

2021

C&O Canal 100

Runner Information

Packet

Table of Contents	Page
COVID-19 Mitigation Plan	3
The C&O Canal and the Race Today	5
Awards	6
Race Schedule	7
General Information for Runners	10
General Information for Pacers	12
General Information for Crews	13
Medical Considerations	14
General Information: Other	15
Aid Station Locations	16
Aid Station Directions	17
Appendix A – Maps/2021 Course Changes	19
Appendix B – More Aid Station Logistics	22
Appendix D – Post-race meal menu	24

Overview of 2021 COVID-19 Mitigation

1. Packet pickup of race bib will be cancelled for 2021 and they will be mailed to runners in advance of the event. Premiums will be picked up after finishing. Pre-race briefing information will be recorded in a live zoom session and sent to runners prior to race morning. A streamlined race-day self-check in will be used. This will eliminate crowding and congregating on race morning.

2. Participants (runners and pacers) will have to print and bring a signed waiver stating that to their knowledge they have no COVID-19 symptoms AND they have taken and received a negative COVID-19 test within 72 hours of the event or been fully vaccinated (2 weeks after Moderna/Pfizer second dose or 2 weeks after J&J single dose). Volunteers will be strongly encouraged to take and receive a negative COVID-19 test in the 72 hours prior to the event and will be required to wear a face mask at ALL TIMES during the event.

3. Runners will start in 4 waves of ~40 people, socially distanced, every 10 minutes starting at 7:00AM on April 24th.

4. Runners will always be required to wear a face covering when social distancing (> 6 feet) is not possible (e.g. race start/finish, aid stations, passing another runner, passing another C&O Canal user). Runners will be required to wear a face covering at all times on Manidokan property.

5. All race volunteers will be required to wear face coverings and those handling foods will wear disposable gloves.

6. Runners will be required to use hand sanitizer prior to entering an aid station. Aid stations will be organized so that race volunteers will dispense all fluids/food items to runners upon request in disposable bags/cups, etc. Aid stations will be organized so that social distancing is possible. Pre-packaged food items will be prioritized for safety.

7. Spectators will not be allowed at aid stations. Each runner will only be allowed ONE crewmember at the Manidokan (not C&O Canal) aid stations. Runners will be allowed only ONE pacer and both runner/pacers must wear a face covering or be socially distant.

8. Runners will be discouraged from spitting, coughing, or sneezing without properly covering mouth and nose.

9. Handwashing/hand sanitizer will be available at all toilet facilities and face coverings will be required inside all toilet facilities.

10. The pre-race meal cancelled. The post-race meal will consist of catered Chipotle burritos, ice cream, and drinks. See appendix C for more details.

The C&O Canal and the race today

The C&O Canal can trace its history back to the time of George Washington, who was one of the first advocates for connecting the Eastern seaboard to the interior Great Lakes and Ohio River through a series of waterways. Construction began in 1828 and progressed slowly westward from the Potomac River to Cumberland, MD in 1850. Unfortunately for all the hard-working laborers who made the canal possible, by that time the completion of the B&O Railroad several years earlier had rendered the canal obsolete as far as it's originally intended purpose.

Today the Canal extends from Georgetown in Washington D.C. 184.5 miles north-west towards Cumberland, MD and exists officially as the Chesapeake and Ohio Canal National Historical Park, under the administration of the National Park Service. Each mile of the canal is marked with a mile marker (starting at 0 in D.C.) and we will be running between miles 44.6 and 69.4 for the C&O Canal 100 race. I recommend that runners, family, and friends get out and enjoy the entire length of the Canal and all of the wide range of sights and attractions it has to offer along the 184.5 mile distance, not only the small (relatively speaking) section we will be running on.

The history of the racecourse dates back to 2012 when another planned 100 mile race had to change the course at the last minute and utilize the current C&O Canal 100 as an alternate route. With the realization that the C&O 100 mile course itself afforded a unique opportunity in the area for a 100 mile race in a beautiful part of Maryland, the current version of the race was officially started, with the inaugural race being held from April 27th-28th, 2013. In the end the intent of this event is to avoid large sponsorships and the more glamorous aspects of running in favor of providing dedicated and passionate runners a chance to throw themselves in the ring against the 100 mile distance and see if they have what it takes to come out on top, all the while providing the best support possible to you in your efforts. At the end of the day you will be tested physically, mentally, and emotionally but we hope you will feel well rewarded for the experience.

