



Angeles Crest

100 MILE ENDURANCE RUN
2019 RACE GUIDE

WELCOME, RUNNER

The Angeles Crest 100 Mile Endurance Run has been run 31 times, and every iteration of the course has pushed competitors to their limits. From the fastest runners to the slowest, no runner has arrived at the finish without dealing with their fair share of hardship. Accordingly, no entrant in the 32nd edition can expect a day without some adversity. The aim of this book is to help racers achieve their best performance on the course.

The information in this book is all you need to plan a successful race. We've added sections with recommended pacing and race management to help share lessons learned for new runners, but the most valuable information for runners will be found on training runs where lessons in ultrarunning are empirically proven to oneself. Good old-fashioned hard training is ultimately the greatest source of information and development for race day.

The race is much more than just 33 hours of running, and we implore all runners to enjoy the journey in training and preparation for race day. The trail work days provide a hands on opportunity for runners to improve the environment that they will be tested to their limits in. The training runs offer supported point-to-point time trials to test race plans and build camaraderie with fellow competitors. Make the most of your time before the race to prepare and develop yourself. Enjoy the process, and find a way to thrive on the high alpine ridges of Baden-Powell, the rocky trails of high country, and the deep canyons surrounding Mt. Wilson.

There are golden moments wrapped inside the exhaustion; savor them.



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WHAT'S NEW IN 2019

Now in it's 32nd year, the AC 100 is one of the original five 100-milers in the country. While the challenge of the race is all yours, the challenge to race management is preserving the "old school" nature of the event, while also making necessary adaptations to our changing landscape: both of the land and the sport of ultrarunning. Each year, we work to provide the best experience possible without sacrificing the race's soul.

Updated Map Book

In 2018, we endeavored to provide you with a new, up-to-date race guide and course maps. Our cartographer has revisited the maps to update sections with inaccurate mileage and/or elevation change. As a reminder, this is a mountain race with areas of switchbacks and steep canyon walls, so no two GPS systems read the same. We have compared the map data with GPS data from experienced course veterans and feel that the updated maps and accompanying mileage and elevation chart are as accurate as you'll find amongst mountain races. We hope that this, among the other updates in the 2019 edition of the race guide serve you well in training, race planning, and crewing.

After the substantial course changes in 2017 to avoid the Pleasant View Ridge Wilderness expansion, we will follow the 2017 course again this year.

Ultrsignup

After the 2018 race, we moved the entry and lottery process over to ultrasignup.com. We hope that this change has made things easier for everyone.



Entry process / lottery

This year, the AC100 lottery was held in December (vs. the day after the 2018 race). In addition to accepting 250 runners, we are maintaining a 50 person wait list. Partial refunds are being offered to registered runners who withdraw before July 1st, 2019. With these changes, we are looking forward to seeing more runners on the starting line Wrightwood, including many of you who have been trying to gain entry for many years.

We plan to keep this process for future years and will provide online communication when the 2020 lottery opens. Interested runners are encouraged to check ac100.com and/or the official AC100 Facebook page for updates.



Many runners pause to contemplate their decision to enter the lottery at Dead Man's Bench, mile 78.6 of the race. This is normal. They all finished.



"Runners, who run in our Forest, gave to the people that live in our Forest... thank-you." - Pastor Wayne Robbins Ph.D, who accepted the food on behalf of the Sunrise Church Food Ministry.

New Race Sponsor - Mountain Hardware

Mountain Hardware at the race's start in Wrightwood has been a long time supporter of the AC100 and has joined us in 2019 as an official race sponsor. The store stocks performance food, gear items (Buffs, bandanas, sunscreen, etc.), and even trail running shoes - so pay them a visit for any last minute race needs.

Sterling Silver Ticket Races

This year, we reserved 12 spots in the race for the top 2 male and female finishers in the following Southern California races: Avalon 50-mile, Leona Divide 50-mile, and Angeles National Forest 60k. If a top finisher is already entered in the 2019 AC100 or declines the entry, the tickets roll down no further than 5th place.

Canned Food Drive

Last year, we were able to donate a large amount of canned goods collected by runners to the Wrightwood Food Bank. We hope to make this a permanent fixture of the AC100 moving forward. Please consider bringing a few canned goods to race check-in on Friday.



Runners enjoyed rain and cool temps during the first official training run of 2019: Chantry to the Finish. Expect the opposite weather on race day!



WHAT'S COMING IN 2020

Next year's race is already set. The 33rd Annual running of the AC100 will be August 1st and 2nd.

RACE WEEKEND SCHEDULE

WEATHER

It's August in Southern California. The combination of dry heat and altitude can be a real dream killer for the unprepared. Expect the heat. Train for it. Embrace it!

Proper heat management form: full body dousing, soaked cotton t-shirt, ice bandana and white everything (except mustache).



	HIGH	LOW	AVERAGE
START / Wrightwood	81	56	66
FINISH / Altadena	91	59	75

SCHEDULE OF EVENTS

Friday, Aug 2 / WRIGHTWOOD

8:00AM - 12:00PM @ Wrightwood Community Building
[1275 Park Dr. Wrightwood, CA 92397]

- Race check-in
- Canned food drive - please bring a donation
- Drop bag collection **11:00 AM SHARP!**

4:30PM @ Wrightwood Community Building

- Spaghetti Dinner / \$8 Donation

2:00PM - 4:00PM @ Wrightwood Community Building

- MANDATORY Pre-race meeting
- USFS / Rules / Trails briefing
- Medical and Search & Rescue concerns

Saturday, Aug 3 / WRIGHTWOOD

4:00AM @ Wrightwood Community Building

- Runner check-in (you must check in on race morning!)
- 4:30AM Race day invocation (Co-RD, Gary Hilliard)
- 5:00AM Official start of the 2018 AC100

Sunday, Aug 4 / ALTADENA

Finish line @ Loma Alta Park

[3330 Lincoln Ave, Altadena, CA 91001]

- 5:00AM - 24-hour buckle cut-off
- 6:00AM - Second sunrise buckle cut-off
- 2:00PM - Final cutoff / conclusion of the 2018 race
- 2:30PM - Awards ceremony

RACE RULES + POLICIES

The AC100 Rules and Policies are designed for the safety and well-being of everyone involved in the race; including runners, pacers, crews, volunteers and spectators - as well as the general public who may choose to enjoy the public lands of the Angeles National Forest on race weekend. Failure to comply with these rules may result in disqualification of the runner.

All runners in both the Crewed and Solo divisions must adhere to all of the following rules. An additional set of rules for the Solo runner has been added at the end.



RULES FOR ALL RUNNERS

1) Runner responsibilities

The runner is responsible for knowing and abiding by all the rules.

2) Race packet pick-up

Runners are required to pick up their own race packet on Friday and may not send anyone else to pick it up for them. ID (i.e., drivers' license) will be required.

3) Pack out what you pack in

Please do not use the USFS brown bear-proof trash containers at aid stations. Runners should throw all of their personal trash away at the aid station provided receptacles, and crews should pack their trash out. This is to avoid over-filling the USFS containers, which often can't even contain a day's worth of weekend trash from the public and creates a hazard for wildlife. The future of the race depends on abiding by this rule.

4) Do not litter

On a related note, (and this should be obvious), but don't throw your trash on the ground. It is full-on illegal. This includes discarding aid cups outside of the checkpoints. This includes your fruit peels and rinds, which you may think are biodegradable but actually take



forever to break down. This includes your toilet paper and feminine items (tip: pack a ziplock bag inside of a brown paper bag, throw it in there and discard at the next trash receptacle). USFS pit toilet locations are included in the Course Description, for your convenience. Runners are welcome to use the aid station provided trash bags for any wrappers they collect on the course. Accidents do happen, so we encourage everyone to pick up any errant gel tabs or trash you may find along the trail. The seconds you may lose will be made up in extra runner karma.



5) No “muling”

Runners must carry all of their own fluids, food, clothing and other supplies needed for use between checkpoints. Pacers are not allowed to carry any of this for the runner.

6) No unauthorized aid, caches or drops

Runners are not allowed aid between checkpoints, plain and simple. No one is allowed to cache, drop or store supplies on the course before or during the run. Crews are forbidden to leave aid along the trail during the run, nor can they utilize highway crossings at Kratka Ridge,

Pajarito, or Glenwood Springs to provide aid to runners. “Friends out on their own runs” may not offer special treats. (We’ve seen it. Don’t try it).

7) Aid stations are for registered runners only

Aid (including water, food, ice, etc.) should only be used by the registered runner. The on-duty pacer may also use aid. Any runner who’s crew or friends are caught using the aid station for their own personal use or training run may be disqualified.

8) No course-cutting

Runners must follow the marked course at all times. If he/she inadvertently departs from the marked course, the runner must return to the point of departure under his/her own power (no car rides allowed) and continue on the correct course. Cutting the course is grounds for immediate disqualification.

9) Checking in/ checking out

The confirmation that you have completed the course relies almost entirely on hand-recording by aid station volunteers and reporting by HAM radio, therefore it is the runner’s responsibility to confirm they have reached each aid station/checkpoint by properly checking in and out. Failure to do so could result in being missed at an aid station and disqualification for cutting the course. Since congestion can be a problem, particularly at the early checkpoints, you can help ensure you are recorded by doing the following:

-
- Keep your bib number visible.
 - Make eye contact with the volunteers as you enter and exit the aid station and announce your arrival / departure with a "Runner [XXX] in!" or "Runner [XXX] out!"

10) Pacers

- Runners in the Crewed Division may be aided by a Pacer beginning at the Chilao Aid Station (mile 44.8) through the Finish. Only one pacer may accompany the runner at a time. The rules for pacing are as follows:
- The pacer may begin running with his/her runner only at the aid station.
- The runner may switch pacers only at the Chantry Flats Aid Station (mile 75.4).
- No pacers may switch at Shortcut or Red Box crew checkpoints. No pacers may "run-in" to switch at Newcomb's, Idlehour, Sam Merrill or Millard, nor at any unofficial point along the course.
- Pacers may not leave their vehicles parked at Chilao, Chantry Flats or any other aid station on the course. They must accompany a runner's one crew vehicle or be dropped off. If any pacer is found to have left a vehicle at an aid station, his/her runner will be disqualified.
- Pacers are allowed to accept aid from the aid station, but must do so within the designated checkpoint. If an aid station shortage occurs, please give registered runners priority.



Exceptions:

- Any runner 65 and older may have a pacer for the full 100 miles.
- Any male runner 60 and older or female runner 55 and older, with at least 7 finishes, can have a pacer for 100 miles.
- In these special cases, pacers may start with their runner and can switch at any aid station with crew access between the start and Chilao. From Chilao, pacers must follow the same rules for switching out as the general field.

Looking to pace / seeking pacer:

- If anyone attending the race would like to pace a runner, please let the aid station captain know and they will keep a list. (Perhaps your runner has dropped or your crew duties are over and you are looking to get a little run in?) Runners IN THE CREWED DIVISION ONLY may inquire if any extra pacers are available at Chilao and Chantry, and if so, pick one up.

-
- If you are looking to pace or seeking a pacer, you can try to coordinate in advance through the official AC100 Facebook page or by contacting the Chilao or Chantry aid station captain. Priority will be given to out-of-state runners.

11) Cutoff times

For everyone's safety and well-being, cutoff times will be strictly enforced at each checkpoint by the aid station captain. What this means is that the runner must **LEAVE** the aid station by the listed cutoff time and must continue forward on the course. They may not return to the aid station, and crew or volunteers may not provide additional aid outside of the aid station. The aid station captain will pull any runner failing to leave the aid station by the cutoff time, and this decision is final. No exceptions. Please familiarize yourself with the cutoff times listed in the AID STATION + CUTOFF CHART on page 58 of this book to avoid any confusion or surprises on race day.

12) Checkpoint leader authority

Checkpoint leaders (aid station captains) have full authority regarding a runner at their station. Arguing or disobeying their decision will cause disqualification of the runner.

13) Highway crossings

There are a few points where the course crosses the busy, Highway 2. In these areas, the main concern is not how fast you can get across, but rather the safe movement of both pedestrian and vehicle traffic. (This is for everyone's safety, as there are multiple accidents and deaths on Highway 2 every weekend.). A run official (flagger) will be placed at the major highway crossings to assist, and the runner is expected to obey this official's directions and all laws pertaining to highway pedestrian crossings. A runner is considered a pedestrian, and vehicles have the right of way at all times... even during a 100 mile race.



14) No poles

The use of trekking poles is not allowed.

SOLO DIVISION RULES

When accepted into the race in the Solo Division, a runner agrees to follow the above race rules plus an additional set of rules set forth for the separate division. All Solo division runners must sign the Solo Runner Agreement form at race check-in to confirm their knowledge and acceptance of the following rules. Violators will be disqualified from the race and may be banned from future runnings of the AC100. If you have any confusion about which division you are in, please consult the 2019 Entrants List on AC100.com.

1) Drop bags and aid stations only

A solo runner may only receive aid from his/her own drop bags, the official AC100 aid stations and official aid station volunteers. Solo runners may not receive any aid or assistance from other runners' crews or spectators.

2) No crew

A solo runner agrees that they will travel the course alone and will not use a crew. Any attempts to subvert this rule by using another runner's crew or "friends that just happen to show up" will not be tolerated. Solo runners will not be penalized from receiving "emotional encouragement" in the form of hugs, high fives or cheers from other runners' crews or spectators.

3) No pacers

A solo runner also agrees to run without a pacer. Having someone meet you "unofficially" along the course is considered cheating, just as it would be in the crewed division. A solo runner may, however, run with other registered racers in either division, which may also include a crewed runner's pacer.

4) No switching to the crewed race

The solo runner has received special consideration for entry through the lottery, so once a Solo designation is accepted a runner may not switch to being a crewed runner. This includes prior to race day, at race check-in and during the race. To repeat, **YOU CANNOT SWITCH FROM SOLO TO CREWED DURING THE RACE.**

5) Switching to the Solo Division

A registered runner in the general division (crewed) may switch to the Solo Division at any point prior to race day or at race check-in. Once a runner is checked-in, his/her division is final.

POLICIES + PROCEDURES

WHAT TO DO IF...

1) You get lost

The course will be clearly marked via surveyor's tape and flour, but if you are unfamiliar with the course, it is always a good idea to carry a copy of the map and written directions or load the GPX files onto your GPS enabled device. Course vandalism is rare, but does occasionally happen.

That said, if you do happen to find yourself lost or injured, never attempt to find your way by traveling cross-country across the forest. **STAY ON THE TRAIL AND WAIT.** If you inadvertently veer off the trail, immediately retrace your steps back rather than continuing forward. Wandering aimlessly, especially at night, will reduce your chances of being found.

2) You decide to drop

We hope this won't be the case, but let's face it - stuff happens out there. If you find yourself unable to continue the race, you absolutely must notify a race official at the next aid station. Your medical band with your name and bib number will be surrendered, at which point the runner is considered officially dropped from the race. You cannot leave the race without surrendering your medical band!

If you check out of an aid station and fail to check into the next within a reasonable time, race officials will assume you are lost and notify Search and Rescue. This could negatively influence the future of the race, so please take this very seriously. This means that if for some reason you decide to drop between aid stations and have the opportunity to hitch a ride at a highway crossing, **YOU MUST GO TO THE NEXT AID STATION AND NOTIFY AN OFFICIAL.** If you realize you did not do this, find a way to make contact with a race official immediately.

3) You drop (or are cut off) at a remote wilderness checkpoint

Remote wilderness (Newcomb's, Idelhour, Sam Merrill and Millard) checkpoint leaders that lead checkpoints which are behind locked gates are required to insure the health and safety of all runners. This includes both you, the dropped, and runners who are still in the race. The aid station volunteers will give you a ride out the aid station, but unless there is a medical emergency, this will likely not be until the aid station closes on Sunday morning. For some runners, this could mean many hours of waiting, and we will not allow dropped or cut off runner to leave a wilderness checkpoint on his/her own volition. Please understand that this is for your safety, and we will do everything we can to keep you warm, fed and comfortable until a way back to civilization is secured.

4) You have a race dispute

Any concern about another competitor violating race rules (cutting the course, accepting aid, solo runner violations, etc.) must be presented to race management prior to the awards ceremony. We would suggest doing so by discussing with an official at the Finish Line. Once the Race Director presents the runner their award, the results are considered final.

5) You lose your award

AC100 awards are not for sale. If you lose an award (buckle, plaque or bronze award), please understand that we cannot offer replacements, nor will we sell them. The only way you can get an AC100 award is to run the race and cross the finish line.



SUPPORT CREWS

Any runner not registered as SOLO may use a support crew. While a runner may find this helpful, a crew is not essential to completing the AC100. There is adequate aid station support along the course with water, electrolyte replacement fluids, food and medical aid. In addition, drop bags are allowed at all major checkpoints (see AID STATION + CUTOFF CHART, page 58).

If you do choose to have a crew, these individuals are considered an extension of the runner and must adhere to the following rules. Any violations may result in disqualification of the runner.

- Each runner may only have one crew vehicle on the course, including at the starting line in Wrightwood and finish line at Loma Alta Park. This will be policed via a Vehicle ID Pass, which must be prominently displayed throughout the race for access to the aid stations.



- The Vehicle ID pass does not override the USFS required Adventure Pass. A crew is responsible for purchasing and displaying their own Adventure Pass, which is available at many Wrightwood businesses such as the grocery store, hardware store and gas station. A National Parks pass may be used instead.

- Only support crew vehicles are allowed in congested parking areas. Spectators are asked to park in turnouts and walk in to the aid stations.
- Many checkpoints are located directly along busy and dangerous Highway 2. Whether on foot or in vehicles, crews must not impede highway traffic. Crews are encouraged to carpool when possible to prevent traffic problems.

- **DO NOT PARK OVER THE WHITE LINE.** This is illegal, and violations put the race in jeopardy. Please help us ensure the race's future by following all traffic and parking rules and signs.
- Crews must comply with run officials directing traffic at all times.
- Crews are NOT allowed at checkpoints marked "NO" in the crew column of the AC100 checkpoint table, nor or they allowed at highway crossings or any unofficial spot on the course. We realize that



Crewing two kids AND the 2015 female champion? You can sip that "World's Greatest Dad" mug with confidence.

some aid stations are accessible by vehicle, (Mt. Hilyer, Millard), but due to parking and noise restrictions, crews are not allowed there. Crews also may not hike in to any aid station marked “NO.”

- Crews must not drive alongside their runner while they complete the road sections of Highway 2. This includes slowing to less than 25 MPH or in any way impeding traffic when they are passing their runner. This is incredibly dangerous for everyone involved.
- No dogs are allowed at any aid stations or on the course.

Crew Infraction Penalty:

If a crew is determined to have broken any of the above rules, the runner will be held for one hour at the aid station where the infraction occurs. If the runner has already left, the runner will be notified and held at the next aid station. A second infraction will result in disqualification.

DROP BAGS

All runners in both the general (crewed) and Solo divisions are offered drop bag service at major checkpoints. We highly encourage using this service to ensure you have exactly what you need, when you need it, especially for any runners with special dietary restrictions. The use of drop bags instead of a crew also helps the race minimize highway traffic.

How to label them:

To help ensure that your drop bags get to the correct checkpoint, clearly write your name, bib number and checkpoint name on each bag, preferably in black permanent marker.

Drop bag deadline:

Drop bags will be collected on Friday morning between 8:00AM - 10:30AM in front of the Wrightwood Community Building. Be sure that all bags are securely tied and labeled. Drop bags will be picked up at **11:00AM SHARP** and transported to the end of the course for distribution.

What to pack:

While the aid stations are well stocked, you should never expect them to have exactly what you like or might be accustomed to. If it's imperative to your race, pack it in a drop bag! Don't forget extra lights or batteries for the night sections, as well as extra layers in the event it cools off. Do not pack or leave your favorite shirt or expensive piece of gear in a drop bag. While it's rare, the bag could get lost or accidentally opened, and race management will not be responsible for any lost or damaged item.

Drop bag retrieval:

All drop bags will be returned to the finish line area as the aid stations close. All drop bags are expected to have arrived by the end of the awards ceremony.

Finish line drop bag:

Do not place valuables such as wallets, car keys or phones in your finish line drop bag. Solo runners should carry these key items with them during the race or make other arrangements.

NO SHUTTLE SERVICE

This is a point-to-point race. No shuttle service is provided by the race to bring runners back to Wrightwood. Runners in all divisions are responsible for making their own arrangements.

If you drop during the race and do not have a crew, you can try to negotiate a ride with another crew or spectator or wait until the aid station volunteers are able to provide a ride.

Solo Van

If you are a Solo Runner, you may have purchased a Solo Van ticket. Please be advised that this is more of an insurance policy, in the event that you need to drop at an aid station along the course. The Solo Van will only guarantee dropped runners a ride to the finish line and will not provide transportation back to Wrightwood. If you purchased a ticket in advance, you are guaranteed a ride from any aid station. There may be additional spots available for purchase on race day, but priority will go to those who have purchased tickets in advance. If you think you are at risk of dropping or being cutoff from the race and have not made other arrangements, we'd suggest using this service.

If you're concerned about logistics, a really solid option is just to not drop. Take some inspiration from this hearty runner, finishing on fumes with mere minutes to spare.





TRAIL MARKING

Trails are marked with **YELLOW** surveyor ribbon and biodegradable powder. Night sections are marked by glow-sticks in difficult areas. Biodegradable powder will be used to mark the trail near campgrounds, since campers have been known to remove ribbons and glowsticks, as well as help add additional marking to intersections. Please note that there could

be areas where surveyors have marked trees with other colored ribbon (pink, orange, blue, fun stripes, etc.). You should always follow yellow, with the exception of one area: From Shortcut to Red Box, the trail will be marked with **RED** ribbon. From Red Box to Newcomb, the dirt road will resume to **YELLOW** ribbon. This is to help avoid confusion where the course crosses itself.



