

# BADWATER®



July 2023





L-R: The Kostman Family: Chris, Shelby, Keith, and Wayne. Keith heads up the Badwater 135 webcast each year and has supported Chris' events since 1985. Wayne and Shelby volunteered at many dozens of events that Chris produced from 1984 all the way to 2014, when they supported the Badwater 135 that year. It was from these amazing parents - who took Keith and Chris on not one, but two, one-year-long travels through Europe and North Africa during their childhood in Volvo station wagons - that the Kostman brothers learned their appreciation for travel, adventure, "foreign" cultures, languages, history, and so much more.

Welcome to the 2023 Badwater® 135 Ultramarathon, the 135-Mile World Championship globally known as the world's toughest foot race!

This year's race celebrates the 46th anniversary of Al Arnold's original trek from Badwater Basin to Mt. Whitney in 1977. Arnold, an ultrarunning pioneer, human potential guru, and health club manager, competed in a solo effort: it was just Arnold and his support crew against the elements and the clock. It took him three efforts before he was successful, having first attempted the route in 1974 and then 1975. It took four more years until Jay Birmingham also completed the course, in 1981.

The official head-to-head race began in 1987, with all four entrants finishing: Jeannie Ennis and Tom Crawford of the USA, and Eleanor Adams and Kenneth Crutchlow of the UK. The race has been held annually since then without serious incident and we are extremely proud of our safety record and the high esteem in which this race is held both locally and across the globe. We are equally proud that this event has become the de facto "Olympics of Ultra Running" with its incredible international appeal and participation.

The inside front cover of this magazine celebrates all sixty-two nationalities which have been represented on the Badwater 135 finish line over the years. This year we expect as many as twenty-seven flags will be carried proudly across the finish line!

I took the event over after the 1999 edition, so this year marks 24 years of AdventureCORPS producing this historic and legendary

race. (I had been invited to compete in the 1991 Badwater 135 – when I was 24 years old and my resumé consisted of a long list of ultra cycling races plus two Ironman Triathlons – but I ended up accepting a race directing job in British Columbia that summer instead. I have been organizing ultra-endurance events – and competing in them – since I was in high school in 1984.)

It has been a privilege and an honor – and an epic challenge far surpassing anything I could have ever imagined – to organize and direct this race for the past 24 years. I humbly thank everyone, most especially the incredible race staff who make the magic happen each year. I bow deeply to the entire Badwater 135 race team.

I also enthusiastically endorse and thank our sponsors, Joe Nimble Footwear and Lone Pine Chamber of Commerce, along with the drinks produced by Badwater Beverages.

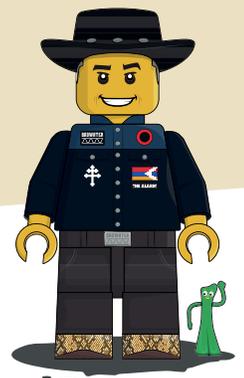
Finally, we also thank our colleagues at the National Park Service, U.S. Forest Service, Inyo County, Department of Transportation, and California Highway Patrol – for their important and crucial roles in safeguarding the remarkable setting for this race and for helping to ensure that it runs smoothly, safely, and fairly.

Long live Badwater 135 and may we all remain forever #BadwaterStrong!

Yours in sport,

*Chris Kostman*

Race Director and Chief Adventure Officer





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638 Lindero Canyon Rd., #311, Oak Park, CA 91377 U.S.A.

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[www.adventurecorps.com](http://www.adventurecorps.com)

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Images courtesy of Ron Jones, Ian Parker, Robert Lee, Jay Lee, Dave Nelson, Keith Kostman, and others.

Front cover: 2022 women's champ Ashley Paulson and her sister Tracy Heywood head up Towne Pass.

All hand-drawn art within these pages courtesy Badwater athlete Rich Peers.

Design and Layout by Kevin Fung, [kevin@kfungdesign.com](mailto:kevin@kfungdesign.com)



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# REMEMBERING

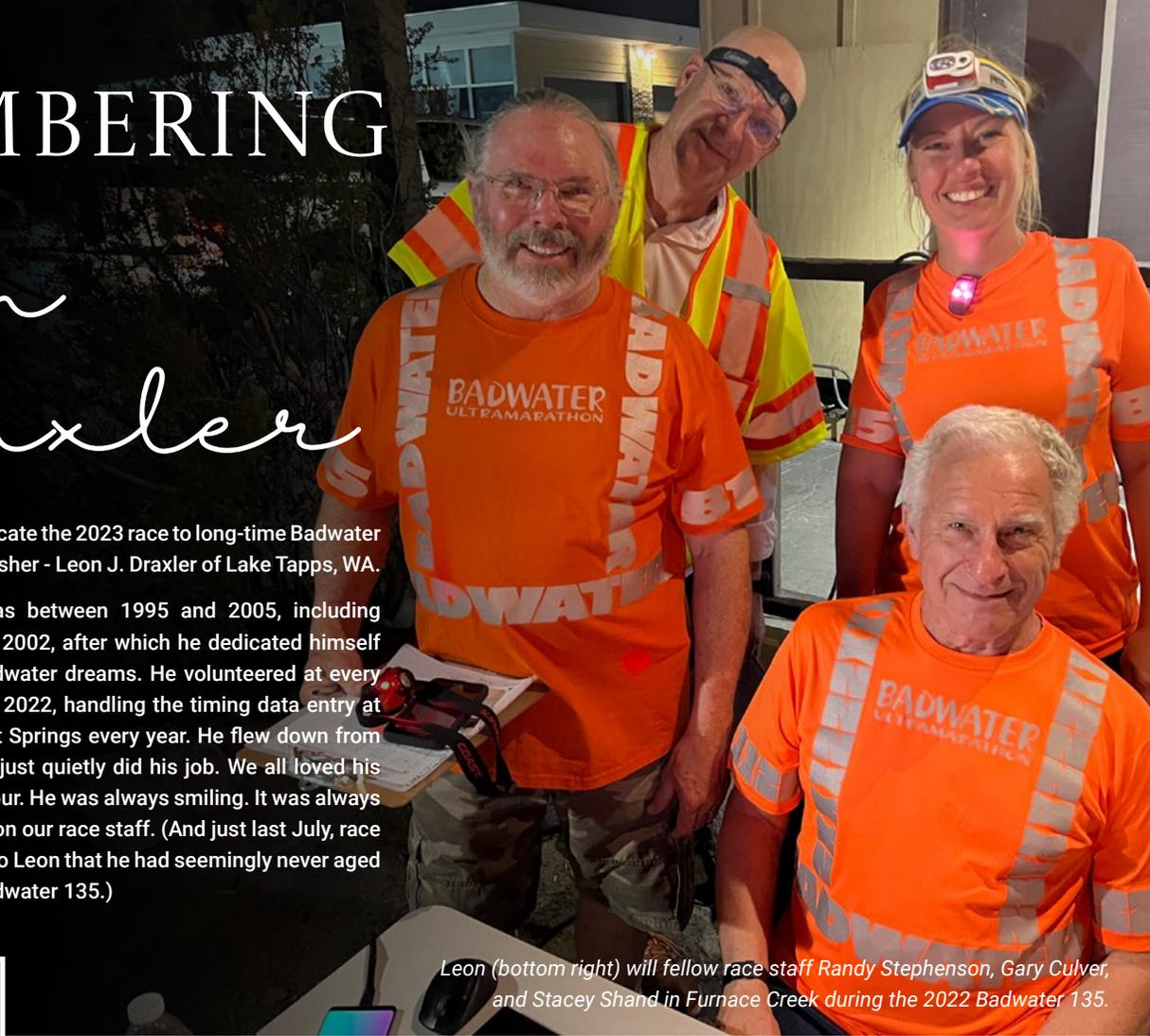
## Leon Draxler

It is with a heavy heart that we dedicate the 2023 race to long-time Badwater 135 supporter - and three-time finisher - Leon J. Draxler of Lake Tapps, WA.

Leon completed a total 54 ultras between 1995 and 2005, including Badwater 135 in 2000, 2001, and 2002, after which he dedicated himself to helping others realize their Badwater dreams. He volunteered at every Badwater 135 from 2003 through 2022, handling the timing data entry at both Furnace Creek and Panamint Springs every year. He flew down from Seattle by himself each year and just quietly did his job. We all loved his always calm and friendly demeanor. He was always smiling. It was always an absolute pleasure to have him on our race staff. (And just last July, race director Chris Kostman marveled to Leon that he had seemingly never aged over his 22 years of coming to Badwater 135.)



Leon, all smiles, at his 2002 Badwater 135 finish.



Leon (bottom right) with fellow race staff Randy Stephenson, Gary Culver, and Stacey Shand in Furnace Creek during the 2022 Badwater 135.

Leon was 58-60 when he completed the race, and 80 when he passed away recently while on vacation in Cuba with friends. His sister Audrey told us he was having a great time, and enjoying seeing the classic cars.

The race staff at Badwater 135 is the backbone of the event. They make it world-class. They make the dream possible for all the runners and crews each year, and Leon was a bright star in a constellation of very good souls. We will miss him deeply and treasure his memory forever.

### Leon's Badwater 135 Competition History:

2000, Age 58: 54:42:47      2001, Age 59: 55:09:37  
2002, Age 60: 46:27:50      2003 - 2022: Race Staff

### From Leon's 2001 Badwater 135 Application:

#### Best Ultra Run Experience:

- 1) Finishing the six 100's in 1999 that make up the 'Last Great Race' combination
- 2) Doing the coldfoot classic in 1999, in the Arctic Circle, with the Northern Lights
- 3) Finishing Badwater 135 in 2000, experiencing the heat and still being able to move

#### Biggest Ultra Running Challenge:

Badwater 135, 2000: I remember thinking at the pre-race meeting, that I didn't know if I would be able to move in such heat. (It was about 120 degrees at that time, and got even warmer during the run (+127), but I was able to move, albeit at a slow pace.

## An Email from Leon after his 2002 finish:

Chris,

I finally got back, so i want to take this time to thank you and all the people who help you, in the staging of the Badwater run. Via your efforts, a lot of us are able to come away with some pretty neat memories...

For me, this was a pretty good year (especially after being dead last at Western States 100, a few weeks earlier):

First, I finished; then I finished under 48 hours; then I made it up Whitney on Friday ... made all my goals!

Right now, I am actually thinking about helping out next year by volunteering, or helping someone out by crewing.

Again thanks to you, and all involved.

- Leon Draxler



## ADVENTURECORPS — A BRIEF HISTORY

Founded in 1984 by Chris Kostman, AdventureCORPS has made its name producing the world's toughest endurance races in dramatic, remote locations that few people would ever visit, let alone run or bike across, and offering products and services for those who live their life on the edge of what's possible. Held under the Badwater® banner, AdventureCORPS events have allowed runners and bicyclists to explore the Death Valley, Salton Sea, Cape Fear, Mojave Desert, and Nevada outback regions in the USA, as well as the Okanagan Valley of British Columbia, Mustang region of Nepal, Yunan Province of China, the Republic of Artsakh, and now Armenia and the Santa Ynez Valley.

As an athlete, Chris got his start early in ultra sports: He set world ultra cycling records in high school (riding against the clock from San Francisco City Hall to Los Angeles City Hall) and completed the 3127-mile Race Across America bicycle race in less than eleven days at age 20, the youngest finisher ever. That was a springboard to competing in events as diverse as three 100-mile snowshoe running races on the Iditarod Trail across the Alaskan wilderness, the Triple Ironman triathlon in France, the 6.5-mile Skaha Lake Ultra Swim in Canada, the 10km Bridge to Bridge Swim in San Francisco, six Ironman Triathlons, an Ultraman-distance triathlon in Vermont, the 100th anniversary Boston Marathon, and many other endurance races.

Hand in hand with this athletic career and right from the beginning, Chris has been producing and directing endurance sports events through his company, AdventureCORPS. He and his team have now produced more than 150 endurance sports and adventure travel events.

Our hands-on involvement with the Death Valley region goes back to 1987 when Chris broke the record for a double-crossing of Death Valley by bicycle, and then in 1990 when AdventureCORPS took over the small ultra cycling race that would become known as Furnace Creek 508. From a humble field of just 25 racers that first year, Chris and AdventureCORPS grew "The 508" to 249 racers at the final edition in 2013.

In 1999, the opportunity to take over the Badwater 135 led to taking this small race of about 25 mostly American runners from obscurity to becoming the absolute pinnacle event in the world of ultra running.

Seeing an immense desire for more and more athletes to have an authentic Badwater experience and to join "the Badwater Family" – but with a marquee event which is limited to just 100 competitors - we launched sister events Badwater Salton Sea in 2013 and Badwater Cape Fear in 2014. They quickly became must-do races with their own individual identities and reputations, while sharing the three main hallmarks of all Badwater races:

- 1) A dramatic, gorgeous location which most people wouldn't otherwise visit.



Furnace Creek 508 racer David Holt. Image by Badwater legend Ian Parker.



The competitors - including Chris Kostman - gather at the start line of the eight-day Mustang Trail Race in Nepal.

- 2) Top level of competition with a diverse race field from all over the USA and across the globe, but with intentionally small fields to encourage both camaraderie and time alone on the race course.
- 3) The highest level of professional event production with an exacting eye for detail and a laser focus on the athletes first and foremost while working in close collaboration with local partners.

Over the years, Chris' background in archaeology and love of travel, history, languages, and "foreign" cultures led to AdventureCORPS launching international events under the Badwater banner. These included Badwater Presents Mustang Trail Race in Nepal in 2015, an eight-day trail stage race held in the little-known Mustang region of Nepal at elevations from 10,000 to 14,500 feet (3000-4500m.) Both Chris and his brother Keith even got to participate in Mustang!

The following year, 2016, Chris was hired by Explore China to help develop and co-race direct the inaugural Badwater Presents Mt. Gaoligong Ultra in China. Held in the Yunnan Province of southwestern China, this was a 104-mile (168km) mountain trail ultra through history and time.

We are also excited to return to hosting cycling events with our new "Velo & Vino Solvang, a Wine Country Cycling Experience" in 2024.

Finally, we have spent five years developing a six-day trail stage race across Artsakh and Armenia, and we look forward to bringing "Armenia Ultra" to life in 2025.

Wherever you join us for a Badwater event – including our exciting virtual offerings – and whenever you bring some Badwater into your daily life, AdventureCORPS is here to inspire and provide the forum for "chasing the horizon." We will see you "out there"!



Chris Kostman and his fellow race staff at the conclusion of the 2016 Mt. Gaoligong Ultra.



The people and history of Armenia and Artsakh are like no other place in the world!

**The Official Charities of AdventureCORPS** include the Challenged Athletes Foundation, Major Taylor Association, Death Valley Natural History Association, and Bald Head Island Conservancy. A primary goal and purpose of our events is to raise funds for, and awareness of, these wonderful and important organizations.



Since 2002, the original Official Charity of AdventureCORPS has been the **Challenged Athletes Foundation**. One of the goals of our events is to raise funds for, and awareness of, this wonderful organization.

The Challenged Athletes Foundation was created on the belief that people of all abilities should have the opportunity to pursue a life full of physical activity and of sports. Be they recreational or in pursuit of a gold medal at the Paralympic Games, people with a physical disability are limited only by their access to funding.

Since 1994, CAF has raised over \$159 million and more than 44,000 funding requests from challenged athletes in all 50 states and over 70 countries supporting 104 different sports have been satisfied. It's a \$2,500 grant for a handcycle, helping underwrite a carbon fiber running prosthetic foot not covered by insurance, or making the introduction to a mentor who has triumphed over a similar challenge, CAF provides those with the desire to live active, athletic lifestyles every opportunity to compete in sports and physical activities.

Eighty cents of every dollar raised by CAF provides funding and programs that get challenged athletes into the game. (CAF has a Four-Star rating by Charity Navigator.)

Since 2002, AdventureCORPS has raised over \$400,000 for CAF, and AdventureCORPS athletes have raised equally impressive sums! We are nearing one million dollars raised for CAF!

**Website:** [www.challengedathletes.org](http://www.challengedathletes.org)



**The Bald Head Island Conservancy** was founded on Bald Head Island, NC in 1983 with a focus on barrier island conservation, preservation, and education. The Conservancy sponsors and facilitates scientific research that benefits coastal communities and provides numerous recreational and educational activities to the public. In coordination with various organizations, partnerships, and collaborations, the Conservancy has led the nation in conservation and research efforts and is uniquely poised to become a leader in Barrier Island Conservation world-wide.

Badwater fans and race participants will appreciate that BHIC cares for the pristine setting for the Badwater Cape Fear race route and its role as a sea turtle nesting site and sanctuary. The Conservancy also serves as the host and finish line for our event. As such, our goal is to annually raise \$10,000 to purchase one of the special UTV vehicles which BHIC uses to patrol the beach and care for sea turtle nesting sites.

Since 2014, AdventureCORPS has made or facilitated more than \$125,000 in donations to the Bald Head Island Conservancy.

**Website:** [www.bhic.org](http://www.bhic.org)

## Environment

AdventureCORPS events happen not in a human-made stadium, but in the real world “out there.” We care deeply about the natural world for we are intrinsically linked with it and because we want to enjoy these events in their awesome natural settings for a long, long time.

As such, in 2008 we joined **One Percent For The Planet**, a growing global movement of more than 5000 companies that donate at least 1% of their sales to a network of thousands of vetted environmental nonprofit partners in over 60 countries. Therefore we donate at least 1% of total revenues (in other words, “off the top,” not just 1% of profit) to environmental causes. This is in addition to all the work we do on behalf of, and donations we make to, the Challenged Athletes Foundation and other non-environmental focused organizations. To date, we and our fellow One Percent members have invested over \$350 million in environmental nonprofit solutions through the 1% for the Planet network. Learn more at [OnePercentForThePlanet.org](http://OnePercentForThePlanet.org).