Awards

In keeping with the spirit of an event focused on the fostering friendly ultrarunning spirit and camaraderie there will be no prizes or awards for the top runners. All runners who officially finish within the 30 hour time limit will receive a belt buckle to commend their determination and perseverance to complete the distance. We hope you will wear this buckle proudly and have plenty of stories to tell your friends when they ask why you are walking around like a penguin for a week post-race.

Due to the COVID-19 pandemic, runners will receive their buckles and race premiums immediately after crossing the finish line. We hope the buckle ceremony and post-race BBQ will return in 2022.

Race Schedule

Friday **MASK REQUIRED AT ALL TIMES AT MANIDOKAN**

12PM: Runners who plan to camp out overnight can begin to arrive any time after noon. You will need to pay \$3 per “tent/small RV camper”. **Large RV campers are not allowed.** Someone should be at the pavilion to help direct you where to park/set up camp. Due to COVID-19 regulations we will be spreading out campsites more than in the past. Be sure to stay up against the tree line so there will be room for parking in the field below on race morning. NOTE: Don't camp completely flush against the tree line as runners will be running along the tree line in the field at race start. Leave at least a car width between your tent/tent stakes and the trees.

If you did not receive your mailed bib number or signed up in the last few days of registration you can obtain your bib number and sign the race waivers between 12PM and 5:30PM at the Pavilion near the top of the hill. If you have already signed your mailed waivers you can also turn those in between 12PM and 5:30PM Friday afternoon. The pre-race dinner will not be held in 2021 due to the COVID-19 pandemic. Campers should plan to arrive no later than 10PM to respect fellow runners who want to try and get some sleep.

10PM: Quiet time for campers.

Saturday **MASK REQUIRED AT ALL TIMES AT MANIDOKAN**

5:45AM: Runners may begin arriving at Camp Manidokan. Please do not arrive before 5:45AM. I know everyone is eager to nervously sit in your car prior to the race, but we won't be ready for you before that time. You will be parked in the field by race volunteers.

5:45AM-7:15AM: If you did not receive your mailed bib number or signed up in the last few days of registration you can obtain your bib number and sign the race waivers during this time from the Pavilion near the top of the hill. If you have any special medical conditions the race volunteers might need to know about, please write them on the back of your number in

water-proof ink. **You will check in and get your wave sticker as you approach the start line for your starting wave (see below), not from the Pavilion.**

5:45AM-7:15AM: Distribute your drop bags to the appropriate locations. There will be a zone on the grass near parking marked off for the Brunswick and Antietam aid stations. The Manidokan drop bag location will be behind the race pavilion, also marked off with a sign. These drop bags will remain where they are placed. If you are having trouble just ask a volunteer for help finding your way. Volunteers should be wearing green long sleeve shirts or orange safety vests. Please label your drop bag with the following information in water-proof ink:

- Name
- Bib number
- Aid station

We will try to arrange the drop bags in order per bib number to facilitate finding them, so it is crucial that your drop bags are clearly marked.

Due to COVID-19 regulations at Camp Manidokan please do not congregate near the start line/Pavilion. Once you have your number (if applicable), have dropped off your drop bags and used the port-a-pots, please wait in your car until 10 minutes prior to your assigned starting wave.

10 minutes prior to your starting time you will be at the starting line.

- You will be directed by signs to one of several white boards with your bib numbers listed.
- Hand your race waivers to the volunteers. Make your way to the starting line for your designated start time.
- Cross off your bib number to “check in” to the race.
- Pick up a sticker corresponding to your start wave and place it on your bib. This sticker must still be always visible if you fold/modify your bib.

6:50AM – Wave 1 lines up at the starting line

7:00AM – Wave 1 start and wave 2 lines up at starting line.

7:10AM – Wave 2 start and wave 3 lines up at starting line.

7:20AM – Wave 3 start and wave 4 lines up at starting line.