AID STATIONS

AC100 has 10 major aid stations and 5 wilderness stations. At each, runners can expect to find water, CarboPro, Ice and an assortment of food items. Each aid station is run by volunteers who supply their own mix of food and supplies, but in general, you can expect a mix of sweet and salty snacks, soda, fruit, and hot soup at night. Chantry Flats is a major aid station with many food options for runners to fuel up before tackling the last 25 miles. If there is anything specific you must have during the race, please pack a drop bag. Runners with dietary restrictions are especially encouraged to pack their own food.



CELL SERVICE ON THE COURSE

There isn't much. Depending on which service provider you have, there are a few tiny pockets along Blue Ridge and the top of Baden-Powell and intermittent service during the last 25 miles as you approach the city. You should not rely on your phone for safety or route finding. Crews will not experience much, if any, service at all along Highway 2 and should not depend on it for driving directions.

MEDICAL

The race is staffed by an all-volunteer medical team, led by the Medical Coordinator. These volunteers are there to provide guidance and help you make good decisions concerning your health and safety. We no longer weigh runners at aid stations and will not pull runners for excessive weight gain or loss, however a medical volunteer may make recommend either remaining at an aid station or dropping from the race. In particular, they will be looking for signs of dehydration and hypothermia.

Full medical service will be stationed at Islip Saddle, Chilao, Chantry Flats and the Finish Line. If available, we also try to have a wilderness medical person at Idlehour.

HAM RADIO COMMUNICATION TEAM

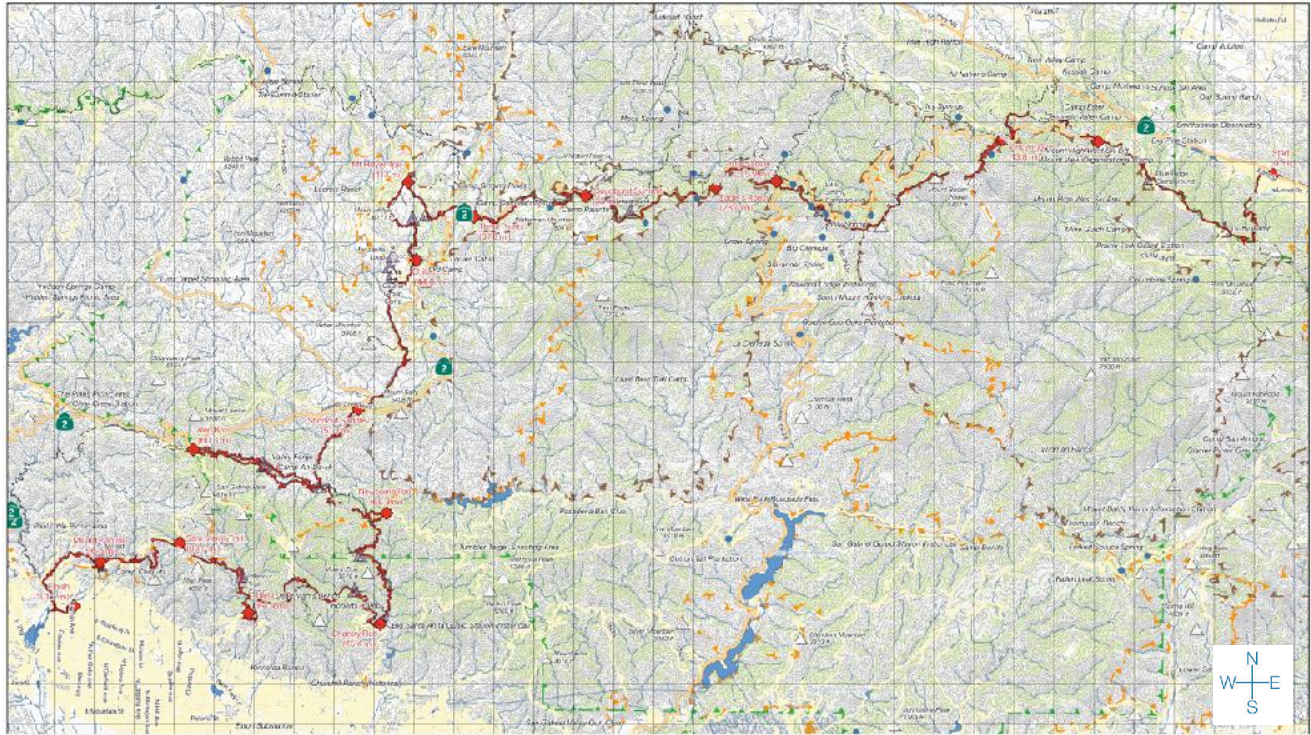
HAM radio operators will be tracking runners' progress at each checkpoint. Arrival, departure, and drop information will be distributed among checkpoints and to a database at the finish area using integrated radio communications and computers. This system not only makes it possible to locate runners' positions throughout the race, it also facilitates emergency response.

We ask that crews and spectators please understand that the HAM operators' first priority is accurately and quickly communicating the whereabouts of each and every runner on the course, not to provide you with race updates. Larger aid stations may display runner check-ins and times, but this is at the discretion of the checkpoint volunteers and not required. If they are not overwhelmed with incoming/outgoing runners, they may be happy to provide you with information - just please use your best judgement and be courteous. At the Finish Line, we encourage crews and spectators to use the Live Runner Tracking on their phones to obtain updates on their runner. The link to Live Runner Tracking will appear on AC100.com closer to race day.

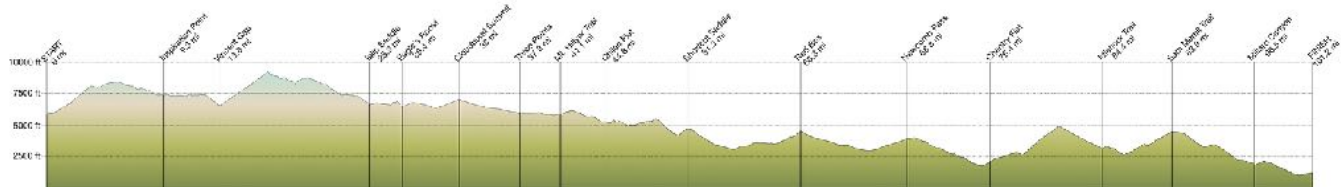
THE COURSE

DESCRIPTION + MAPS

DRIVING DIRECTIONS



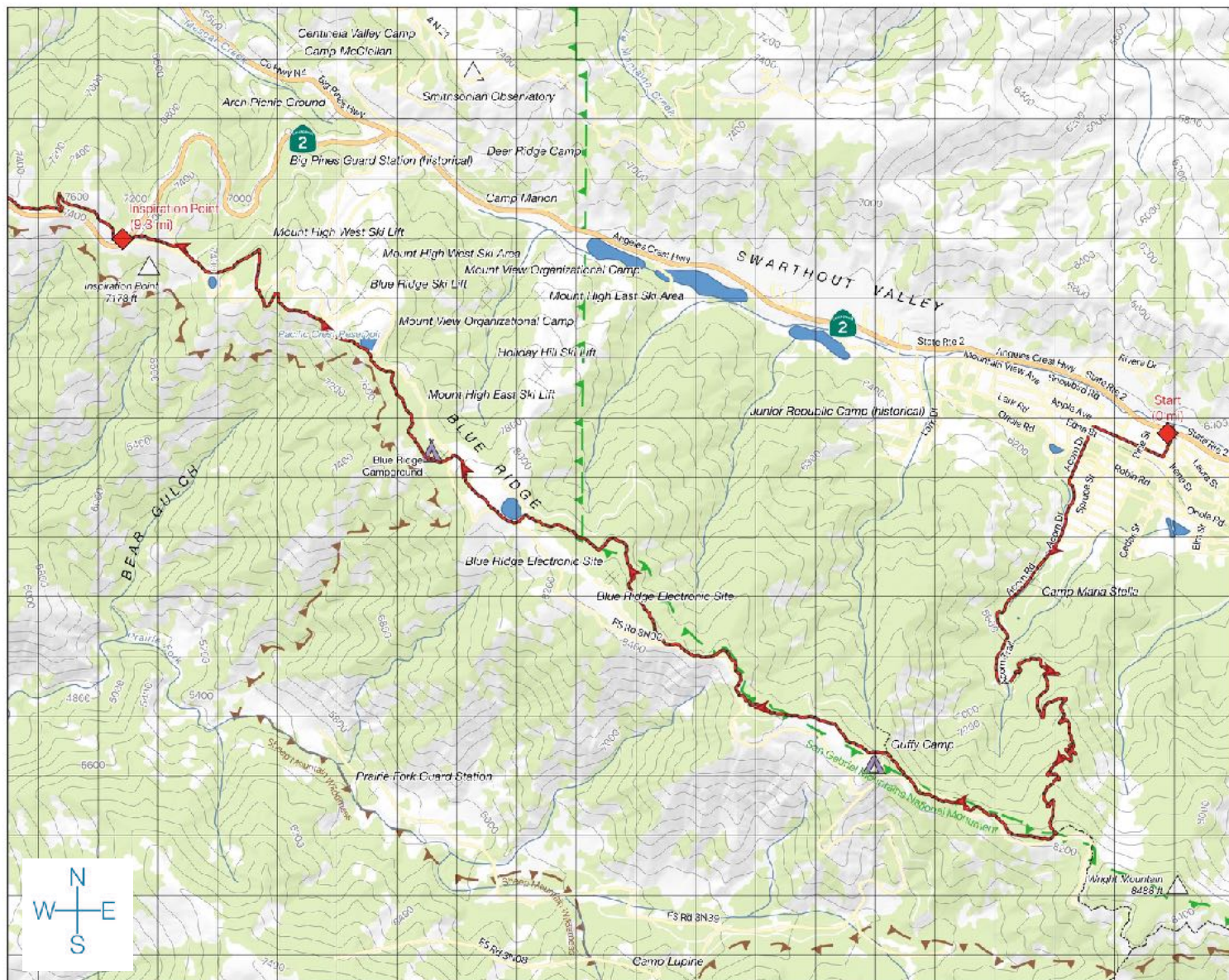
TOTAL RACE DISTANCE:	101.2 miles	ELEVATION GAIN:	21,810'
ALTITUDE RANGE:	1,135' - 9,300'	ELEVATION LOSS:	26,480'



This section was created to give runners a general overview of the course, a detailed written description and AC100 Veteran tips for reaching the Finish, as well as driving directions and details for both you and your crew. Larger versions of these maps as well as detail maps for tricky sections can be found in the official 2019 AC100 Map Book, which will be more suitable for printing and carrying, if you so desire. You can find it in the left hand column under “2019 Race Information” on AC100.com. This column also contains a GPX file of the course for you to download.

WRIGHTWOOD to *INSPIRATION POINT* / miles 0 - 9.3

Section Length:	9.3 miles	Drop Bags:	NO
Driving Distance:	5.5 miles / 10 minutes	Crew:	YES



Elevation:

GAIN: 3,230'	HIGH POINT: 8,480'
LOSS: 1,770'	LOW POINT: 5,945'



COURSE DESCRIPTION:

The race begins at 5,945' at the Wrightwood Community Center Parking lot. Runners gaze South at Wright Mountain (the landslide), and turn their focus West along 8,400 foot Blue Ridge, which they'll soon climb and traverse to Inspiration Point. From the start, runners turn right on Park Dr. and head uphill two blocks, turn right on to Apple Ave. for 0.3 miles, and then turn left onto Acorn Dr., following the road uphill past the private road signs* until the pavement ends 1.4 miles from the start. A signpost at the race book author's cabin informs AC100 runners that Altadena is a mere 98.8 miles away. The paved road transitions to a dirt fire road climbing for 0.2 miles to a signpost denoting the Acorn Trail where runners turn left onto single track climb. Finally, 3.4 miles and 2,200' of climbing from the start, runners turn right on the Pacific Crest Trail, which they will follow towards Canada for the next 22.5 miles.

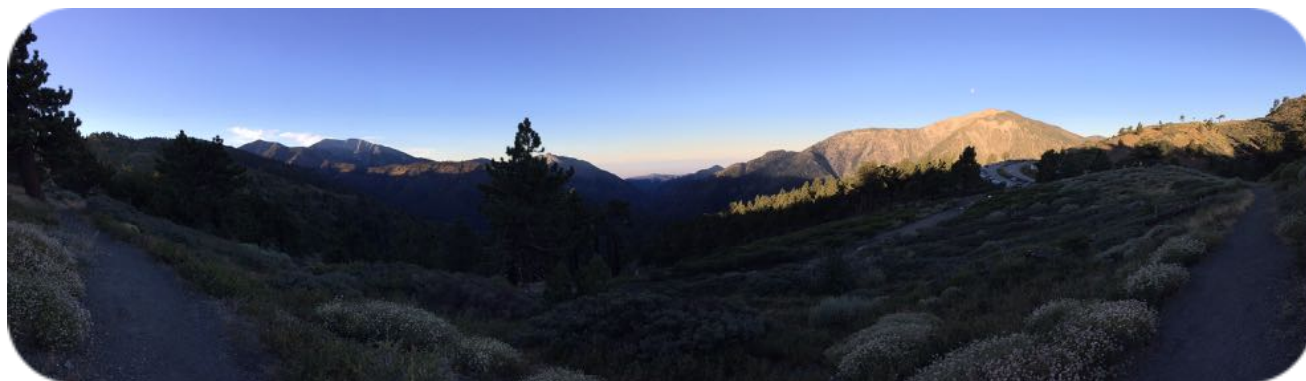


Where the dirt begins...

Runners roll and climb past Guffy Campground** until reaching the high point for the section of 8,480 feet at 5.7 miles. Winding through a forest of Ponderosa, Jeffery Pine, and Spruce, runners are treated to a golden sunrise with views of the Los Angeles Basin and the Mojave Desert. The peaks visible from Blue Ridge are Pine Mountain and Mt. San Antonio to the South, the antenna-clad Mt. Wilson (mile 79 of the course) to the far West, and Mt. Baden Powell to the Northwest (mile 17). Continuing West past Mountain High Ski Resort and Blue Ridge Campground**, runners roll downhill to Highway 2 and cross the road to the Inspiration Point Aid Station at Mile 9.3, elevation 7,400'.

**When training on the course, do not park anywhere past the private road signs- an upset home owner could have your car towed for \$800+.*

*** Excellent high altitude campgrounds that make great training bases for those looking to acclimatize before the race at 8,000+ feet. USFS pit toilets are available at both campgrounds.*



Blue Ridge in all its early morning glory.

VET'S ADVICE:

24-hr Runner / Runners seeking the elusive Sterling Silver Buckle should focus on hiking anything on the Acorn climb that strains their breathing or burns their calves. Though taking 50-55 minutes to climb 3.4 miles might seem slow, the initial climb is one of the steepest on the course, and the downhill running that comes next is good terrain that should allow some quick and easy miles to get a runner to Inspiration Point just before 7:00 AM. The average to run 100.3 miles in 24 hours is 14:22/mi, but for this section, 24-hour runners usually average 12:22/mi to reach Inspiration Point by 6:55 AM.

33-hr Runner / For those looking to finish, this section's cutoff of 8:15 AM requires runners to average a pace of 20:58/mi, which is slower than the average of 19:45/mi for 33 hours over 100.3 miles. Runners arriving after 7:40 AM are less likely to make following cutoffs, so a pace closer to 17:12/mi is recommended.

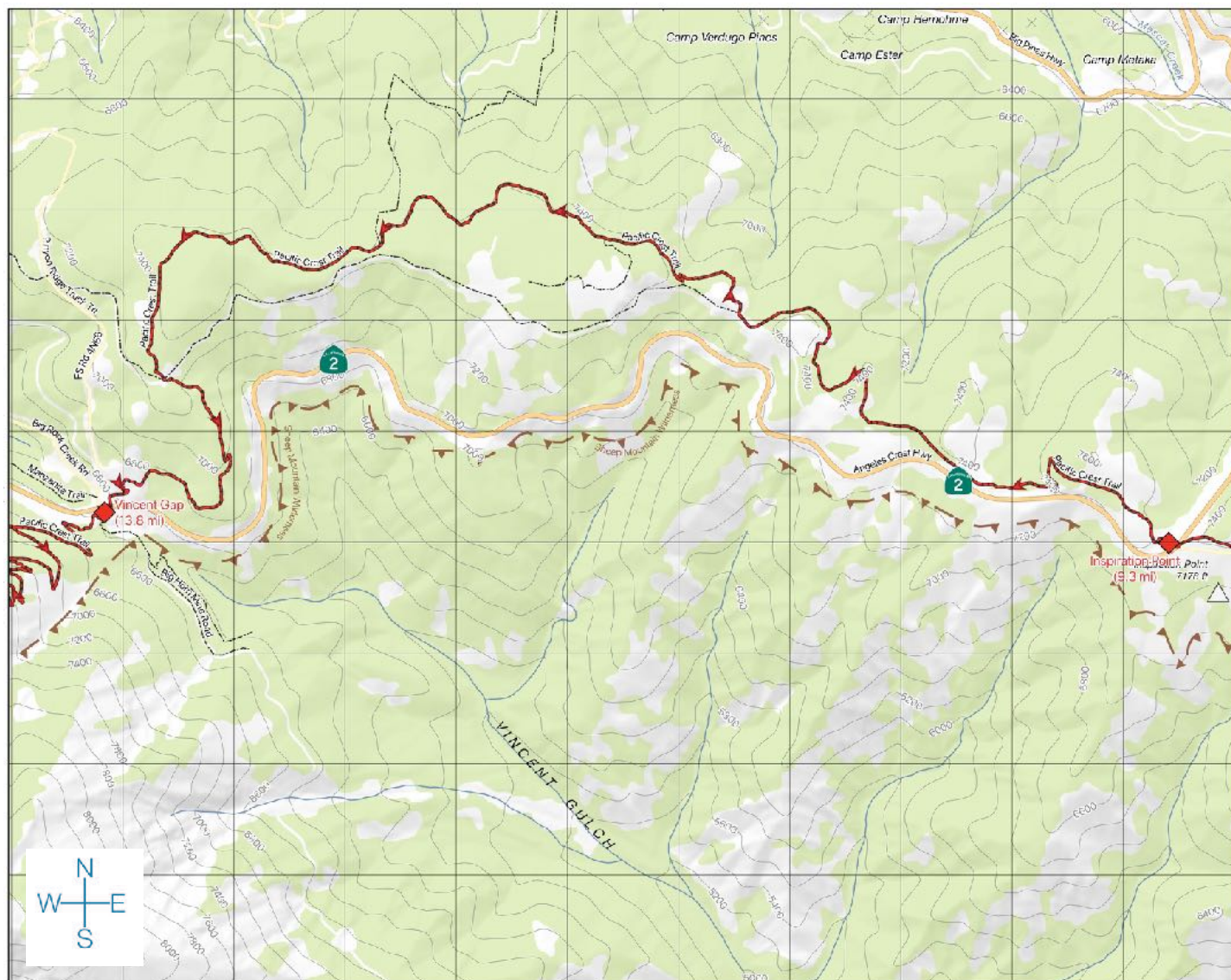
DRIVING DIRECTIONS + PARKING INFO:

Leaving Park or Pine St., turn left on Highway 2 (completed in 1956), drive 3.5 miles to Big Pines Junction. Follow signs to the left for La Canada-Flintridge/Glendale, and continue 2 miles to the Inspiration Point Aid Station. This is a mountain route, so watch for fallen rocks on the roadway, as well as speeding motorcycles and cars.

Being the first, this aid station will be crowded! There are large parking areas on both sides of the highway at the aid station. There isn't enough room in these lots for everyone, so crews may need to utilize turnouts before or after the aid station. Runners will be crossing the road at the aid station, so please take extra caution when approaching and leaving the aid station. USFS pit toilets are available for use at the aid station.

INSPIRATION POINT to *VINCENT GAP* / miles 9.3 - 13.8

Section Length:	4.5 miles	Drop Bags:	YES
Driving Distance:	3.3 miles / 8 minutes	Crew:	YES



Elevation:

GAIN: 700'

LOSS: 1,460'

HIGH POINT: 7,492'

LOW POINT: 6,590'



COURSE DESCRIPTION:

Leaving an exciting early morning aid station, runners head up the PCT out of the aid station. 1 mile later, the trail passes Grassy Hollow Visitor Center - pit toilets are available off the trail to the left. 3.5 miles past the Inspiration Point aid station (PAS)*, a picturesque view of the next challenge comes into view - 9,406' Mt. Baden-Powell. Runners then dive downhill another mile to 6,600' Vincent Gap, where they cross Hwy 2 and prepare for the longest climb of the race.

VET'S ADVICE:

24-hr Runner / Sterling Silver Buckle hopefuls can improve their chances of a successful Baden-Powell climb by taking time to eat and drink on the way to Vincent Gap. If a runner hikes the short uphill on this section, and runs the rest of the terrain, 50 minutes for 4.5 miles should accommodate an arrival at Vincent before 8:00AM.

33-hr Runner / For those looking to finish, this section's cutoff of 9:20 AM only allows 65 minutes or 14:26/mi from the last aid station. This is definitely a section where all flat or downhill terrain must be jogged to lower the average pace after the last net uphill section. Eating and drinking before Vincent Gap is also advised in case of altitude sickness that upsets runners' stomachs. Historically, the last finisher gets to Vincent Gap by 8:40 AM, which is necessary to bank time for the cutoff at Islip, which is one of the tougher splits to make.