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In association with our membership in One Percent for the Planet, since 2008 we have supported **The Conservation Alliance**. The Conservation Alliance is an organization of outdoor businesses whose collective contributions support grassroots environmental organizations and their efforts to protect wild places where outdoor enthusiasts recreate. Alliance funding has helped save 80 million acres of wildlands; protect 3,580 miles of rivers; stop or remove 37 dams; designate five marine reserves; and purchase 21 climbing areas.



Membership in the Alliance is open to companies representing all aspects of the outdoor industry, including manufacturers, retailers, publishers, mills and sales representatives. The result is a diverse group of businesses whose livelihood depends on protecting our natural environment. Since its inception in 1989, the Alliance has contributed more than \$30 million to grassroots conservation groups throughout North America. Learn more at [ConservationAlliance.com](http://ConservationAlliance.com).

Besides The Conservation Alliance, our One Percent For The Planet donations have gone to Bald Head Island Conservancy, Death Valley Natural History Association, Los Angeles County Bicycle Coalition, Trails For Change NGO, American Rivers, Rails to Trails Conservancy, and yet other organizations.

Additionally, we have championed other environmental causes including the **Los Angeles County Bicycle Coalition**, a nonprofit organization with over 1,000 members that engages cyclists through advocacy, education and outreach across the county. Founded in 1998, LACBC brings together the diverse bicycling community in a united mission to improve the bicycling environment and quality of life for the entire region. In 2011, we donated \$10,000 to LACBC to initiate and sponsor the Jim Swartzman Memorial Membership Drive, an effort that brought \$23,000 into LACBC.



AdventureCORPS joined the **Death Valley Natural History Association** as a Life Member and began recognizing DVNHA as an Official Charity of AdventureCORPS in 2009. DVNHA is a nonprofit organization supporting education, research, and preservation in Death Valley National Park and Ash Meadows National Wildlife Refuge. Some of their efforts include Death Valley R.O.C.K.S. (bringing inner city kids to experience one of the largest outdoor classrooms in the world), Devil’s Hole Pupfish Recovery, Death Valley All Taxa Biological Inventory, plus they run the wonderful gift shops in the Park.



According to DVNHA, AdventureCORPS has paid for, at the minimum, “every need (sleeping bags, cooking fuel, transportation) for one Death Valley ROCKS school group (50-60 students, chaperones, and teachers) every year since 2009.” AdventureCORPS athletes have also supported this and other DVNHA causes! Additionally, through DVNHA, AdventureCORPS and our athletes have donated \$5000 to support the recently renovated Death Valley National Park Visitors Center, as evidenced by five “donor tiles” are in the Visitors Center (one per \$1000 donation.)

# Make the great toe great again!

99% of running shoe brands ignore the big toe but we make it the centre of attention! The ToePilot® is the running shoe revolution from Germany. Generate up to 85% more stability and power from your big toe during the push-off phase of running.

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[joe-nimble.com/int/road](http://joe-nimble.com/int/road)



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## 2023 BADWATER 267 VR

### *466 Athletes Kicked off the New Year in Badwater Style!*



For the third year in a row, Badwater 267 VR offered adventurous athletes across the globe the chance to kick off the New Year in a Badwaterly fashion!

This year, 466 athletes in 25 countries - and in 45 American states - took on this incredible 31-day, 267-mile epic Badwater event! Of those, 337 completed the event, a 72% finishing rate, which is lower than Badwater 135. World's Toughest, indeed!

Badwater 267 VR competitors had the 31 days of January to virtually and sequentially traverse the routes of all three Badwater® races – the 51-mile Badwater Cape Fear, the 81-mile Badwater Salton Sea, and the 135-mile Badwater 135 – for a total of 267 miles (430km) over 31 days. Competitors could run at their own pace, as often and as far as they wanted, wherever they lived, anywhere on the planet! (In this January event, treadmill running is also allowed, and there are also bike, swim, and multi-sport options with different distance requirements.)

As competitors progressed along the route, they were taken on a virtual tour of all three Badwater race courses. Besides cool graphics and descriptions of the different highlights and landmarks of each race route, there were links to videos and image galleries of the various Badwater events, inspiring stories from the various Badwater races, and much more to encourage everyone to keep moving forward towards their Badwater 267 VR finish line at Whitney Portal.

With massive interaction through a private and super fun Strava club and the #Badwater267VR hashtag on all social media, the excitement for Badwater 267 VR for the entire 31-day duration of January was absolutely off the charts!

It was such a pleasure to host the race and we are already planning and looking forward to the return of Badwater 267 VR in January of 2024! In fact, registration is already open.

For full race results and participant image galleries - and to register for 2024 - visit [RunSignUp.com](https://RunSignUp.com).

Thank you and congratulations to everyone who participated! And see you "out there" in January of 2024!

“

*Thank you, Chris, for making this event absolutely incredible! Loved learning about the routes & the history! I also love being a Badwater Finisher! It was a truly motivating way to start 2023. Thank you for all your hard work in making this the best VR experience.*



– Arlene Margulis

“

*Thank you so much! This was an amazing challenge. It totally kicked my butt!! I know it is not supposed to be easy, but it was so worth it!!”*

– Tammi Smith



The BADWATER® ultra running experience returns to the (B)east Coast when the tenth BADWATER CAPE FEAR race takes place on Bald Head Island, North Carolina on March 23, 2024. Registration is open now at [UltraSignUp.com](https://UltraSignUp.com) and we hope you will join us!

With 50km and 51-mile race options, Badwater® Cape Fear features a twelve-mile warm-up on the car-free, one-lane-wide roads and maritime forest trails of Bald Head Island, followed by either 19.5 or 39 miles of running on the wild and secluded sandy beach between Cape Fear and Fort Fisher. The race is held along the Atlantic Seaboard with spectacular views of the Frying Pan Shoals to the east and wild and undeveloped Cape Fear River marshlands to the west. Running this remote coast is a dramatic, invigorating, and inspiring manner in which to experience the Cape Fear region in all its grandeur!

This exquisite natural setting is the perfect antidote to the “real world” and a wonderful counterpart to the desert sands and mountains of Death Valley and Anza-Borrego Desert featured in the two West Coast BADWATER® races.

Bald Head Island and nearby Southport, NC (featured in the film “Safe Haven”) are ideal vacation get-away spots for the entire family, located less than one hour from Wilmington, NC and its major airport with American, United, and Delta service. (Flying into Myrtle Beach, SC is another convenient option.) Due to the remarkable beauty and quaint southern charm of this area, as well as this impeccable, authentic BADWATER race experience, many Badwater Cape Fear participants are now making this race an annual pilgrimage!





## Historical Data, Badwater Cape Fear, 2014-2023:

**Total Number of Participants:** 1277 (385F / 892M)

**Total Number of Unique Entrants:** 962

**Total Number of Unique Finishers:** 739

### Nationalities Represented:

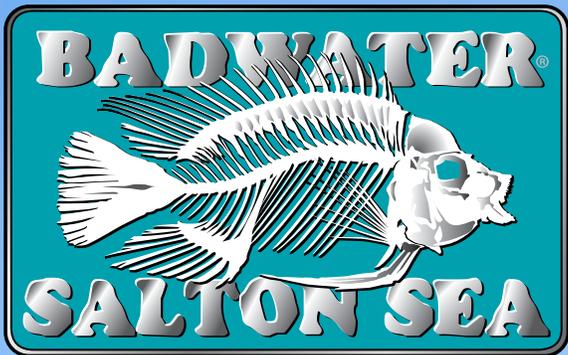
Argentina: 1	Mexico: 5
Armenia: 2	Norway: 1
Australia: 1	Philippines: 20
Canada: 17	Portugal: 1
Cayman Islands: 2	Singapore: 1
Colombia: 3	Spain: 1
Denmark: 1	Sweden: 1
Germany: 2	Turkey: 1
India: 4	United Kingdom: 13
Iran: 1	USA: 1197
Japan: 1	Venezuela: 1

**American States Represented:** 45

### Hats Off to our Six- to Nine-Time Finishers!

- Bob Becker, Fort Lauderdale, FL, age 68-77, 9x consecutive finisher
- Gerald Tabios, Elmhurst, NY, age 44-53, 9x consecutive finisher
- Timothy Henderson, Sayville, NY, age 44-53, 8x finisher
- Kevin Delk, Greeneville, TN, age 32-40, 7x finisher
- Keith Straw, Malvern, PA, age 59-68, 7x finisher
- Sandra Buruss, Palm City, FL, age 42-49, 6x finisher
- Suzane Tulsey, Oak Island, NC, age 40-49, 6x finisher, 6x champion





The BADWATER® ultra running experience returns to the Anza-Borrego Desert and San Diego County's Palomar Mountain when the eleventh BADWATER SALTON SEA race takes place on April 27-29, 2024. Registration is open now at [UltraSignUp.com](https://UltraSignUp.com) and we hope you will join us.

This remarkable event challenges teams of two or three ultrarunners – running together as duos or trios for the duration, NOT in a relay – to tackle an unimaginable traverse of Southern California deserts and mountains. The route covers 81 miles (130km) from Salton City (elevation 234 feet / 71m below sea level) to Palomar Mountain, the almost tallest mountain in San Diego County (elevation 5500 feet / 1676m.) Eight of the 81 race miles pass through Anza-Borrego State Park on an epic and steep single track trail from Borrego Springs to Ranchita, creating a race route which is a mix of road and trail. There is a total elevation gain of over 9000 feet (2740m).

The ten previous editions were received with wide acclaim. The eleventh edition – with a limit of 100 runners – is scheduled for April 27-29, 2024. Register now at [UltraSignUp.com](https://UltraSignUp.com).



# Historical Data, Badwater Salton Sea, 2013-2023:

**Total Number of Participants:** 690 (224F / 466M)

**Total Number of Unique Entrants:** 495

**Total Number of Unique Finishers:** 421

## Nationalities Represented:

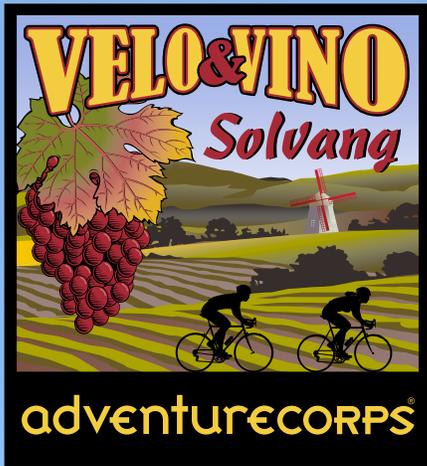
Armenia: 3	Lithuania: 1
Australia: 5	Mexico: 9
Belarus: 1	Mongolia: 4
Bolivia: 1	Netherlands: 1
Brazil: 3	Peru: 1
Canada: 21	Philippines: 7
Cayman Islands: 2	Poland: 2
Colombia: 1	Serbia: 1
Czech Republic: 2	Singapore: 1
Denmark: 4	Slovakia: 1
El Salvador: 1	South Korea: 1
Germany: 7	Sweden: 3
India: 3	Switzerland: 3
Italy: 3	United Kingdom: 17
Japan: 14	USA: 566
Kenya: 1	

## American States Represented: 41

### Hats Off to our three Six-Time Finishers!

- Kevin Delk, Knoxville, TN, age 33-40
- Emily Ryan, Washington, DC, age 39-44
- Ray Sanchez, Sacramento, CA, age 46-54





# AdventureCORPS is pleased to present Velo & Vino Solvang a Wine Country Cycling Camp

*An amazing cycling retreat with wine tasting and winery visits based in California's Solvang and Santa Ynez Valley*

**Friday-Tuesday, April 5-9, 2024**

We welcome you join us in Solvang, the "Danish Capital of America" nestled in Southern California's world renowned Santa Ynez Valley wine region equally famous for its scenic and quiet roads for cycling.

Participants will enjoy vehicle-supported world-class cycling in the Santa Ynez Valley. Each day's ride will start and finish at our host hotel in Solvang, with multiple distances offered each day, offering something for everyone. This camp

is suitable for most any eager cyclist, whether gearing up for a first-ever century or gran fondo, or for a long season of triathlon, bike racing, bike adventuring. It is also suitable for "bike-curious" runners who want to discover and learn more about this sport. Best of all, this cycling retreat offers the pure enjoyment of exploring a fantastic cycling region.

Besides incredible cycling, we will also enjoy wineries, wine tasting, and fabulous food. The riding, camaraderie, and setting are so fabulous that we believe this camp will become an annual pilgrimage for all who attend. (We will also modify routes and feature different wineries and restaurants each year so that it's a new adventure every year.)



## Solvang

Located just a 40-minute drive from Santa Barbara (or two hours from LAX), Solvang is known as both the "Danish Capital of America" and the "Most Christmasy Town in America." Solvang and the Santa Ynez Valley are also legendary for providing some of the finest cycling in North America, and several pro cycling teams host their winter training camps here.

Truly, you will love the cycling, and you will love the town and the valley. Non-riding spouses and family members will have plenty to do, too, including horseback riding, shopping, touring, hiking, visiting secluded beaches, even glider rides and more – and, of course, plenty of wine tasting! (There are also local breweries!)



All the info is at [Badwater.com](http://Badwater.com) and registration is open at [UltraSignUp.com](http://UltraSignUp.com). Limited to 30 cyclists.

# Join AdventureCORPS for a Brand New Vision of Stage Racing and Adventure Travel... *in Armenia!*

Coming in 2025, AdventureCORPS will host "Badwater Presents Armenia Ultra" - a multi-day trail running stage race across the Republic of Armenia!

Armenia is a beautiful, wondrous place with an incredible, warm culture, fantastic food, great music, and legendary hospitality. Its countryside is covered in mountains, rivers, lakes, and waterfalls, along with ancient sites and monasteries dating back thousands of years. Armenia is also the oldest Christian nation on earth - since 301 AD - and a vibrant democracy. It is easily reached via connecting flights from Europe, Russia, and the Middle East.

We look forward to bringing runners and adventurers here from all over the world in September 2025 to compete in Armenia Ultra!

Will YOU join us for the first stage race held in Armenia?

The race will be organized in a stage race format, in which runners will run a different section of trail each day. Each day's stage will be timed separately, and overall results will be calculated by adding all six days' times together.



Racer check-in and gear check will take place in Yerevan, the capital of Armenia, while runners will enjoy restaurant dining that night and an overnight at an excellent Yerevan hotel. The next morning we will board buses to drive to our start line.

Because we want you to focus on the running and the overall experience, luggage transport will be provided each day. Also, all breakfast and most dinner meals will be provided. (Runners only need to provide their own energy food while running.)

While the route will be incredibly beautiful and challenging, the race itself will also be a culturally immersive experience. Each day's route will pass through one or more villages, while the overnights will be in or near villages and cities. Runners will eat the local, super healthy, incredibly fresh food. They will enjoy Armenian music, dance, and culture. Along the way, the runners will visit - sometimes "off the clock" - 1000-year-old Armenian churches, monasteries, and archaeological sites. Also, other than the race director, the entire race staff will be Armenians. And while each competitor will run as part of an international field of runners, they will be embraced, surrounded, and supported by the people of Armenia and their incredible food, music, language, and culture.



Mt. Ararat looms large over the monastery of Khor Virap and all of Armenia.

# 2023 Badwater 135 Schedule of Events

## SUNDAY, JUNE 25

**0900-1030: Online Pre-Race Meeting:** ALL Competitors, ALL crew chiefs, and ALL crew members must view the Online Pre-Race Meeting. It will be archived for later viewing for those who cannot watch it live. A special code will be given out to prove it was watched.

**NOTE:** All Lone Pine activities on the schedule - unless otherwise noted - take place at the Lo-Inyo Elementary School, Multipurpose Room, 223 East Locust Street, 1.5 blocks east of 395 (in the north end of town).

## MONDAY, JULY 3

**1230-1630: Competitor Check-In / Retail of Badwater Gear / Vehicle Inspection:** Each Competitor and their designated Crew Chief must attend; all crew are welcome and encouraged to attend.

**1700-1830: Pre-Race Meeting for All Racers + All Crew Chiefs:** Each Competitor and their designated Crew Chief must attend; all crew are welcome and encouraged to attend, if space allows.

**1830: Group Photo of All Competitors:** 2023 Competitors Only: Please be ready to pose for the photo outside at the conclusion of the pre-race meeting!

## TUESDAY, JULY 4, AMERICA'S BIRTHDAY

**Morning Rest & Relaxation; Vehicle Prep; Buy Ice and Supplies:** Get your final shopping and preparations done, but also relax and rest while you can!

**1030-1200: Retail of Badwater Gear**

**1100-1200: Optional Races Rules Review / Questions & Answers:** We host an optional but helpful in-person meeting to review race rules and best crewing practices, as well as a Q&A session. Anyone may attend. If you want or need to know more this race, how to crew, or anything else, please attend!

**1100-1200: Media Check-In and Briefing:** All journalists / media / videographers / photographers must attend.

**1200-1330: Private Staff Meeting**

**NOTE:** Plan on a minimum of a 2.5-hour drive from Lone Pine to Badwater Basin! (Three hours is a better plan.) It's not a fast route, plus you may want to stop for photos, gas, supplies, to stretch your legs, or for lunch or dinner during the drive!

**2000: 1st Wave Starts at Badwater Basin:** ALL Wave 1 racers must check in at 1930.

**2100: 2nd Wave Starts at Badwater Basin:** ALL Wave 2 racers must check in no later than 2030.

**2200: 3rd Wave Starts at Badwater Basin:** ALL Wave 3 runners must check in and weigh in no later than 2130.

## WEDNESDAY, JULY 5

**0200: Furnace Creek General Store Closes.** By special arrangement, the General Store at Furnace Creek will remain open on the first night of the race until 0200. Stop there to load up on plenty of ice, food, snacks, and drinks.