7:30AM – Wave 4 start.

Sunday

Saturday ~11:00PM – Sunday 1:00PM: The post-race meal will be ready for you as you finish. The meal will be Chipotle burritos and tacos (vegans only). See appendix C for more details and the form to RSVP your meal choice.

1:00PM-1:30PM: Race time limit based on assigned starting wave. Anyone who has passed the last cutoff time will be allowed to proceed to the finish line, but they will not receive a belt buckle or official finish time if they finish after 30 hours. Your buckle and post-race premium will be handed out as you finish.

~1:45PM: Breaking down of the race HQ.

General Information for Runners

- Getting to this race involves traveling over a lot of narrow back roads with sharp turns, especially travelling to/from the race start at Camp Manidokan. Allow extra time to safely drive on these unfamiliar roads and be sure to carefully read the instructions to minimize your chances of getting lost. The race will start at 7AM (or your later starting wave time) no matter what.
- Runners must wear their race numbers always while on the course.
- Runners are responsible for knowing where they are on the course and proceeding in the correct direction. If it helps you to remain oriented, consider where the river or the canal is. If you should be heading west the canal should be on your right and the river should be on your left. If you are heading east the opposite should be true. As described on the race website, an east heading would eventually take you to Washington D.C., while a west heading would eventually take you to Cumberland, MD. Worst case scenario you will get to an aid station and be told you already came from there. You were just getting in a few bonus miles!
- The only tricky turn is the trail leading up to Manidokan. There will be an orange construction cone with an LED light placed along the canal at the turnoff. There **MAY** be a volunteer there as well but you as a runner are responsible for being on the lookout for this turnoff. Look for these markings ~6.5 miles after you leave the Keep Tryst AS inbound. Most runners are so eager for the turnoff they have no trouble finding it. Other than that, the C&O Canal portion of the course will not be marked. There will be orange flagging and reflective tape marking the trail up to/from Manidokan.
- Each time you get to an aid station you are responsible for checking in with an aid station volunteer. Make sure the person holding the clipboard/tablet sees you **and** your number. There may be other events occurring on the Canal that weekend and we want to minimize any possible confusion. Our bibs are clearly marked with our event so this should minimize any issues.

- **IMPORTANT: If you decide to drop from the race, you must do so at a designated aid station and you must tell an aid station captain that you are dropping. You must also turn in your bib number. Failure to do so will result in disqualification from any future C&O Canal 100 events.**
- If you drop from the race at an aid station your crew can come pick you up from that location. For 2021 this is the only reason a crew should go to an aid station other than Manidokan.
- If you drop from a race and leave early with your crew be sure to pick up your drop bags at the Brunswick and Antietam aid stations. We don't need any extra pairs of dirty socks! All drop bags will be brought back to Manidokan after the aid stations have closed (late Sunday morning) so you may also pick-up drop bags at that time.
- If you drop from the race and you do not have a crew, we will try to get you back to Manidokan as soon as possible. Aid station volunteers coming and going from shifts might be able to give you a ride, or you could ride with another runner's crew. Please be patient.
- The C&O Canal 100 course provides a unique terrain for running. The packed dirt towpath may seem to be quite tame initially, however the small gravel rocks will grow as the miles wear on and your feet will start to take a beating. Additionally, those little rocks will do their best to find ways to sneak into your shoes as often as they can. Runners in general should come prepared with alternative pairs of shoes to account for how your feet might feel as the day goes on and bring gaiters to prevent the rocky invaders.

General Information – Pacers

- Pacers are allowed at any point after the 69-mile Manidokan AS (second time through). For 2021 only one pacer at a time is allowed and pacers must start from Manidokan.
- Pacers must be runners; cycling pacers are not allowed.
- Pacers may not carry any aid or supplies (AKA “muling”) for their runners or otherwise assist them outside of pacing duties when not at an aid station. While at an aid station runners can assist with volunteers in helping their runners, but once the aid station is out of sight the aid must stop.
- Pacers found to be in blatant violation of the above rules may lead to the disqualification of their runner.

