

Bulletin 1

June 12, 2019



International
Rogaining
Federation



NORTH AMERICAN
ORIENTEERING
CHAMPIONSHIPS

NORTH AMERICAN
JUNIOR AND YOUTH
ORIENTEERING CHAMPS

WORLD
ROGAINING
CHAMPIONSHIPS

21 JULY - 2 AUGUST, 2020
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1. Introduction

Eureka! Two Weeks of World Class Map Events in the World's Favorite Playground!

Whether uttered by Archimedes in Ancient Greece, miners during the California Gold Rush, or participants of the 2020 Cal-O-Fest (when discovering the awe inspiring orienteering terrain California offers), the term "Eureka!" is a fitting motto for both the State of California (yes, it is the state's official motto) and for this Cal-O-Fest as well.

"Eureka" is Greek for "I found it" and it is a simple, beautiful way to express something that we, as Orienteers and Rogainers, often experience in this sport we know and love. Every time we come upon that orange-and-white control marker, our inner voice erupts "Eureka!" and we are filled with an instant shot of joy, energy and excitement. We know you will be filled with the same joy and excitement over and over during this crazy cool navigation sports party in the woods.

California really is that amazing - come see for yourself.



California Orienteering Festival Steering Team

Erik Blake, Jay Hann, Mats Jansson, Tapio Karras, Gary Kraght, Stephanie MacLean, Marie-Josée Parayre, Gavin Wyatt-Mair



2. Welcome



Clare Durand, President of Orienteering USA

Welcome!

As President of Orienteering USA and a Californian, I would like to welcome you to the 2020 California Orienteering Festival. From coastal redwoods to the alpine beauty of Lake Tahoe, you will experience some of the best terrain the west has to offer. Incorporating both the North American Orienteering Championships and the World Rogaining Championships, the festival has races for orienteers of all abilities, all ages, and all

interests.

Bay Area Orienteering Club and all of the organizers have a sterling reputation for putting on high quality events. Whether you're attending as an elite competitor, challenging in your age class, or simply enjoying an adventurous orienteering vacation, you won't be disappointed. The festival also affords opportunities to see some of the wonders of California. Spend a day in San Francisco taking in views of the historic Golden Gate Bridge then explore the majesty of Lake Tahoe with paddle boarding or a more leisurely dinner cruise. Wherever you choose to wander, we're happy to have you visiting and hope your adventures are satisfying and your navigation is sharp.

California, here I come!



3. Invitation



Bud Laird, Chairman of the US Rogaining Committee

On behalf of Orienteering USA, and the organizers of the 17th World Rogaining Championships, I invite the world of wilderness sports enthusiasts to this first festival in North America featuring both Orienteering and Rogaining Championship-level events. The Rogaining committee of Orienteering USA has been working together with the International Rogaining Federation to make this an experience worthy of the legacy of many fine World Rogaining Championship events held throughout the world during the past decades.

I would like to share with you some personal reflections about the 17th WRC. As the California Orienteering Festival organizers have stated, this event is to be held in a world famous resort area known for its pristine beauty and outstanding opportunities for recreation and relaxation. I have personally hiked the trails in this locale, rafted its rivers, camped amongst the towering pines, biked its miles of bike paths, canoed in its alpine lakes, and ridden its ski area chairlifts (I don't ski). It is a place that I never tire of visiting, and always enjoy sharing with others coming from far and wide to experience the unique environment of Lake Tahoe – a lake so pure and clean that you can see eighty feet or more into its depths. I live 20 minutes from the grandeur of Yosemite National Park, but North Lake Tahoe will always be my favorite alpine wilderness area. I hope that the world's wilderness sports enthusiasts will find the same enduring sense of wonder and gratitude for this special place, and join us for an adventure into this wilderness realm at the event put on by our experienced team of Rogainers and Rogaining groups. Welcome to you all, stay for a while, compete fairly and well, and take away memories of beauty along with fellowship in sport.

Gavin Wyatt-Mair, Director of California Orienteering Festival 2020:

To all Orienteers and Rogainers of the world: We invite you to join us in beautiful California for the 2020 California Orienteering Festival. Our organizers, partners, sponsors and volunteers are working to bring you the biggest Orienteering and Rogaining festival ever held in North America. We have constructed an outstanding program of Championship-quality events for your adventure and entertainment. Our program comprises 10 high-level events spread across two weeks in a wide variety of challenging terrain that is unique to the West Coast of the United States. You will enjoy the eclectic pleasures of the great City of San Francisco, orienteer in an ancient Giant Redwood forest, and be challenged by the high alpine forests around the scenic Lake Tahoe resort area. Our events are designed to appeal to Orienteers and Rogainers of all abilities, ages and genders. Y'all come!