**0330: Stovepipe Wells General Store and Gas Station Opens.** By special arrangement, the General Store and Gas Station in Stovepipe Wells will open at 0330 during the first night (first morning) of the race. They have food, snacks, drinks, ice, and much more. Please support them, and stock up heavily!

**1000: First Time Cut-Off.** Deadline for ALL COMPETITORS, regardless of starting wave, to pass Mile 50.8 (2000' Elevation Sign, located 8.8 miles beyond Stovepipe Wells.) This is imposed by the National Park Service and is mandatory.

**2000: Second Time Cut-Off.** Deadline for ALL COMPETITORS, regardless of starting wave, to pass Mile 72 (Panamint Springs Resort.) Panamint Springs Resort has restaurant food, snacks, drinks, ice, and much more. Please support them, and stock up heavily!

**2100:** Approximate time for the First Racer to cross the Finish Line.

## THURSDAY, JULY 6

**0500: Third Time Cut-Off.** Deadline for ALL COMPETITORS, regardless of starting wave, to pass Mile 90 (Darwin Time Checkpoint.)

**Afternoon: Fourth Time Cut-Off:** ALL COMPETITORS should pass Mile 122 (Lone Pine Time Station) within 42 hours of their own elapsed time, depending on starting wave.

**1800:** ALL Competitors are encouraged to complete the race by 1800 on Thursday so that they can attend the post-race get-together in Lone Pine. That equals a 46-hour completion for the 2000 wave Competitors, 45 hours for 2100 wave Competitors, and a 44-hour completion for 2200 wave Competitors. However - of course - all Competitors have 48 hours to complete the course, based upon their starting wave time.

**1900-2100: Post-Race Get-Together:** Lo-Inyo Elementary School at, 223 East Locust Street (1.5 blocks east of Hwy 395 in the north-east end of town). Food and drinks will be served. No charge (up to four crew per competitor may attend).

**NOTE: After the Post-Race Get-Together,** many Competitors, support crew members, and staff continue their socializing and celebrating at Jake's Saloon at 119 North Main Street in downtown Lone Pine! Always drink responsibly.

**2000 / 2100 / 2200:** Course Closes for 1st Wave Competitors at 2000, at 2100 for 2nd Wave Competitors, and then at 2200 for 3rd Wave Competitors.

**SUNRISE / SUNSET** (July 4, using Ridgecrest for reference): Moonset: 0643 | Morning Civil Twilight: 0510 | Sunrise: 0540 | Moonrise: 2155 | Sunset: 2010 | Evening Civil Twilight: 2039 | Note: July 3 is the full moon.

**PERMITS:** This event is held under special use permits from the California Department of Transportation, Inyo National Forest, Death Valley National Park, and Inyo County, and is additionally overseen by the California Highway Patrol. (If one of these agencies won't issue us a permit, this race could be cancelled. Please keep that in mind!)

### DRIVING DISTANCES:

Las Vegas Airport to Furnace Creek: 120 miles

Los Angeles Airport to Furnace Creek: 270 miles

Lone Pine to Las Vegas Airport: 225 miles

Lone Pine to Los Angeles Airport: 220 miles

## Medical Risks in the Badwater Ultramarathon



2011 champ Oswaldo Lopez stays cool during the 2013 race.

This 135 mile race is probably the most physically taxing competitive event in the world. It also has considerable medical risks. All runners and crews must appreciate these two facts both before and during the race.

Heat illness and heat stroke are serious risks. These can cause death, renal shutdown, and brain damage. It is important that runners and crews be aware of the symptoms of impending heat illness. These include: nausea, vomiting, headache, dizziness, faintness, irritability, lassitude, weakness, and rapid heart rate. Impending heat stroke may be signaled by a decrease in sweating and goose bumps, especially over the chest.

Heat stroke may progress from minimal symptoms to complete collapse in a very short period of time. Deaths and renal shutdown (kidney failure) have been reported in other ultra-marathons. Adequate conditioning is mandatory.

Adequate fluid and electrolyte intake is the most important preventative for heat illness. Runners may well require dozens of gallons of fluid during this race. Proper pace is crucial.

The high altitude plus exertion can also produce various degrees of altitude sickness. This can lead to severe lung and brain swelling, and even death. The main treatment is rest, and especially to get to a lower altitude.

Blisters are also a problem on this course, with pavement temperatures perhaps reaching 200 degrees. Proper foot care & preparation are essential for having a successful race.

Remember, you are responsible for your well-being while participating in this race. There are no aid stations. Know where your limits are and know your body. Your acceptance of invitation to this race declares that you are aware of the risks & potential health problems.

HEAT EXHAUSTION		OR	HEAT STROKE	
Faint or dizzy			Throbbing headache	
Excessive sweating			No sweating	
Cool, pale, clammy skin			Body temperature above 103° Red, hot, dry skin	
Nausea or vomiting			Nausea or vomiting	
Rapid, weak pulse			Rapid, strong pulse	
Muscle cramps			May lose consciousness	
<ul style="list-style-type: none"> <li>• Get to a cooler, air conditioned place</li> <li>• Drink water if fully conscious</li> <li>• Take a cool shower or use cold compresses</li> </ul>			<p><b>CALL 9-1-1</b></p> <ul style="list-style-type: none"> <li>• Take immediate action to cool the person until help arrives</li> </ul>	

@NWSSacramento  
weather.gov/Sacramento



@SacramentoOES  
SacramentoReady.org



# THE DANGERS OF RUNNING IN THE HEAT

Noora Alidina receives fluids for inside and out during the 2007 race from her husband and daughter.

By Jason Hodde, MS, ATC/L

Running in hot weather can pose many dangers to ultrarunners. Although most runners are aware of the dangers of running for prolonged distances in hot and humid weather, many are also inadequately prepared for the intense stress placed on the body during these hot weather runs.

In July 2002, I participated in the 25th anniversary of the Badwater Ultramarathon, a 135-mile trek from the lowest place in the continental United States (Badwater Basin), through Death Valley National Park, and to the foot of Mount Whitney, the Whitney Portals, at an altitude of 8,360 feet (2,548 meters). The run was held in the middle of one of the most severe heat waves southern California has ever seen. In preparation for the run, I made sure my crew was aware of the signs and symptoms of heat illness, as well as how to treat me should problems occur. Here are some of the dangers of ultrarunning in the heat, and preventative measures that can be taken to avoid potential problems.

## The Heat Index

The heat index is the apparent temperature felt by the body due to the combined effects of actual temperature and humidity. Most people understand that as the air temperature goes up, so does the heat index, but humidity also plays a role. As the humidity rises, the body is unable to efficiently evaporate the sweat it produces. Therefore, the perceived temperature is much higher than the actual air temperature. The loss of cooling efficiency thus makes exercise extremely dangerous.

Although it is convenient to use a single number to describe the apparent temperature your body feels, keep in mind that heat and humidity affect everybody differently. Several assumptions are made to calculate the heat index measurements in the table below. Specifically, the heat index assumes the body to be:

- 5' 7" (170 cm) in height
- 147 pounds (67 kg) in weight
- Caucasian
- At 98.6° F (37° C) body temperature

- Clothed in long pants and a short-sleeved shirt
- In shade
- Walking at a speed of 3.1 mph (5 kph)
- In a breeze of 6 mph (10 kph)
- Not dripping with sweat

Changing any of these factors can either increase or decrease the heat index from those shown in the table. Be aware that heat index values of over 100 significantly increase your risk of heat-related illness.

Relative Humidity	Air Temperature (Degree F)										
	70	75	80	85	90	95	100	105	110	115	120
	Heat Index										
0%	64	69	73	78	83	87	91	95	99	103	107
10%	65	70	75	80	85	90	95	100	105	111	116
20%	66	72	77	82	87	93	99	105	112	120	130
30%	67	73	78	84	90	96	104	113	123	135	148
40%	68	74	79	86	93	101	110	123	137	151	
50%	69	75	81	88	96	107	120	135	150		
60%	70	76	82	90	100	114	132	149			
70%	70	77	85	93	106	124	144				
80%	71	78	86	97	113	136	157				
90%	71	79	88	102	122	150	170				
100%	72	80	91	108	133	166					

**Heat Illnesses**

There are three major heat illnesses—and all of them can be exacerbated by ultra distance running and prematurely end an ultrarunner’s race. In all cases, the main reason that runners experience heat illness is dehydration. If you replace lost fluids and electrolytes and are able to train your body to process a high volume of fluid in a short period of time, you significantly decrease the risk of experiencing these race-ending medical emergencies.

**Heat cramps:** Exercising in hot weather can lead to muscle cramps, especially in the legs. This is usually caused by imbalances or deficiencies in your body’s electrolyte stores. A cramp is characterized by sharp, stabbing pain in the muscle and rarely works itself out on its own. On a training run earlier this year in Death Valley, many runners complained of cramps in their legs; I suffered from cramps in my diaphragm and had difficulty breathing for more than an hour! Cramps become less frequent with heat training, but for those of us unaccustomed to such extreme conditions, maintaining adequate hydration and electrolyte balance is critical to avoiding them. To eradicate cramps, you should stop running, drink fluids containing electrolytes, cool your body with wet towels, and immediately get out of the sun.

**Heat exhaustion:** Losing fluid and electrolytes through sweat leads to dizziness and weakness if the lost fluids are not replaced. Heat exhaustion is characterized by a moderate rise in body temperature, dizziness, nausea and vomiting, and a headache. You might also experience weakness, lack of coordination, heat cramps, heavier than usual sweating accompanied by moist and cold skin, and “goose bumps.” Your heart rate may rise and you won’t be able

to run as fast due to fatigue. Many runners—even those who are well trained—will suffer from mild heat exhaustion after running for several hours in hot and humid conditions. If you experience the signs of heat exhaustion, stop running immediately and drink fluids containing electrolytes, cool your body with wet towels, lie down and elevate your feet a few inches above your heart, and immediately get out of the sun. Since heat exhaustion can lead to the most severe form of heat-related illness, heat stroke, seeking prompt medical attention for heat exhaustion is also highly recommended.

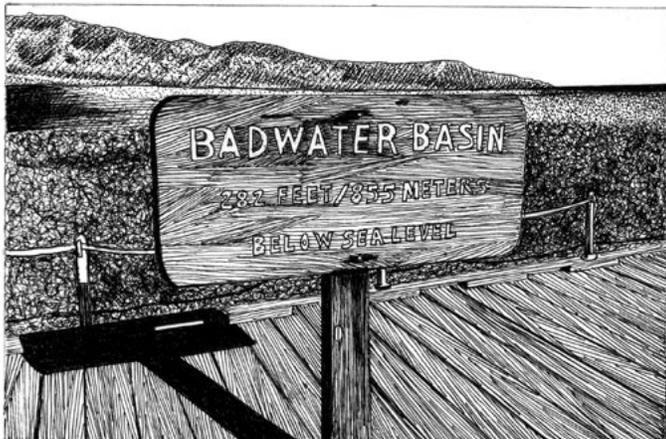
**Heatstroke:** In extreme cases heat can upset the body’s thermostat, causing body temperature to rise to 105 degrees F or higher. This is a life-threatening situation that requires immediate medical attention. While it is common for untreated heat exhaustion to rapidly progress to heatstroke, heatstroke can (and does) occur without the signs of heat exhaustion being apparent. Symptoms of heatstroke include lethargy and extreme weakness, confusion and odd or bizarre behavior, disorientation and unconsciousness. Because heatstroke is a complete failure of the body’s temperature regulation system, sweating ceases and the skin becomes hot and dry. Convulsions or seizures can occur as the brain begins to shut down. Coma and death are also possible in extreme cases. Heatstroke is a medical emergency that requires immediate medical attention. Call the emergency response system immediately! Get the runner out of the sun, remove all clothing, and immediately rub their body with ice or immerse the runner in cold water.

By staying properly hydrated and recognizing the early warning signs of heat illness, as a runner you can prevent a heat-related problem from becoming a life-threatening situation. As a volunteer, recognizing these heat-related dangers may one day help you save the life of a runner who has underestimated the intensity of the surroundings.



## Course Description

**Badwater Basin, Death Valley (280ft / 85m below sea level),  
Mile Zero (Start Line)**

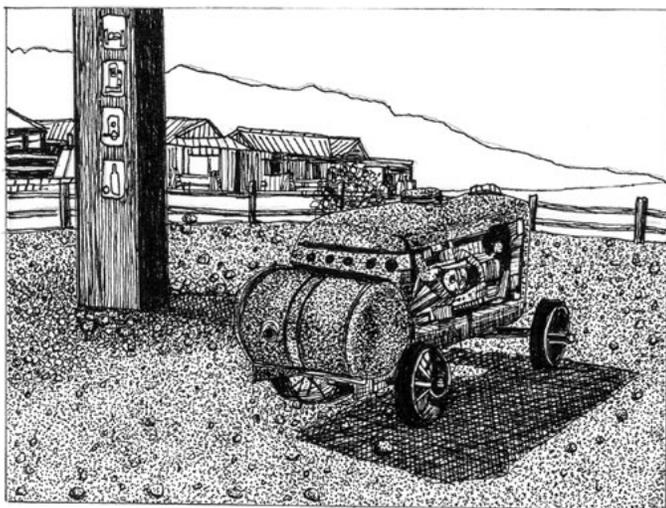


The race begins here adjacent to a pool of saltwater located at the lowest place in North America. There are toilets, but no other services.

**Furnace Creek Ranch (170' / 51m below sea level),  
17.5mi / 28.2km (Time Checkpoint #1)**

The first oasis in our journey. Two hotels, gas station, general store, restaurants, camping, and ice are available. Stock up here on ice, water, food, supplies, and gas both before the race and when you pass through during the race!

**Stovepipe Wells (Sea Level), 42.2mi / 68km (Time Checkpoint #2)**



A general store, gas station, restaurant and motel. Location of the race's Medical HQ for most of first 15 hours of the race. It is critical that you stock up on ice, water, food, supplies, and gas when you pass through here during the race!

**Towne Pass (4956' / 1511m), 58.7mi / 94.5km  
(Time Checkpoint #3)**

From Stovepipe Wells, it's 17-mile long ascent with 5000' of elevation gain to the highest point of the race course. From the summit, it's a 10-mile long descent with 3000' feet of elevation loss into the Panamint Valley. On both sides, it's a steep and narrow road with limited opportunities to park. Support vehicles, crews, and runners must be cautious and extra aware of the traffic.

**Panamint Springs Resort (2000' / 610m),  
72.7mi / 117km (Time Checkpoint #4)**



Gas station, mini-mart, plus restaurant and motel. We rent out "The Cottage" as a way station for any and all race entrants and crews to use during the race: Bring your own towel, soap, and shampoo and make a big effort to keep the room and bathroom tidy. After passing Panamint Springs, a long, steep climb follows on a steep and narrow road with limited opportunities to park. Support vehicles, crews, and runners must be cautious and extra aware of the traffic, and ONLY park in the eight designated parking zones between Panamint Springs Resort and unmarked "Panamint Pass" at mile 84.9.

**Father Crowley's Turnout (4000' / 1219m), 80.65mi / 130km**

The bathrooms and parking lot that designate this viewpoint are not the top of this ascent, though you may hope so. The road continues to rise to 5000' / 1524m over rolling hills, then eventually descends into the Owen's Valley.

**Darwin Turn-Off (5050' / 1540m), 90.6mi / 146km  
(Time Checkpoint #5)**

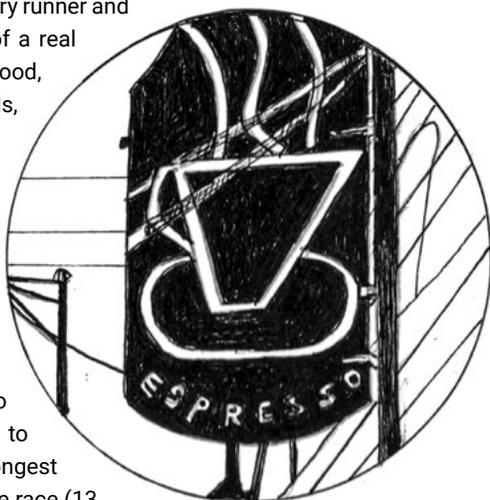
There are no services here, but just a few miles to the south of our route is the small inhabited ghost town of Darwin, the website for which touts "NO broadcast TV; NO AM/FM radio, NO cell signal; NO stores; NO restaurants." The Darwin time station is where the race usually starts to get serious for all entrants. Look for "gunsite notch" about 9.3 miles ahead to indicate your 100-mile mark! The generally flat or slightly downhill stretch ahead can be tedious and demoralizing; Mt. Whitney is visible ahead and never seems to get closer!

**Keeler (3610' / 1100m), 108.1mi / 174km (Time Checkpoint #6)**

This is a small mining town with no facilities which abuts the Owens Dry Lake Bed on the left of the highway. Amazing views of Mt. Whitney and the Sierra Nevada abound. A dirt road to the right ascends to Cerro Gordo, an authentic ghost town high in the mountains.

**Lone Pine (3610' / 11km), 122.7mi / 197.5km (Time Checkpoint #7)**

Lone Pine offers the weary runner and crew all the amenities of a real town: café fare, fast food, pizza, restaurants, motels, gas stations, a grocery store, and much more, not to mention our Race Headquarters at the Dow Villa. Restock here for the climb to Whitney Portal as there no services after Lone Pine. Turn left onto the Whitney Portal Road to begin the final leg, the longest and steepest climb of the race (13 miles or 21km with 5000 feet or 1524m of elevation gain). Temperatures will steadily decrease during the ascent (though depending on time of day). As you ascend Mt. Whitney, be sure your support vehicle is always parked completely off of the road and that you do not block traffic, not even for a moment.



**Portal Road / Base of the Switchbacks (6890' / 2100m), 131.1mi / 211km (Time Checkpoint #8)**

After the turn from Hwy 395 in Lone Pine, it's 8.3 miles or 13.4km to the final Time Checkpoint, located at the start of the switchbacks. For nighttime finishers, be prepared with extra layers of clothing; at night it can approach freezing temperature. The Portal Road is steep and very narrow: please drive and park extra carefully all the way to the finish!