General Information – Crews

- For 2021 crews are only allowed to provide support to their runners at the Camp Manidokan/Race HQ aid station.
- Crews are responsible for respecting the canal and other canal users. This includes giving other bikers/walkers/runners plenty of space and not littering.
- Crews should obey any directions given by aid station volunteers. Runners whose crews are found to violating these rules will be subject to disqualification.
- **Under no circumstances should crews meet a runner at a non-official aid station or canal access point. We will monitoring these locations and any crews observed helping a runner will have their runner immediately disqualified from the race. NO EXCEPTIONS!**
- The rules of crew canal access are put forward by the National Park Service as part of our permit for this race. Respect for these rules is crucial for our ability to successfully acquire permits to hold this race.

Medical Considerations

- All aid stations will have the various first-aid necessities of a 100-mile race. Because this race is in April, you should be prepared for all types of extreme weather (hot and humid, cold and rainy) and know how to prepare accordingly. If at any point during the race an aid station captain deems that you are not well enough to continue the race, they reserve the right to halt your progress until your condition improves or remove you from the race all together. Their decision is final. Protecting the safety of all runners is our top priority.
- If you have a unique medical condition that race volunteers should know about in the event of an emergency, please write it on the back of your race number with a water-proof ink. Aid stations will have lists with emergency contact information should they need to call someone in the event of an emergency.
- Runners, pacers, or crew members who require medical assistance outside of basic first aid available at aid stations will be held financially responsible for their own injuries. A copy of the waiver form was signed when you registered for the race, and you acknowledged the previous statement as well as the fact that participating in an event like this has the potential to be dangerous to your health (including communicable diseases).
- Note: due to the potential for associated health risks, aid stations will not carry pain killers for runners. If you anticipate wanting to use them during the race you may carry them with you or place them in drop bags and use them at your own risk.

General Information – Other

- Drop bags left over when the aid stations close will be brought back to the race start. All drop bags must be picked up by 2PM on Sunday. Drop bags will not be mailed to runners.
- Drop bags for the Brunswick and Antietam aid stations must fit through a 6" X 8" opening and can be no longer than 16". Each runner is allowed one drop bag for each aid station. Pacers are not allowed to have drop bags. There are no size restrictions for the Manidokan drop bag placed near the start/halfway point/finish. You're welcome to haul a giant drop bag up there if you want. Just make sure you haul it back to your car after the race.
- Drop bags which do not meet the specified dimensions will be turned away. To avoid having to scramble on race morning to re-pack your bag, make sure it conforms to the dimensions before you arrive.

Aid Station Locations

Below are GPS coordinates and links to the location on Google Maps for all aid stations as well as Camp Manidokan. Note in some cases the coordinates given may not be the exact coordinates of the AS, but rather a point closest to the AS on a road that your GPS would recognize. Google locations are the to the closest road access point. If you can't find the aid station, walk towards the river. *Note: the directions are given for going between Camp Manidokan and all aid stations. There may be a more direct route between two individual aid stations.* All aid stations will have at least two port-a-pots for use by runners. There may also be official C&O Canal "outhouses" (not quite, but close enough). I can say from experience you probably want to use our port-a-pots instead of these "outhouses".

- [Camp Manidokan](#): 39.3567°N, 77.7339°W
Address: 1600 Harpers Ferry Rd, Knoxville, MD 20733
- [Antietam AS](#): 39.4215°N, 77.7485°W
- [Dargan Bend AS](#): 39.3632°N, 77.7398°W
- [Keep Tryst AS](#): 39.3299°N, 77.6817°W
- [Brunswick AS](#): 39.3115°N, 77.6273°W

Aid Station Directions

Directions to Manidokan from Frederick, MD (est. 30 minutes)

- Drive 16 miles on US 340W.
- Turn left onto Keep Tryst Rd. **If you see a sign welcoming you to West Virginia, you went too far.**
- Drive 0.2 miles on Keep Tryst Rd.
- Turn Right onto Harper's Ferry Rd.
- Drive 1.6 miles on Sandy Hook Rd., continue 2.7 miles on Harper's Ferry Rd. **Follow the signs for Manidokan posted along the way.** At one point there is a sign which points to the right for Manidokan but in the past it has been confused for pointing left. **Do not turn left here (onto the narrow and poorly maintained paved Back Rd.)** Be forewarned of narrow and winding roads on this stretch, drive with caution. The destination will be on your left.

