lake City, CO 81235
970.944.2527
<http://www.lakecity.com>

OURAY VISITOR CENTER

1230 Main St.
PO Box 145
Ouray, CO 81427
970.325.4746
800.228.1876
<http://www.ouraycolorado.com>

TELLURIDE VISITOR CENTER

236 W. Colorado Ave
Telluride, CO 81435
888.605.2578
<http://www.visittelluride.com>

8.3 During the Run

If you need to contact someone during the run, the point of contact is the Run Director, [Dale Garland](#). He may be reached at the Start/Finish area. **DO NOT** call his home phone number in Durango – you will just annoy his wife and he’s not there!

9. 2018 Course Marking Schedule

This schedule is subject to change. For additional information, contact [Charlie Thorn](#).

Marking and surveying the Hardrock course will be strenuous and provides participants the opportunity to acclimate as well as to see the course first hand. Runners not familiar with the course are strongly advised to participate. All participants are responsible for their own equipment, food, etc. These efforts will usually be full day affairs of hiking and running and may be conducted at a slow pace, so be prepared.

Below is the tentative schedule for surveying and marking the course. Interested runners and crew are invited to participate in all or portions of the effort. Although transportation for each day’s efforts **MAY** be available, none is promised. The general plan is to meet at Charlie Thorn’s house in Silverton, 1338 Reese St., at 7 am each day, unless otherwise stated. From there, we will go to the course section to be worked that day. Because the schedule will likely change, based on course conditions or personal quirk, persons interested in working on the course should coordinate the schedule the day before with Charlie in order to be sure the schedule is accurate. The porch in front of Charlie’s house will serve as the course marking coordination point.

This Schedule Is Subject to Change

Date	Course Section	Comments
Saturday 7/7	Cunningham Gulch to Silverton Hiking miles = 10	Meet at 10AM at Charlie’s house – 1338 Reese Shuttle vehicles
Sunday 7/8	Silverton to Ice Lake Trail to S Mineral CG Hiking miles = 15	Shuttle vehicles: Leave at 7:00 AM
Monday 7/9	Ice Lake Trail to Chapman. Hiking miles = 8	Shuttle vehicles
Tuesday 7/10	Grouse Gulch to Handies to Burrows Park Hiking miles = 10	4WD shuttle
Wednesday 7/11	A. Chapman to Wasatch Saddle – Thorn Hiking miles = 8 RT B. Telluride to Wasatch Saddle – Lang Hiking miles = 12 RT	Two Teams working concurrently will meet. Depart Silverton at 7 AM Depart Telluride at 9 AM
Thursday 7/12	A. Telluride to Virginius Pass. Hiking miles = 11 RT B. Governor Basin to Virginius Pass. Hiking miles = 9 RT	Two Teams working concurrently will meet atop Virginius. Telluride team departs City Park at 9AM. Governor Basin team departs Governor Aid Station at 10AM.
Friday 7/13	US 550 to Oh! Point and return Hiking miles = 13 RT	Depart Bear Creek Trailhead at 9AM.
Saturday 7/14	Sherman – Pole Creek – Maggie Gulch Hiking miles = 10	4WD shuttle
Sunday 7/15	Maggie Gulch to Cunningham Gulch Hiking miles = 7	4WD shuttle
Monday 7/16	Backup if needed	
Friday 7/20	Strip course	Contact Betsy Kalmeyer for details.
Saturday 7/21	Strip course	
Sunday 7/22	Strip course	

10. Directions to Crew Access Aid Stations

These directions are for finding the Aid Stations if you start in Silverton, except where otherwise noted.

10.1 Chapman Gulch

4WD from Silverton Take US 550 west from the south end of Silverton. Near MP 75, turn west onto the Ophir Pass Road. This intersection is marked with a large green sign. Take the dirt road to Ophir Pass (11,800'). The road becomes noticeably rougher and steeper on the two-mile descent to the aid station at the south turnoff toward Swamp Gulch. Although rougher roads exist in the San Juans, this section is not for the faint of heart. If you would like to see your runner at Chapman Gulch Aid Station during the run, continue west past the intersection with the path where runners come out onto Ophir Pass Road. You must park in the designated lot in Ophir and take the shuttle back up Ophir Pass Road. It will drop you off at the point where the Chapman Gulch access road connects with Ophir Pass Road, and you have a 0.3mi hike in. The shuttle will run from 8:30a until 2:00p; crews leaving the aid station after that time will need to be prepared to walk the 2mi back to Ophir. **No crew, spectator, media or parking or drop-offs of any kind will be allowed along Ophir Pass Road.** We are serious, and penalties including suspension from the lottery in future years can be applied for non-compliance.