*For more of Badwater athlete Rich Peer's art, follow his Instagram @RichPeersArt*

**Mt. Whitney Trailhead, (8360' / 2548m), 135mi / 217km**



Congratulations! You have finished The World's Toughest Foot Race! A small burger shack / shop are open during daylight hours. There is also a stocked fishing pond and a campground (because, of course, after running 135 miles, you really want to go fishing and camping!).



**TOILET LOCATIONS ALONG THE ROUTE**

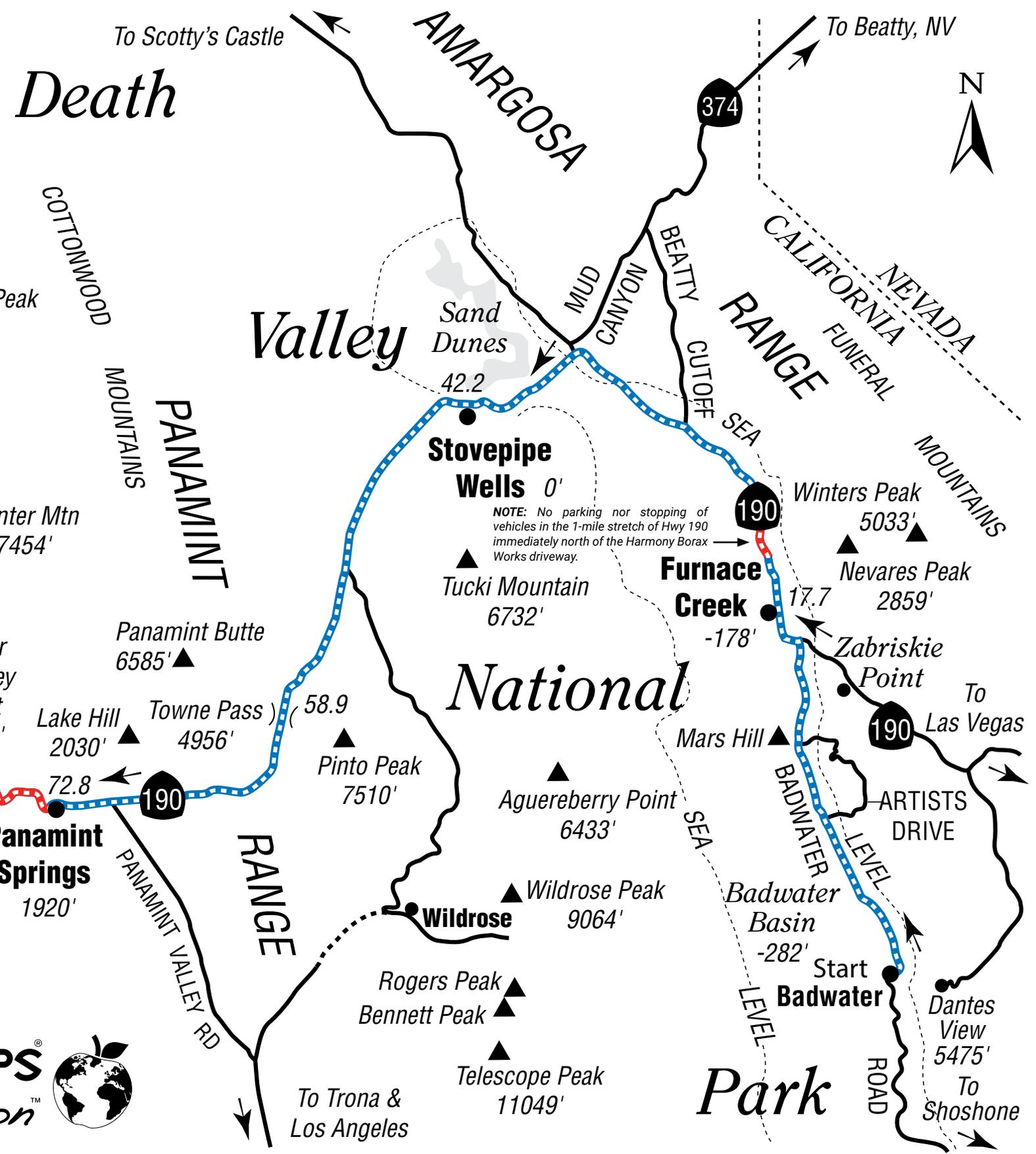
- 14.5 Golden Canyon (top end of parking lot; right side of road)
- 17.6 Furnace Creek Gas Station (left side of road)
- 40.2 Sand Dunes Parking lot (right side of road)
- 42.2 Stovepipe Wells Gas Station (right side of road, and at the hotel on the left)
- 51.2 Wildrose Station (parking lot on Towne Pass; right side of road)
- 72.7 Panamint Springs Resort (left side of road)
- 80.6 Father Crowley's Point (right side of road)
- 121-122.8 Various locations along Hwy 395 in Lone Pine (restaurants and hotels)
- 135 Mt. Whitney Portal / Finish Line

# BADWATER<sup>®</sup> ULTRAMARATHON 135-Mile World Championship



**NOTE:** Between Panamint Springs and Panamint Pass, support vehicles may only park in eight designated locations, as described in the text version of the route sheet. Also, on this stretch of the route, crew members—other than pacers—may NEVER cross the highway; only pacers and competitors may cross the highway.

# Death

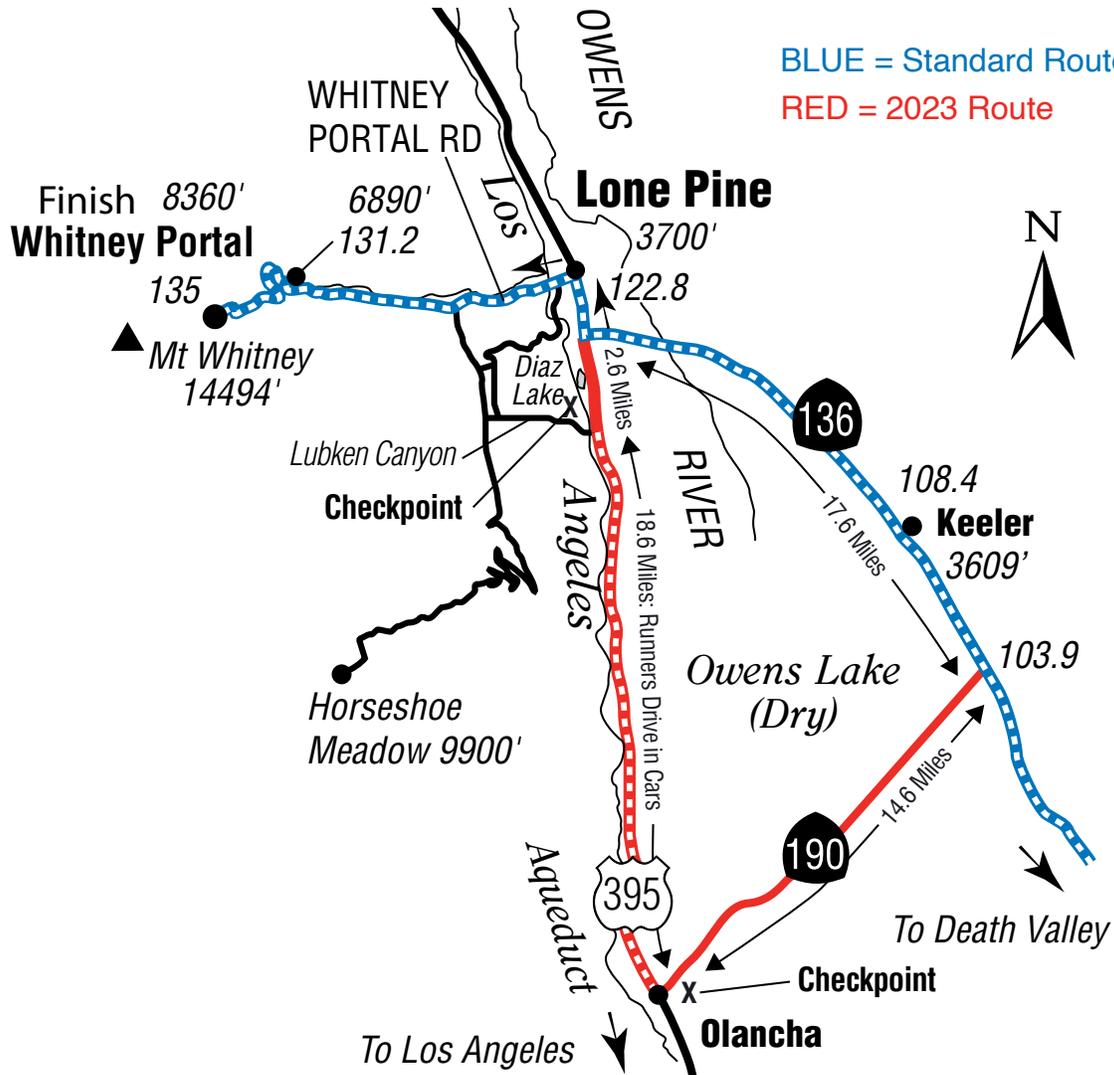


**NOTE:** No parking nor stopping of vehicles in the 1-mile stretch of Hwy 190 immediately north of the Harmony Borax Works driveway.



## 2023 Route Change

CA Hwy 136 is CLOSED where it is flooded by the Owens River and will remain closed for a long time. The cause is the record-breaking amount of snow that the Sierra Nevada mountains received over the winter, which is now melting. (The location is about mile 118-119 of the traditional race route.)



### 2023 Plans to Account for the Route Change:

- 1) Competitors will run a 2/10 of a mile out-and-back at the Darwin Time Checkpoint at Mile 90.7.
- 2) At Mile 103.9, instead of going north onto CA Hwy 136 like normal, Competitors will run west on CA Hwy 190 to Badwater Timing Checkpoint #6 at Mile 118.45 at Olancha at the intersection with CA Hwy 395.

Crews should arrive at the Olancha Checkpoint five to eight minutes before their competitors to receive instructions, and to prepare their vehicle for the competitor to get inside the vehicle immediately upon arrival.

Upon arrival, competitors will get inside their support vehicles and will drive north on CA Hwy 395 to Badwater Timing Checkpoint #7 at Lubken Canyon Road / Boulder Creek.

This will be on the LEFT / west side of Hwy 395, so vehicles should turn left at Lubken Canyon and then stop.

This 18.6-mile drive will take 19 minutes, driving at 50 to 60mph (the speed limits.)

After the drive - and after 21 minutes - competitors will resume running northbound along the west shoulder of Hwy 395. (These 21 minutes will be deducted from the overall finishing time, after the race.)

While running north for the next 2.6 miles, crews may ONLY cross over to support their competitor at Diaz Lake Recreation Area, 1.2 miles north of Checkpoint 7.

After 2.6 miles from Checkpoint 7 - at the junction with Hwy 136 - competitors will re-join the traditional race route and continue running north into Lone Pine.

Be sure to be seen / check-in at Time Checkpoint 8 at Mile 122.8 at the Dow Villa Motel on the Right. (CP 8 and Race Headquarters is at Room 32, on the sidewalk next to "The Grill" at the Dow Villa.)

# 2023 Badwater 135 Official Race Route

LANDMARK	Dist. (MI)	Ele. (FT)	MARKER
<i>NOTE: TL = Traffic Light; SS = Stop Sign; T-Int = T-Intersection; Jct. = Junction</i>			
Badwater Basin: Head north (45 MPH) (TOILET)	0	-282	
Crews will be held for 5 minutes after each wave begins, then released in small batches.			
Wide Shoulder on Right: best place for first crew stop	2.6 to 3.4		
Natural Bridge turnoff on R (PACERS MAY JOIN AGE 65+ COMPETITORS HERE)	3.5	-170	MM 13
Wide Shoulder on R.	3.9		
Wide Shoulder on R.	4.5		MM 12
Devil's Golf Course on L.	5.6	-165	MM 11
Wide Shoulder on R.	6.5		MM 10
Artist's Drive entry on R.	8	-165	
West Side Road on L.	10.6		MM 6
Artist's Drive exit on R.	11.7	-70	
Mushroom Rock on R.	12.1	-170	MM 5
Unmarked Road on R.	12.8		
Golden Canyon on R. (45 MPH) (TOILET)	14.5	-165	MM 2
Jct. Hwy 190 & Badwater Rd. (SS): Go Left onto 190 north (Phone Service Begins)	16.5	0	
Watch Speed Limits! (Don't be like that Aussie team in 2015!)			
Timbisha Shoshone Reservation on L. (35 MPH)	17.2	-140	
The Oasis (Furnace Creek Ranch) on L. <b>General Store open until 200am</b> (TOILET)	17.5	-165	
It is CRITICAL to stock up on water, ice, and snacks, plus real food for the crew!			
Park in lots, not along roadway, throughout Furnace Creek!			
Furnace Creek Fuel on L. (Time Checkpoint #1) (TOILET)	17.7		
Dumpsters available to dump garbage at Gas Station.			
Park Service Visitor's Center on L. (Please use running path on left of roadway)	17.8	-165	
Furnace Creek Campground on L.	18.2	-170	
Harmony Borax Works on L. Park here and let competitor run one mile ahead (45 MPH)	19.1	-170	
NO STOPPING, SLOWING, or PARKING NEXT 1 MILE! Drive to beyond the curves!			
Parking allowed beyond curvy section, where safe.			
Cow Creek on R. (60 MPH)	20.8		
1st Marathon	26.2		
Daylight Pass Rd. / "Beatty 30" on R.	28.4		MM 99.5
Salt Creek turnoff on L.	30.8		MM 97.5
Sea Level sign on L.	32.1	0	
"Summit" / end of rolling hills section	33.7	140'	MM 94.5
North Hwy / Scotty's Castle turnoff on R.	34.9		MM 93.5
Sea Level sign on L.	35.4	0	
MINIMAL PARKING NEXT 6 MILES! SOFT SHOULDERS. Do not get stuck in sand.			
Devil's Cornfield on R. / "Soft Shoulders 2 Miles" sign	36.3	-80	MM 91.5
Three Small Parking Areas on R. (Space for 2 cars each)	36.9, 37, 37.1		
Devils Cornfield Sign and paved pullout on R. (Space for 4-5 cars only)	37.5		MM 90.5
Sand Dunes Parking Lot on R. (35 MPH) (TOILET)	40.2	0	
"CAUTION EXTREME HEAD DANGER" sign on L., facing opposite direction	41.8	0	MM 86.5
Stovepipe Wells Village Welcome sign: <b>Gas / Food / Store opens at 400am!</b>	42	0	
Time Checkpoint #2 & Medical HQ on L. by hotel courtyard & flag. (TOILET)	42.2		
(PACERS MAY JOIN COMPETITORS OF ANY AGE HERE.)			
It's a long climb, and a long way, to Panamint Springs, 30 miles away! Be ready!			
It is CRITICAL to stock up on water, ice, and snacks, plus real food for the crew!			
Also, take advantage of the relatively low gas prices while you are here!			
Mosaic Canyon turnoff on L.	42.4	5	
Mile Marker 83.5	44.7		MM 83.5
1000' Elevation sign on R. (65 MPH)	46.9	1000	
Short downhill (Phone Service ends soon along the ascent of Towne Pass)	47.3		
DIP Sign on R. (Do NOT park in dips as you will be invisible!)	47.9		