DRIVING DIRECTIONS + PARKING INFO:

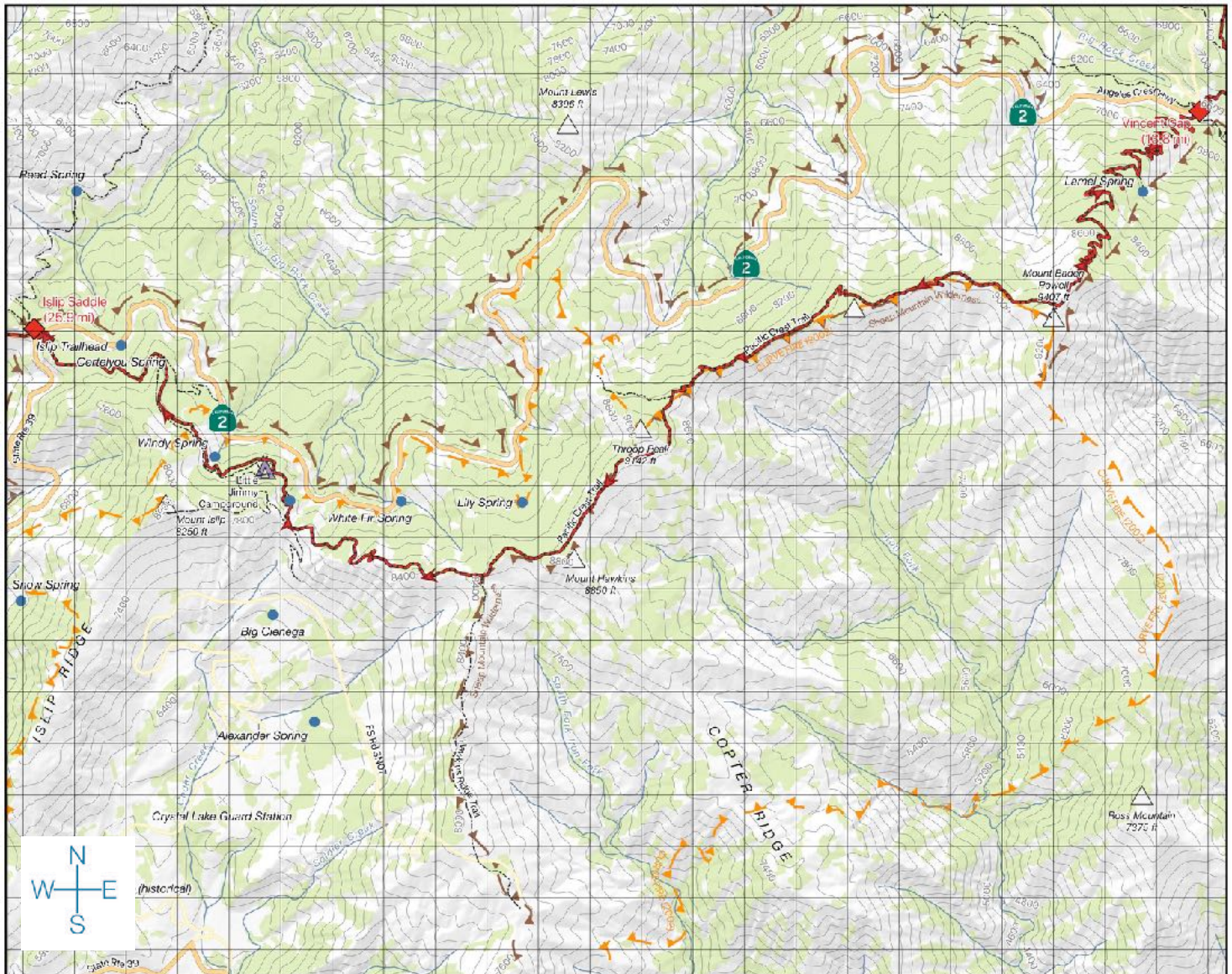
Leaving Inspiration Point, continue heading west towards Mt. Baden-Powell for 3.3 miles to Vincent Gap Aid Station.

Vincent Gap will also be crowded with crews, as the field is not yet spread out. There is a large parking lot at the aid station, however many crews will need to utilize the large turnout to the right of the road or turnouts before and after. Again, runners cross the highway at the aid station, so take caution. USFS pit toilets are available for use.

**PAS = distance past previous aid station*

VINCENT GAP to *ISLIP SADDLE* / miles 13.8 - 25.9

Section Length:	12.1 miles	Drop Bags:	YES
Driving Distance:	10.6 miles / 20 minutes	Crew:	YES



Elevation:

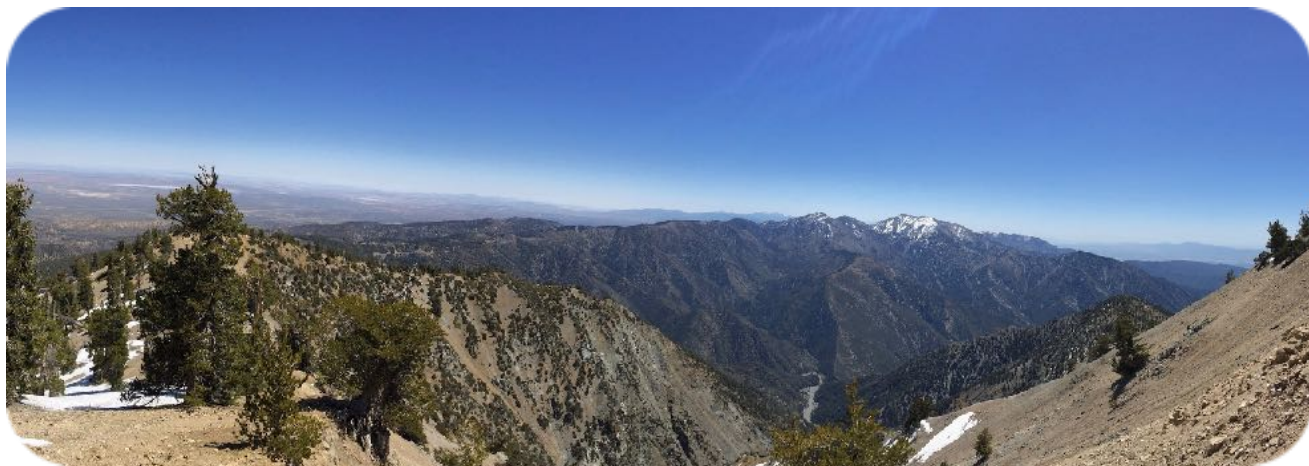
GAIN: 3,610' HIGH POINT: 9,300'

LOSS: 3,520' LOW POINT: 6,590'



COURSE DESCRIPTION:

Leaving Vincent Gap, runners are advised to carry 80-120 oz of water and 2-4 hours of calories to make the long, high altitude 12.1 mile push to Islip Saddle. (Many runners have found success using liquid calories here, as the combination of heat and altitude can be troublesome on the stomach.) From the parking lot, a venerable 3.6 Mile, 2,650' climb to 9,300' awaits. All runners, from the front to the back of the pack, will feel temperatures rise as the sun begins to seep through the pines. After more than four dozen switchbacks, runners reach a spine at 9300' that affords views of Mt. San Antonio to the Southeast and the East Fork of the San Gabriel river 4,000' below. The PCT nears the summit but veers to the right at the Wally Waldron Tree - an ancient 2,000+ year old limber pine, 150' below the summit. (Runners do not summit Baden-Powell during the race). As the runner passes the peak, Mt. Wilson (mile 79 of the course) appears off in the distance to the Southwest. The trail begins to drop, but runners will face a small climb around Mt. Burnham, and then a 300-foot climb up to the Dawson Saddle Trail Junction, 5.2 PAS. Following signs towards Little Jimmy/Islip Saddle, head left to continue on the PCT (NOT down the Dawson Saddle Trail to the right).



The high point of the course - the Mt. Baden-Powell spine - also affords one of the most spectacular views.

The trail traverses on the South face of Throop Peak for a half mile and then finally begins a long, sustained downhill to Windy Gap. The PCT heads right at Windy Gap (do NOT follow sign to Crystal Lake to the left) and in a quarter mile offers a junction to Little Jimmy Spring to the right or a direct path to the left. If you do not need water for the last 2 miles to Islip, continue left, but if necessary, the path to the right offers mountain spring water for the price of a small 50' climb out to the North to rejoin the trail. Crossing a fire road 1 mile later, the trail dives a final time to Islip Saddle, mile 25.9, elevation 6,590'.



Little Jimmy Spring.

VET'S ADVICE:

24-hr Runner / The longest and toughest section in the course's alpine forces runners to maintain a 15:00/mi pace over the rugged 11.6 mile section to reach Islip Saddle by 11:00 AM. Experience and patience will help runners focus on maintaining caloric intake as the body struggles to make forward progress for several miles above 8,000'. Eating gels or taking down several ounces of sports drink might be the best chance at keeping energy levels up while the digestive system is compromised by altitude and heat. A common sign that nutrition is off is if one feels extremely weak on the 300' climb up to the Dawson Saddle Junction. The body will respond well to oxygen on the decent towards Windy Gap, with most sub-24 runners taking 50-65 minutes to get from the Dawson Saddle Junction to Islip Saddle. However, it is

important to not get carried away here with unnecessary exertion and quad-thrashing.

Success in the road section to come depends on the runner's ability to eat and run downhill - losing time on the "easy" miles of the course to recover from the fun on Baden-Powell has been the demise of many silver dreams.

33-hr Runner / For those looking to finish, if one left Vincent Gap without a time buffer, this section's cutoff of 1:05 PM means that 12.1 miles must be covered in 3:45, requiring a 19:23/mi pace. Historically, the last finisher arrives at Islip by 12:45 PM. As mentioned in the above 24-hour pace recommendations, liquid calories can be helpful at high altitudes. However, runners should also try to consume proteins, fats, and even some fiber near meal times to help the stomach absorb acids from sugars. Runners arriving at Little Jimmy Spring might consider consuming a sandwich or a wrap to ensure an efficient pass through the Islip aid station. In general, runners should never run hungry, and should try to eat whenever/wherever they feel ready to consume calories.

DRIVING DIRECTIONS + PARKING INFO:

Leaving Vincent Gap, continue heading west for 10.6 miles to Islip Saddle Aid Station. Rockfall is common on this stretch of Highway 2, so for the sake of your tires and oil pan, drive with caution.

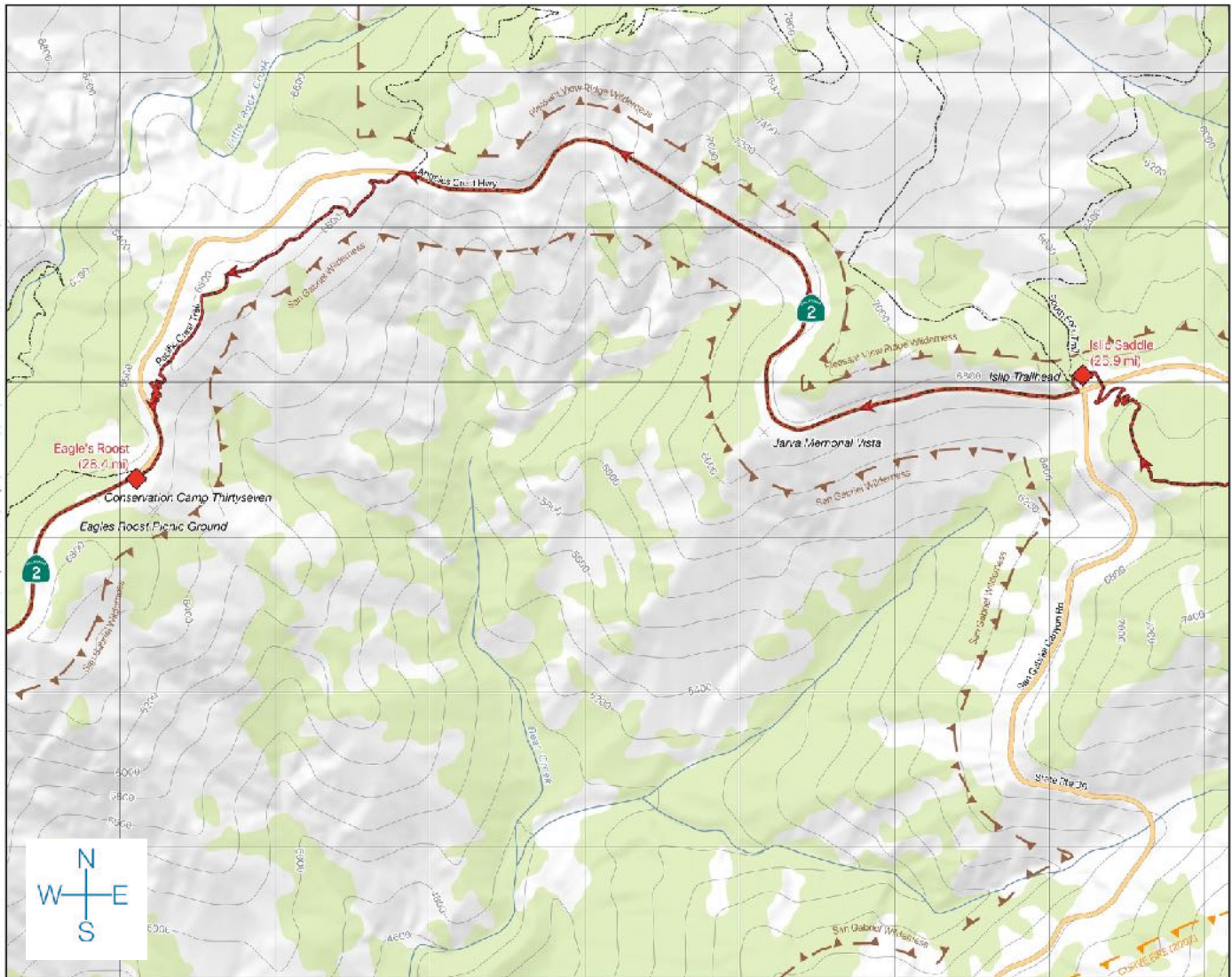
Parking is located in turnouts before, after and across from the aid station - the small lot will be filled. Take extra caution for runners crossing the road at Islip and running on the shoulder of the highway to the next aid station. USFS pit toilets are available.

Mt. Baden-Powell spreads the field out quite a bit, so crews of later-arriving runners may choose to wait a bit in a scenic turnout along the highway before approaching the aid station. Crewing space is limited, so please share and allow crews with approaching runners priority.

Hot tip: Depending on your service provider, small pockets of cell service can be obtained on this drive near Dawson Saddle, as well as standing at the edge of the parking lot, facing the desert, at the Islip Saddle aid station.

ISLIP SADDLE to *EAGLE'S ROOST* / miles 25.9 - 28.4

Section Length:	2.5 miles	Drop Bags:	NO
Driving Distance:	2.3 miles / 4 minutes	Crew:	YES



Elevation:

GAIN: 490' HIGH POINT: 6,906'

LOSS: 590' LOW POINT: 6,675'



COURSE DESCRIPTION:

After the San Gabriel Mountains National Monument was recently established, increased oversight from NPS and USFS required the Angeles National Forest to deny AC100 any special exemptions to passing through wilderness. The Pleasant View Ridge Wilderness is all forestland North of Hwy 2, from Islip Saddle to 3 Points, and while the race works with local congresspersons and the National Forest to re-establish access, the race is prohibited from using all trails in this area. The modified course runs mostly along the paved Hwy 2, utilizing trail sections to the South whenever available. Mileage/climbing lost from the original course is made up later via the addition of the Red Box loop.

Runners leave the Islip Saddle parking lot and run West on the left (South) side of the road, enjoying the scenic view of Bear Creek thousands of feet below. Please exercise caution running through the Williamson Tunnels, as motorcycles are known to rip through at top speeds. 1.6 miles PAS runners turn left onto the PCT and follow the trail up and over Kratka Ridge (the scenic mound) for 0.9 miles to Eagles Roost Aid Station, mile 28.4 at 6,666'.

VET'S ADVICE:

24-hr Runner / The heat will begin to be felt in earnest along this section, yet runners expecting to run 24 hours should try to stay on pace running no more than 30 minutes for the 2.5 mile section. Heat acclimation is key for this section, as runners need to focus on taking in enough calories to maintain energy levels and water/electrolytes to prevent overheating, adequate kidney function, and proper blood pressure. Various strategies of wet, white cotton t-shirts, wet handkerchiefs, and extra water to squirt on oneself come into play.

33-hr Runner / 33 Hour finishers generally arrive at Eagle's Roost by 1:40 PM, even though the cut off is 2:05 PM. Though there is a slight uphill grade on the road, the incline is much less than the previous section, and runners need to jog the road to take advantage of the light incline. Hiking the climb up Kratka Ridge is common for many runners. As mentioned in the 24-hour section, heat acclimation is key, and the runner must make good decisions on when to eat/drink/take electrolytes/wet themselves with water/change clothes.

DRIVING DIRECTIONS + PARKING INFO:

Leaving Islip Saddle, continue heading west for 2.3 miles to Eagle's Roost Aid Station. Parking is located in the turnouts after the aid station. USFS pit toilets are available.

By this time of day, the weekend traffic will be out. Highway 2 is a popular route for motorcycles and racing enthusiasts, and they have been known to drive quite aggressively. Please use the turnouts and just let them pass. Do not slow down and drive alongside runners on the course, as this creates a very dangerous situation for yourself, the runner and other motorists.

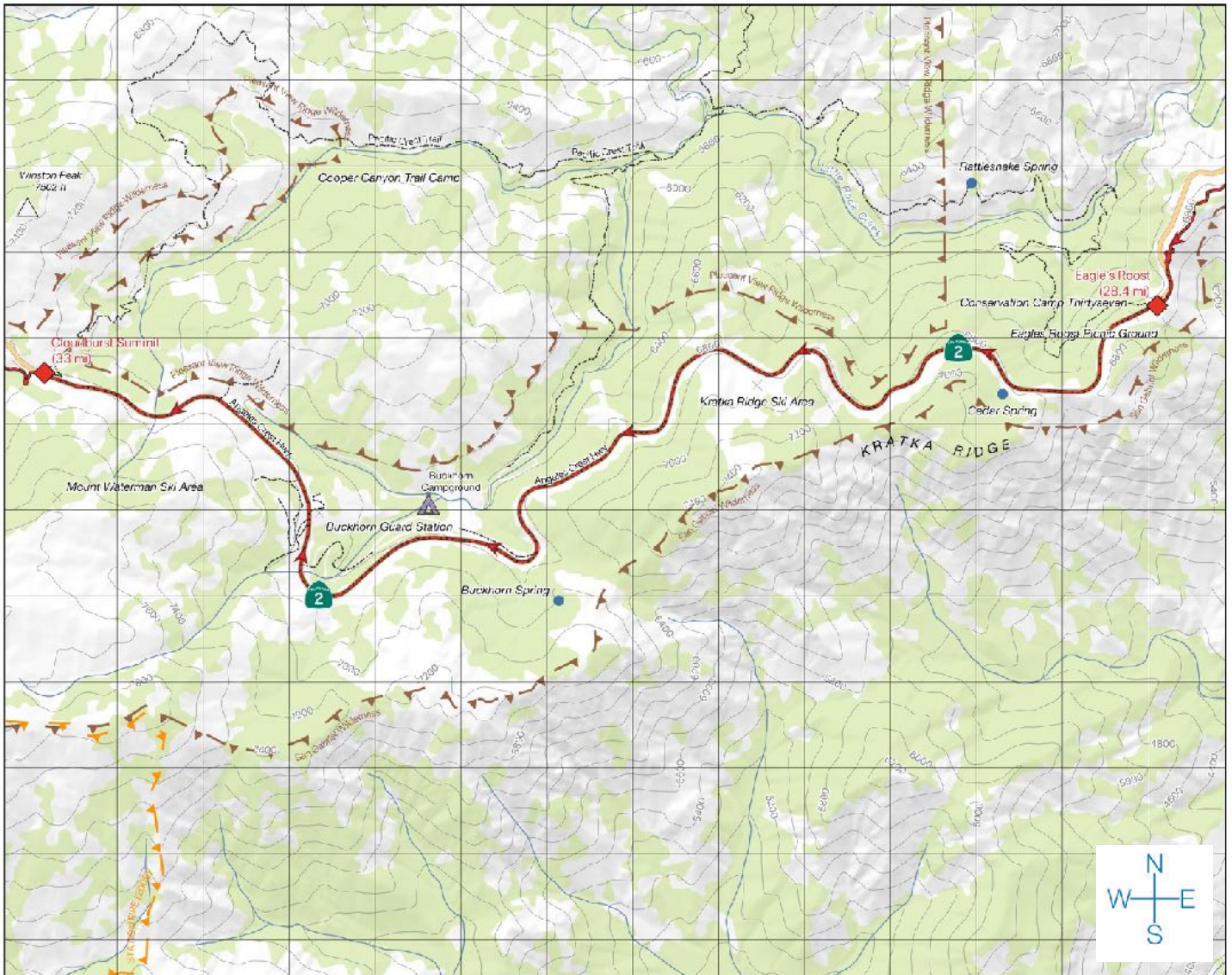
EAGLE'S ROOST to *CLOUDBURST SUMMIT* / miles 28.4 - 33

Section Length: 4.6 miles

Drop Bags: NO

Driving Distance: 4.6 miles / 9 minutes

Crew: YES



Elevation:

GAIN: 770"

HIGH POINT: 7,018"

LOSS: 420"

LOW POINT: 6,548"



COURSE DESCRIPTION:

The entirety of this section runs along Hwy 2 - a total of 4.6 miles, climbing 770' and descending 420'. Leaving Eagles Roost, runners travel on the North side of the road (with traffic) until they reach the Cloudburst aid station. Please run on the right side of the road, which will be marked with yellow ribbons.