Alternate 2WD from Telluride Exit Telluride on Main Street and go west about three miles to SR 145. Turn left (S) and go about 10 miles to the Ophir Pass Road. This intersection is marked with a green sign. Turn left (E) passing through the hamlet of Ophir, taking care not to lose your muffler on the speed bumps. You must park in the designated lot in Ophir and take the shuttle up Ophir Pass Road. It will drop you off at the point where the Chapman Gulch access road connects with Ophir Pass Road, and you have a 0.3mi hike in. The shuttle will run from 8:30a until 2:00p; crews leaving the aid station after that time will need to be prepared to walk the 2mi back to Ophir. **No crew, spectator, media or parking or drop-offs of any kind will be allowed along Ophir Pass Road.** We are serious, and penalties including suspension from the lottery in future years can be applied for non-compliance.

10.2 Telluride

Auto. From the courthouse in Telluride, go east on Colorado Ave (the main street) to the Telluride town park area. Turn right and immediately cross the bridge toward the white canopy and baseball field. Parking is limited both by the number of spots available and a two hour time restriction for occupying a spot. Crews who plan to spend more than two hours at the station should consider unloading their runner's gear and finding a spot back east of the river. Be aware that parking on most streets in Telluride requires a paid stamp-- the machines are to be found in most blocks. Pacers may not leave their vehicles at the aid station.

10.3 Ouray

Auto. Take US 550 over Red Mountain Pass to Ouray. Go to the north end of the main business district, and turn left (West) on 9th Ave. Follow it 2 Blocks, and it will curve to the right (North). Continue straight, and park in the gravel lot designated for RV parking to your right. The aid station will be on the west side of the park between the gazebo and restrooms.

10.4 Grouse Gulch

Auto. Take CR 2 NE from Silverton about 10 miles to a sign stating Picayune Gulch. Just beyond the sign and just before the Animas River Bridge turn left (NW) onto a dirt road. The aid station is on the flats southwest of the bridge and close to the main road. Only one vehicle per runner will be allowed to park at Grouse. You must have your runner's hangtag. Pacers may not leave their vehicles at the aid station.

10.5 Sherman

4WD. Take CR 2 NE from Silverton to Animas Forks (~11 miles) and continue on county roads over Cinnamon Pass (~5 miles beyond Animas Forks). Signs mark the road turns. From Cinnamon Pass, continue east toward Lake City approximately 11 miles to Burrows Park. **CREWS MUST NOT STOP AT BURROWS PARK AID STATION.** The Sherman turn-off is about 4 miles SE of Burrows Park. You'll know you're close to the Sherman turn when the road becomes significantly better at the bottom of the shelf road. Look for the BLM sign that faces Lake City. Turn sharply right (W) on the Sherman road, one mile to the BLM latrine and Cascade Creek trailhead where the aid station is located.

Alternate 2WD from Lake City. From Lake City, take SR 149 south to the turnoff to Lake San Cristobol Road. Turn on the Lake San Cristobol Road and continue past the lake to the end of the pavement. Continue on CR 30 about 14 miles to signed turnoff to Sherman. Go one mile to the BLM latrine and the Cascade Creek trailhead where the aid station is located.

10.6 Cunningham Gulch

Auto. Auto. Take CR 2 NE from Silverton 4 miles to Cunningham Gulch following the signs to the Old Hundred Mine Tour. Just after crossing the Animas River Bridge at Howardsville, follow the signs and traffic marshals to the parking area for shuttle boarding.

11.1 Crew Rules at HRH Aid Stations

The purpose of the Hardrock Hundred Aid Stations is to give each runner aid in their attempt to reach the finish line. As long as crews share this purpose they are welcome at the **CREW ACCESS** aid station. If a crew chooses to ignore the following guidelines then their runner is at risk of being disqualified.