Directions to Antietam AS from Camp Manidokan (est. 12 minutes)

- Turn left coming out of Manidokan onto Harper's Ferry Rd.
- Proceed 5.8 miles on Harper's Ferry Rd. You know you are getting close when you drive over a stone one-lane bridge.
- Turn left onto Canal Rd.
- Drive 0.1 miles on Canal Rd. Destination will be on your left.

Directions to Dargan Bend AS from Camp Manidokan (est. 3 minutes)

- Turn Right coming out of Camp Manidokan onto Harper's Ferry Rd.
- Proceed 0.4 miles. Turn Right onto Back Rd. Back Rd. may be unmarked, or the sign may be difficult to see. You should see a sign pointing you in the direction you came (to Manidokan) you want to go the other way.
- Drive 0.8 miles on Back Rd. Dargan Bend Parking area/AS will be on your left.

Directions to Keep Tryst Rd. AS from Camp Manidokan (est. 11 minutes)

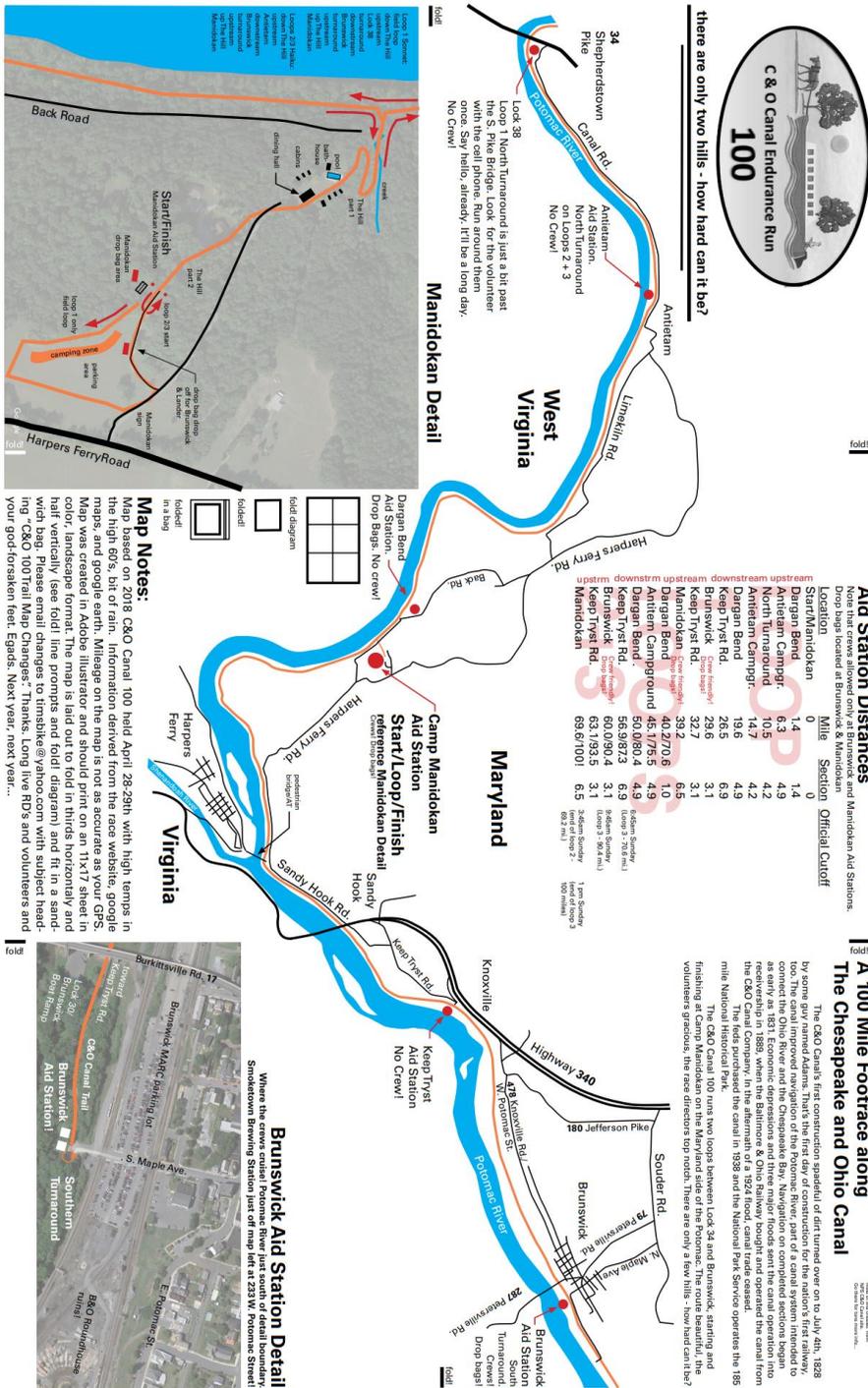
- Turn Right coming out of Camp Manidokan onto Harper's Ferry Rd.
- Proceed 2.7 miles on Harper's Ferry Rd., proceed onto Sandy Hook Rd. for 1.6 miles.
- Turn Right onto Keep Tryst Rd. Proceed 0.9 miles on Keep Tryst Rd. The aid station will be located through the gate and across the train tracks.