Runners may notice that certain parts of this section feel hotter, as additional solar radiation is reflected off the light colored rock and canyon walls block air movement. Nearing the Cloudburst Aid Station at mile 33, 7,020', a cooler breeze usually provides a bit of relief.

VET'S ADVICE:

24-hr Runner / 24-hour runners tend to arrive by 12:15 PM, running the majority of this section. Though an "easy" road, this stretch is notoriously tough on runners, as their systems cope with the combined effects of heat, altitude, and 28 miles on the legs. The 2 mile, 450' climb to Cloudburst is hotter and longer than it seems, and runners that tackle it cool and fueled up fare better in the race. Ease up if you're overheating.

33-hr Runner / 33-hour finishers tend to reach Cloudburst before 2:50 PM, despite the 3:30 PM cutoff. The 2 mile, 450' climb to Cloudburst is hotter and longer than it seems, and it can be brutal on runners later in the day. Always being ready to deal with additional heat and a potentially upset stomach can be the difference between needing 30 minutes to repair at an aid station and an efficient 2-minute pit stop. Remember: race time doesn't stop in aid stations.

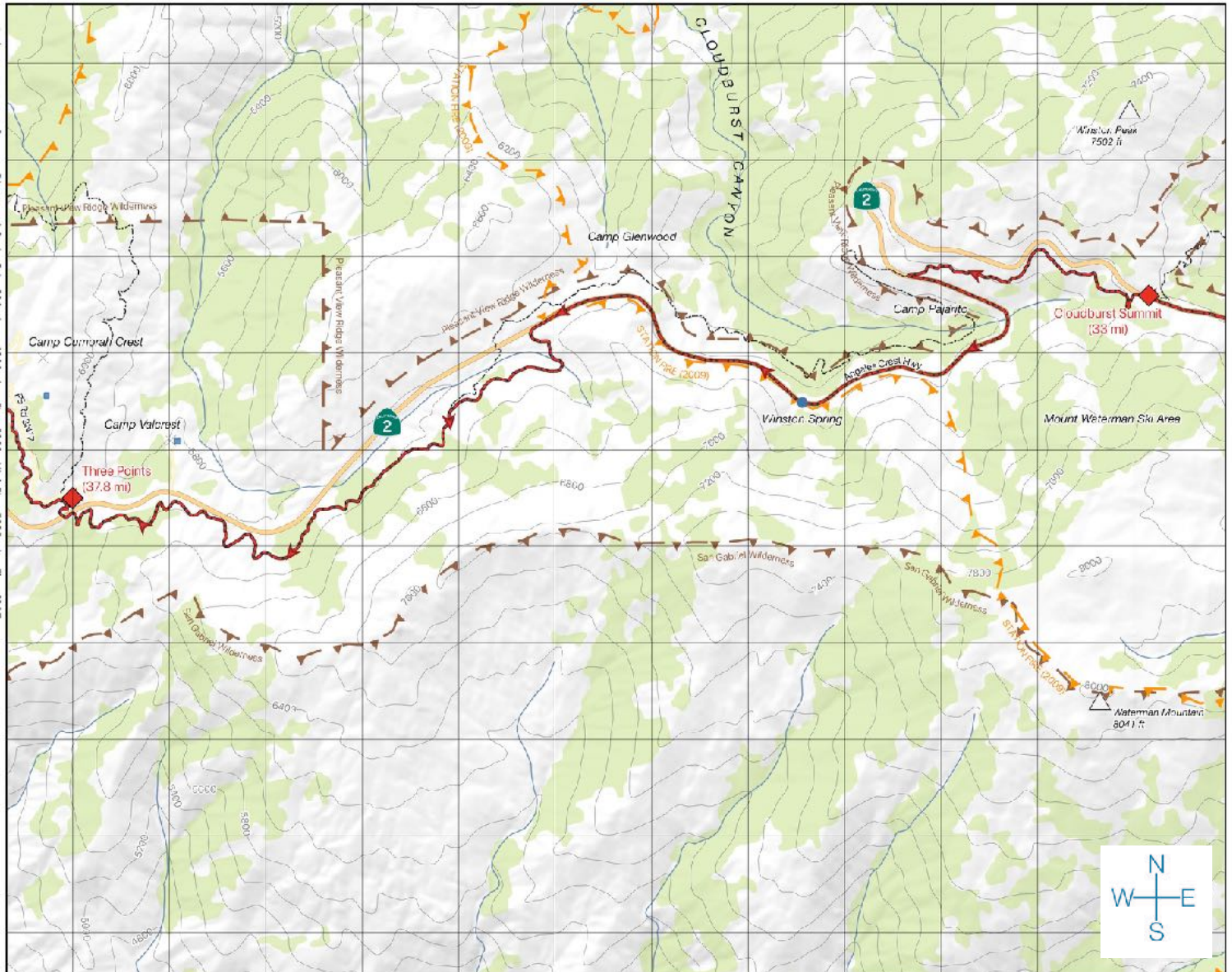
DRIVING DIRECTIONS + PARKING INFO:

Leaving Eagle's Roost, continue heading west for 4.6 miles to Cloudburst Aid Station. Parking is located in the turnouts before and after the aid station.

The aid station itself is located in a turnout, and there are no toilets available. Runners cross the highway after the aid station, so please slow as you approach.

CLOUDBURST SUMMIT to *THREE POINTS* / miles 33 - 37.8

Section Length:	4.8 miles	Drop Bags:	NO
Driving Distance:	4.5 miles / 9 minutes	Crew:	YES



Elevation:

GAIN: 220'	HIGH POINT: 7,025'
LOSS: 1,290'	LOW POINT: 5,860'



COURSE DESCRIPTION:

Leaving Cloudburst, runners join the PCT on the South side of the highway. From there, it's downhill for 0.75 miles to again meet Hwy 2. Runners make a sharp left here, to continue running downhill on the left side of the road (facing traffic). 2.5 miles PAS to the Glenwood turnout on the left side of the road, where a large yellow gate blocks a fire road. This is the route, but feel free to use the USFS pit toilets in the turnout if necessary. Now off the highway, the course continues past the yellow gate and follows a fire road down the South (left) side of the canyon for 2 miles, gradually turning into a single track trail. Runners may begin seeing and smelling the infamous purple, poodle-dog bush along this stretch and should use caution (see pages 61-62 for details on this toxic plant). At the junction with the Mt. Waterman Trail, runners follow the PCT to the right (go towards the highway) and down to the road crossing where the PCT climbs for 0.1 Miles to Three Points Aid Station, mile 37.8, elevation 5,900'. Flaggers will direct runners at the highway crossing.

VET'S ADVICE:

24-hr Runner / 24-hour runners tend to arrive by 1:10 PM, running almost all sections of this stretch. A light breeze may provide some relief, but the dry heat and the Southern California sun is still baking runners in a largely exposed section. Carrying enough water to douse oneself every few minutes is key as the downhill breaks up near Three Points.

33-hr Runner / 33-hour finishers reach Three Points by 4:00 PM, despite the 4:30 PM cutoff. The mix of pavement and trail running can begin to take its toll on runners' knees. The heat might appear to be wearing off with a nice breeze moving through Cloudburst, but there still are warm pockets in the canyons below. Be prepared with plenty of water as you leave the aid station.



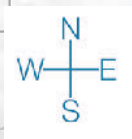
DRIVING DIRECTIONS + PARKING INFO:

Leaving Cloudburst, continue heading west for 4.4 miles on Hwy 2 to Sulfur Springs/Santa Clara Divide Road, turn right and the aid station is 200 feet up the road. Parking is located at the aid station, and the field is usually spread out enough to accommodate most crews. If not, you can head back down to the highway to find a turnout - you know the drill by now! USFS pit toilets are located at the aid station.

This section of Highway 2 is often filled with speeding motorcycles (in 2014, one literally flew off the highway and crashed in the middle of the race course). Take caution for runners joining the shoulder of the road 0.75 miles after the aid station.

Section Length: 3.3 miles
Driving Distance: No crew access

Crew: NO



LOW POINT: 5,746'



COURSE DESCRIPTION:

By Three Points runners will begin to notice signs of the 2009 Station Fire, with a transition to more chaparral and less forested terrain. Leaving the aid station on the same trail they entered on, runners will bid adieu to the PCT and make a quick right on to the Silver Moccasin Trail (roughly 100 feet below the aid station). Rolling through exposed terrain, runners turn right off the trail 2 miles PAS at the Bandido Campground onto a paved road that leads to Santa Clara Divide Road. Runners turn left and follow it for 1.2 miles up to Rosenita Saddle where the Mt. Hilyer Aid Station is located at mile 41.1, elevation 5,900'

VET'S ADVICE:

24-hr Runner / 24-hour runners tend to arrive by 1:55 PM, making quick work of the section, provided their stomachs are still with them. The absence of trees for the first mile is palpable, as the light rocks reflect heat upward. The trail tends to become more technical from this point forward as the pine trees become more sparse. Heat is still very much an issue, and heat management is more important than ever..

33-hr Runner / 33-hour finishers reach Three Points by 5:00 PM, despite the 5:30 PM cutoff. Leaving the pine trees, the trail becomes noticeably more technical and requires additional focus. For much of the remainder of the race, attention will be necessary to avoid tripping on rocks and roots as the sun begins to set and legs begin to tire.

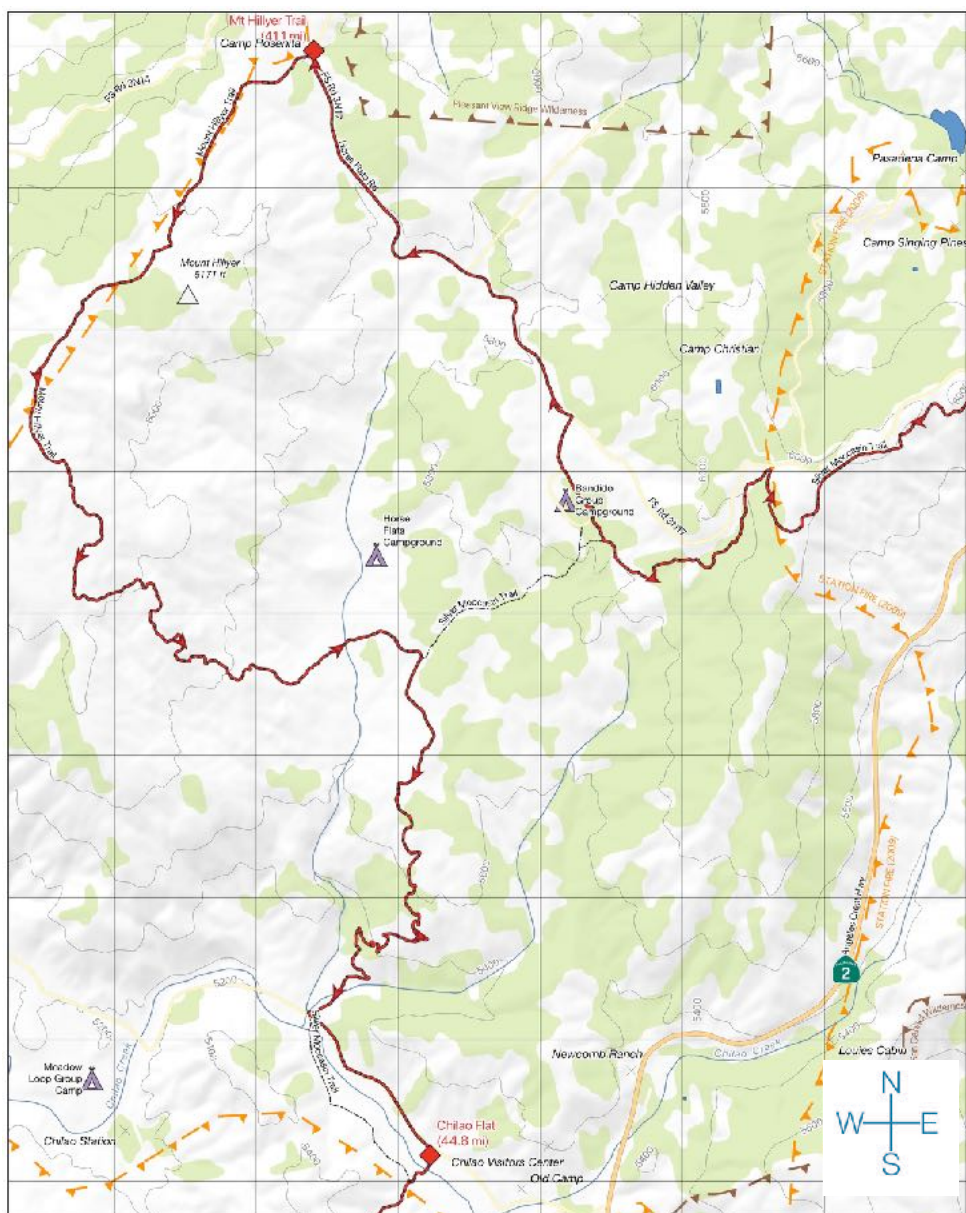
DRIVING DIRECTIONS + PARKING INFO:

NO CREW ACCESS AT MT. HILYER.

Crews are prohibited from accessing the Mt. Hilyer Aid Station, so many use this time to stop at Newcomb's Ranch, 2 miles West down the highway. The only restaurant on the course, Newcomb's serves hot food and cold drinks from 7:00am-4:00pm. Depending on the speed of one's runner, some crews choose to drop off a member and supplies at either Three Points or Chilao and send someone to pick up lunch for the group.

MT. HILLYER to *CHILAO FLAT* / miles 41.1 - 44.8

Section Length:	3.7 miles	Drop Bags:	YES	[PACER MAY
Driving Distance:	4.5 miles / 9 minutes	Crew:	YES	START AT CHILAO]



Elevation:

GAIN: 550'

LOSS: 1,160'

HIGH POINT: 6,198'

LOW POINT: 5,219'



COURSE DESCRIPTION:

Runners depart southwest from the aid station on a trail leading up Mt. Hilyer. The one mile climb tops out at 6,198' before a bobsled-style descent through cabin-sized boulders. The trail has numerous off-shoots worn in by climbers, so the runner must keep their head up to ensure they're on the main trail. (This area was a favorite hideout of horse thief, Tiburcio Vasquez, in the mid-1800's. He was able to hide full grown horses amongst the rocks, so you can see why we'd caution you not to get lost.)

After another mile of downhill, runners eventually bottom out at the right turn on the Silver Moccasin Trail. From there, it's a quarter-mile traverse to another 0.9 mile descent down to a paved road. Turn left at the road and run 0.4 miles to the right turn across the wash, directly into the Chilao Aid Station, mile 44.8, elevation 5,250'.

VET'S ADVICE:

24-hr Runner / 24-hour runners are generally successful because they're resilient on the downhills and can keep their average pace low, enabling a 2:45 Chilao arrival. This section often brings drastic temperature swings: offering a cool breeze atop Mt. Hilyer, and then back to hot and muggy on the approach to the aid station. Hiking up Mt. Hilyer in control and being able to jog the flat sections through the meadow is a good sign of pacing.

33-hr Runner / 33-hour finishers reach Chilao as the sun begins to set at 6:15 PM, ahead of the 6:40 PM cutoff. The runner that is destined to make it to Altadena will have a controlled jog heading down through the boulders, and a steady resilience as the day begins to turn to night.

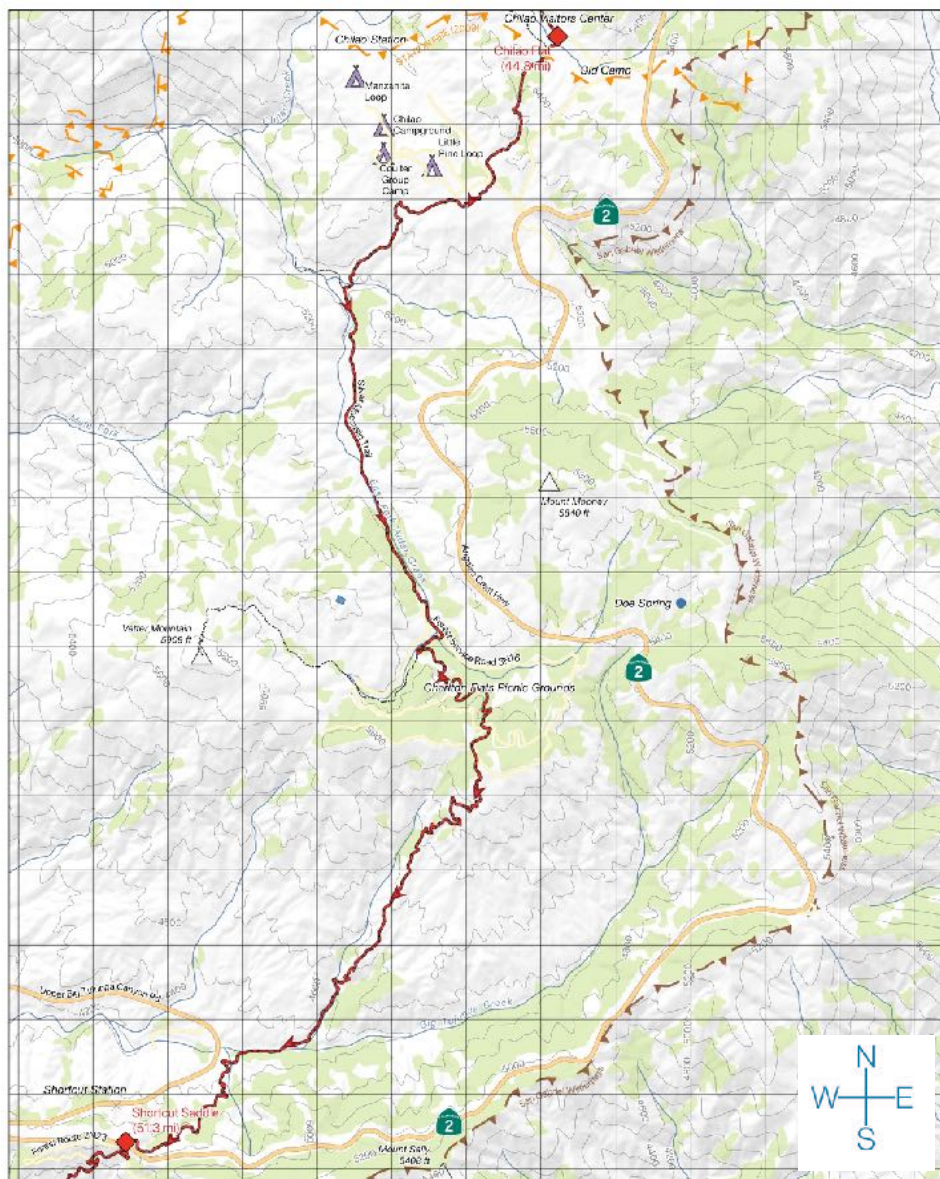
DRIVING DIRECTIONS + PARKING INFO:

Leaving Three Points, return to Hwy 2, turn right and head 2.2 miles to Chilao Day Use Area. Turn right off the highway, and the aid station is located 0.4 miles down the road. As you approach the aid station, you'll turn left through the wash for parking in a large lot. USFS pit toilets and water spigots are available.

If leaving Newcomb's Ranch, head 0.2 miles West on Hwy 2 to reach the Chilao Day Use Area.
PACERS MAY NOT LEAVE CARS AT THE CHILAO AID STATION, OR AT ANY AID STATION ON THE COURSE.

CHILAO FLAT to *SHORTCUT SADDLE* / miles 44.8 - 51.3

Section Length:	6.5 miles	Drop Bags:	NO	[NO PACER MAY SWITCH
Driving Distance:	7.7 miles / 13 minutes	Crew:	YES	OR START AT SHORTCUT]



Elevation:

GAIN: 1,510'

LOSS: 2,000'

HIGH POINT: 5,537'

LOW POINT: 4,269'



COURSE DESCRIPTION:

Runners cross the concrete wash and re-join the Silver Moccasin Trail via a left turn uphill. After 0.6 miles, a paved road is crossed, and runners follow single track South for another 0.8 miles, until dumping out on a fire road.

You'll turn left on this fire road and continue South for 1.2 miles to a T junction with another fire road. Again, you'll bear left and after only 0.1 mile, turn right to get back on the single track as it crosses a creek bed. After following the single track for 0.3 miles, a hard left is taken at another junction, and runners traverse winding single track for 0.6 miles to a hard right. Runners cross a road after 0.2 miles, and proceed up another 0.2 to a final paved road crossing (Vetter Mountain Road) with views of the Shortcut Aid station 2.8 miles away and Mt. Wilson looming in the distance. From the road, it's 2 miles of technical single track down to cross a creek bed, and then a relatively quick 500', 0.8 mile climb up to the Shortcut Aid Station, mile 51.3, elevation 4,760'. You're over halfway there!

VET'S ADVICE:

24-hr Runner / 24-hour runners are still in the heat of the day, as they reach Shortcut by around 4:15 PM. This section can start to offer gentle breezes, but then punishes runners with a hot and technical descent off Charlton Flat. The creek bed at the bottom is usually dry by July, and the 0.8 mile climb to shortcut can feel hot and muggy crushing spirits if one runs out of water or begins to overheat. The following segment is one of the longest, so it's in one's best interest to not arrive too beat up at Shortcut Saddle.

33-hr Runner / 33-hour finishers witness the golden Southern California sunset traversing through Chilao and usually reach Shortcut by 8:45 PM, a bit ahead of the 9:10 PM cutoff. The trail after Vetter Mountain Road is technical, and requires focus to keep footing through numerous ruts and wooden step-downs.