11.2 The Hardrock Hundred 10 Crew Commandments

- 1 The Aid Station Captain is in charge of the aid station. It is up to them as to how the aid station will be organized and where crews will be allowed.
- 2 Crews are allowed into the aid station only when their runner and pacer are present.
- 3 Pets are not allowed in the aid station. In your vehicle? Sure, but please keep them restrained at all time.
- 4 Children are allowed within an aid station **ONLY** under the **DIRECT** supervision of an adult. This includes the start/finish in Silverton.
- 5 Food, drink, blankets, medical supplies, etc. at the aid stations are provided for the comfort of and use by the runners and their pacers.
- 6 Crews are asked to help us protect the fragile environment that we utilize. Please pack out all trash and equipment when you leave.
- 7 There are no bathroom facilities at most aid stations. Please keep this in mind and help us protect this part of the country.
- 8 Cheering runners is encouraged, but excessive noise, raucousness, and partying are not part of an effective aid station. Please save your celebrations for when your runner crosses the finish line!
- 9 Pacers may meet their runner at **CREW ACCESS AID STATIONS ONLY** except that, 1, for the CW direction, pacers are allowed to start pacing at Maggie Gulch if they hike in to the aid station on their own, and 2. In CCW years, pacers are allowed to start at KT if they hike in to the aid station on their own.
- 10 Crew may give runners aid within 400 yards of the aid station. Please do not go out on the course and give aid between aid stations nor should runners or their crew stash aid for runners along the course.

Crew Access Aid Stations for the Hardrock Hundred are:

Silverton, Chapman, Telluride, Ouray, Grouse Gulch, Sherman, and Cunningham Gulch

Remember, runners are responsible for and accountable for the actions and behaviors of their crews and pacers before, during, and after the run.

12. Joel Zucker Memorial Scholarship

The [Joel Zucker Memorial Scholarship](#) was created in memory of Joel Zucker who died at the age of 44, two days after completing his third Hardrock Hundred run in July 1998. Joel loved Silverton and running in the mountains and was loved by all who knew him. He was an inspiration to many people who thought they could never run a hundred miles. Joel always managed to finish the run within the last 10 minutes of the 48-hour deadline.

The scholarship is awarded by the Hardrock Hundred Endurance Run to San Juan Mountain High School seniors or to seniors from the region with a connection to the run. Additional scholarships are given to former recipients to continue their undergraduate education. Students must apply in writing and be interviewed to qualify.

Money for this scholarship is raised entirely by donations received from Hardrock Hundred runners, volunteers, the Hardrock Hundred organization, and friends and family of Joel. Donations can be sent payable to "**Community Foundation Serving Southwest Colorado**", PO Box 1673, Durango, CO 81302. Include the words "Joel Zucker Scholarship" on the memo line.

11.3 Keeping The Hardrock Hundred Green!

A core value of the Hardrock Hundred is responsibility to the lands on which we run and the communities in which we operate. It is our responsibility to reduce negative impacts every chance we get. To reduce our impact, the HRH:

- Is a cupless event. Every aid station will have reusable cups, dishware, and a wash kit; runners do not need to carry their own cup. No disposable dishware will be provided by Run HQ.
- Is working to reduce traffic at key wilderness areas: Chapman (Ophir), Grouse, Sherman, and Cunningham in particular
- Is working to provide recycling during run week – look for information at the gym

It takes awareness and effort by **everyone**, runners, crews, volunteers, as well as spectators and media, to reduce the impact of the HRH. Here are some ideas to help the HRH do even better! Keep these in mind during the run, when you are training, or just out exploring the San Juan Mountains!

Runners

- Don't litter! Pick up trash you find on trail
- Eliminate trail trash
 - Use reusable dispensers on trail and buy products in bulk
 - Keep track of your trash, particularly gel packs and wrappers
- Embrace cupless running
- Plan with your crew to reduce traffic to aid stations
- Bring your own reusable plates, cups, and utensils to the post-run breakfast
- Learn and Practice "[Leave No Trace](#)"
- Practice low-impact use of the wilderness during the HRH and any time you are on the trail

Crews

- Bring supplies such as reusable cups, plates, and utensils
- Collect recyclables and make sure they get recycled
- Reduce the number of vehicles going to aid stations – carpool!
- [Learn the rules for responsible off-road driving](#)
 - Stay on designated routes
 - Observe right-of-way on narrow mountain dirt roads
 - Park in designated spots only
- Don't litter! Pick up trash you find on trail
- Pick up after your pets

Volunteers

- Help runners be cupless. Runners will be prepared for it, help them be successful
- Limit cars to aid stations as much as possible
- Separate recyclables and make sure they get recycled.
- Compost food wastes
- Learn and Practice "[Leave No Trace](#)"