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4. Organizers and supporters

Organization	Type	Function
	National Federation	Sponsor
	Club, based in the San Francisco Bay Area	Primary Host
	Rogaining Club, based in Northern California	Rogaine support
	Club, based in the Sacramento area	Midweek event host
	Club, based at Truckee	Midweek event host
	Club, based in the San Francisco East Bay	Midweek event host
 Western Race Services	Company, based in the San Francisco East Bay	Timing and Results
	Club, based in the Seattle area	NAOC starts
	Large resort company, landowners	Event center and logistics, support and access
	Landowners	Support and access



5. Program of events

WRE=World ranking event NRE=National Ranking Event WRC= World Rogaining Championships

Date	Stage	Map and location	Event	Time (first start to course closed)
Tuesday Jul 21	1	Golden Gate Park San Francisco	Middle NRE	11:00 – 16:00
Wednesday Jul 22	2	Ancient Redwoods Park Santa Cruz County	Long NRE	10:00 – 16:00
Thursday Jul 23	3	The Presidio San Francisco	Sprint NRE	9:00 – 13:00
Friday Jul 24		Northstar California Resort Lake Tahoe	Model	9:00 – 18:00
			NAOC opening ceremony	13:00 – 13:15
	4		NAOC Sprint WRE, NRE	14:00 – 18:00
Saturday July 25	5	Spooner Lake State Park Lake Tahoe, Nevada	NAOC Middle WRE, NRE	10:00 – 15:00
		Northstar California Resort	Banquet and Awards	18:00 – 20:00
Sunday Jul 26	6	Independence Creek Truckee	NAOC Long WRE, NRE	09:30 – 15:30
Monday Jul 27	7	Northstar California Resort Lake Tahoe, California	NAOC relay Club Relay	10:00 – 14:00
			Awards and NAOC closing ceremony	14:00 – 14:30
Tuesday Jul 28		Rest day	Entertainment	
Wednesday Jul 29	8	Little Truckee Summit Truckee	Middle NRE	10:00 – 15:00
		Boreal Ridge / Castle Peak Truckee	WRC Model	10:00 – 16:00
Thursday Jul 30	9	Independence Creek Truckee	Long NRE	09:30 – 15:30
		Boreal Ridge / Castle Peak Truckee	WRC Model	10:00 – 16:00
Friday Jul 31		Boreal Ridge / Castle Peak Truckee	WRC Model	09:00 – 16:00
		Northstar California Resort	WRC Opening Ceremony & Dinner	17:30 – 19:00
Saturday Aug 1	10	Northstar Northstar California Resort	World Rogaining Championships	12:00 – 12:00
Sunday Aug 2				Awards at 13:00