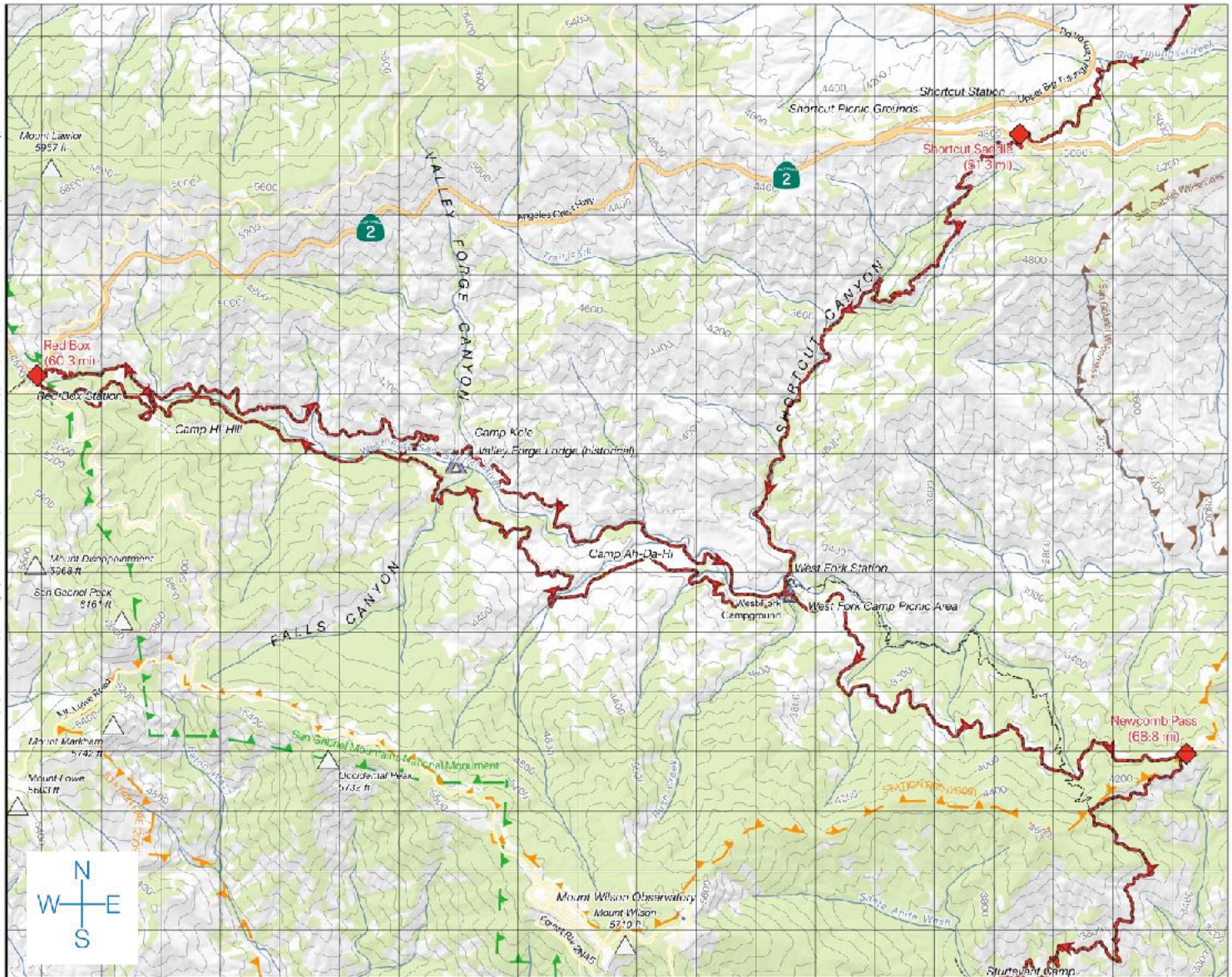
DRIVING DIRECTIONS + PARKING INFO:

Leaving Chilao, return to Hwy 2 and turn right. Head 7.3 miles South to the Shortcut Saddle Aid station, which is a large turnout directly next to the road.

Parking is available in turnouts before and after, but very limited at the actual aid station. Again, runners will cross the highway here, so take caution. There are no toilets available at this aid station.

SHORTCUT SADDLE to *RED BOX* / miles 51.3 - 60.3

Section Length:	9 miles	Drop Bags:	YES	[NO PACER MAY SWITCH OR START AT RED BOX]
Driving Distance:	5.0 miles / 9 minutes	Crew:	YES	



Elevation:

GAIN: 2,260'

LOSS: 2,470'

HIGH POINT: 4,790'

LOW POINT: 3,061'



COURSE DESCRIPTION:

Runners cross Hwy 2 and re-join the Silver Moccasin Trail by heading 0.1 down a single track connector to the Edison fire road. (This is the one section where course markers will be **RED**, to help avoid confusion on the approach vs. the departure from Red Box. Red for Red Box, get it?) Departing from the old course, runners turn **RIGHT** on this fire road and continue for 0.1 miles to the left turn onto a single track trail down to West Fork. Narrow, scenic and rocky, the trail descends for 1.5 miles to a creek bottom, where they traverse along the bed for 1.8 miles to West Fork.

At this junction, runners cross the same fire road (Rincon-Redbox Road) they will take from Red Box to Newcomb in 10 miles. Continue following the **RED** ribbons uphill on the Gabrielino Trail. After 150 yards, runners will enter a small meadow and hear water flowing - 30' off-trail to the left, runners can access a pipe with flowing water. Returning to the trail, they will follow the Gabrielino single track trail for 5.6 miles towards Red Box, passing left turns for the Kenyon Devore and Valley Forge Trails. Stay on the Gabrielino all the way to the aid station! About 0.75 miles from Red Box, you'll again cross Rincon-Redbox Road, and then it's a steep climb to the aid, mile 60.3, elevation 4,170'.

VET'S ADVICE:

24-hr Runner / 24-hour runners will enjoy cooling temperatures as the sun begins to fade behind Mt. Disappointment. Speaking of which, they also might experience a bit of that mountain's namesake, as this section feels notoriously long. 2.5 hours is to be expected, which puts the time of arrival at Red Box around 6:45 PM. It's important to remember to stay fueled up for the entirety of the climb out of West Fork, enabling you to take advantage of running the flat sections and bank time.



The red arrows denote the trail crossing Rincon-Redbox Road while on the approach to the Red Box Aid Station. 9.5 miles later, you will cross this spot again, this time following the yellow arrows to Newcomb Saddle.



"The Pipe" is found in the small meadow, just 200' past Rincon-Redbox Road on the way to Redbox. Free water for thirsty runners!

33-hr Runner / 33-hour finishers face a very dark and remote section, taking upwards of 3.5 hours to reach the Red Box aid station. The back of the pack arrives by 12:15 AM, just a little ahead of the 12:25 AM cutoff. Heading down Silver Moccasin in the dark is no easy task, so persistence and grit is required to out-hike the cutoff on the climb up to Red Box.



The stone steps leading up to the Red Box Aid Station.

DRIVING DIRECTIONS + PARKING INFO:

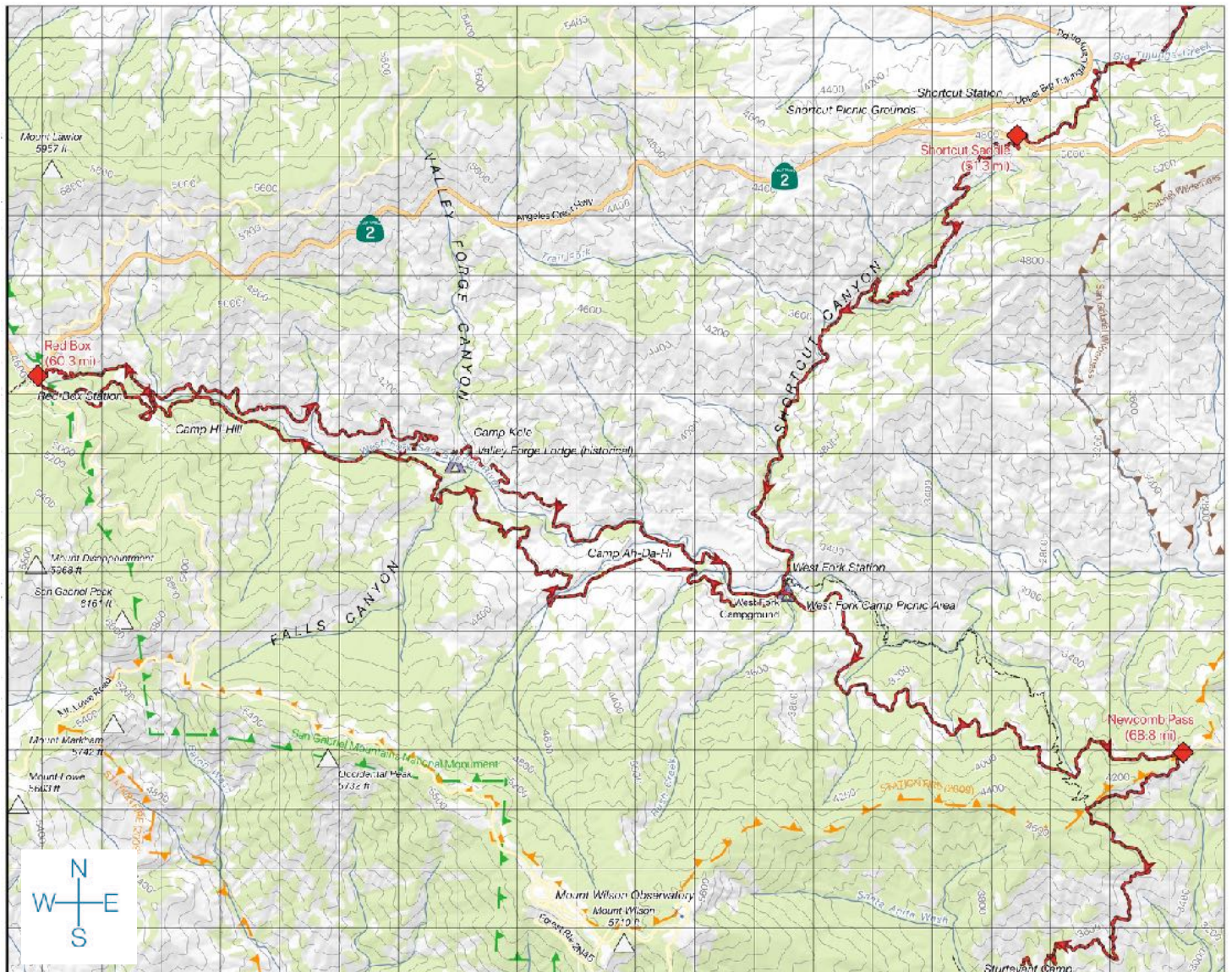
Leaving Shortcut, continue West on Hwy 2 for 5.0 miles to the Red Box Aid Station. A large parking lot and USFS pit toilets are available at the aid station. Nearby turnouts can be used for overflow.

RED BOX to *NEWCOMB PASS* / miles 60.3 - 68.8

Section Length: 8.5 miles
Driving Distance: No crew access

Drop Bags: YES
Crew: NO

[NO PACER MAY SWITCH
OR START AT NEWCOMB]



Elevation:

GAIN: 1,020'

HIGH POINT: 4,656'

LOSS: 1,630'

LOW POINT: 3,061'



COURSE DESCRIPTION:

Runners leave Red Box on the dirt Rincon-Redbox Road, heading past the restrooms and back into the depths of the canyon from which they just escaped. The fire road descends for 5.2 miles back to West Fork (water available again at the pipe), and then begins a 3.1 mile, 900' climb up to Newcomb Pass Aid Station, mile 68.8, elevation 3,120'. Runners are welcome to their first views of the city, and a CCTV feed of their crews waiting for them at Chantry Flat.

VET'S ADVICE:

24-hr Runner / 24-hour runners get some of the easiest miles on the course, cruising down a gentle fire road (Rincon-Redbox Road) and then up a mostly runnable climb to Newcomb. As with the previous section, it can feel longer than advertised, but one should remain calm and focused, as these miles can set up either a calm or stressful final 33. An 8-8:15 PM arrival assures a casual 1:40-2:00 split to Chantry, and a reasonable 7 hour split for the last 25. It's a good idea to run most of the section and take walk breaks every 10 minutes to make sure calories are being consumed and properly digested. The next section can be slower going than it would seem on paper, due to the dark.

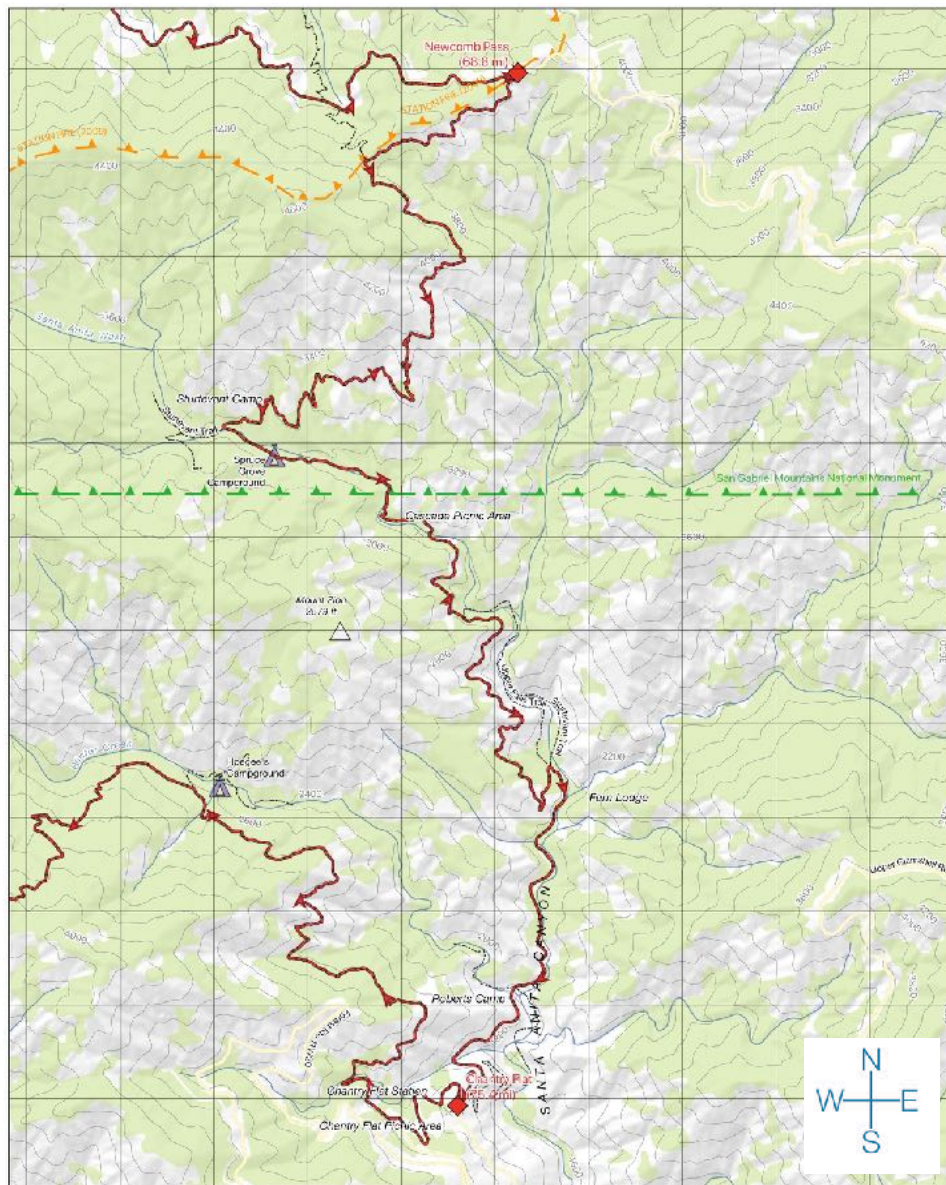
33-hr Runner / Now in the dead of night, 33-hour finishers face one of the historically hardest cutoffs, having only 2.5 hours to reach Newcomb by 3:00 AM. Luckily, the fire road (Rincon-Redbox Road) is runnable and non-technical, and with proper nutrition and pacing, one of the faster sections of the entire race. Runners who slowed on the previous section often make up time here if they have taken good care of themselves.

DRIVING DIRECTIONS + PARKING INFO:

There is no crew access at Newcomb Pass. Crews can take advantage of this time to eat and refresh in the city on the way to the final Crew checkpoint - Chantry Flat.

NEWCOMB PASS to *CHANTRY FLAT* / miles 68.8 - 75.4

Section Length:	6.6 miles	Drop Bags:	YES	[NEW PACER MAY SWITCH
Driving Distance:	31.1 miles / 50-75 minutes	Crew:	YES	OR START AT CHANTRY



Elevation:

GAIN: 830'

HIGH POINT: 4,122'

LOSS: 2,680'

LOW POINT: 1,775'



COURSE DESCRIPTION:

Diving into Big Santa Anita Canyon on a 6-mile descent, runners officially enter the Front Country of the San Gabriels, famous for steep canyons, long climbs, lush pockets of green, and all-too-convenient trail access for millions of people. The great hiking revolution of the 1920's and 30's built many of these trails, leaving the crumbling remnants of wilderness resort hotels seen along the trail.

Runners access this descent after a 0.5 mile Southwest traverse from the helipad near the aid station. Arriving at a picnic table and the Newcomb Pass signpost, it's a left hand turn down a narrow single track towards the historic and still-active Sturdevant Camp. This trail is steep and somewhat technical, and is definitely harder to travel in the dark. 2.6 PAS, runners turn left at the signpost towards Chantry Flat, criss-crossing the stream. 1.4 miles later, at the Upper and Lower Falls trail Junction, runners keep right on the Upper Falls trail. 5.1 Miles PAS, the single track ends, and runners turn right on wide trail headed towards Chantry Flat. Crossing a bridge 0.8 miles later, runners head up a paved road for a 0.6 mile, 350' climb to the Chantry Flat Aid Station - mile 75.4, elevation 2,140'.



The approach to the Chantry Flat aid station. If you haven't found yourself yet, you certainly will on the next climb.

VET'S ADVICE:

24-hr Runner / 24-hour runners face a technical and dark descent that tests their resolve and attention span. Many “icebergs” exist in this section, where it may appear a small stone is on the trail, but it’s in fact the tip of a large buried rock that does not move when your foot makes contact with it. It’s important to stay alert and move quickly but not rushed through this section. There are small 20’ climbs occasionally in the descent, and they present good opportunities to take in calories and stay fueled for what lies ahead. This section usually takes 80-90 minutes for 24-hour runners, but can take closer to 2 hours if one is not a particularly adept technical downhill runner. *Chantry by 10* is the long-held “rule” for realizing one’s dreams of silver, but a 10:30 PM arrival is still within the realm of possibility if a runner leaves in strong spirits.

33-hr Runner / 33-hour finishers face a technical descent during the witching hours of the night. Fatigue and exhaustion appear to become insurmountable as the body is pushed through its normal deep sleep hours. Through a combination of focus, caffeine, and persistent fueling, runners can make it to Chantry by the 5:25 AM cutoff and escape in time to finish the last 25 in 8:35. It should be noted that running the last 25 in the daylight becomes very difficult in the mid-morning and afternoon heat, and the chances of missing a cutoff increase for runners that don’t leave Chantry before 5:00 AM.

DRIVING DIRECTIONS + PARKING INFO:

Leaving Red Box, continue West on Hwy 2 for 14 miles to La Canada. Before continuing on the 210 East Freeway Entrance, most crews have 20-40 minutes to stop for food and gas at the shopping center on Foothill Blvd (Panera, Blaze Pizza, Habit Grill, Chipotle, etc.). Depending on what time you arrive to the city and what happens to be going on (one year it was a Beyonce concert at the Rose Bowl), you could experience a bit of traffic at this point. Do not worry - you still have PLENTY of time to get to Chantry, just consult your favorite maps app before settling into a nice dinner and missing your runner due to LA being very LA.

Continuing on the 210 East towards Pasadena for 5.0 miles, follow signs for 210 E/San Bernardino, and continue for 6.0 miles to Exit 32: Santa Anita Ave. Turn left at the bottom of the exit and head uphill for 5 miles into the mountains to Chantry Flat.