LANDMARK	Dist. (MI)	Ele. (FT)	MARKER
DIP Sign on R. (Do NOT park in dips as you will be invisible!)	48.5		
2000' Elevation sign on L.: <b>All competitors must pass this location before 1000am</b>	50.8	2000	
Wildrose Station parking lot on R. (TOILET)	51.2	2450	
<b>Please park neatly and use designated spaces. Do not park "haphazardly."</b>			
Wildrose Turnoff on L.	51.4	2500	MM 76.5
2nd Marathon	52.4	2800	MM 75.5
3000' Elevation sign on L.	53.6	3000	
4000' Elevation sign on L. (Nice paved pullout on R., followed by a dip in the road.)	56	4000	
Approaching the summit of Towne Pass (35 MPH)	57.4		
Brake Check parking area on R.	58.9		
Towne Pass Summit (Time Checkpoint #3)	58.9	4956	
"Downhill Next 9 Miles - 9% Grade" - Begin descent into Panamint Valley	59.6		MM 65.5
4000' Elevation sign on R. after large paved pullout on R. (55 MPH)	61.8	4000	
Check out the amazing view of Mt. Whitney! (100km mark!)	62	3500	
Paved pullout on L. (9% downhill grade)	62.5		MM 65.5
Gravel pullout on L.	63.7		MM 64.5
3000' Elevation sign on L.	64.1	3000	
Large gravel pullout on R.	64.9		
Large paved pullout on L.	65.3		
2000' Elevation sign on L. (5% downhill grade) (65 MPH)	66.4	2000	
Panamint Dry Lake Bed, east edge; "Soft Shoulder" sign	68.5	1640	
Panamint Valley Road to Trona / Ridgecrest on L.	70.2	1750	MM 58.5
Panamint Springs Resort: <b>Gas / Mini Mart / Food / Hotel</b> (35 MPH). (TOILET)	72.8	1970	MM 55.5
<b>Time Checkpoint #4 on L. at resort hotel / restaurant, NOT at gas station</b>			
<b>All competitors must pass here before 800pm, Wednesday evening</b>			
<b>Free Showers and Flush Toilets here in "The Cottage" and across street at the campground!</b>			
<b>Get water, ice, snacks, and more (pizza, hot dogs, shakes, ice cream) at Gas Station / Mini Mart!</b>			
<b>Get REAL FOOD at the Panamint Grill Restaurant at the Resort!</b>			
<b>WARNING: Parking only allowed in designated locations for next 12.2 miles: follow odometer closely!</b>			
<b>Also watch for our "Badwater Parking Zone" signs and only park in those areas.</b>			
2000' Elevation sign on L. (55 MPH)	73.4	2000	
Darwin Falls turnoff on L. / "Rock Slide Area" sign on R.	73.8	2500	
<b>Parking Allowed on R. in gravel pullout with yellow left arrow (1.7 from PSR) (25 MPH)</b>	74.5		MM 53.5
<b>Parking Allowed on R. in small gravel pullout on right (3.3 from PSR)</b>	76.1		
3000' Elevation sign on L. (end parking allowed zone)	76.2	3000	
<b>Parking Allowed on R. in large gravel shoulder on right (4.6 from PSR) (25 MPH)</b>	77.4 to 77.6		
<b>Parking Allowed in large gravel pullout on L. before left curve (5.3 from PSR)</b>	78.1		
3rd Marathon at 25 MPH sign with sharp left curve arrow	78.6	3400	MM 48.5
4000' Elevation sign on L. (25 MPH)	80.7	4000	
Father Crowley's Point on R. (Toilet) <b>Parking Allowed in lot (7.9 from PSR)</b>	80.75	4000	
<b>Please no sleeping on the ground in parking spaces! Please do not leave garbage here. (TOILET)</b>			
<b>Parking Allowed in elevated gravel pullout via small drive on R. (8.8 from PSR)</b>	81.6		
<b>Parking Allowed in wide gravel pullout on R. (35 MPH) (10.5 from PSR)</b>	83.3		
Summit (no sign) <b>Parking Allowed in large gravel pullout on R. (12.2 from PSR)</b>	84.9		
65 MPH sign on right, just beyond parking zone	85.1		
<b>Support vehicles may resume parking wherever it is safe to do so from here onwards.</b>			
Death Valley National Park sign on L. (65 MPH)	85.5	4200	MM 42.5
Saline Valley Rd. on R. (actual DVNP boundary)	86.5	4800	MM 41.5
"Adopt a Highway" sign on R.	88.7		MM 39.5
Darwin turnoff on L.: <b>Time Checkpoint #5</b>	90.7	5050	MM 37.5
<b>All competitors must pass here by 500am, Wednesday morning</b>			
<b>2023 only: Runners will run 2/10 of mile down the Darwin road and back</b>			
	90-7-91.1		
Adopt-a-Highway sign facing opposite direction	93.1		MM 35.5
Talc City Road on R.	93.9		
Gravesite on R. (white cross on elevated area)	97.3	4100	
"Rock Slide" sign on R.	101.3		

LANDMARK	Dist. (MI)	Ele. (FT)	MARKER
Pass through narrow area known locally as "Gunsite Notch" (Phone Service Begins soon afterwards)	101.4	4000	
Jct. Hwy 136 & Hwy 190: Go left / west on Hwy 190 "Olancha 15mi" sign	103.9	3935	
<b>SOFT SHOULDERS: BE CAREFUL! DO NOT GET STUCK!</b>			
4th Marathon	104.8	3800	MM 16.5
Mile Marker 18.5	110		MM 18.5
LA DWP buidling and large equipment lot on right	114.2		
Mile Marker 10.0	118.3		
<b>Time Checkpoint #6</b> on left just before Hwy 395 intersection: arrive 5-8 minutes before your competitor!	118.45	3650	
<b>Hwy 395: Load runner into support vehicle and drive north 18.6 miles</b>	118.5		
Do Not Exceed the Speed Limit (50, 55, 60mph)			
<b>Drive will take 18 minutes: Competitor many not resume running unil 21 minutes elapsed time</b>			
<b>Time Checkpoint #7:</b> Turn left at Lubken Canyon Rd. (across hwy from Boulder Creek RV Resort) and stop			
Competitor will resume running northbound along the west shoulder of Hwy 395 after 21 minutes	118.5		
<b>During the next 2.6 miles, crews may ONLY cross over Hwy 395 at Diaz Lake Recreation Area</b>	119.7		
Jct. Hwy 136 & Hwy 395: Continue North (U.S. Inter-Agency Visitor Center on Right) (TOILET)	121.1	3696	
<b>WARNING: SPEED LIMITS DROP TO 25mph as you pass through town!</b>			
Comfort Inn on R. (45 MPH)	121.2		
Chevron / Lee's Frontier Deli / Mini Mart (Great sandwiches!) on L. (TOILET)	121.4		
Best Western on R. (35 MPH)	122.1		
Lone Pine City Limits sign on R. (25 MPH)	122.4		
McDonald's on L. (TOILET)	122.7	3610	
Dow Villa Motel on R. at 310 S. Main Street: <b>Time Checkpoint #8 &amp; Medical HQ</b> (TOILET)	122.8	3610	
<b>All competitors must pass within 42 hours of their individual wave start!</b>			
<b>All competitors with time penalties must "check in" and serve penalty time here before continuing.</b>			
Portal Road (the only traffic light in Lone Pine): Go left / west / uphill for the final mountain ascent!	122.9	3610	
Tuttle Creek turnoff on L.	123.4	3770	
<b>WARNING: Park and Drive Properly! NO slow driving; NO stopping in roadway!</b>			
Cross over the Los Angeles Aqueduct	123.5	3855	
"Alabama Hills Recreation Area" sign on R.	123.7		
Lone Pine Creek	124.6	4200	
Pass the "Happy Face" Rock on R. (large dirt parking area; fun photo spot)	125.1		
Movie Road on R.	125.7	4590	
<b>WARNING: Park and Drive Properly! NO slow driving; NO stopping in roadway!</b>			
Lone Pine Creek	125.8	4800	
Horseshoe Meadow turnoff on L.	126.1	5000	
Cuffe Ranch turnoff on R. / Valley View Road on L.	127.2	5100	
<b>WARNING: Park and Drive Properly! NO slow driving; NO stopping in roadway!</b>			
Whitney Vista Drive on L	127.5		
Olivas Ranch Road on L.	128.5	5300	
Former location of "Entering Active Bear Area" sign (but the bears are still here!!!)	129.3		
<b>WARNING: Park and Drive Properly! NO slow driving; NO stopping in roadway!</b>			
Lone Pine Campground on L.	129.4	5700	
"Inyo National Forest" sign on R.	129.9	6400	
5th Marathon at Indian Creek Rd. on R.	131	7000	
<b>Time Checkpoint #9 in Large gravel pullout on R. It is 3.6 miles to the finish!</b>	131.2	6890	
Road makes a 180-degree switchback to L.	132.2	7215	
Vista Point on Left at large gravel pullout	132.9	7400	
"Campsites 39-44" and "Whitney Portal Recreation Area" signs	133.8	7700	
<b>WARNING: Park and Drive Properly! NO slow driving; NO stopping in roadway!</b>			
Meysan Lakes trailhead on L.	134	8035	
Family Campground on L.: <b>Support vehicles should drive ahead NOW to find parking!</b>	134.1	8100	
Overflow Parking Lot on L. (All crew may join their competitor here to cross the finish line together.)	134.7	8200	
Finish Line of the World's Toughest Foot Race: <b>Congratulations!</b>	134.8	8360	

Mile Markers (MM) noted are on R. side of road and within 2/10 of a mile of their stated location. For reference only. Official distance is 135.0 miles. Remember all car odometers have error. Distances above were GPS-measured and are accurate in a relative sense.

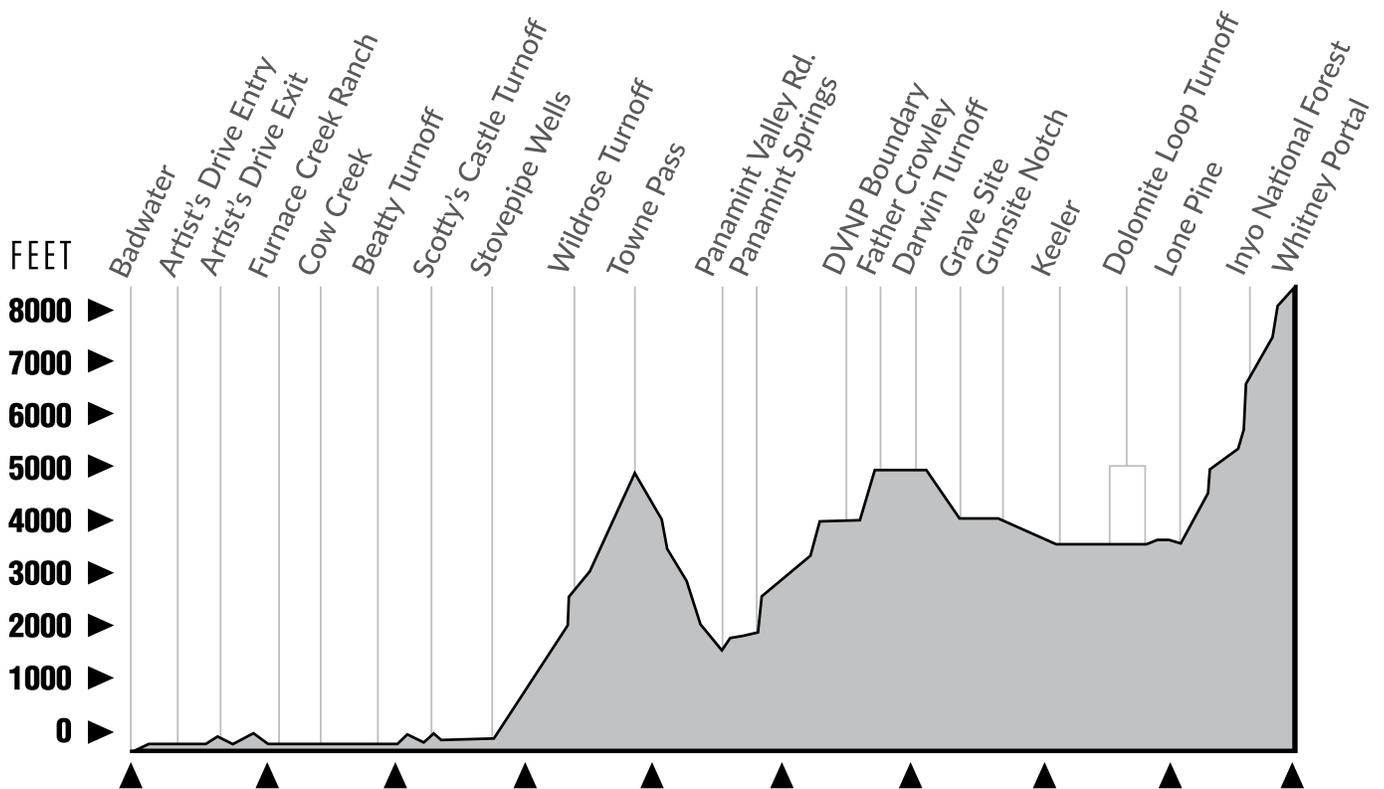
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**SAMPLE TIME SPLITS FROM ACTUAL BADWATER 135 FINISHERS**

Sample, Actual Time Splits from Previous Badwater 135 Finishers								
FC / 17	SPW / 42	PSR 72	Darw 90	LP 122	P Rd. 131	Whitney 135	Who	When?
3:13	8:17	13:10	22:19	30:07	32:58	34:0-9:31	Ray Sanchez	2022
2:58	7:35	12:23	15:28	28:59	32:33	34:00:30	Chris Cavanaugh	2022
3:19	8:30	17:01	23:09	30:38	32:58	34:04:14	Jill Andersen	2015
2:36	6:40	13:40	18:57	29:01	32:47	34:10:50	Ed Ettinghausen	2016
3:31	8:19	15:38	22:11	33:54	38:31	39:59:59	Jason Romero	2015
3:17	8:21	15:22	20:42	34:56	38:42	40:14:10	Keith Straw	2015
2:46	8:08	16:58	24:04	34:59	38:50	40:36:11	Dale Cougot	2016
3:34	9:50	20:04	27:43	38:58	41:10	43:37:51	Jodi Weiss	2015
4:08	11:23	21:46	28:47	39:38	42:54	44:13:01	Rich Peers	2022
3:24	9:17	19:55	28:33	38:54	42:40	44:15:53	Derek Dowell	2016
4:06	10:35	21:58	29:00	39:43	42:49	44:07:16	Molly Melton	2021
3:42	9:58	21:47	30:16	40:39	44:13	46:01:29	Tess Leono	2016
3:26	8:58	19:22	27:37	40:16	44:21	46:11:42	Eric Gelder	2015
4:43	11:27	22:10	31:12	41:19	44:28	45:57:42	Jackie Brown	2021

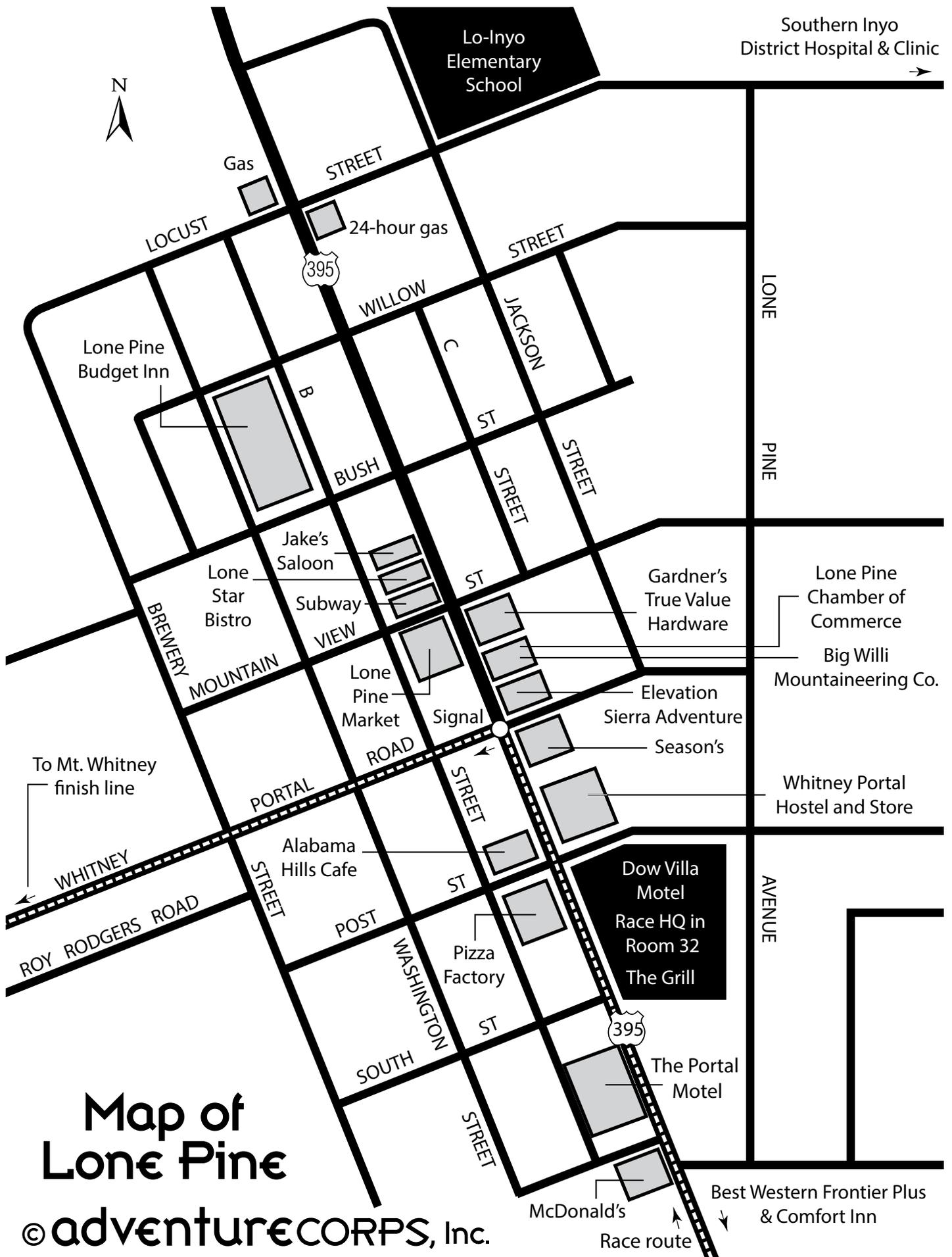
My Splits							
FC / 17	SPW / 42	PSR 72	Darw 90	LP 122	P Rd. 131	Whitney 135	Date



# Find Your Epic



# BadwaterLife.com



# Map of Lone Pine

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## Lone Pine: Quick Reference to the Most Popular Places for Badwater Folks

Lone Pine is located at Mile 122 of the Badwater 135 race route and is an important hub of activity before, during, and after the race. Located at 3727 feet (1136m) at the foot of Mt. Whitney and with a population of just over 2000 friendly people, it is a wonderful and appealing destination year-round and particularly important to the success of the Badwater 135.

Lone Pine meets every need, from great food to comfortable hotels, plus all enjoy the Post-Race Get-Together at the school, followed later by the traditional social hour(s) at Jake's Saloon. We hope you enjoy the town, spend lots of money there, and let everyone know how much you enjoy racing in their back yard!

Many Badwater 135 runners and crews buy race equipment and supplies at True-Value Hardware or Whitney Portal Hostel and Store, groceries at Lone Pine Market, purchase moderately priced gas in town, and/or excellent coffee, snacks, and sandwiches at Lone Star Bistro, get an excellent meal at The Grill or enjoy fine dining at Seasons Restaurant.

During the race, many support teams will go into town to pick up coffees and more at Lone Star Bistro, pizza from The Pizza Factory, to-go food from The Grill or Lee's Frontier Deli, or for ice, water, & groceries.