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6. Maps and Terrain

Overview of stage locations

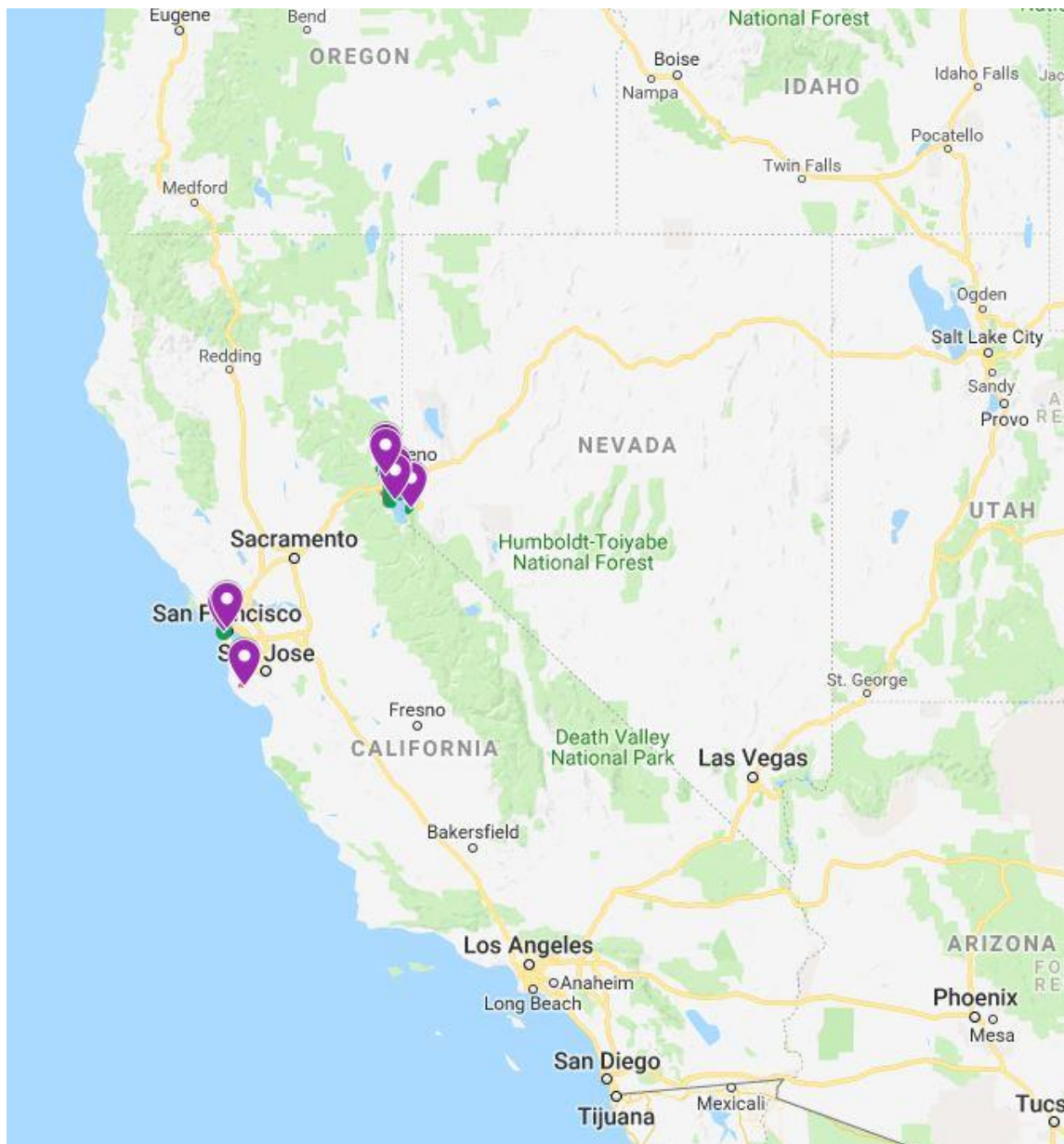




Stage locations and embargoes

Click this link to access an interactive map showing the stage locations and embargoes:

<https://tinyurl.com/y6n55yhg>





Stage 1 San Francisco Golden Gate Park Middle NRE July 21

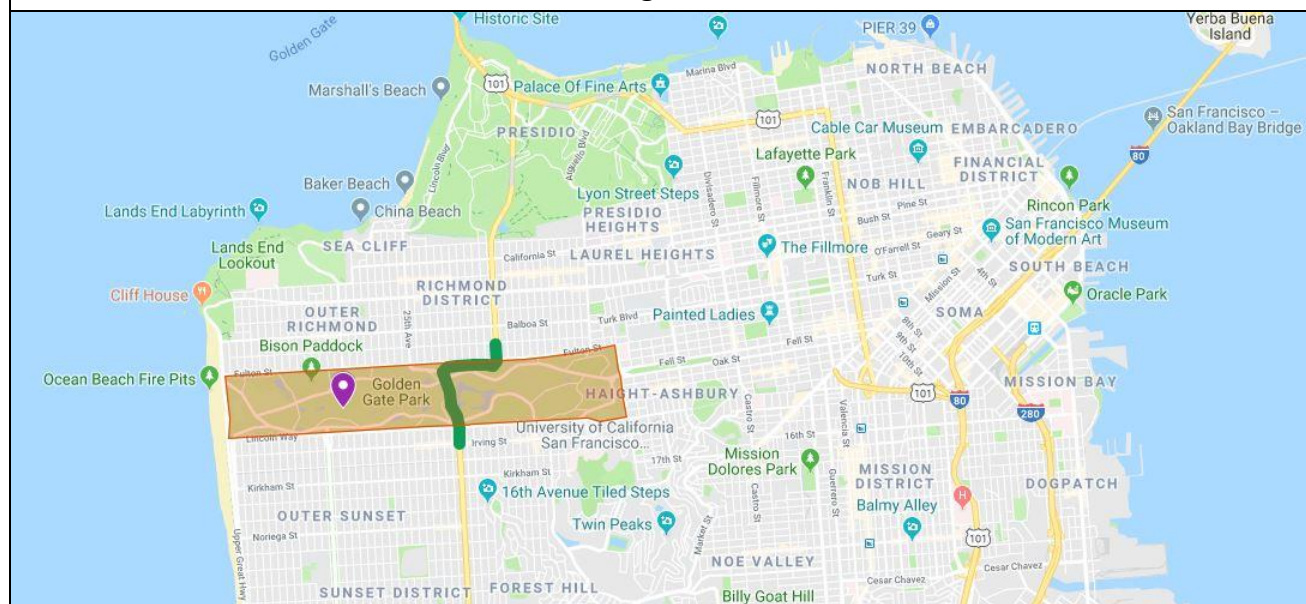
Stage	Map Name	Location	Distance from Event Center	Event	Event Date	Embargo starts	Scale	Contour
1	Golden Gate Park	San Francisco	Not applicable	Middle NRE	Tuesday July 21	January 1, 2020	1:7,500	3 m