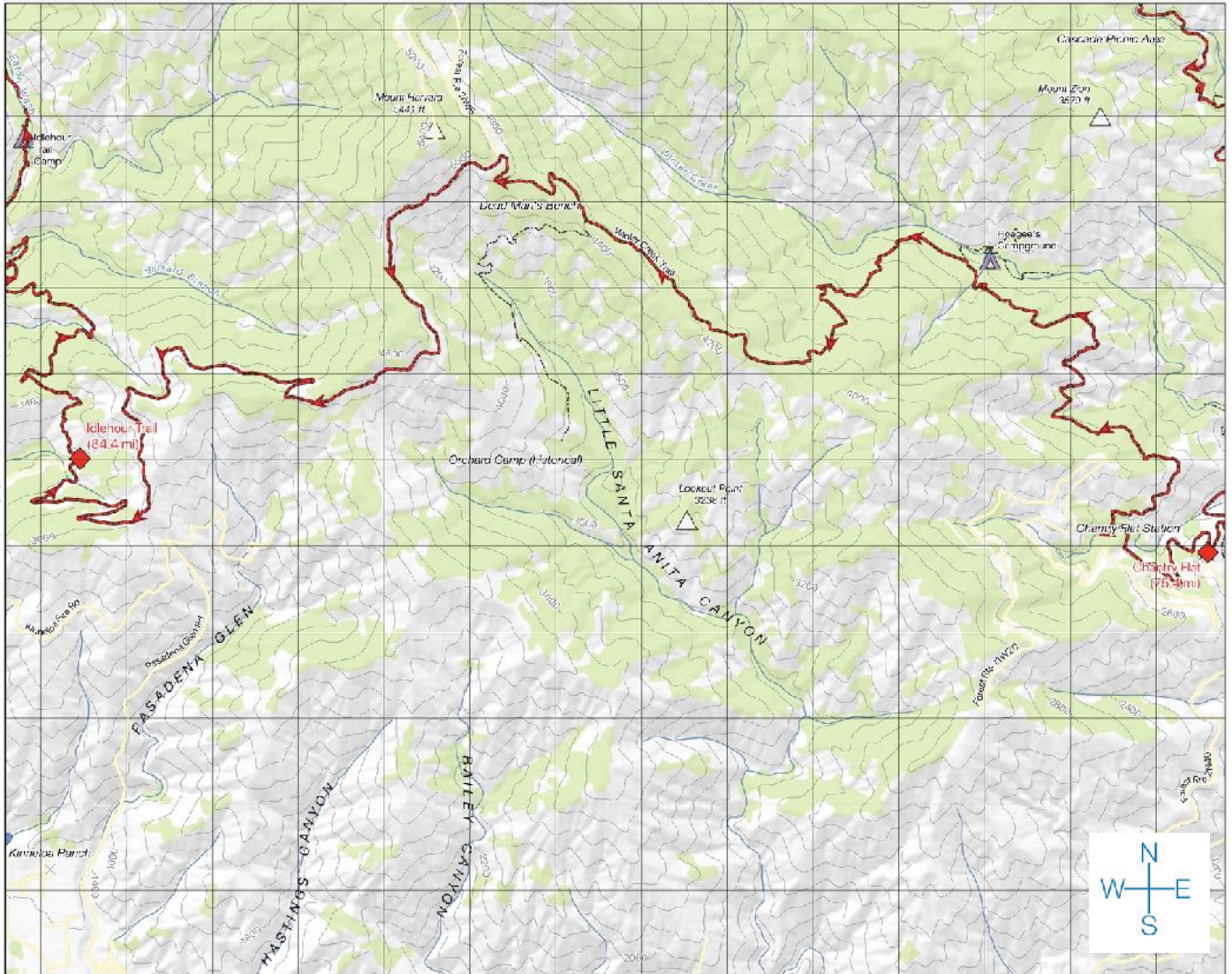
This aid station is very crowded and parking will likely be full in the lot at the aid station. Please park along the road in the turnouts as you approach the aid station - turning around in the actual aid station proper can be very difficult when there is congestion and you could get stuck for quite some time. Again, pacers are not allowed to leave vehicles at the Chantry Flat aid station. USFS pit toilets and water spigots are available for use.

CHANTRY FLAT to *IDLEHOUR* / miles 75.4 - 84.4

Section Length: 9 miles
Driving Distance: No crew access

Drop Bags: YES
Crew: NO

[NO PACER MAY SWITCH
OR START AT IDLEHOU



Elevation:

GAIN: 3,000'

LOSS: 2,050'

HIGH POINT: 4,926'

LOW POINT: 2,182'



COURSE DESCRIPTION:

Beyond Chantry Flat lies one of the most infamous climbs in all of ultrarunning. Runners leave the aid station by heading through the upper parking lot to the gated paved road in the West corner. Following the signs for Upper Winter Creek/Mt. Wilson, runners follow the paved road uphill for 0.3 miles, to the marked right-hand turn on to the Upper Winter Creek single track. Gently climbing for 1.6 miles and then descending for 0.5 miles, the Upper Winter Creek trail comes to a junction with the Winter Creek Trail 2.6 miles PAS, where runners turn left uphill, and begin a 2.7 mile, 2,200' 16% grade climb. Now over 75 miles into the race, *arduous* is putting it lightly. Poison oak is plentiful trailside, so watch where you take your breaks!



The entrance to Idlehour Canyon, and the site of the Idlehour Aid Station

Runners stay straight at the junction found 1.3 miles up the climb, and eventually reach the infamous "Dead Man's Bench," 2.1 miles up the climb at the junction with the Mt. Wilson Trail. From the bench, runners formerly used a 20% grade fire break ridge scramble on Manzanita Ridge, but now use the Hal Winton Bypass trail, an uphill stretch of single track to the right of the ridge. Topping out at just under 5,000', runners turn left on the Mt. Wilson Toll Road and follow it downhill, winding between spectacular views of the Los Angeles Basin and the antennae-clad Mt. Wilson.



Heading down the Mt. Wilson Toll Road with the greater LA basin twinkling below.

It's 3.8 miles of gentle downhill grade to the Idlehour Aid Station, located on the turn of a wide switchback that marks the entrance to Idlehour Canyon, mile 84.4, elevation 3,160'.

Note that all aid stations after Chantry are located behind locked gates and are inaccessible to crew or any unofficial vehicles. Be prepared when you leave mile 75, as a drop at any future aid station means a wait until the race cutoff times for a ride. The only sure way out is the Finish Line!

VET'S ADVICE:

24-hr Runner / 24-hour runners generally try to jog Upper Winter Creek and then mostly hike the Winter Creek Climb. The difference between a strong “Tommy Nielsen” power-hike and a “zombie” saunter can be the difference of 10+ min/mile, or 25-minutes on the Winter Creek climb. Remaining fueled up, engaged and focused is paramount. Conditions on the Mt. Wilson Toll Road vary from year-to-year, dependent on late summer storms, and runners should expect some to many ruts and loose rocks on the descent. There are usually just enough to turn this from an easy, mindless descent to one that requires a bit of muscle and focus. A 2:25-2:40 split to Idlehour is ideal, but only if the silver hopeful retains the ability to weather many more technical miles.

33-hr Runner / 33-hour finishers face a 3+ hour push to make the 8:45 AM Idlehour cutoff. Though most of this section is shaded, the sheer amount of climbing requires a solid commitment to the task at hand, and leaves little spare time for trailside naps. The descent to Idlehour must be run.

DRIVING DIRECTIONS + PARKING INFO:

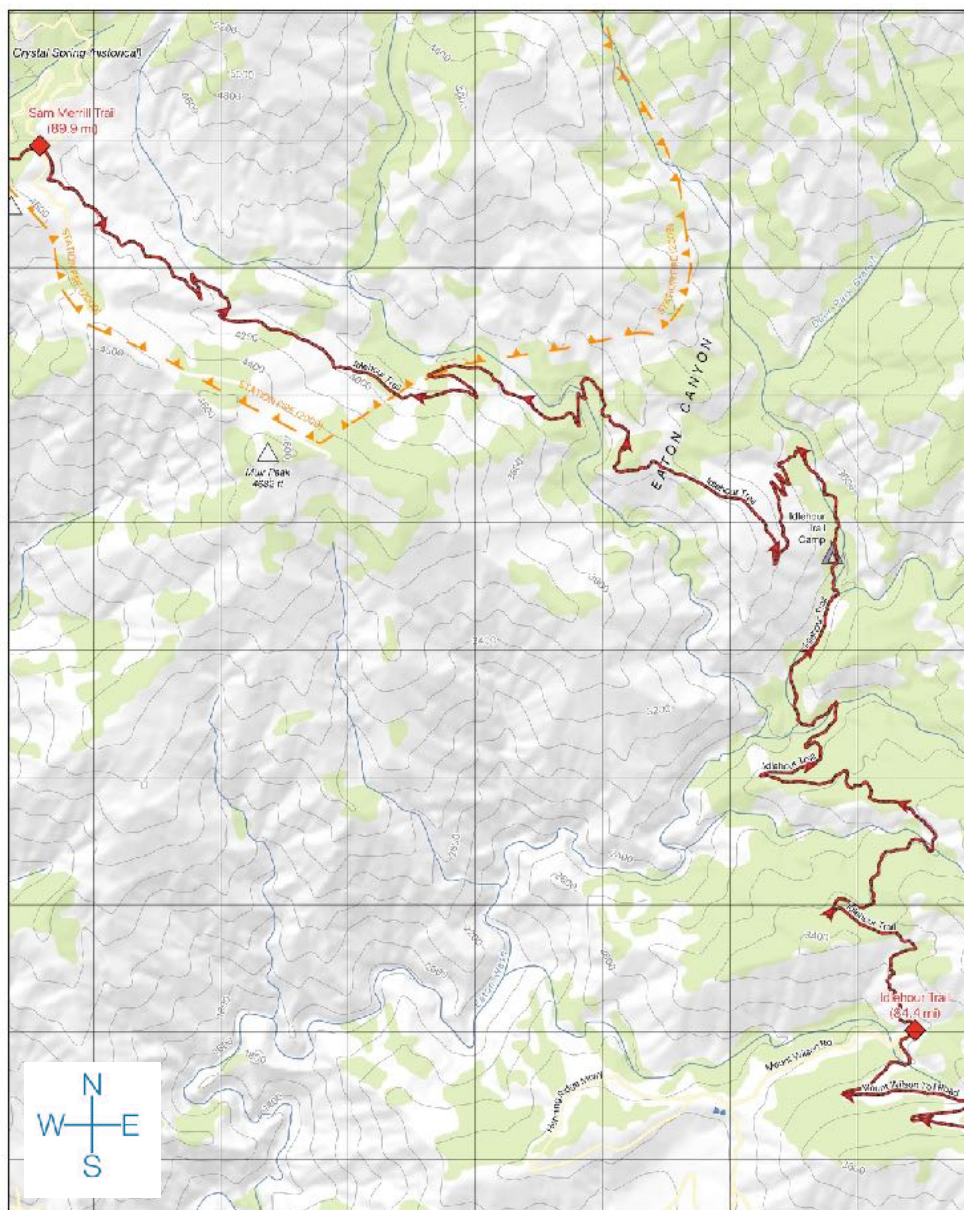
There is no crew access at Idlehour, nor at any point along the rest of the course. Many crews use this opportunity to rest and refuel in the city - perhaps even indulging in a hard-earned shower and nap at a nearby hotel.

IDLEHOUR to *SAM MERRILL* / miles 84.4 - 89.9

Section Length: 5.5 miles
Driving Distance: No crew access

Drop Bags: YES
Crew: NO

[NO PACER MAY SWITCH
OR START AT SAM MERRILL]



Elevation:

GAIN: 2,310'

HIGH POINT: 4,483'

LOSS: 960'

LOW POINT: 2,611'



COURSE DESCRIPTION:

As an apt follow-up to the monster Winter Creek climb, Idlehour Canyon becomes the Bermuda Triangle of the course. The net uphill push through two canyons seems at moments to be never ending. Leaving Idlehour on the footbridge, the trail climbs for 0.4 miles to a saddle before diving down narrow singletrack to Idlehour Campground, 1.7 miles PAS. After numerous stream crossings and climbing 900' in 1.6 miles, runners exit the first canyon. From there, it's a short 0.2 mile descent to another stream crossing, followed by the final 2.1 mile, 1100' ascent to the aid station on the saddle - Sam Merrill, mile 89.9, elevation 4,483'. Watch for dead, overgrown poodle-dog bush on the last half mile.

VET'S ADVICE:

24-hr Runner / 24-hour runners are pushing through the witching hours after midnight, taking roughly 1:40 to complete the section and reaching Sam Merrill by 2:00AM. There are no secrets to this mysterious section other than this is where the silver is smelted for the buckle. The thick canopy blocks out light, and only on climbs can runners see the lights of Mt. Wilson as they rotate around the antennae farm above. Terrible fatigue washes over runners as the last significant climbs of the course drag on. The only way out is through fast hiking and jogging whatever the runner can muster.

33-hr Runner / 33-hour finishers have 2:35 to finish the section, but a bronze buckle hopeful usually reaches Sam Merrill by 10:30 AM - a full 50 minutes ahead of the 11:20 AM cutoff. The heat of the second day is brutal; extra water for dousing should be carried. Do not underestimate the final climb to Sam Merrill.

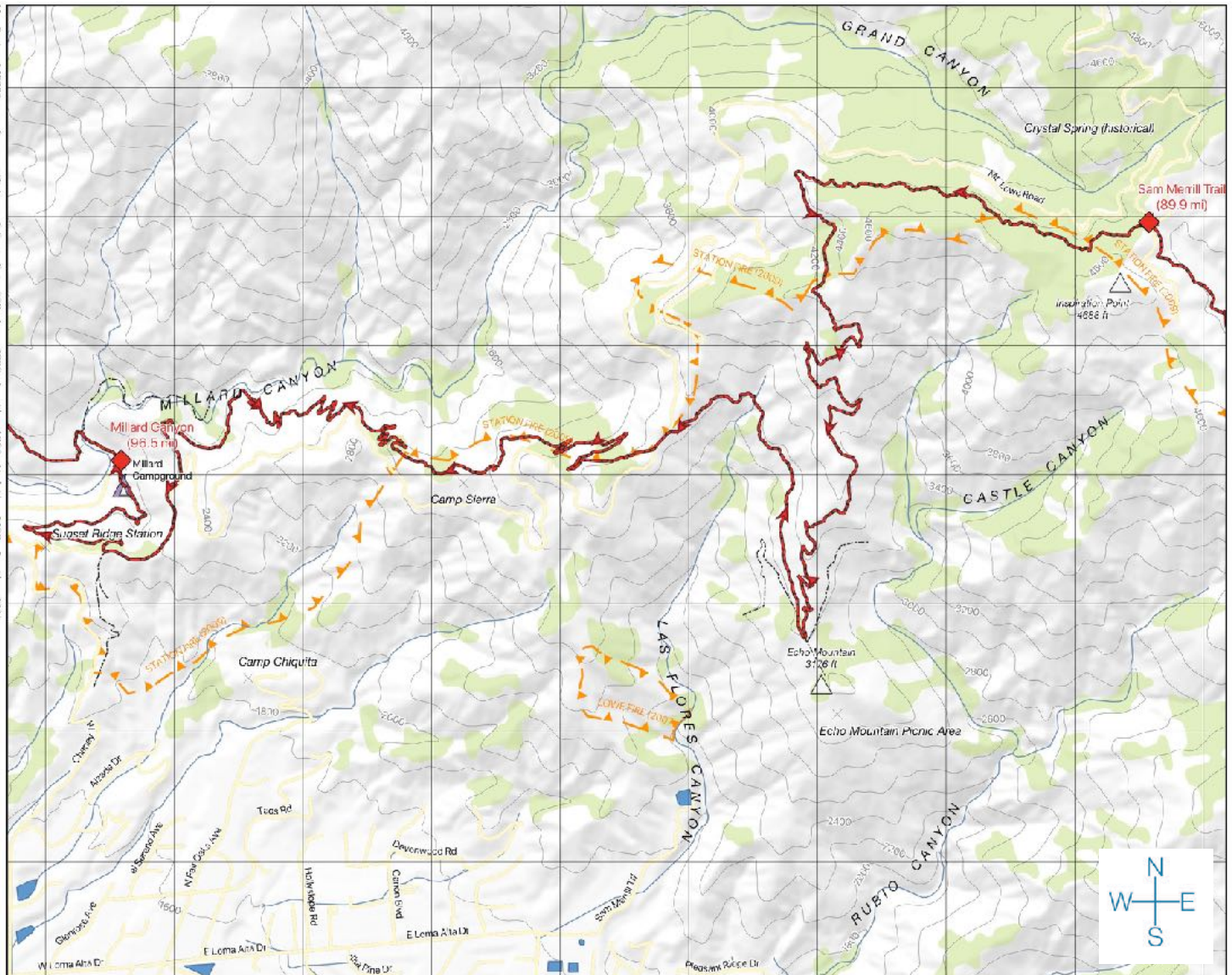
DRIVING DIRECTIONS + PARKING INFO:

No crew access is available at Sam Merrill. Hopefully y'all are napping!

SAM MERRILL to *MILLARD CANYON* / miles 89.9 - 96.5

Section Length: 6.6 miles
Driving Distance: No crew access

Drop Bags: YES
Crew: NO *[NO PACER MAY SWITCH OR START AT MILLARD]*



Elevation:

GAIN: 290' HIGH POINT: 4,498'
LOSS: 2,890' LOW POINT: 1,880'



COURSE DESCRIPTION:

Despite it being “all downhill from here,” the course is still quite technical and demanding in the last 11 miles. Runners follow the single track trail to the South and into the trees towards Echo Mountain/Cobb Estate. Traversing cliffs for a mile, runners pop out to a view of the city and begin a technical 1300’ descent to Echo Mountain, 2.5 miles PAS. Taking one right turn and then another right at the Echo junctions, runners head gradually uphill on the old Mt. Lowe Railway for 200’ and 0.7 miles to the Sunset Trail/Cape of Good Hope. Reaching a paved road, runners turn left and 100’ later make a right turn onto the Sunset Trail following it down into Millard Canyon. After 2 miles and 1300’, the trail levels out for 0.4 miles before joining a paved road. You’ll turn right and run this road for 0.3 miles to re-enter the Sunset Trail - it will be marked, but be on the lookout for this junction. If you’re ever on a road for more than a few minutes, you have missed a turn. Once back on the trail, it’s just a quick 0.7 mile, 300’ descent to aid station at Millard Campground, mile 96.5, elevation 1,880’.

VET’S ADVICE:

24-hr Runner / 24-hour runners are generally targeting 1:45 on this difficult, technical descent. This has them reaching Millard at 3:45 AM, with a comfortable cushion to get to the finish by 4:59:59. Parts of the trail are well lit by the city’s glow, but the winding, sandy and rocky nature of the trail require complete focus to avoid a painful fall or too much walking. Runners can use the gradual climb up to the Sunset Trail to take on calories and water and sustain the long descent to Millard.

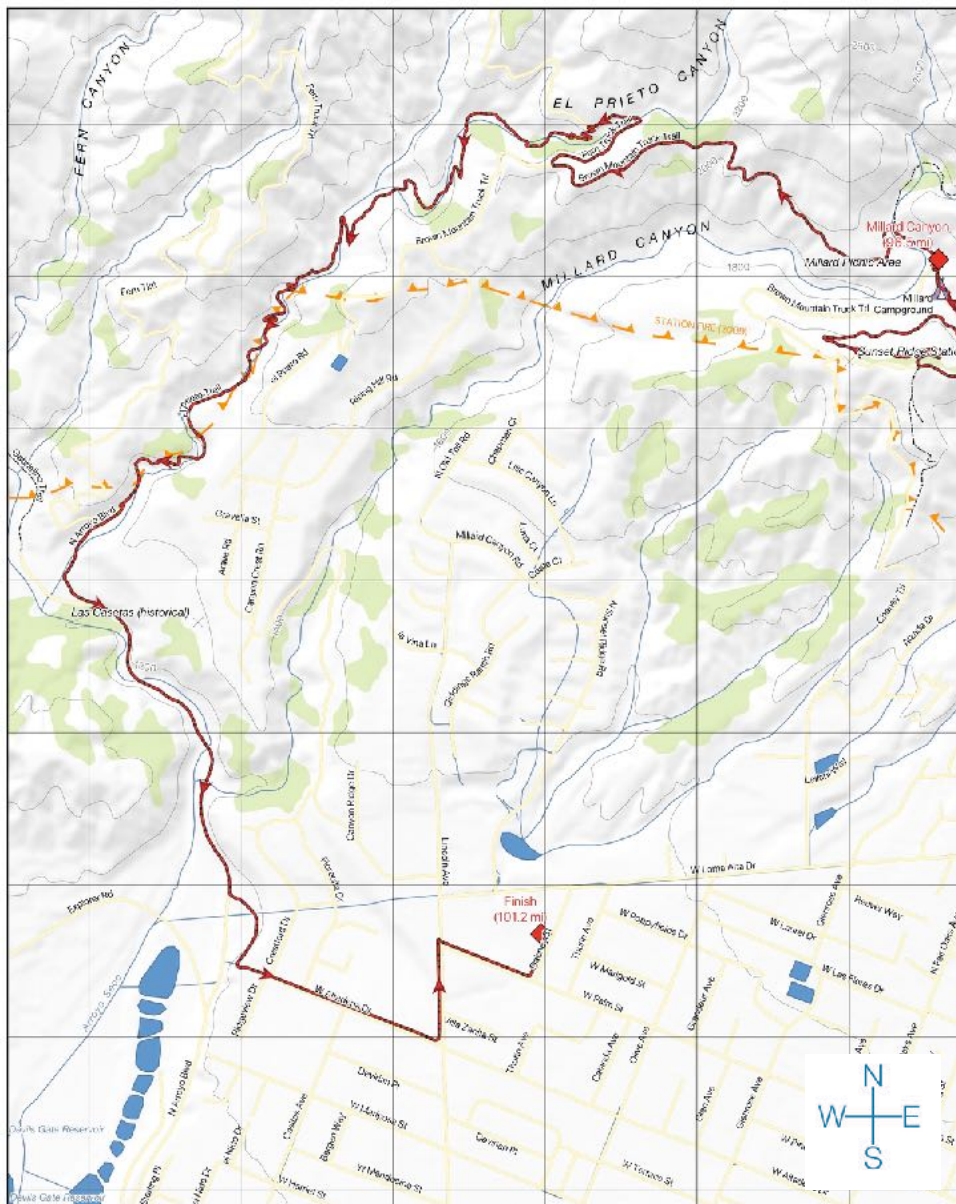
33-hr Runner / 33-hour finishers face a 2:10 hour push to reach Millard by 12:40 PM. Though the official cutoff is 1:20 PM, rarely does even the race winner finish the last section in 40 minutes. Runners are fighting heat and sore quads, running on adrenaline-laced fumes to reach the finish line.

DRIVING DIRECTIONS + PARKING INFO:

There is no crew access at Millard. If you’re resting up nearby and notice your runner has made it through Millard on the Live Runner Tracking, it would be a good time to get to the finish line to find parking and post up.