### Motels / Hotels (Not a complete list! See LonePineChamber.org for more listings!)

#### **Best Western Frontier Hotel**

1008 S Main Street 760-876-5571

#### **Comfort Inn**

1920 S Main Street 760-876-8700

#### **Dow Villa Motel**

310 S Main St (Race HQ) 760-876-5521

#### **Portal Motel**

425 S Main St 760-876-5930

#### **Whitney Portal Hostel (and Store)**

238 S Main St 760-876-0030

### Popular Eateries

**Lone Star Bistro** at 107 N Main St (Coffee drinks, sandwiches, pastries, ice cream, smoothies, and such, plus WiFi. Very popular with PCT hikers.)

760-876-1111 Open 7am-5pm daily

**The Grill** at 446 S Main St. (Located on the southern end of the Dow Villa parking lot. Great food and great location!)

760-876-4240 Open 7am-9pm daily

**Alabama Hills Cafe** at 111 W Post S

760-876-4675 Open 6am-2pm daily

**Pizza Factory** at 301 S Main St

760-876-4707 Open 11am-10pm daily

**Season's Restaurant** at 206 S Main St

760-876-8927 Open 5pm-10pm daily

**Jake's Saloon** at 119 N Main St (Many runners and crews socialize here after attending the official post-race pizza party at the Lo-Inyo Elementary School at the conclusion of the race!)

### Groceries, Gas & Mini-Mart, Outdoor Outfitters, Hardware

**Whitney Portal Store and Hostel** at 238 S Main St

760-876-0030 Open 7am-9pm daily in July

**Elevation Sierra Adventure** at 150 S Main St

760-876-4560 Open 9am-630 or 7pm daily

**Lone Pine Market** at 119 S Main St

760-876-4378 Open 8am-9pm daily

**Gardner's True Value Hardware** at 104 S Main St

760-876-4208 Open 8am-6pm, Mon-Sat

**L.P. Chamber of Commerce** at 120 S Main St

760-876-4444 Open 830am-430pm daily

**Big Willi Mountaineering Co.** at 120 S Main St.

760-878-8325 Open 800am-400pm Thu-Mon

**Chevron & Lee's Frontier Deli** at 1900 South Main St (This is the last business on the west side of the road on the far southern end of town. Many crews call ahead to order sandwiches as they approach town, or if making a quick run into town from the race route.)

760-876-5844 Gas 24/7; Deli closed 2-4am only

**Exxon-Mobil & AM-PM** at 380 North Main St

760-876-4073 Open 24 Hours a Day



## 2023 Badwater 135 Race Rules and National Park Service Regulations

### General Race Rules

1. There are three starting times for the 2023 Badwater Ultramarathon (2000, 2100, and 2200 on July 4, 2023), but all Competitors in all waves are competing in the same race. Competitors must check in at the start line, ready to race, 30 minutes prior to their start time.

2. Starting Groups are assigned by the race director and are non-transferable. Split times will be collated throughout the race to maintain overall standings. There are only two divisions: men's and women's. The Competitor to arrive at the finish line in each division with the lowest overall time, based on their starting time, will be considered the winner.

3. The race number bib must be worn by the Competitor on the front of the body, unmodified, unfolded, and visible at all times during the race. It may not be worn on the head or hat. The Pacer Bib numbers must also be worn similarly by any Pacer / crew member who is running along with his or her Competitor.

4. All Competitors MUST have passed, and be proceeding beyond, the following locations along the race route within the specified time cut-offs:

- Mile 50.8 (2000' Elevation Sign, located 8.6 miles beyond Stovepipe Wells): All Competitors must pass by 1000am, Wednesday morning (regardless of starting wave).
- Mile 72.8 (Panamint Springs Resort): All Competitors must pass by 800pm, Wednesday night (regardless of starting wave).
- Mile 90.7 (Darwin Turn-Off): All Competitors must pass by 500am, Thursday morning (regardless of starting wave).
- Mile 122.8 (Lone Pine Dow Villa Motel): All Competitors must pass within 42 hours, based upon individual start time. Additionally, beyond the Darwin Checkpoint, if it becomes clear that a Competitor will not be able to finish the race officially within the 48-hour time limit, that Competitor may be forced to withdraw from the course and the race prior to the actual conclusion of the 48 hours.

5. Competitors who fail to meet the specified time cut-offs along the course must withdraw from the race course; similarly, Competitors who are disqualified from the race must also withdraw from the race course. Such Competitors may not continue on the race course "unofficially" or after simply removing their bib number. Crew members from withdrawn Competitors must also depart the race course, unless they formally join another Competitor's crew.

6. The clock does not stop for any reason until the race course officially closes 48 hours after each designated official start time.

All Competitors must leave the course by the 48th hour beyond their start time: Finishing, or remaining on the race course with the intent to continue, is not allowed after 48 hours.

7. Running must always be single file, on the far left side of the road or off the left side of the road, facing traffic (Pacers, too).

8. Competitors must make their presence known at all Time Checkpoints located along the route.

### Legal and Bureaucratic Issues

1. If the event is canceled due to pandemic, extreme weather, community disaster, or other *force majeure*, neither refunds nor credits will be given.

2. Although we anticipate using the same route each year, the final, exact route is subject to approval from various government agencies and is always subject to change due to various factors beyond our control.

3. "Badwater®" is a federally registered trademark and may not be used in any commercial or promotional manner except under license from AdventureCORPS, Inc. In particular, t-shirts (such as for crew members, friends, supporters) may not state "Badwater" or feature any version of the race logo.

4. All applicants must be a minimum of 18 years in age when applying to race.

5. All Competitors must follow and complete the entire application and entry process, filling out all forms and paying all necessary fees.

6. Each Competitor's Support Crew must have a designated Crew Chief and his or her name and email address must be provided to the race organizers at least eight weeks before the race. All crew chiefs must study all race rules and information about supporting a Competitor and organizing and overseeing a support team, as well as study all email correspondence sent by the race organizers. Each Crew Chief is to be primarily responsible for managing the support crew, maintaining adherence to all race rules, state and local laws, and common sense, as well as overseeing the Health and Safety of all crew members and the Competitor at all times.

7. The names and email addresses of all support crew members must be provided at least four weeks before the race (preferably eight weeks.) All crew members must study all race rules and information about supporting a Competitor and organizing a support team, as well as study all email correspondence sent by the race organizers.

8. Each Competitor is strongly encouraged to bring a nurse, EMT, MD or other first responder or medical professional on his or her support team.

9. Each Competitor is strongly encouraged to bring at least one crew member or Crew Chief who is a veteran Competitor, crew member, or Crew Chief with Badwater 135 experience.

10. Each Competitor is strongly encouraged to carry a walkie-talkie for communicating with his or her support crew.

11. All Competitors and all crew members must sign the Accident Waiver and Release of Liability / Release of Name and Likeness. Each Competitor must also bring the properly completed Check-In Form and Medical History Form to Competitor Check-In.

12. All race vehicles must meet the minimum requirements of property damage and personal injury liability automobile insurance for the State of California. All vehicle drivers must be fully licensed.

13. It is mandatory that all Competitors and all Crew Chiefs attend Competitor Check-In and the Pre-Race Meeting in Lone Pine, while all crew members are encouraged to attend both events. Additionally, all Competitors and all their Support Team must view the Online Pre-Race Meeting held prior to the in-person events in Lone Pine. (A code will be given out during the online meeting to prove it was viewed.)

14. All Competitors must bring one U.S. dollar (or more) in a sealed envelope to Competitor Check-In. Please write the Competitor number on the envelope. This envelope will not be returned and the money will be donated to charity.

15. During Competitor Check-In, all Competitors must display a minimum of two running-style reflective vests - which will be worn and utilized by the Competitor and Pacer (if a Pacer is used) during nighttime periods of the race - and eight blinking red lights for Competitors, Pacers, and crew members to wear at night. Competitors without satisfactory quality, or quantity, nighttime safety equipment, will be required to purchase additional gear at that time, IF any such gear is available.

16. During Competitor Check-In, all Competitors must display one OSHA Class 3 reflectivity garment for each crew member to wear at all times during the event. See point 4 under "Support Crew & Assistance" below.

17. During Competitor Check-In, all Competitors must show that they have at least eight personal portable toilet products such as the Biffy Bag for use on the race course wherever toilets are not available. (Ziplock bags or dog poop bags are NOT acceptable. See website for Biffy Bag discount.) Such products must be used discreetly and must be disposed of properly after use. Public and/or unsanitary defecation by Competitors or crew members will result in disqualification of the Competitor.

18. All Competitors must pay the Death Valley National Park Entrance Fee for their support vehicle. (This is most easily done, prior to the race, by paying online at [Recreation.gov](http://Recreation.gov).) Proof must be brought to Competitor Check-In. Competitors will not be allowed to check-in for the race without proof of paying the Park Entrance Fee.

19. No commercial photography or videography may be conducted at the race without the specific written permission of AdventureCORPS, Inc. Additionally, the National Park Service, California Department of Transportation and/or the U.S. Forest Service may also require

commercial filming agreements. Also, bona fide media must contact AdventureCORPS, Inc. to request a media credential. All media, photographers, and videographers must attend the Media Check-In and Briefing prior to the race. The National Park Service - which has jurisdiction over the first 86.5 miles of the race route - regulates photography and videography if it makes an impact on Park resources or other Park visitors. Please visit [nps.gov/deva/](http://nps.gov/deva/) for information.

20. All Competitors must be willing to submit to a drug urine test before (at any point prior to the race, after being officially confirmed for entry), during (at any time), or after the race (up to 90 days after the conclusion of the race). If any WADA banned substances are detected, the Competitor will be disqualified from competition, listed as DISQUALIFIED FOR DOPING in the final standings of the race, and banned for life from any AdventureCORPS event. Refusal to submit a urine specimen upon demand will also result in the Competitor being disqualified from competition, being listed as DISQUALIFIED FOR DOPING in the final standings of the race and being banned for life from any AdventureCORPS event. Additionally, any Badwater 135 finisher who fails a drug test within 36 months after competing in any edition of the Badwater 135 will be retroactively disqualified from any and all previous Badwater 135 races, removed from all Badwater 135 race results, as well as banned for life from any AdventureCORPS events.

#### Support Crew and Assistance

1. Each Competitor must be accompanied by a support crew comprised of no more than one four-wheeled motor vehicle and at least two and no more than four crew members - at least two of whom are legally licensed to drive and at least one of whom can speak English - at all times. Race Competitors may have no more than one support vehicle and no more than four crew members in total on the race course.

2. "Unofficial" or extra crew members and "family cheering squads" may only be present in Lone Pine and at the finish line; they may not drive on the race course except between Lone Pine and the finish line and that drive must be made without stopping. A secondary vehicle may not be used to shuttle crew members or supplies to and from the Competitor and support vehicle, except within Lone Pine.

3. Each Competitor must have his or her own personal support crew and vehicle; crew and support vehicles may not be shared, except informally in the spirit of the event, i.e., crews may lend assistance to other Competitors or crews. (Exceptions may be made under some circumstances for married couples or others who have a history of racing together and would like to race with one shared crew. Please inquire.)

4. ALL support crew members (except those actively pacing their Competitor) must wear OSHA Class 3 high-visibility / reflectivity clothing at all times during the event. These regulations may ONLY be met by wearing the special garments developed by ZZYXXZ in collaboration with BADWATER and which can be pre-ordered for

pick-up in Death Valley prior to the race, OR by wearing certified OSHA Class 3 shirts. Please note: Class 3 garments have sleeves with reflective stripes, while Class 2 garments do not have sleeves. Also note: Running-type reflective vests, such as those by Nathan Sports, do NOT meet OSHA Class 3 requirements.

5. Competitors and Pacers may dress as they choose during daylight. At night, Competitors and Pacers must wear 360 degree reflectivity (such as Competitor-type reflective vests by Nathan Sports) and front and rear blinky lights. Competitors and Pacers are not required to wear the specific OSHA Class 3 garments that are required for all crew members, but that level of high-contrast reflectivity and visibility is highly recommended for Competitors and Pacers, too.

6. In addition to the requisite reflective garments, all crew members, Pacers, and Competitors must wear front and rear blinky lights whenever they are outside of a motor vehicle during nighttime.

7. Beginning immediately at the start line, Competitors must not run abreast with other Competitors or with Pacers, except when passing a slower Competitor, which must be done quickly. All running must be single-file. Additionally, Pacers may not run in front of, even slightly, Competitors at any time. (Pacers may run next to their Competitor briefly, when handing off supplies or spraying their Competitor, but only on the left side of the Competitor.)

8. Competitors must progress under their own power without drafting (except other Competitors during the first few miles), helping, pushing, supporting, or any other type of physical assistance. Competitors may not use walking sticks, ski poles, or the like.

9. So-called "cooling vests," "cooling hats or visors," or other types of artificial / technological cooling systems may not be worn or utilized by race Competitors while making forward progress on the race course. (Ice, wet towels, hand-held water sprayers or misters, and such are fine and commonly used. What is not allowed are products or technology whose sole purpose is to keep the Competitor "artificially cool.")

10. Neither Competitors nor Pacers / crew members may carry an umbrella or shade cover for a Competitor while the Competitor is moving forward on the race course.

11. Competitors may not wear so-called "supershoes" with soles thicker than 40mm or that contain more than one carbon plate. Additionally, prototype shoes or shoes that are not on mass sale are not be allowed.

12. Any crew member running along - for more than few moments - with their Competitor is considered a Pacer and must wear the Pacer's designated number bib (provided at Competitor Check-In). If a Competitor is running with a Pacer, any additional crew members that are handing off supplies, or otherwise providing aid, must be off the roadway at all times (i.e. left of the white line on the shoulder) and may not run along with the Competitor and Pacer for more than a few moments.

13. No more than two crew members, including a Pacer if one is present, may be on the other side (Competitors' side) of the highway at any given time.

14. Crew members, other than Pacers, may never cross the roadway during the entire Father Crowley climb (a 12.1-mile stretch from Panamint Springs Resort at Mile 72.8 to "Panamint Pass" at Mile 84.9), as described above. Also, each Competitor, or Competitor's Pacer, is strongly encouraged to carry a walkie-talkie for communicating with the support crew during this 12.2-mile stretch of the race route. In addition to Badwater race staff, this will also be monitored by National Park Service staff who have the authority to disqualify Competitors.

15. Competitors may not be accompanied by Pacers or moving crew members until Mile 42 at the Stovepipe Wells time checkpoint. Exceptions: Competitors 65 or older may utilize a Pacer from Mile 3.5 (Natural Bridge turn-off.) Blind Competitors may utilize a Pacer / guide from the start line.

16. Wheeled conveyances (other than a motorized support vehicle), including in-line skates, strollers, and bicycles, are prohibited on the course at all times. Likewise for hovercrafts and helicopters. Competitors accompanied by any such conveyance will be disqualified. (Drones are illegal within Death Valley National Park boundaries.)

17. Crew members may not use illegal drugs, stimulants, or dope, as well as alcohol of any kind, during the race or at any official race events or activities.

### Support Vehicles

1. The California Motor Vehicle Code, and all local, county, and/or federal laws, rules, and regulations, must be respected at all times. In particular, support vehicle drivers and crews are reminded that phones must only be operated by the driver with a hands-free device; seat belts must be worn by all vehicle occupants at all times while moving, and it is illegal to drive on a highway while displaying emergency flashers. For further information, consult the DMV Code.

2. Support vehicles may not be wider than 80" in width, per official manufacturer specifications (not including mirrors.) Additionally, support vehicles may not be more than 84" in height. Small Cars, Minivans, and SUVs are recommended. Oversize SUVs, vans, and trucks, or other types of oversize vehicles are strongly discouraged. Motorhomes, RVs, "SportsMobiles," Sprinter Vans (and similar, such as the Dodge Ram 1500 / 2500 Promaster), vehicles with extra high rooflines, and all types of Hummers are specifically not allowed. Support vehicles may not pull trailers of any kind. (The largest vehicle currently allowed at the event is the Nissan NV3500, which is no longer made, as of 2022. Please note that Ford Transit vans are also now too wide - as of 2023 - for use at the race. See the [Ideal Support Vehicle and Set-Up](#) blog post at [Badwater.com](#) for further information.)

3. All Competitor support vehicles must have highly visible signage on the back of the vehicle stating "CAUTION RUNNERS ON ROAD." Magnetic reusable signs may be ordered from our sign vendor, or one-time use signs will be provided during Competitor Check-In.

4. All support vehicles must have their Competitor's bib number easily and clearly visible on both sides, the front, and the left rear. Sticky Competitor bib numbers will be provided to ALL Competitors during Competitor Check-In: these Competitor numbers must be displayed on all four sides of the support vehicle.

5. Sponsor / Charity names and graphics may be placed on support vehicles on the left and right sides only, but NOT on the front or rear.

6. Vehicle windows may not be blocked or obstructed with any signage, paint, or the like. No Competitor will be allowed to start the race who has any vehicle windows blocked. If a Competitor support vehicle is found with blocked windows during the race, that Competitor will be forced to stop and wait while the vehicle's windows are unblocked and signage properly mounted.

7. Driving must be done at the speed of traffic, without slowing down to encourage, talk to, or lend assistance to any Competitor while moving. All assistance must be provided by pedestrian crew members; handing off of supplies from the vehicle is never allowed, nor is slowing down to speak with or to a Competitor or other person while moving. Vehicles must "leapfrog" the Competitor at all times. Each "leapfrog" should generally be about two miles in length, perhaps less on mountain ascents. Competitors may not be "shadowed" (driving a vehicle at the Competitor's speed.) Driving may never be at the speed of any Competitor.

8. All support vehicles must have their headlights on while driving, 24 hours a day.

9. Vehicles must be parked completely off the road surface whenever they are stopped (with all four tires right of the white line). Many areas of the route have very little shoulder for parking so care must be taken in choosing stopping places. When stopping/parking, vehicles may not stop on the left side of the road, except in parking lots or exceptionally large pullouts. From 700pm to 600am each day (night) of the event, at all times while stopped or parked off the road, support vehicles must have their headlights turned off and emergency flashers turned on.