Urban park



Embargoed area





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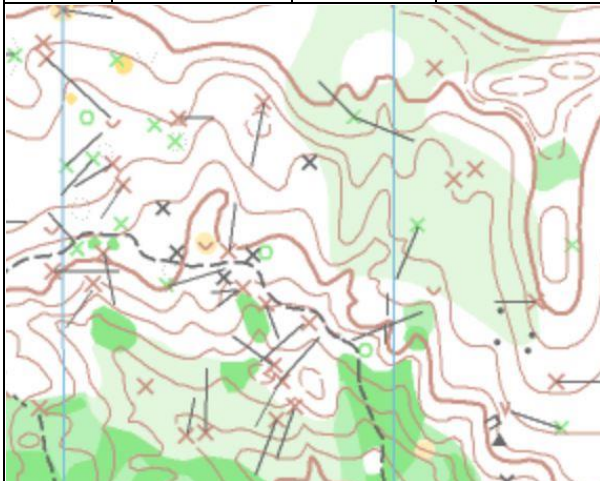
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Stage 2 Santa Cruz Ancient Redwoods Long NRE July 22

Stage	Map Name	Location	Distance from Event Center	Event	Event Date	Embargo starts	Scale	Contour
2	Ancient Redwoods	Santa Cruz	Not applicable	Long NRE	Wednesday July 22	April 1, 2019	1:7,500 1:10,000	5 m



Ancient Redwoods Forest



Embargoed area





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Stage 3 San Francisco Presidio Sprint NRE July 23

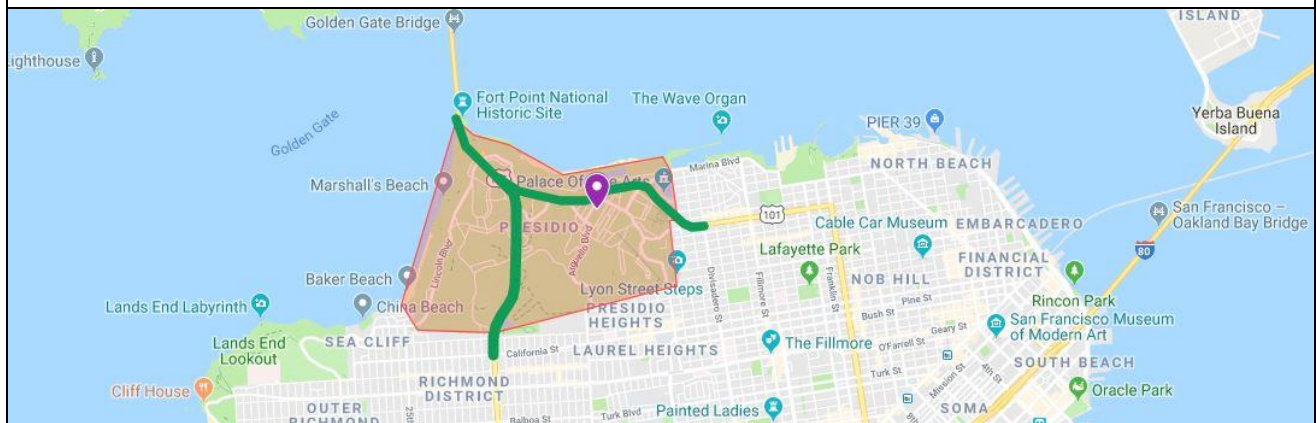
Stage	Map Name	Location	Distance from Event Center	Event	Event Date	Embargo starts	Scale	Contour
3	The Presidio	San Francisco	Not applicable	Sprint NRE	Thursday Morning July 23	January 1, 2020	1:4,000	2.5 m