MILLARD to *THE FINISH* / miles 96.5 - 101.2

Section Length:	4.7 miles	Drop Bags:	YES	[CREW/FAMILY MAY RUN
Driving Distance:	16 miles / 30-45 minutes	Crew:	YES	THE GRASS/FINISH]



Elevation:

GAIN: 450'	HIGH POINT: 2,112'
LOSS: 1,000'	LOW POINT: 1,135'



COURSE DESCRIPTION:

Heading across the stream and up the dirt Millard Canyon road, runners climb 300' and 0.7 miles to an overlook of the Arroyo. 0.2 Miles later, Brown Mountain Road joins to the right at a large dirt berm. Runners take this hard right and dive into the Arroyo, where crisscrossing a creek will become the norm for the final 2 miles. Another 0.3 miles into the canyon there is a momentary opening and the El Prieto single track dives off to the left. Take this trail through the remainder of the Arroyo, always choosing the trail that leads back to the stream and not upwards out of the canyon at junctions.

Finally 2.9 miles PAS, runners leave single track behind for good and join the dirt Fern Truck Trail for a moment before it spills out onto the paved Arroyo Secco Road. This leads runners over a bridge and South out of the canyon past JPL. 3.7 PAS, runners reach a short connector trail that leads 100' up to Altadena Drive. This is the trail home! Reaching the paved streets of Altadena, runners head East for a half mile, and then turn left on Lincoln Ave. Continuing on Lincoln for two blocks, runners make the right hand turn on Palm Street at the community garden and can now hear the Finish Line. Approaching the park, runners make the final left-hand turn into the grass and on to glory.

VET'S ADVICE:

24-hr Runner / 24-hour runners make their final push up a short climb and technical descent, all under the cover of darkness in the wooded Arroyo. Careful navigation is key, as a few seconds lost to a missed turn could be the difference between a Sterling Silver and Bronze Buckle. Race time is held by the race organization, and a runner or pacer's chronograph can occasionally display an erroneous time compared to the time of day. (This has happened. It is fun for no one.) Upon finishing, the finish line is cooking food through the night, hot showers are available, and medics are on hand to handle most issues, so leave it all out there and get that Silver!

33-hr Runner / 33-hour finishers make certain to push all the way through to the Finish Line, and take care to avoid any missed turns. Getting to the finish from Millard in an hour is do-able, but will require the buckle-seeker to RUN.

DRIVING DIRECTIONS + PARKING INFO:

From Chantry Flat, head the 5 miles back down Santa Anita to the 210 West Freeway. Take the 210 West for 6.2 miles, following signs for the 210 West towards Sacramento, and then proceed 2 miles to the Lincoln Ave Exit. Turn right at the exit and follow Lincoln uphill for 2 miles to a right turn on to W Loma Alta Dr. One block down on the right is a horse corral where street parking is located. Just south of the horse corral is the finish line.

Loma Alta Park

3330 Lincoln Ave.

Altadena, CA. 91001

Please do not park on Palm, Dabney, or any street directly in front of a residence. Do not park in the small parking lot South of the restrooms at the Park. Proceed to Loma Alta Drive where there is ample parking and residents will not become angry and threaten our permits.

Food will be available to runners at the finish line at all hours of the night. Hungry and desperate crews can access a 24-hour McDonald's on Lincoln Ave during the wee-hours.

The Awards Ceremony follows the 2:00 PM conclusion of the race, and typically begins sometime around 2:30 PM.

2019 AC100 AID STATION + CUTOFF CHART

AID STATION	MILES FROM LAST AID	CUM. MILES	CREW ACCESS	PACER ACCESS	DROP BAG	APPROX. FIRST RUNNER*	ABSOLUTE CUTOFF
Start			YES			5:00AM Sat	
Inspiration Point	9.3	9.3	YES		NO	6:33AM Sat	8:15AM Sat
Vincent Gap	4.5	13.8	YES		YES	7:12AM Sat	9:20AM Sat
Islip Saddle	12.1	25.9	YES		YES	9:21AM Sat	1:05PM Sat
Eagle's Roost	2.5	28.4	YES		NO	9:45AM Sat	2:05PM Sat
Cloudburst	4.6	33	YES		NO	10:25AM Sat	3:30PM Sat
Three Points	4.8	37.8	YES		NO	11:05AM Sat	4:30PM Sat
Mt. Hillyer	3.3	41.1	NO		NO	11:35AM Sat	5:30PM Sat
Chilao	3.7	44.8	YES	YES	YES	12:15PM Sat	6:40PM Sat
Shortcut	6.5	51.3	YES	NO	NO	1:23PM Sat	9:10PM Sat
Red Box	9	60.3	YES	NO	YES	2:50PM Sat	12:25AM Sun
Newcomb	8.5	68.8	NO	NO	YES	3:52PM Sat	3:00AM Sun
Chantry	6.6	75.4	YES	YES	YES	4:59PM Sat	5:25AM Sun
Idlehour	9	84.4	NO	NO	YES	6:59PM Sat	8:45AM Sun
Sam Merrill	5.5	89.9	NO	NO	YES	8:23PM Sat	11:20AM Sun
Millard	6.6	96.5	NO	NO	YES	9:32PM Sat	1:20PM Sun
Finish	4.7	101.2	YES		YES	10:35PM Sat	2:00PM Sun

*Based on men's 17:35:48 Course Record splits

Splits for various paces from the 2018 race can be found [HERE](#) on [AC100.com](#) . With only two years on the current course, meaningful averages for various paces are hard to determine, but we'll be working to compile that data for future years. In the meantime, consult the Vet's Advice for each course section for estimates on 24-hour pace and 33-hour pace.

COURSE HISTORY + CHANGES

The first annual Angeles Crest 100 was held in September of 1986. Over the past 32 years, Race Management has strived to keep the race's original point-to-point course from Wrightwood to Altadena largely in tact, while preserving it's level of difficulty. However, a combination of new wilderness designations and just nature being nature has mandated that a few changes be made over the years.

August Date

For 22 years, the Angeles Crest 100 was held annually in late September/early October. After the devastation of the 2009 Station Fire and years of drought, the decision was made to move the race to the first weekend in August, in the hopes of avoiding fire season. While the race is undoubtedly a bit more challenging in the Southern California summer heat, the race has not been cancelled since.

Mt. Williamson / The Tunnels

With the expansion of the Pleasant View Wilderness (PVW) came a major course update in 2016. No longer allowed to use the PCT section in the PVW from Islip Saddle over Mt. Williamson, the race now utilizes the shoulder of Highway 2 until rejoining the trail over Kratka Ridge, lovingly referred to by local runners as the "scenic mound." The current course between the Islip Saddle and Eagle's Roost aid stations is now a 2.5 mile section of pavement which travels through the Williamson Tunnels.

Cooper Canyon

The original Cooper Canyon section was updated in 2005 when environmental concerns over the endangered Mountain Yellow-legged Frog closed a section of the PCT leaving Eagle's Roost. Runners instead traveled the shoulder of paved Highway 2 to the exit of Buckhorn Campground, which they ran through to join the Burkhart Trail to Cooper Canyon Trail Camp. For a number of years, the course then took a "death march" up a fire road until rejoining the trail for the final ascent up to Cloudburst Summit, but was replaced by a section of the PCT, adding a mile but also a lot more scenery (and maybe even a slight breeze). Awaiting the outcome of an Environmental Impact Report regarding the Mountain Yellow-legged Frog, the intent has always been to return to the original course through the infamous inferno that is Cooper Canyon, however the same Pleasant View Wilderness expansion that disallowed the race to travel over Mt. Williamson has also barred us from entering Cooper Canyon at all. For the foreseeable future, the course must continue for 4.6 miles on the asphalt of Highway 2 all the way to Cloudburst Summit.

Sulphur Springs

Beginning in 2016, a short section of highway paralleling the trail must be traveled to avoid Pleasant View Wilderness. Beginning at the Pajarito Highway Crossing, the course rejoins the original trail at the Glenwood turnout/bathrooms.

Three Points to Mt. Hilyer

As of 2016, the course now leaves Three Points on a new section of trail to, again, avoid the PVRW. What used to be a rolling section of PCT to join an asphalt grade up to Manzanita Saddle, home of the Three Points Aid station, is now a rolling, exposed section of the Silver Mocassin Trail, joining the asphalt of Santa Clara Divide Road through Bandido Campground and entering Three Points Aid from the opposite direction. While the direction traveled and trails used have changed, the nature of the course here is largely preserved. The 2016 running saw an added out-and-back on an exposed fire road to Pacifico Mountain to regain lost mileage, but this was removed with the 2017 Red Box addition (see below).

Red Box Addition

In 2016, environmental concerns over the endangered Arroyo Toad habitat closed access to the Edison fire road where it crosses the West Fork of the San Gabriel River. Leaving the Shortcut Aid Station, runners now use the Silver Moccasin Trail down to West Fork, turning on the Gabrielino Trail which ascends to the new aid station and crew access point at Red Box. From there, the course travels back down to West Fork via the unpaved Rincon Red Box forest road, continuing directly up to the aid station Newcomb's Saddle. Adding 8.5 miles and 1,300' of gain, this new section makes up for the elevation lost over the removal of the Mt. Williamson, Cooper Canyon and Mt. Hilyer climbs and the cumulative mileage lost between Islip Saddle and Three Points. With the added climbing, heat and technical nature of the trail, most runners believe this has made the course significantly more difficult, and truer to the spirit of the original 1986 course.

The Winton Bypass

In 1999, the AC100 Trail Volunteers built the "Winton Bypass," lead by (you guessed it), longtime Forest Service volunteer and 30-year Co-Race Director, Hal Winton. The new trail traverses below Manzanita Ridge on Mt. Wilson, replacing a 16% grade section of nasty, crumbling ridge.

The Finish Line

The original finish line of the course was at the Rose Bowl, and was replaced by Johnson Field in 1992. This resulted in the course being shortened from 101.9 miles to 100.2 miles.

The current finish line at Loma Alta Park was adopted in 1998, but the overall distance of the course remains the same as the 1992 edition.

On Course Changes + Course Records...

As with many historical races, course changes throughout the years have sometimes made it difficult to accurately compare finishing times for the purposes of records. The original course length was 101.9 miles with 20,610' of elevation change, while the modern course is 100.2 miles and 19,930', and contains 7 miles of road running. On paper, it would seem fair to say the original course was more difficult. However, many seasoned AC runners argue that the hotter weather during the August date combined with the degradation of trails, decreased tree cover and

the addition of new, technical trails due to fire, drought and wilderness designations have actually made the course more comparable than one might think based purely on mileage.

The course records on the original course were set at 17:35:48 by Jim O'Brien and 22:36:57 by Kathy Britcliffe, both on a historically cool day in 1989. The modern women's record is held by Pam Smith, who ran 21:04:18 in 2014, and is considered enough of an improvement to make the difference in courses negligible. For the men, O'Brien's record still stands.



Jim O'Brien, Hal Winton and Jussi Hamalainen at the 2014 finish line, celebrating Jim's then 25-year-old record.

The future...

Continuing the tireless work of Hal Winton, rest assured that we are working year-round to keep the Angeles Crest 100 in business and reduce the amount of mileage this trail race is forced to run on pavement. By fostering relationships with the United States Forest Service through trail service and stewardship, taking an active role in our communities and other special interest groups and lobbying local politicians, we are committed to preserving and restoring the historic Angeles Crest 100 course.

HAZARDS: FLORA + FAUNA



Poison Oak (*Toxicodendron diversilobum*)

How to spot it:

Poison oak is distinctive by its triple leaf pattern with prominent veins and shiny surface. In the summer, leaves are yellowish-green, pink, or reddish, with small white or tan berries. In the fall, the leaves turn bright red or russet brown.

Where it's found:

Poison oak is usually first encountered on miles 47-60 of the course. It is particularly prevalent on the Upper Winter Creek Trail between Chantry Flats and Manzanita Ridge before the Wilson Toll Road (miles 75-79) and reappears in Idlehour Canyon, especially at the bottom (miles 83-89). The next occurrences are on the Sunset Trail going into Millard Campground.

What it does:

An oil called urushiol on the leaves and twigs of poison oak causes irritation to the skin, resulting in rash or blisters. While a significant percentage of people are not allergic to urushiol, it is important to note that you can develop an allergy at any point, so contact with the plant is best avoided.

How to treat it:

Wash as soon as possible with cold water and an oil-cutting solvent (Tecnu or Fels Naptha). Particularly sensitive folks have found luck in using alcohol wipes on the course to prevent a major outbreak.

Poodle-Dog Bush (*Eriodictyon parryi*)

How to spot it:

Active blooms are lush spikes of lavender bell-shaped flowers. Dried out "dead" looking plants are brown but can still make you pay. You'll likely smell it before you see it - it has an unpleasant, skunky odor. Do not confuse this plant with the related yerba santas (*Eriodictyon* sp.), which are abundant at mid-elevations in chaparral and do not cause a skin reaction.



Where it's found:

Poodle-Dog seeds lie dormant in southern California soils awaiting significant disturbance events such as wildfires and landslides. This plant became abundant within the burn perimeter of the 2009 Station Fire, which burned significant portions of the race course. You'll encounter your first, small patch on the back side of Baden-Powell, though it is well off the trail. It is mainly concentrated on the approach to Three Points through Shortcut saddle, with the largest concentration lying in the Charlton Flats area. You'll continue to find patches along the rest of the course, with other heavy concentrations approaching and leaving Sam Merrill. As of 2017, the blooms have backed off significantly and the plant's reign of terror seems to be receding.

What it does:

The plant is covered in sticky hairs, which can dislodge easily and can be passed on by touching or brushing up against it. On a windy day, it can sometimes get into the air. Poodle Dog Bush causes severe irritation to the skin, akin to poison oak or poison ivy, and can be a lung irritant for the sensitive when in the air. AVOID THIS PLANT. IT IS TERRIBLE.

How to treat it:

Same as you would for poison oak or ivy.

Rattlesnakes

Rattlesnakes do call the San Gabriel Mountains home, and you may encounter one (or a few) along your 100-mile journey. Pacific Rattlesnake (*Crotalus oreganus helleri*) is the only regularly-encountered rattlesnake species in the San Gabriel Mountains. This species is generally considered docile and prefers to avoid interactions with humans, however, if you startle or step on one, you could get bitten. To reduce this risk, stay on maintained trails. If you do happen to get bitten (very rare) do not panic and do not sit and wait it out. Try to remain calm, call 911 if you have a working phone and walk to the nearest aid station or road so that you can get medical help quicker. Bites on the hand or arm should be held in a heart-neutral position (level with the heart). DO NOT, for any reason, try to catch the angry snake.



Black Bears

Black Bears (*Ursus americanus*) are occasionally spotted in the San Gabriels. While their colors may range from black and dark brown to cinnamon, light brown, and even yellow and bluish hues, rest assured they are all black bears. The last grizzly in California was memorialized on the state flag. Bears mostly keep to themselves, but can travel fast and climb trees with ease. If you see a bear, most likely it will run away after seeing you. If it appears curious, you should first speak calmly and wave your arms to help the bear recognize that you are human. Stay calm and do not scream. If you are near other runners,

stay in a group and make yourselves look as large as possible to intimidate the bear. Move away slowly and sideways if you can, never taking your eyes off the animal and DO NOT RUN. If you can't get around the bear, wait until it moves. Take caution to never place yourself between a female and her cubs. If the bear does attack, do not play dead - this does not work with black bears. Fight back. While you now know what to do, rest assured that a bear attack in the San Gabriels is highly unlikely.

Mountain Lions

A healthy Mountain Lion (*Puma concolor*) population coupled with habitat loss have lead to increased sightings in the local foothills. If this freaks you out, know this: less than forty Americans have been killed by mountain lions, and approximately thirty have been injured. Compare this to an average of 40,000 deaths per year from highway fatalities. A human standing up is not the right shape for a cat's prey. Standing up, facing the mountain lion, not running away, making a lot of noise, and putting on a face, may deter big cat attacks. It is important to note that the vast majority of cat sightings in region, including ones photographed and put on the internet as Mountain Lion sightings, are actually of the smaller Bobcat (*Lynx rufus*). Unless you are a rodent, a Bobcat in the vicinity is nothing for you to worry about.



Bighorn Sheep

Bighorn Sheep (*Ovis canadensis*), like mountain goats and caribou, are a wilderness species intolerant of human disturbance. If you're lucky, you may see a herd in the high country! Bighorn Sheep are docile and are not known to attack humans.

TRAVEL + ACCOMMODATIONS

The point-to-point nature of the course makes planning a little more involved, but we promise it's well worth it. Before making travel arrangements, you'll want to decide on whether you'll be ending your journey in the city or returning to Wrightwood after the race.

GETTING HERE

Airports

The closest airport to Wrightwood is Ontario (ONT), which is about a 40-minute drive, and is advantageous because it can help you largely avoid the legendary LA traffic. However, flying in and out of LAX or Burbank is usually a bit cheaper and might be more convenient if you plan to stay in the Pasadena or LA area after the race.



Driving to Wrightwood

If you do happen to be coming from the LA-area, there are a few ways your GPS may take you, and honestly, it all depends on what time you leave. If it looks clear, you can risk it, but your safest, most enjoyable bet is to get to La Cañada and take Highway 2 to Wrightwood. It's less stressful, more beautiful, and will allow you to see a lot of the course and aid stations on the way.

**Note that Highway 2 sometimes closes due to rockfall. Check the [Caltrans website \(http://www.dot.ca.gov/hq/roadinfo/display.php?page=sr2\)](http://www.dot.ca.gov/hq/roadinfo/display.php?page=sr2) for details before you head up.*



WHERE TO STAY

The Start (Wrightwood)

Many of the hotels/motels in Wrightwood are not listed on the usual sites (Priceline, Kayak, etc.) and many don't offer online booking. It's all part of the small-town Wrightwood charm! There is no official "race hotel," but here are a few places and numbers to get you started:

- Pines Cabins - (760) 249-9974
- Canyon Creek Inn - (760) 249-4800
canyoncreekinn.com
- Mountain View Cabin & Motel - (760) 249-5578
- Cedar Lodge - (760) 249-4673
cedarlodgewrightwoodca.com
- The Rhinestone Rose - (760) 912-3838 therhinestonerose.com
- Mountain High Cabins - (online only)
stayinwrightwood.com
- Best Western Cajon Pass (15-min drive) - (760) 249-6777
- For maximum mountain charm, a vacation rental through AirBnB or VRBO is a great option. Prices are usually pretty cheap up here in the summer. Keep in mind, however, that many of these rentals have a 2-night minimum.
- Some runners or crews choose to camp before the race. There are a few first-come first-served campgrounds close to Wrightwood off of Big Pines Highway and the unpaved Blue Ridge Road. Dispersed camping is legal in the National Forest, but illegal at trailheads. Grab a spot early, if this is your plan, as it is summer and many Angelenos head to the hills on the weekend.
- If Wrightwood isn't working for you, the closest cities with accommodations are in the high desert area (Victorville/Hesperia - 40-45 min drive) or down the hill near Ontario airport (San Bernardino/Fontana/Rancho Cucamonga - 30-45 min drive). These locations contain hotels, restaurants, stores and the general creature comforts you'd expect in a major city.



The Finish (Altadena - Greater Pasadena area)

The finish line is located in the greater Los Angeles area, so hotels are plentiful. Again, there is no official race hotel, so have at it with your favorite booking site/rewards points/personal preferences.

RESOURCES IN WRIGHTWOOD

Wrightwood lacks a stoplight, but does have your basics: a grocery store, gas station, hardware store, restaurants and a pair of coffee shops. Hot tip: the grocery store (Jensen's) closes at 10PM and the gas station (Wrightwood Market) closes at 9PM, so don't wait until late to pick up anything you need race morning. Race sponsor, Mountain Hardware stocks supplies for hikers and is the place to find a forgotten gear item (performance food, Buff, bandana, water bottle, even trail running shoes!)



A few businesses will be open early on race morning for breakfast, coffee and last minute supplies:

- Jensen's Finest Foods for groceries and a breakfast bar
- The Village Grind for breakfast food and coffee
- Cinnamon's Bakery & Sandwich Shoppe for breakfast food and coffee
- Wrightwood Market for gas and drinks/snacks/coffee

ALONG THE COURSE

- Wrightwood is your only chance to gas up until you depart Highway 2 for Chantry Flats. Make sure you can get there.
- There is little to no cell service along the course, so don't rely on this for driving directions or communication with the outside world.
- The only restaurant is Newcomb's Ranch, which is located along Highway 2 between the Three Points and Chilao aid stations. It's open from 7AM-4 or 5PM, depending on how busy they are, and is a favorite of both AC100 crews and Jay Leno.
- Once you depart the mountains for Chantry Flats, you have the greater LA area to your disposal. Cell service, gas and restaurants abound.

SHUTTLING BETWEEN THE START AND FINISH

Throughout the history of this point-to-point race, the logistics of how to organize rides between the start and finish has always been up to you, the runner. Keep in mind that you are only permitted to have one crew vehicle on the course, so you'll need to factor this into your planning. The official AC100 Facebook page is a great resource for connecting with other runners, making carpool plans, and finding a pacer.

Most runners choose to meet their crew members and/or other runners near the Finish Line and carpool or share an Uber/Lyft to Wrightwood. If you do this, DO NOT park in the parking lots at Loma Alta Park or in front of the residences on Palm or Dabney. Homeowners complain, and we risk losing our permit. Instead, please utilize the plentiful street parking off Lincoln and Loma Alta Drive - just be sure to look for any parking restrictions. You do not need an Adventure Pass to park near the Finish Line.

Please make arrangements prior to leaving the Wrightwood Community Center on foot. While you may get lucky and be able to hitch a ride, the reality is that most runners do not return to Wrightwood after the race and those that do often have full vehicles. If you choose to wait, you may find yourself with an expensive Uber/Lyft ride.