10. When parked, the doors on the left side of the vehicle must never be opened into the roadway, even momentarily. All exiting of the vehicle by active crew members must be from the right side of the vehicle; drivers may exit from left but only if space allows for them to do so without their door opening into the roadway. Crew members must not stand on the left side of a parked vehicle (between the road and the vehicle.)

11. Support vehicles must not park across from parked vehicles on the other side of the road (50 meters in either direction), in order to avoid bottlenecking the roadway.

12. Support vehicles may not stop during the one-mile stretch which begins at Harmony Borax Works at Mile 19.1, while Competitors pass through the curvy "Harmony Curves" section of Hwy 190. Each support vehicle should wait at Harmony Borax Works long enough to allow the Competitor to cover the next, mostly uphill mile, then drive ahead (no stopping nor slowing until Mile 20.1).

13. On the Father Crowley climb (a 12.1-mile stretch from Panamint Springs Resort at Mile 72.8 to "Panamint Pass" at Mile 84.9), support vehicles may only stop at EIGHT designated locations along the route. These are identified in the route book and with signage along the roadway. Except in a legitimate emergency situation, stopping at any other location along this stretch of roadway, even momentarily, will result in the immediate disqualification of the Competitor associated with the stopped crew. In addition to Badwater race staff, this will also be monitored by National Park Service staff who have the authority to disqualify Competitors. See Badwater.com for more details and photos.

### Safety and Medical Issues

1. Remember, at all times and in all situations, safety is the most important issue. This means safety for Competitors, crew, staff, and the general public. The roads are not closed for this event and may be quite busy with tourist and local traffic.

2. I.V.s (intravenous fluids) are not permitted during the race. If a Competitor receives an I.V. during the race, for any reason, then that Competitor is disqualified and must withdraw from the race and the race course.

3. Competitors are responsible for both their own actions and their crew's actions; crews are responsible for both their own actions and their Competitor's actions.

4. Always look and listen both ways before crossing the highways. Remember that drivers will not expect to encounter a Competitor or parked vehicle out on the course. Remember the event is held on public roads. Competitors should not cross over the highway more than necessary; crew should cross the highway carefully to bring assistance to their Competitor - except on the Father Crowley climb as noted elsewhere - rather than the Competitor crossing to the crew / vehicle. Time Penalties or Disqualification will be enforced with a Zero Tolerance Policy towards dangerous crossing of, or behavior on, the roadway.

5. Per National Park Service regulations, Competitors and crew members may not wear any headset covering the ears, or any earplugs in both ears, unless it is a necessary prosthetic device that aids the hearing-impaired.

6. All Competitors and crew must study "Medical Risks in the Badwater Ultramarathon," "Dangers of Running in the Heat," and "The Dangers of Hot Weather Running" as found at Badwater.com and/or Badwater Magazine.



*Badwater 135 competitor Kim Budzik is supported with perfect style and technique by Arnold Begay.*

### Leaving the Course or Withdrawing

1. Every inch of the course must be traveled by each Competitor. In the event of a routing error, e.g., wrong turn, the Competitor may be driven back to the exact original spot where he/she left the course and continue running from that location. There will be no allowance made for lost time or miles run in the wrong direction.
2. If a Competitor needs to leave the course via motor vehicle, his/her crew must physically mark the exact location with a numbered stake in the ground. This numbered stake must be visible from the road in both directions. The Competitor must then resume the race from the same place that he/she left it. The numbered stakes will be provided to all Competitors at Competitor Check-In. Competitors may only leave or otherwise drive up or down the course via motor vehicle for medical attention, NOT simply to rest. This must be reported as soon as possible to Race Headquarters or the nearest time checkpoint. Competitors found in a moving motor vehicle will be disqualified unless they are en route to or from medical care. Focus must be kept on the speedy completion of the course.
3. If a Competitor withdraws, he/she or his/her crew must contact Race Headquarters or a Time Checkpoint immediately. Name, bib #, reason for withdrawal, time of withdrawal, and miles completed must be stated. All Competitors and crew who withdraw from the race are encouraged – almost expected - to come to the finish line and the post-race party to greet and celebrate with their fellow Competitors and crews.
4. All Emergency Medicine and/or Emergency Evacuation costs for Competitors, crew members, or staff will be borne by that person or their heirs. The race organizers are in no way liable or responsible for medical care, nor responsible for emergency evacuation.

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### Awards

1. All Competitors who begin the event will receive a Badwater 135 race t-shirt, hat, Race Magazine, and a goodie bag with other one-of-a-kind Badwater items and products from the race sponsors, as well as entry into the post-race party (for the Competitor and up to four crew members. All Competitors who officially complete the event within 48 hours will receive a finisher's t-shirt and commemorative Badwater 135 buckle.

### Rule Enforcement and Penalties

1. Race rules are designed to provide a safe and fair experience for everyone involved and to help ensure our ability to produce the race again next year.
2. Major rule infractions by Competitors or their crew, especially those regarding "cheating," will result in immediate disqualification of the Competitor.
3. Other, lesser offenses will result in the following cumulative time penalties:
  - A WARNING may be issued, depending on the nature of the infraction, at the discretion of the race official (A "slash" will be marked on the Competitor's bib number.)
  - First Penalty: One Hour ("X" will be marked on the Competitor's bib number.
  - Second Penalty: Disqualification
4. Time penalties are imposed by the penalized Competitor stopping at the Time Checkpoint in Lone Pine to serve his/her time penalty. The race and clock will continue while the penalized Competitor waits out his/her penalty time. A Race Official will be present to oversee this process. Any Competitor who is required to serve a time penalty, but does not stop to do so, will be disqualified.
5. The Race Director has the authority, at any time, to overrule any rule or invent a new rule based on extenuating, unforeseen, and/or unusual circumstances and/or to maintain the integrity and fair play necessary for the successful completion, and continuation, of the race. The Race Director has ultimate authority regarding all rules, their interpretation, and their enforcement. There is no "appeals committee" nor an "appeals process." All Competitors in the race, and their support crews, willingly acknowledge this fact, as well as all other race rules, by attending the race in any capacity.
6. In all cases and circumstances, it is the intent, and spirit, of the rules which will govern their implementation and enforcement.

### Finally

Have fun and keep smiling! Remember, you chose to be here!

# A SALUTE TO BOB BECKER!

This will be Bob Becker's 16th year at Badwater 135, and we salute him for all his support and enthusiasm over the years! Bob has completed the race four times, including becoming the oldest runner - at age 77 - to cross the finish line in 2022.

He has also crewed for Badwater 135 runners nine times and will join our race staff for the second time this year.

Bob created the world-class Keys 100 event back in 2007 and - under his leadership - it has become one of the very finest ultramarathons and relay races on the planet.

## Bob's Badwater 135 History:

2007 Crew for Nattu Natraj  
2008 Finisher in 40:48:35, age 63  
2009 Crew for Nattu Natraj  
2010 Crew for Brian Krogmann  
2011 Crew for Marshall Ulrich  
2012 Crew for Paul Grimm  
2013 Crew for Sergio Radovic  
2014 Finisher in 39:45:13, age 69  
2015 Finisher in 41:30:21, age 70  
2016 Race Staff  
2017 Crew for Dan McHugh  
2018 Crew for Telma Altoon  
2019 Crew for Dan McHugh  
2021 Did Not Finish  
2022 Finisher in 48:17:27, age 77  
2023 Race Staff

## Bob's Additional Badwater History:

Badwater Cape Fear finishes: 2014 through 2023  
Badwater Salton Sea finishes: 2013, 2015, 2021  
Badwater presents Mt. Gaoligong Ultra: 2016



# Badwater 135 Ultramarathon Statistics, 1990–Present

Year	Starters	Finishers	Sub 60hr	Sub 48hr	Sub 40hr	Sub 34hr	New Record: Men	New Record: Women	Buckle Cut-Off
2022 (PM)	94	77	N/A	79%	56%	16%		24:09:34	48 Hours
2021 (PM)	84	68	N/A	81%	51%	20%			48 Hours
2019 (PM)	95	79	N/A	83%	56%	24%	21:33:01	24:13:24	48 Hours
2018 (PM)	99	69	N/A	70%	39%	23%			48 Hours
2017 (PM)	95	75	N/A	79%	52%	16%			48 Hours
2016 (PM)	97	84	N/A	87%	55%	25%	21:56:32	25:53:07	48 Hours
2015 (PM)	97	77	N/A	81%	57%	20%			48 Hours
<b>7 Year Avg</b>	<b>94.4</b>	<b>75.6</b>		<b>80%</b>	<b>52%</b>	<b>21%</b>			
2014 (AM)	97	83	N/A	86%	52%	23%			48 Hours
2013 (AM)	96	81	N/A	84%	39%	23%			48 Hours
2012 (AM)	96	89	N/A	93%	71%	34%			48 Hours
2011 (AM)	94	81	N/A	86%	76%	20%			48 Hours
2010 (AM)	80	73	91%	83%	51%	19%		26:16:12	48 Hours
<b>5 Year Avg</b>	<b>92.6</b>	<b>81.4</b>		<b>86%</b>	<b>58%</b>	<b>24%</b>			
2009 (AM)	86	75	87%	77%	47%	24%			48 Hours
2008 (AM)	82	75	91%	83%	37%	10%		26:51:33	48 Hours
2007 (AM)	84	78	93%	77%	47%	18%	22:51:29		48 Hours
2006 (AM)	85	67	79%	62%	24%	13%			48 Hours
2005 (AM)	81	67	83%	56%	22%	7%	24:36:08		48 Hours
<b>5 Year Avg</b>	<b>83.6</b>	<b>72.4</b>	<b>87%</b>	<b>71%</b>	<b>35%</b>	<b>14%</b>			
2004 (AM)	72	57	79%	58%	28%	8%			48 Hours
2003 (AM)	73	46	63%	42%	14%	5%			48 Hours
2002 (AM)	78	58	74%	47%	12%	4%		27:56:47	48 Hours
2001 (AM)	71	55	77%	46%	14%	7%			48 Hours
2000 (AM)	69	49	71%	41%	16%	12%	25:09:05	29:48:27	48 Hours
<b>5 Year Avg</b>	<b>72.6</b>	<b>53</b>	<b>73%</b>	<b>47%</b>	<b>17%</b>	<b>7%</b>			
1999 (AM)	42	33	78%	60%	26%	12%			48 Hours
1998 (AM)	29	20	69%	41%	17%	10%			48 Hours
1997 (AM)	27	20	74%	44%	26%	3%			48 Hours
1996 (AM)	23	14	61%	35%	1%	4%			45 Hours
1995 (PM)	24	16	67%	38%	13%	0%			45 Hours
<b>5 Year Avg</b>	<b>29</b>	<b>20.6</b>	<b>70%</b>	<b>44%</b>	<b>17%</b>	<b>6%</b>			
1994 (PM)	25	16	64%	32%	1%	4%			45 Hours
1993 (PM)	12	10	83%	50%	25%	17%			60 Hours
1992 (PM)	14	13	92%	29%	14%	14%	26:18:00		60 Hours
1991 (PM)	14	14	100%	71%	36%	14%	26:34:10	36:19:20	60 Hours
1990 (PM)	21	17	81%	29%	29%	14%	27:56:20	39:27:00	70 Hours
<b>5 Year Avg</b>	<b>17.2</b>	<b>14</b>	<b>84%</b>	<b>42%</b>	<b>21%</b>	<b>13%</b>			

# Unique Finishers' Nationality

Argentina	5
Armenia	1
Australia	22
Austria	12
Belgium	1
Bermuda	1
Bolivia	1
Brazil	31
Bulgaria	1
Canada	30
Cayman Islands	1
Chile	1
China	2
Colombia	1
Costa Rica	1
Cuba	1
Czech Republic	4
Denmark	7
El Salvador	2
Finland	1
France	32
Germany	48
Greece	4
Guatemala	3
Hungary	6
India	9
Iran	3
Ireland	6
Israel	1
Italy	19
Japan	12
Jordan	2
Kazakhstan	1
Latvia	1
Luxembourg	2
Malaysia	1
Mexico	15
Netherlands	2
New Zealand	5
Philippines	6
Poland	9
Portugal	6
Romania	1
Russia	4
Serbia	2
Singapore	3
Slovakia	1
Slovenia	1
South Africa	3
South Korea	2
Spain	8
Sweden	5
Switzerland	6
Taiwan	1
Ukraine	1
United Kingdom	54
USA	581
Uruguay	1
Venezuela	1
<b>Total Non-USA</b>	<b>413</b>
<b>Total</b>	<b>994</b>

## Age Group and \*Overall Course Records

Age Group	Men	Time	Women	Time
10-19	Nickademus Hollon, 19, USA, 2009	33:21:29	N/A	N/A
20-29	Pete Kostelnick, 28, USA, 2016	21:56:32	Jen Lee Segger, 28, Canada, 2008	32:31:57
30-39	Yoshihiko Ishikawa, 31, Japan, 2019*	21:33:01	Alyson Venti (Allen), 34, USA, 2016	25:53:07
40-49	Valmir Nunes, 43, Brazil, 2007	22:51:29	Ashley Paulson, 40, USA, 2022**	24:09:34
50-59	Charlie Engle, 50, USA, 2013	26:15:35	Irina Reutovich, 50, Russia, 2000	29:48:27
60-69	David Jones, 60, USA, 2012	30:33:19	Norma Roberts, 62, Canada, 2021	33:37:49
70-79	Arthur Webb, 70, USA, 2012	33:45:40	N/A	N/A
Youngest Ever	Nickademus Hollon, 19, USA, 2009	33:21:29	Breanna Cornell, 22, USA, 2014	44:58:21
Oldest Ever, 2011 to Present*	Bob Becker, 77, USA, 2022	48:17:27*	Pamela Chapman-Markle, 66, USA, 2022	44:09:55
Oldest Ever, 1987-2010*	Jack Denness, 75, UK, 2010	59:13:02*	Sigrid Eichner, 64, Germany, 2005	52:45:46*

♠ 48-Hr Era   ★ 60-Hr Era   \* Honorary Finisher   ♣ Race had a 48-hr cut-off for a buckle, but allowed up to 60 hrs for a medal

# Historical Data about Badwater 135, 1987-2022

**Total Number of Entrants: 2154**

\* 1686 Males, 468 Females (78.3% / 21.7%)

**Total Number of Unique Entrants: 1109**

\* 862 Males, 247 Females (77.7% / 22.3%)

**Total Unique Finishers, (any time limit): 987**

\* 752 Males, 235 Females (76.2% / 23.8%)

\* Time limits have been 70 hrs, 60 hrs, then 48 hrs

**Total Unique Finishers (48 hrs or less): 868**

\* 658 Males, 210 Females (75.8% / 24.2%)

**Total Unique Finishers (36 hours or less): 286**

\* 227 Males, 59 Females (79.4% / 20.6%)

**Comparison: Total Number of Mt. Everest Summits, as of 2016:**

**7,646 summits by 4,469 people (and in 2018, 800 people summited Everest.)**

## Numbers of Official Finishes, through 2022

**1-Time Finishers: 669**

(511 Males and 158 Females; 77.7% / 22.3%)

**2-Time Finishers: 175**

(136 Males and 39 Females; 76.5% / 23.5%)

**3-Time Finishers: 57**

(44 Males and 13 Females; 77% / 23%)

**4-Time Finishers: 25**

(16 Males and 9 Females; 62% / 38%)

**5-Time Finishers: 16**

(11 Males and 5 Females; 68.5% / 31.5%)

**6-Time Finishers: 6**

(Ruben R. Cantu, Charlie Engle, Zach Gingerich, Chris Moon, Hiroyuki Nishimura, Steven R. Silver)

**7-Time Finishers: 7** (Shannon Farar-Griever,

Grant Maughan, Frank McKinney, Mark Olson, Anthony Portera, Monica Scholz, Gerald Tabios)

**8-Time Finishers: 9** (Kimberlie Budzik, Amy Costa,

Eberhard Frixe, Jonathan Gunderson, Joshua Holmes\*, Mark Matayzic, Ian Parker, Keith Straw, Cheryl Zwarkowski)

**9-Time Finishers: 2** (Chris Frost, Oswaldo Lopez)

**10-Time Finishers: 4** (Ed Ettinghausen\*, Dean Karnazes,

Karla Kent\*, Lisa Smith-Batchen)

**11-Time Finishers: 3** (David Jones, Harvey Lewis\*,

Pam Reed)

**12-Time Finishers: 2** (Jack Denness, Dan Marinsik\*)

**13-Time Finishers: 1** (Scott Weber)

**14-Time Finishers: 3** (John Radich, Ray Sanchez\*,

Arthur Webb)

**15-Time Finishers: 1** (Danny Westergaard\*)

**20-Time Finishers: 1** (Marshall Ulrich)

(Those with an \* have all consecutive finishes)