Urban park



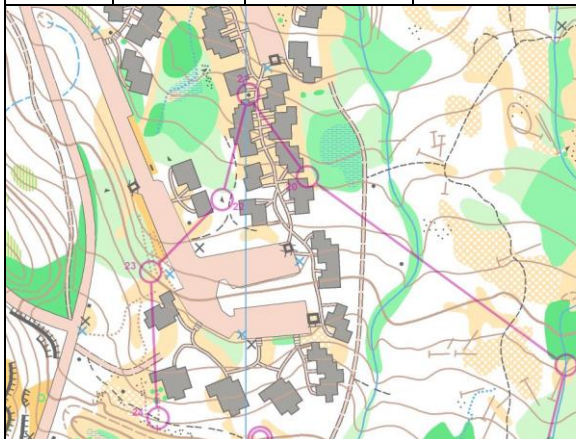
Embargoed area





Stage 4 Northstar NAOC Sprint WRE July 24

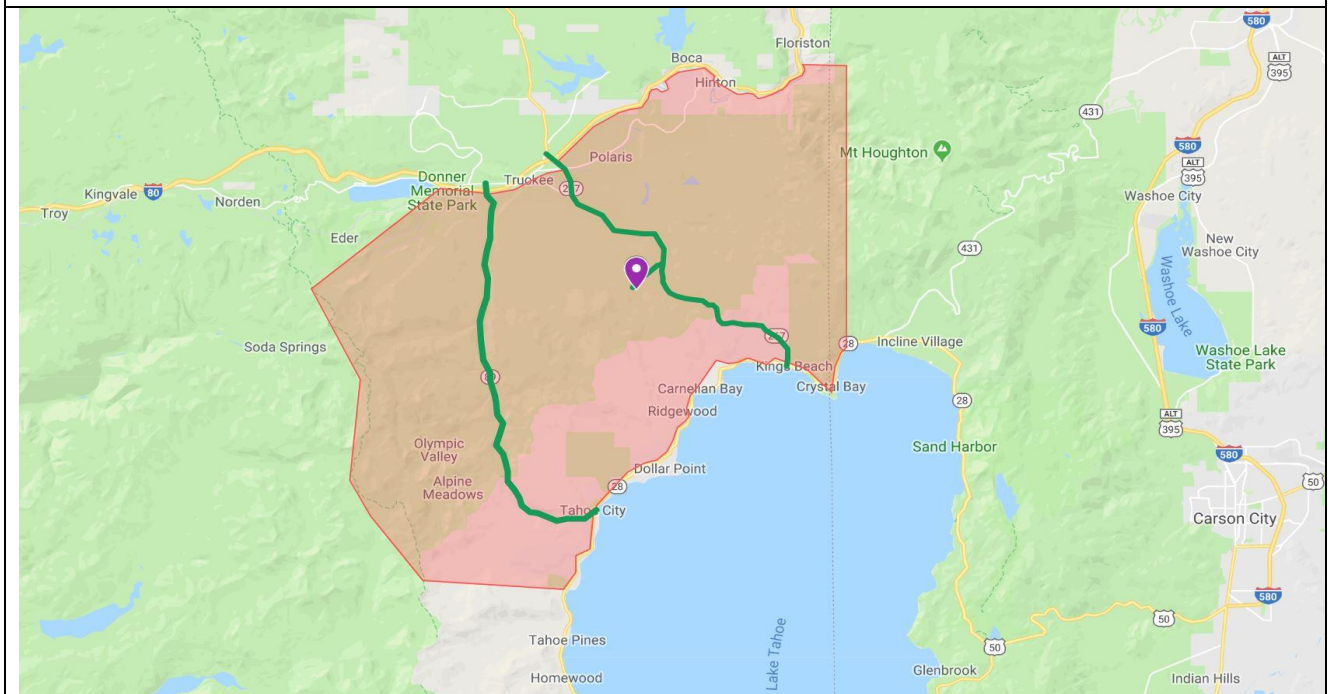
Stage	Map Name	Location	Distance from Event Center	Event	Event Date	Embargo starts	Scale	Contour
4	Northstar	Northstar California Resort	0 km	Sprint WRE	Friday Afternoon July 24	April 1, 2019	1:4,000	2.5 m