Directions to Brunswick AS from Camp Manidokan (Est. 20 minutes)

- Turn Right coming out of Camp Manidokan onto Harper's Ferry Rd.
- Proceed 2.7 miles on Harper's Ferry Rd., proceed onto Sandy Hook Rd. for 1.6 miles.
- Turn Left onto Keep Tryst Rd. Proceed 0.2 miles and then merge onto US 340 E.
- Drive 1.8 miles and take the MD-180 W/Knoxville exit toward MD-478/Brunswick.
- Merge onto MD-180 E.
- At the intersection with the Church, turn right onto MD-478 E/ Knoxville Rd.
- Proceed 2.3 miles. In the center of town (Brunswick) at the stoplight, turn right onto South Maple Avenue. *Note, follow the speed limit carefully in within the City of Brunswick. The police are notorious for pulling people over for doing slightly over the speed limit (e.g. 2MPH).*
- Proceed across the first set of train tracks and park in the MARC lot. The AS will be located across the second set of train track down a small hill.

Appendix A – Maps

Note the map below is slightly outdated for the 2021 race. An overview of changes to the map is below. A full size PDF can be found [here](#).



Overview of course changes in 2021

1. Dargan Bend aid station will be more minimally staffed/stocked than in the past. Dargan Bend is encountered twice each loop. The first time is ~0.75 miles after leaving Manidokan. Runners have traditionally never stopped at the aid station at this point. The other time is coming back from Antietam aid station (section distance 4.9 miles) with Keep Tryst aid station another 6.9 miles down the Canal. With limited volunteers this year, the decision was made to direct those volunteers to the other more critical aid stations. You can expect to see at most 1-2 volunteers at Dargan Bend aid stations, and at times the aid station may be self-serve as we resupply the aid station from Manidokan. The Dargan Bend aid station will have ice, water, Tailwind, Honey Stinger gels, chews, energy/protein bars, and small individually packaged snacks (chips, cookies, nuts, etc.). At night the aid station will also have hot water and cup noodles, instant coffee, and hot chocolate. There will not be check in or live timing at Dargan Bend aid station. There will be no drop bags at Dargan Bend.

2. A new drop bag will be available at Antietam aid station! With the changes to crew access/Dargan Bend, a new drop bag will be accessible at Antietam aid station (mile 6.3, 13.9, 44.7, and 77.5). This will be in addition to the drop bags at Manidokan (38.4, 68.2) and Brunswick (28.8, 59.6, 90.4). The summarized drop bag locations for 2021 are as follows:

Mile 6.3 Antietam

Mile 13.9 Antietam

Mile 28.8 Brunswick

Mile 38.4 Manidokan

Mile 44.7 Antietam

Mile 59.6 Brunswick

Mile 68.2 Manidokan

Mile 77.5 Antietam

Mile 90.4 Brunswick

3. All aid stations other than Dargan Bend will be full-service aid stations with lots of volunteers, but with a focus on COVID-conscious serving. Please remember to use your mask in the aid stations unless you are socially distanced and sitting in a chair eating/resting. All aid stations will have [Tailwind](#) (Mandarin Orange flavor in jugs, Raspberry Buzz at request) and an assortment of [Honey Stinger](#) products. Ask a volunteer to refill your bottle/pack for you. Aid stations will also have things like chips, pretzels, PB&J, assorted fruits, soup, etc. This year there will be a preference for individually packaged foods, and if you need other food from an aid station, please ask a volunteer to get it for you. (There will be no communal bowls of M&Ms or chips.)

Appendix B – More Aid Station Logistics

Cutoff times listed here will be adjusted based on starting wave.

Start Time	7.00				
* indicates Saturday			Front of the Pack	30 hour even splits	Cutoffs
‡ indicates Sunday	Average Pace	----->	8.00	18.00	
Aid Station	MILE	Section Distance (miles)	Wave one aid station arrival time	Aid Station Arrival Time	
Manidokan-Start	0				
Dargan Bend	1.4	1.4	7:11*	7:25*	
Antietam Campground	6.3	4.9	7:53*	8:53*	
North Turnaround	10.5	4.2	8:26*	10:01*	
Antietam Campground	14.7	4.2	8:58*	11:10*	
Dargan Bend	19.6	4.9	9:40*	12:38*	
Keep Tryst Rd.	26.5	6.9	10:39*	14:42*	
Brunswick	29.6	3.1	11:06*	15:38*	
Keep Tryst Rd.	32.7	3.1	11:32*	16:34*	
Manidokan	39.2	6.5	12:28*	18:31*	
Dargan Bend	40.2	1.0	12:36*	18:56*	
Antietam Campground	45.1	4.9	13:22*	20:24*	
Dargan Bend	50.0	4.9	14:04*	21:52*	
Keep Tryst	56.9	6.9	15:03*	23:57*	
Brunswick	60.0	3.1	15:29*	00:52‡	
Keep Tryst	63.1	3.1	15:56*	01:48‡	

Manidokan	69.6	6.5	16:51*	03:45‡	03:45‡
Dargan Bend	70.6	1.0	17:03*	04:10‡	
Antietam Campground	75.5	4.9	17:45*	05:39‡	05:39‡
Dargan Bend	80.4	4.9	18:27*	07:07‡	
Keep Tryst Rd.	87.3	6.9	19:26*	09:11‡	
Brunswick	90.4	3.1	19:52*	10:07‡	09:45‡
Keep Tryst Rd.	93.5	3.1	20:19*	11:03‡	
Manidokan	100.0	6.5	21:15*	13:00‡	13:00‡

Aid station mileages and paces for estimated front of the pack and 30 hour even pace runners. A runner must leave an aid station by the listed cutoff time to be allowed to continue the race.

Appendix C – Post-race dinner menu

Unfortunately, with changes to this year's race due to the ongoing COVID-19 pandemic, the post-race buckle ceremony and BBQ will not take place this year. You will receive your buckle (and your race premium) immediately after finishing. You can then take some time to rest at the Manidokan Pavilion and enjoy a meal of Chipotle burritos or tacos (if vegan). We will also have ice cream (with vegan options) and assorted drinks.

Burrito Menu

Protein choices: chicken, carnitas, steak, barbacoa, sofritas, veggie

All burritos will contain: cilantro-lime white rice, black beans, cheese, tomato salsa

Sides: chips, salsa, guacamole

Taco Menu (vegan only)

Bases: black beans, cilantro-Lime white rice in soft flour tortillas

Proteins: guacamole, sofritas

Toppings: fajita veggies, lettuce, more guacamole, tomato salsa, roasted corn salsa

The burritos will be picked up late Saturday night and Sunday morning and kept warm and ready to go for you as you finish. The taco option is only available to vegans. **Please fill out the survey [here](#) (especially if you are vegan) so we can make the most accurate order possible.** The purchase of additional post-race meal tickets for crew/pacers is not possible this year.