## Men Who Have Run Under 26 Hours

Name	Age	Nationality	Year	Time
Yoshihiko Ishikawa	31	Japan	2019	21:33:01
Pete Kostelnick	28	USA	2016	21:56:32
Valmir Nunez	43	Brazil	2007	22:51:29
Mike Morton	40	USA	2012	22:52:55
Yoshihiko Ishikawa	34	Japan	2022	23:08:20
Jorge Pacheco	40	Mexico	2008	23:20:16
Pete Kostelnick	27	USA	2015	23:27:10
Oswaldo Lopez	40	Mexico	2012	23:32:28
Marco Farinazzo	40	Brazil	2009	23:39:18
Harvey Lewis	35	USA	2016	23:40:52
Oswaldo Lopez	39	Mexico	2011	23:41:40
Akos Konya	32	Hungary	2007	23:47:47
Akos Konya	33	Hungary	2008	23:49:44
Dan Lawson	43	United Kingdom	2016	23:52:43
Mick Thwaites	42	Australia	2016	23:52:43
Harvey Lewis	38	USA	2014	23:52:55
Iván Penalba Lopez	31	Spain	2022	24:02:57
Oswaldo Lopez	37	Mexico	2009	24:36:07
Scott Jurek	31	USA	2005	24:36:08
Carlos Sa	39	Portugal	2013	24:38:16
Grant Maughan	50	Australia	2014	24:43:08
Zach Gingerich	30	USA	2010	24:44:48
Ryoichi Sekiya	44	Japan	2011	24:49:37
Michele Graglia	34	Italy	2018	24:51:47
Grant Maughan	49	Australia	2013	24:53:57
Iino Wataru	37	Japan	2017	24:56:19
Oswaldo Lopez	38	Mexico	2010	25:05:38
Zach Gingerich	29	USA	2009	25:06:12
Anatoli Kruglikov	42	Russia	2000	25:09:05
Dusan Mravlje	47	Slovenia	2000	25:21:20
Oswaldo Lopez	41	Mexico	2013	25:27:03
Oswaldo Lopez	43	Mexico	2015	25:28:32
Jared Fetterolf	29	USA	2018	25:33:42
Scott Jurek	32	USA	2006	25:41:18
Marco Bonfiglio	39	Italy	2017	25:44:18
Charlie Engle	46	USA	2009	25:45:11
Zach Gingerich	32	USA	2012	25:49:40
David Goggins	32	USA	2007	25:49:40
Harvey Lewis	37	USA	2013	25:49:50
Harvey Lewis	45	USA	2021	25:50:23
Akos Konya	31	Hungary	2006	25:58:42

## Women Who Have Run Under 30 Hours

Name	Age	Nationality	Year	Time
Ashley Paulson	40	USA	2022	24:09:34
Patrycja Bereznowska	43	Poland	2019	24:13:24
Alyson Venti	34	USA	2016	25:53:07
Jamie Donaldson	35	USA	2010	26:16:12
Jamie Donaldson	34	USA	2009	27:20:18
Jamie Donaldson	33	USA	2008	26:51:33
Nikki Wynd	43	Australia	2015	27:23:27
Pam Reed	47	USA	2009	27:42:52
Pam Reed	41	USA	2002	27:56:47
Brenda Guajardo	41	USA	2019	28:23:10
Pam Reed	43	USA	2003	28:26:52
Alyson Venti	32	USA	2014	28:37:28
Brenda Guajardo	39	USA	2016	28:40:13
Georgia Jo Manta	44	Greece	2022	28:45:32
Pam Smith	43	USA	2018	28:47:53
Sumie Inagaki	45	Japan	2011	28:49:27
Pam Reed	48	USA	2009	29:03:09
Nikki Wynd	44	Australia	2016	29:06:00
Monica Scholz	37	Canada	2004	29:22:29
Gina Slaby	38	USA	2019	29:26:45
Pam Reed	53	USA	2014	29:30:04
Jennifer Vogel	30	USA	2011	29:42:12
Nikki Wynd	42	Australia	2013	29:44:33
Irina Reutovich	50	Russia	2000	29:48:27
Iris Cooper-Imhof	52	Canada	2011	29:51:23
Sumie Inagaki	46	Japan	2012	29:53:09
Catherine Todd	43	Australia	2013	29:55:29

To study and parse data and results from all the Badwater® races, visit: [dbase.adventurecorps.com](http://dbase.adventurecorps.com).



2022 Men's Champion Yoshihiko Ishikawa, 34, of Tokushima, Japan was first across the line in 23:08:20. This was his second finish, with a 21:33:01 course record finish and victory in 2019.



Rookie entrant and 2022 Women's Champion Ashley Paulson, 40, of St. George, Utah was third across the line in a new women's course record time of 24:09:34.



Rookie entrant Maria (Peachy) Poso, 50, of West Covina, CA and representing the Philippines, was the final female official finisher in 2022 with a time of 47:04:11.



Rookie entrant Tapani Tarnanen, 57, of Helsinki, Finland was the final male official finisher in 2022 with a time of 47:35:09.

# A SALUTE TO *KARLA KENT*



TEN-TIME  
CONSECUTIVE  
FINISHER

## What does Badwater mean to you?

*"Badwater means challenge, rough, demanding, one of a kind, crazy."*

## Why do you want to run again this year?

*"My friend and Badwater pacer Susan Schenberg recently left us unexpectedly and it is just another reminder of how precious our time here is. If I get in again, I will dedicate my race to her."*

## Karla's Badwater 135 History:

2012, age 49, 40:24:35  
2013, age 50, 46:24:30  
2014, age 51, 40:44:09  
2015, age 52, 44:44:12  
2016, age 53, 43:05:05  
2017, age 54, 43:09:03  
2018, age 55, 44:32:45  
2019, age 56, 40:24:15  
2021, age 58, 41:23:34  
2022, age 59, 39:09:40





The BADWATER® ULTRA CUP comprises Badwater Cape Fear in March, Badwater Salton Sea in late April, and Badwater 135 in July. Those runners who complete all three full-distance events in the same calendar year are featured on the Badwater website and their virtues are extolled throughout the Internet and in future editions of BADWATER Magazine.

## 2023 BADWATER ULTRA CUP CURRENT STANDINGS (CAPE FEAR + SALTON SEA)



**Amy Adams, #99**  
Combined Time: 37:16:15



**Sonia Ahuja, #91**  
Combined Time: 34:08:30



**Bobby Andrews, #42**  
Combined Time: 31:18:31



**David Castro, #73**  
Combined Time: 37:16:00



**Susie Chan, #88**  
Combined Time: 30:23:00



**Kevin Delk, #30**  
Combined Time: 32:17:00



**Kaylee Frederick, #18**  
Combined Time: 35:02:00



**Emily Lyons, #90**  
Combined Time: 35:25:45



**Hillary Peabody, #9**  
Combined Time: 39:25:00



**Maria Poso, #48**  
Combined Time: 38:59:01



**Keith Straw, #60**  
Combined Time: 35:32:01



**Amanda Wilson, #34**  
Combined Time: 28:43:00



**Charles Zuckerman, #55**  
Combined Time: 32:50:00



# 2023 Badwater 135 Official Race Roster

Wave	Bib#	Name	City	State	Country	Nationality	M/F	Age	# of BW135 Finishes
2000	99	Amy Adams	Manchester	MD	USA	USA	F	47	0
2200	87	Drew Adams	Twin Falls	ID	USA	USA	M	35	0
2100	21	David Aguayo	Atascadero	CA	USA	USA	M	47	0
2100	91	Sonia Ahuja	Thousand Oaks	CA	USA	India	F	47	0
2100	11	Noora Alidina	Clearwater	FL	USA	Jordan	F	66	4
2000	78	Pål Andersson	Beddingestrand		Sweden	Sweden	M	45	0
2100	42	Bobby Andrews	Port Orchard	WA	USA	USA	M	42	0
2000	82	Dan Aspromonte	Scotts Valley	CA	USA	USA	M	67	0
2000	29	Adil Beg	Mumbai		India	India	M	29	0
2100	2	Rachel Belmont	Tucson	AZ	USA	USA	F	26	0
2000	14	Natalie Bickers	Palmer	AK	USA	USA	F	48	0
2200	75	Starshine Blackford	Columbus	OH	USA	USA	F	47	1
2100	62	Lucien Boulet	North Miami Beach	FL	USA	USA	M	52	0
2100	47	Jason Brock	Kaysville	UT	USA	USA	M	47	0
2200	89	Shalev Brosh	Pardeš Hana		Israel	Israel	M	45	0
2200	6	Viktoria Brown	Whitby	ON	Canada	Hungary	F	47	0
2100	33	Jared Buchanan	Ellington	CT	USA	USA	M	33	0
2200	101	Shaun Burke	Durango	CO	USA	USA	M	36	0
2000	45	Bonnie Busch	Betterndorf	IA	USA	USA	F	65	5
2000	58	David Bushroe	Bellbrook	OH	USA	USA	M	58	0
2000	32	Alexandre Castello Branco	Rio de Janeiro		Brazil	Brazil	M	41	0
2000	73	David Castro	Marathon	FL	USA	USA	M	50	0
2100	88	Susie Chan	Bordon	Hampshire	United Kingdom	United Kingdom	F	48	0
2000	10	Pamela Chapman-Markle	SanLeon	TX	USA	USA	F	67	5
2200	46	Lori Chekal	Lynnfield	MA	USA	USA	F	46	1
2100	96	Juan Jose Coassolo	Crespo		Argentina	Argentina	M	47	0
2100	40	Ethan Coffey	Knoxville	TN	USA	USA	M	40	0
2000	17	Laura Cole	Brooksville	FL	USA	USA	F	54	0
2200	15	Maree Connor	Lambton		Australia	Australia	F	43	0
2000	25	Amy Costa	Ponte Vedra Beach	FL	USA	USA	F	58	8
2000	3	Taz Elizabeth Davis	Key West	FL	USA	USA	F	59	0
2200	54	Tim Deer	Charleston	WV	USA	USA	M	58	2
2200	5	Sierra DeGroff	Las Vegas	NV	USA	USA	F	32	0
2100	30	Kevin Delk	Knoxville	TN	USA	USA	M	40	5
2200	13	Julie Fingar	Roseville	CA	USA	USA	F	47	1
2000	68	Dawn Forman-Lisenby	Flagler Beach	FL	USA	USA	F	55	0
2000	18	Kaylee Frederick	Johnstown	PA	USA	USA	F	18	0
2100	37	Simon Guerard	Carlsbad	CA	USA	Canada	M	37	0
2200	24	Jonathan Gunderson	San Bruno	CA	USA	USA	M	45	8
2000	7	Aaron Hale	Santa Rosa Beach	FL	USA	USA	M	45	0
2100	36	Joshua Holmes	Los Angeles	CA	USA	USA	M	45	8
2200	95	Simen Holvik	Hundvaag		Norway	Norway	M	46	0
2000	77	Leanne Hood	Key West	FL	USA	USA	F	54	0
2200	23	Eric Hunziker	Cincinnati	OH	USA	USA	M	54	2
2200	59	Yoshihiko Ishikawa	Tokushima		Japan	Japan	M	35	2
2200	83	Thor Johansen	Prescott Valley	AZ	USA	USA	M	47	0
2000	12	David Jones	Murfreesboro	TN	USA	USA	M	71	11
2100	16	Jessica Jones	Dauphin Island	AL	USA	USA	F	45	0
2100	8	Kerri Kanuga	Grand Cayman		Cayman Islands	Cayman Islands	F	53	5
2000	49	Karla Kent	Las Vegas	NV	Czech Republic	Czech Republic	F	60	10
2000	52	Peter Kline	Bellevue	WA	USA	USA	M	70	0
2100	19	Emilia Aleksandra Kotkowiak	Lacchiarella		Italy	Italy	F	35	0
2000	28	Christian Landresse	Luxembourg		Luxembourg	Luxembourg	M	53	0
2200	35	Harvey Lewis	Cincinnati	OH	USA	USA	M	47	11
2200	26	Caryn Lubetsky	Miami Shores	FL	USA	USA	F	52	3
2000	90	Emily Lyons	Castle Hayne	NC	USA	USA	F	32	0
2100	92	Emilio Martinez	Arleta	CA	USA	El Salvador	M	53	1
2100	38	Melissa McKeehan	Dana Point	CA	USA	USA	F	38	0
2000	93	Andrew Mckillop	St Albans		United Kingdom	United Kingdom	M	52	0
2000	74	Brian Medley	Folsom	CA	USA	USA	M	49	1
2200	31	Mirko Bogomir Miklic	Ljubljana		Slovenia	Slovenia	M	57	0
2100	97	Kornel Miszczak	Klecza Dolna		Poland	Poland	M	25	0
2100	67	Francesca Muccini	Nashville	TN	USA	Italy	F	55	0
2200	64	Todd Nott	Plattsmouth	NE	USA	USA	M	59	2
2000	53	Ray O'Connor	Galway		Ireland	Ireland	M	53	0
2000	57	Thomas O'Connor	Galway		Ireland	Ireland	M	57	0
2000	65	Manny Olivo	San Antonio	TX	USA	USA	M	51	0
2000	56	Jörg Ostrzinski	Köln		Germany	Germany	M	56	0
2200	100	Ashley Paulson	St George	UT	USA	USA	F	41	1
2000	9	Hillary Peabody	Washington	DC	USA	USA	F	36	0
2200	85	Iván Penalba Lopez	Valencia		Spain	Spain	M	32	1

Wave	Bib#	Name	City	State	Country	Nationality	M/F	Age	# of BW135 Finishes
2000	51	Idan Peretz	Shoham		Israel	Israel	M	51	0
2000	48	Maria (Peachy) Poso	West Covina	CA	USA	Philippines	F	51	1
2000	70	Linda Quirk	Las Vegas	NV	USA	USA	F	70	1
2200	76	Nina Raver Shapira	Rehovot		Israel	Israel	F	47	0
2000	79	Manmadh Rebba	Secunderabad		India	India	M	44	0
2100	1	Pam Reed	Jackson	WY	USA	USA	F	62	11
2200	94	Blain Reeves	Pembroke Pines	FL	USA	USA	M	58	0
2000	50	Zilma Rodrigues Da Silva	Sao Paulo		Brazil	Brazil	F	50	0
2000	66	Ronald Ross	Medina	OH	USA	USA	M	65	0
2200	41	Ray Sanchez	Sacramento	CA	USA	USA	M	56	14
2100	61	Vincenzo Santillo	Marcianise		Italy	Italy	M	43	0
2200	39	Jeremy Scanlan	Louisville	CO	USA	USA	M	40	1
2100	27	Martin Sengo	Auburn	CA	USA	USA	M	42	0
2200	81	Jose Jose	Chula Vista	CA	USA	Mexico	M	42	0
2100	72	Jens Sperlich	Hohennölsen		Germany	Germany	M	50	0
2000	60	Keith Straw	Malvern	PA	USA	United Kingdom	M	68	8
2100	63	Sandy Suckling	Ashwood		Australia	Australia	F	63	1
2100	71	Todd Sullivan	Ford Wayne	IN	USA	USA	M	49	0
2200	43	Kazuyuki Takahashi	Yamagata		Japan	Japan	M	45	0
2200	80	Ian Thomas	Norwich		United Kingdom	United Kingdom	M	64	0
2000	20	Cristina Vasilache	Houston	TX	USA	Romania	F	43	0
2100	4	Laura Watts	Bognor Regis		United Kingdom	United Kingdom	F	46	1
2100	22	Michelle West	Costa Mesa	CA	USA	USA	F	51	4
2100	84	Danny Westergaard	Palos Verdes Estates	CA	USA	USA	M	64	15
2200	86	Lee Whitaker	Fort Mill	SC	USA	USA	M	49	3
2100	34	Amanda Wilson	Lillington	NC	USA	USA	F	40	0
2000	98	Justin Yonker	Winter Park	FL	USA	USA	M	50	0
2000	55	Charles Zuckerman	San Francisco	CA	USA	USA	M	55	0
2100	69	Tomek Zysko	Otrebusy		Poland	Poland	M	53	0

## 2023 Badwater 135 Roster Quick Reference

Bib#	Name	Bib#	Name	Bib#	Name
1	Pam Reed	35	Harvey Lewis	70	Linda Quirk
2	Rachel Belmont	36	Joshua Holmes	71	Todd Sullivan
3	Taz Elizabeth Davis	37	Simon Guerard	72	Jens Sperlich
4	Laura Watts	38	Melissa McKeehan	73	David Castro
5	Sierra DeGroff	39	Jeremy Scanlan	74	Brian Medley
6	Viktoria Brown	40	Ethan Coffey	75	Starshine Blackford
7	Aaron Hale	41	Ray Sanchez	76	Nina Raver Shapira
8	Kerri Kanuga	42	Bobby Andrews	77	Leanne Hood
9	Hillary Peabody	43	Kazuyuki Takahashi	78	Pål Andersson
10	Pamela Chapman-Markle	45	Bonnie Busch	79	Manmadh Rebba
11	Noora Alidina	46	Lori Chekal	80	Ian Thomas
12	David Jones	47	Jason Brock	81	Jose Jose
13	Julie Fingar	48	Maria (Peachy) Poso	82	Dan Aspromonte
14	Natalie Bickers	49	Karla Kent	83	Thor Johansen
15	Maree Connor	50	Zilma Rodrigues Da Silva	84	Danny Westergaard
16	Jessica Jones	51	Idan Peretz	85	Iván Penalba Lopez
17	Laura Cole	52	Peter Kline	86	Lee Whitaker
18	Kaylee Frederick	53	Ray O'Connor	87	Drew Adams
19	Emilia Aleksandra Kotkowiak	54	Tim Deer	88	Susie Chan
20	Cristina Vasilache	55	Charles Zuckerman	89	Shalev Brosh
21	David Aguayo	56	Jörg Ostrzinski	90	Emily Lyons
22	Michelle West	57	Thomas O'Connor	91	Sonia Ahuja
23	Eric Hunziker	58	David Bushroe	92	Emilio Martinez
24	Jonathan Gunderson	59	Yoshihiko Ishikawa	93	Andrew Mckillop
25	Amy Costa	60	Keith Straw	94	Blain Reeves
26	Caryn Lubetsky	61	Vincenzo Santillo	95	Simen Holvik
27	Martin Sengo	62	Lucien Boulet	96	Juan Jose Coassolo
28	Christian Landresse	63	Sandy Suckling	97	Kornel Miszczak
29	Adil Beg	64	Todd Nott	98	Justin Yonker
30	Kevin Delk	65	Manny Olivo	99	Amy Adams
31	Mirko Bogomir Miklic	66	Ronald Ross	100	Ashley Paulson
32	Alexandre Castello Branco	67	Francesca Muccini	101	Shaun Burke
33	Jared Buchanan	68	Dawn Forman-Lisenby		
34	Amanda Wilson	69	Tomek Zysko		