Ensure that your crew understands that they are not allowed more than one vehicle on the course, and if they are caught, you, the runner, may be disqualified. In addition, pacers may not leave vehicles parked at any aid station. If your pacer is not crewing you from Wrightwood, they will need to get dropped off at either Chilao or Chantry Flats.

SOLO RUNNER TIPS

Being a solo runner means that you are self-sufficient in every way. You have received special consideration in the lottery in return for making all arrangements on your own. The race is happy to provide aid and drop bag service, but traveling the course and to and from the race is up to you.

Suggestions:

Cars and Travel:

Make arrangements with other runners to shuttle cars between the start and finish lines, as suggested on the previous page. It may be helpful to organize with other Solo division runners, who you can find denoted on the

entrants list on ac100.com. Again, utilizing the official AC100 Facebook page is a great way to connect and make plans.

Getting your belongings to the finish line:

- You may find it easier to plan to return to Wrightwood after the race so that you can have all your belongings the night before the race and race morning.
- If you are not planning on returning to Wrightwood, your best bet is to leave the bulk of your gear (suitcase, etc.) in your vehicle near the Finish if you're carpooling to Wrightwood.
- You can have a drop bag transported to the Finish Line, but keep in mind, this will be picked up on Friday morning at 11:00AM, so you will not have access to anything in that bag for the remainder of Friday and race morning.
- We'd suggest either keeping minimal items with you on Friday that you can carry in your pack or trying to coordinate with another runner or friend in advance. Do not show up on race morning and expect that someone will take your suitcase, coat, etc. to the Finish Line for you.
- Arranging for another runner's crew to transport your bag to the Finish Line is ok, as long as you do not use that crew or anything from that bag AT ALL during the race. That would be an obvious infraction of the Solo division rules, and you will be disqualified.
- Regardless of your plan, we recommend all Solo runners keep their cash, credit cards/IDs, car keys, phone and any other valuables on their person throughout the race. Being SOLO means being responsible for yourself, so besides not wanting any of those things misplaced or stolen, you'll need them to be flexible and ready for anything.

Dropping from the race:

We certainly hope you won't, but this is a tough race and things happen. If you find yourself needing to drop or are cut off, we will eventually get you out of there, but please understand it will be at the convenience of the race and not your own. With that in mind:

- Purchasing a Solo Van ticket in advance is your only insurance policy for having a ride if you drop. This van will only take you to the Finish Line. The van will be following the last runner, so keep in mind that if you are a faster Solo runner, you may have to wait quite a while for that ride, particularly at later aid stations. You may want to pack a jacket or extra clothes in drop bags after Chilao in the event you are caught waiting out the night.
- If you drop without a Solo Van ticket, your only guaranteed option is to wait for the aid station to close and a volunteer to drive you to the Finish. Again, this could result in a very long wait for faster runners, and you should be prepared.
- Once you have dropped from the race, hitching a ride with another runner's crew or a spectator is fine and encouraged. After surrendering your medical band, you are considered officially out of the race.
- Do not have "just calling an Uber" as your master plan, as there is no cell service in most of the Angeles National Forest, nor at any of the aid stations.

AWARDS

One of the highlights of the AC100 is the Awards Ceremony immediately following the conclusion of the race. Yes, it can get a little long, but this is because every finisher is recognized for their great accomplishment. So bring a cooler of cold beverages and lounge in the shade of the park while you celebrate your fellow compatriots.

All runners finishing before the 33-hour cutoff will receive an official AC100 Finisher's tech t-shirt. Solo runners will receive a special solo version.

In addition, all official finishers receive an engraved plaque, personalized with his/her name and finishing time.

The Buckles:

33 Hour Solid Bronze Ram

All finishers between 25:00 and 33:00.

33 Hour Solid Bronze Ram - Solo

All SOLO finishers between 25:00 and 33:00.

Second Sunrise Solid Bronze Ram

All finishers between 24:00 and 24:59:59

24-Hour Solid Sterling Silver

All sub-24 hour finishers. Sub-24 is defined as 23:59:59.

24-Hour Solid Sterling Silver - Solo

All sub-24 hour SOLO finishers. Sub-24 is defined as 23:59:59.

24-Hour Solid Sterling Silver / 14K Gold Rejoice

Any female runner who breaks the existing female course record of 21:04:18.



Pam Smith DNF'd her first attempt at AC100, but came back in 2014 to set the women's course record.





The Gold Buckle (Solid Sterling Silver Plated with 14K Gold)

Any runner who sets the new overall course record. This requires besting Jim O'Brien's stout 17:35:48 run in 1989, a record that has stood for 28 years! The closest anyone has come to this record is within 56 minutes, and only three other runners have ever broken the 19-hour mark. Both men and women are eligible for this award - any person who breaks the time, wins the gold buckle.

Jim O'Brien's 1989 AC100 finish is one of the longest standing records in ultrarunning.

The Trophies:

The Ram

Presented to the Overall Male and Overall Female winners.



The Cougar

Presented to the First Male Solo and First Female Solo runners.

If the Overall winner also ran in the Solo division, The Cougar will be presented to the next Solo finisher.



The Eagle

Any runner officially finishing 10 consecutive Angeles Crest 100-mile Endurance Runs. This is a rare one, folks!

The Elk

Any runner officially finishing 10 AC100 races, over any time period, in any official finishing time.

The Ring

Any runner officially finishing 30 AC100 races, over any time period. This is a Solid Sterling Silver/ 18k White Gold plated "Super Bowl style" Ring, embellished with synthetic diamonds. It is cast with the runner's name and accomplishment of 3,000 miles.



2018 Winners:

RAM

Rene Dorantes, 42 Pasadena, CA 19:23:04

Darcy Piceu, 43 Boulder, CO 22:17:41

COUGAR

Benjamin Atkins, 45 Westlake Village, CA 20:28:08

Bibo Gao, 40 Buffalo Grove, IL 27:38:13

ELK

Rafael Arceo, 51 West Covina, CA



2018 trophy winners (L-R): Benjamin Atkins, Rene Dorantes, Darcy Piceu, and Bibo Gao.

Related Races and Awards:

Western United States

Any runner completing the Western States 100, the Leadville 100, the Wasatch 100 and the Angeles Crest 100 Mile Endurance Runs in the Western United States in the same year will be eligible for a distinctive plaque commemorating the accomplishment.

Last Great Race on Earth

Any runner finishing the six designated 100-mile endurance runs across the US in the same year will be eligible for a special award plaque. Runners must be an official finisher of all the following:

- Eastern US: Old Dominion 100 and Vermont 100
- Central West: Wasatch Front 100 and Leadville 100
- Western US: Western States 100 and Angeles Crest 100



Rafael Arceo earns his Elk Award for racing 1,000 miles of Angeles Crest.

THE PEOPLE

PAST CHAMPIONS

1986	Richard Provost, 40 Sheila Hasham, 44	CA CA	21:52:00 29:15:19	2003	Jorge Pacheco, 34 Diana Finkel, 31	CA CO	18:52:24 24:39:06
1987	Jim Gensichen, 38 Diane Eastman, 45	CA CA	19:37:13 28:31:04	2004	Jorge Pacheco, 36 Jennifer Johnston, 40	CA CA	19:10:28 24:32:24
1988	Jim Gensichen, 39 Kathy Britcliffe, 33	CA CA	20:21:49 26:30:55	2005	Guillermo Medina, 29 Julie Fingar, 30	CA CA	19:33:13 24:53:24
1989	Jim O'Brien, 36 Kathy Britcliffe, 34	CA CA	17:35:48 22:36:57	2006	Hal Koerner, 30 Ashley Idema, 26	OR OR	18:37:29 23:29:05
1990	Jussi Hamalainen, 44 Susan Gimbel, 4x	CA CA	19:31:24 23:37:05	2007	Kevin Dean, 36 Suzanna Bon, 43	CA CA	19:34:41 22:00:15
1991	Jussi Hamalainen, 45 Vicki DeVita, 38	CA CA	20:12:56 23:46:56	2008	Hal Koerner, 32 Prudence L'Heureux, 38	OR OR	18:29:18 22:13:06
1992	Fred Shufflebarger, 44 Joanie Mork, 38/Kathy Welch, 39	CA CA	19:22:16 27:44:40	2010	Jorge Pacheco, 42 Keira Henninger, 34	CA CA	19:20:30 24:15:12
1993	Fred Shufflebarger, 45 Evelyn Marshall, 35	CA CA	19:41:44 25:15:09	2011	Dominic Grossman, 24 Paulette Zillmer, 29	CA AZ	20:21:18 23:47:12
1994	Ben Hian, 25 Evelyn Marshall, 36	CA CA	18:39:48 23:39:37	2012	Chris Price, 31 Keira Henninger, 36	CA CA	19:46:06 23:17:12
1995	Ben Hian, 26 Evelyn Marshall, 37	CA CA	19:11:11 22:01:16	2013	Dominic Grossman, 26 Angela Shartel, 39	CA CA	19:06:03 21:21:13
1996	Ben Hian, 27 Jennifer Henderson, 37	CA CA	18:50:24 24:28:27	2014	Ruperto Romero, 50 Pam Smith, 39	CA OR	19:28:01 21:04:18
1997	Cirildo Gonzalez, 43 Sherry Kae Johns, 42	MEX NM	19:37:03 23:18:00	2015	Erik Schulte, 26 Ashley Nordell, 35	CA OR	19:46:20 22:35:38
1998	Ben Hian, 29 Jennifer Johnston, 34	CA CA	19:05:35 23:28:43	2016	Guillaume Calmettes, 32 Jenny Welch, 34	CA CA	19:14:24 26:51:42
1999	Tom Nielsen, 40 Suzanne Brana, 41	CA Cc	19:07:50 23:08:47	2017	Jerry Garcia, 39 Rachel Ragona, 34	CA CA	20:04:12 24:32:45
2000	Tom Nielsen, 41 Jennifer Johnston, 36	CA MI	19:09:04 25:11:24	2018	Rene Dorantes, 42 Darcy Piceu, 43	CA CO	19:23:04 22:17:41
2001	Jorge Pacheco, 33 Jennifer Johnston, 37	CA CA	19:05:06 25:23:36				

RANKED BY TIME

1	17:35:48	Jim O'Brien, 36	1989	21:04:18	Pam Smith, 39	2014
2	18:29:18	Hal Koerner, 32	2008	21:21:13	Angela Shartel, 39	2013
3	18:37:29	Hal Koerner, 30	2006	22:00:15	Suzanna Bon, 43	2007
4	18:39:48	Ben Hian, 25	1994	22:01:16	Evelyn Marshall, 37	1995
5	18:50:24	Ben Hian, 27	1996	22:13:06	Prudence L'Heureux, 38	2008
6	18:52:24	Jorge Pacheco, 34	2003	22:17:41	Darcy Piceu, 43	2018
7	19:05:06	Jorge Pacheco, 33	2001	22:35:38	Ashley Nordell, 35	2015
8	19:05:35	Ben Hian, 29	1998	22:36:57	Kathy Britcliffe, 34	1989
9	19:06:03	Dominic Grossman, 26	2013	23:08:47	Suzanne Brana, 41	1999
10	19:07:50	Tom Nielsen, 40	1999	23:17:12	Keira Henninger, 36	2012
11	19:09:04	Tom Nielsen, 41	2000	23:18:00	Sherry Kae Johns, 42	1997
12	19:10:28	Jorge Pacheco, 36	2004	23:28:43	Jennifer Johnston, 34	1998
13	19:11:11	Ben Hian, 26	1995	23:29:05	Ashley Idema, 26	2006
14	19:14:24	Guillaume Calmettes, 32	2016	23:37:05	Susan Gimbel,	1990
15	19:20:30	Jorge Pacheco, 42	2010	23:39:37	Evelyn Marshall, 36	1994
16	19:22:16	Fred Shufflebarger, 44	1992	23:46:56	Vicki DeVita, 38	1991
17	19:23:04	Rene Dorantes, 42	2018	23:47:12	Paulette Zillmer, 29	2011
18	19:28:01	Ruperto Romero, 50	2014	24:15:12	Keira Henninger, 34	2010
19	19:31:24	Jussi Hamalainen, 44	1990	24:28:27	Jennifer Henderson, 37	1996
20	19:33:13	Guillermo Medina, 29	2005	24:32:24	Jennifer Johnston, 40	2004
21	19:34:41	Kevin Dean, 36	2007	24:32:45	Rachel Ragona, 34	2017
22	19:37:03	Cirildo Gonzalez, 43	1997	24:39:06	Diana Finkel, 31	2003
23	19:37:13	Jim Gensichen, 38	1987	24:53:24	Julie Fingar, 30	2005
24	19:41:44	Fred Shufflebarger, 45	1993	25:11:24	Jennifer Johnston, 36	2000
25	19:46:06	Chris Price, 31	2012	25:15:09	Evelyn Marshall, 35	1993
26	19:46:20	Erik Schulte, 26	2015	25:23:36	Jennifer Johnston, 37	2001
27	20:04:12	Jerry Garcia, 39	2017	26:30:55	Kathy Britcliffe, 33	1988
28	20:12:56	Jussi Hamalainen, 45	1991	26:51:42	Jenny Welch, 34	2016
29	20:21:18	Dominic Grossman, 24	2011	27:44:40	Joanie Mork, 38/Kathy Welch, 39	1992
30	20:21:49	Jim Gensichen, 39	1988	28:31:04	Diane Eastman, 45	1987
31	21:52:00	Richard Provost, 40	1986	29:15:19	Sheila Hasham, 44	1986

FOR UNCLE HAL - A DEDICATION

We've talked a lot in this book about how earnestly we've worked over the years to keep the spirit of the original Angeles Crest 100 Mile Endurance Run in tact. We've also talked about the changes that have arisen in the course, the organization and the process. One man has not only embodied that spirit, but worked harder than anyone to preserve it, which is why the loss of our Co-Race Director and great friend, Hal Winton, in 2017 has been the biggest change of all.

Hal Winton, or "Uncle Hal" as we all knew him, was the Co-Race Director of AC100 for 30 years and a longtime USFS volunteer. He managed the AC100 Trail Maintenance program, leading runners in logging thousands of hours of volunteer work in the Angeles National Forest each year. It was his mission to keep the forest accessible not only to the race, but to all who wanted to enjoy it. As new wilderness boundaries were established, he worked with the Forest Service to maintain AC100's access to the trails, his only losing battle being with the Mountain Yellow-Legged Frog closure at Eagle's Roost. If we are ever successful with regaining access to that area, we know Uncle Hal will be the first one to cheer.



For AC runners, most of our fond memories of Uncle Hal center around these trail work days and the organized training runs. To attend one of either was an opportunity to get an earful of not only the sternly delivered procedures for the day, but also whatever stories he felt inclined to tell. How to properly dig a drainage culvert could seamlessly transition into the merits of eating for one's blood type, and before you knew it, you were back at your cars enjoying a Coke from the endless depths of his Ford Explorer.



Hal was quite the accomplished runner himself. A high-school cross-country athlete, he didn't pick up ultras until later in life, running his first at the age of 50. He completed many of the toughest races around, including Western States, Leadville, Hardrock, a Grand Slam, and yes - he ran Angeles Crest in 1992 at the age of 61. But perhaps



what Hal is most known for in his racing endeavors is his tenure at the Avalon Benefit 50 miler. Running his first in 1982 at 50-years-young, he racked up 35 consecutive finishes, while consistently being one of the event's top charity fundraisers. Never one to back down from a challenge, Hal had been talked into dropping to the 50k distance for the 2018 race, but he was none too happy about it. In that regard, it seems fitting that his last Avalon was a 50-mile finish at age 85, only a few months before he passed.

Last year was our first race day without Hal out on the course. As we gathered in the Community Center in the final moments before the start, lumps formed in our collective throat, as we realized we'd be missing out on one of the key moments that made AC, AC: Hal's blessing. A profoundly spiritual man, Hal's prayer of thanks to the people and the mountains was a tradition that was deeply appreciated, regardless of one's faith. And though we continued to miss him along the course, goading us to keep going and to announce our numbers clearly at the aid station, his presence was definitely felt.

To all of us, it seemed like Hal was going to live forever. He was still running 50-mile races, wielding a chainsaw, leading trail work and whipping us into shape up until his final moments here on Earth. And for many of us, the AC100 will never be the same without him. But without a doubt, this race is what it is today because of Uncle Hal.

Get out there and make him proud.



Hal Winton 1931-2017

TRAIL WORK PROGRAM

A word from Trail Boss, Gary Hilliard:

The Angeles Crest 100-Mile Endurance Run Trail Work Team has been an *Approved* USDA Forest Service Region 5 Angeles National Forest trail maintenance group since 2000. AC100 requires all entrants to perform 8 hours of volunteer trail work or forestry service, which has resulted in over 33,000 hours of forest improvements since the summer of 2000. All Southern California entrants are required to assist during one of the monthly AC100 Trail Work days in the Angeles National Forest (ANF). Race entrants not residing in Southern California are required to perform 8 hours of forestry through a Park Agency where they reside. Unlike other events that allow their volunteering requirement to be met serving at a race, AC100 requires runners to physically work on the trails that they run, giving back to the ANF and the sport of trail running.



2018: Gary on Kenyon Devore Trail

The mission of the AC100 Trail Work Team is trail restoration, tree removals, trailhead repairs, and trail camp access for all trail users within the ANF. Race Directors, Ken Hamada and Hal Winton began the AC100 Trail Work

Program in 2000 with Hal leading the Trail Work Outings. Gary Hilliard joined Hal in 2004, and together, they led all the AC100 Trail Work outings until Hal's passing in 2017. Gary was joined this year by Rocky Castro, who also became ANF certified, and together they lead outings that ensure safe passage for runners and all trail users over our 100-mile race course.



2018: AC100 Team on Gabrielino Trail

The AC100 Trail Work Program requires all volunteers to wear appropriate work clothing and provides all the trail work tools and hard hats for safe outings. We meet at designated trail work locations, then carpool in high-clearance vehicles to the work areas. Once at the locations, safety and proper trail work technique is always reviewed before beginning work.



2018: Gabrielino Trail to Chantry Flat

While our program concentrates mainly on trails, camps, and Recreational Areas that are part of the AC100-Mile route, we sometimes help other groups as needed in the Angeles National Forest. Some of our work has included: the Gabrielino National Recreational Trail, Silver Moccasin Trail, Red Box Picnic Area, Winter Creek Trail, El Prieto Trail, Kenyon Devore Trail, Idlehour Trail, Sunset Trail, Strawberry Peak Trail, Acorn Trail, and the Pacific Crest Trail.

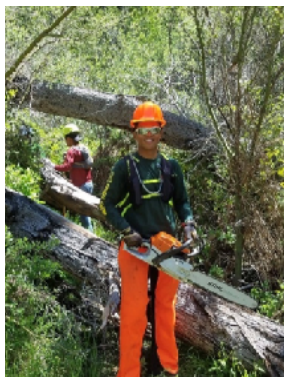
As the pictures show, work is always accomplished safely and everyone has a good time while caring for “OUR FOREST”.

The AC100 Trail Work Program:

- Restores and maintains the Angeles National Forest trail network.
- Provides volunteer opportunities for all Southern California residents.
- Assists other ANF trail groups and Boy Scouts with their projects.
- Builds our forest's trails using ultrarunners and teamwork.



2018: Idlehour Trail

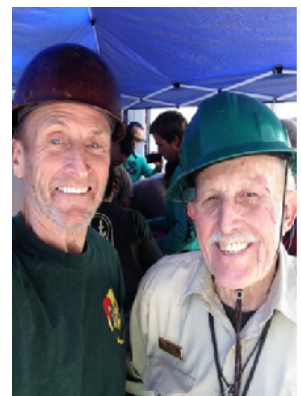


2019: Rocky Castro cutting trails on Silver Moccasin Trail

The AC100 Trail Work Schedule is posted on AC100.com.

Anyone is invited to participate in helping *Our Forest*.

For more information or a trail work outing confirmation, contact Gary Hilliard at: GaryHilliard.RD@gmail.com.



2017: Gary and Hal

RACE ORGANIZATION

RACE DIRECTORS:

Race Director	Ken Hamada	Ass't Race Director	
Co-Race Director		Medical Coordinator	John Emmons
Webmaster	Jakob Hermann	Ass't Race Director	
Co-Race Director		Finish Line Coordinator	Bill Kee
Trail Maintenance	Gary Hilliard	Ass't Race Director	
Ass't Race Director		Training Coordinator	Dominic Grossman
Start & Finish Coordinator	Andy Morehead	Ass't Race Director	
Ass't Race Director		Wrightwood Coordinator	Katie Grossman
HAM Coordinator	John Minger		

HAM RADIO TEAM:

Co-HAM Coordinator	Steve Woo
Run Track Program	Gerry Walsh
HAM Central	TBD

CHECKPOINT COORDINATORS:

Inspiration Point	Cyndi Wyatt
Vincent Gap	Brian Hershberger
Islip Saddle	Judy Reid
Eagles Roost	George Keene
Cloudburst Summit	Monte Lewis
Three Points	Marty Minnich
Mt. Hilyer	Brian Provost
Chilao	Dave Emmons
Shortcut Saddle	John Marnell
Red Box	Larry Rich
Newcomb Saddle	Rob Winterburn
	Mike Peralez
Chantry Flats	Bob Spears
	Scott Cline
Idlehour	Denise Romero
Sam Merrill	Scott Keil
Millard	Bob Adjemian
	Jeff Su
Finish Line	Bill Kee

RACE OPERATIONS:

Time Keeping	Yen Darcy
	Jakob Hermann
Wrightwood Registration	Will Weston
Search & Rescue Coordinator	
Sierra Madre S&R	Arnold Gaffrey
Race Photographer	Ivan Buzik
2019 Race Book	Katie Grossman
	Dominic Grossman
2019 Map Book	Marcus England
Solo Van Driver	Nicole Reeder

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