Urban and forested resort;
2000 m altitude



Embargoed area





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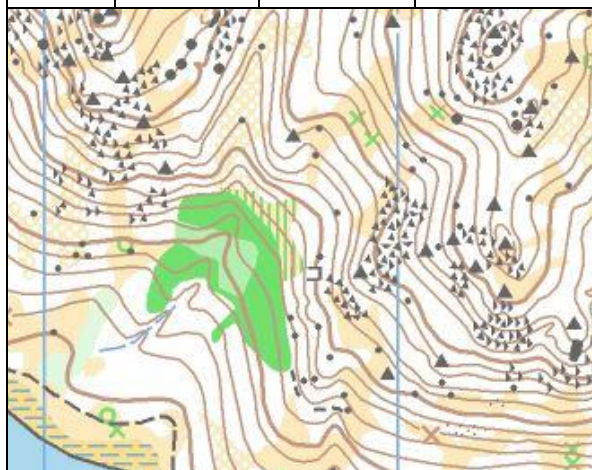
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Stage 5 Spooner Lake NAOC Middle WRE July 25

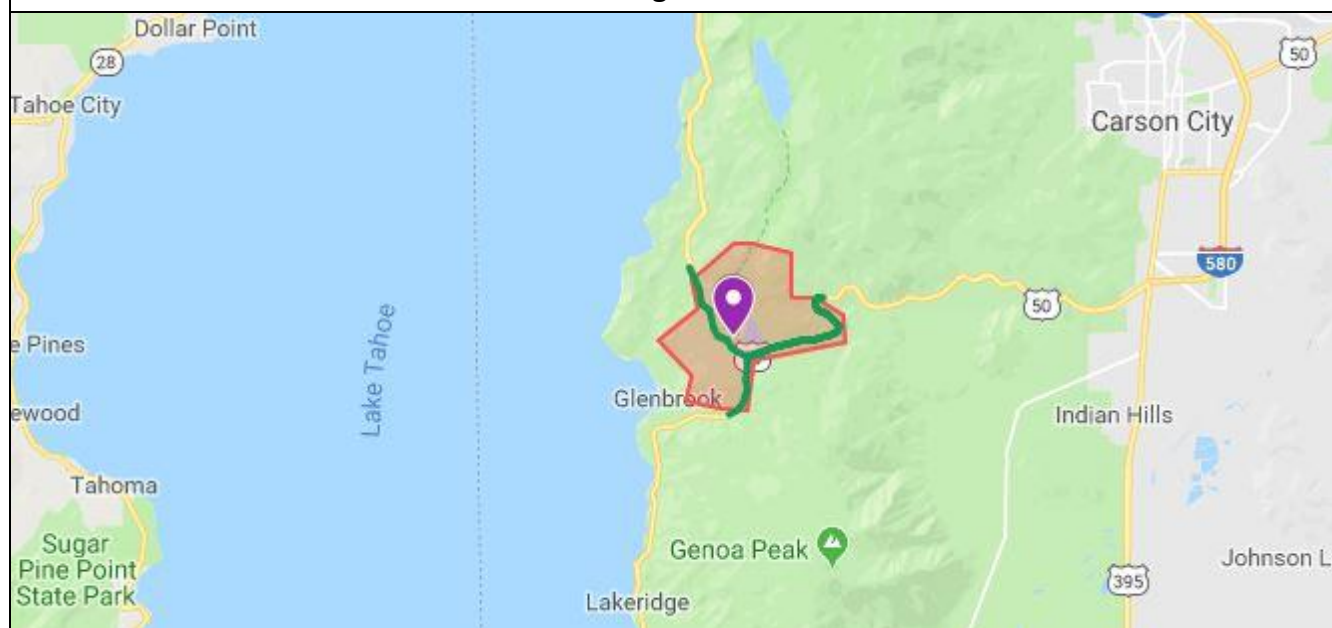
Stage	Map Name	Location	Distance from Event Center	Event	Event Date	Embargo starts	Scale	Contour
5	Spooner Lake	East Lake Tahoe, Nevada	40 km	Middle WRE	Saturday July 25	April 1, 2019	1:7,500 1:10,000	5 m



Alpine forest;
2000 m altitude



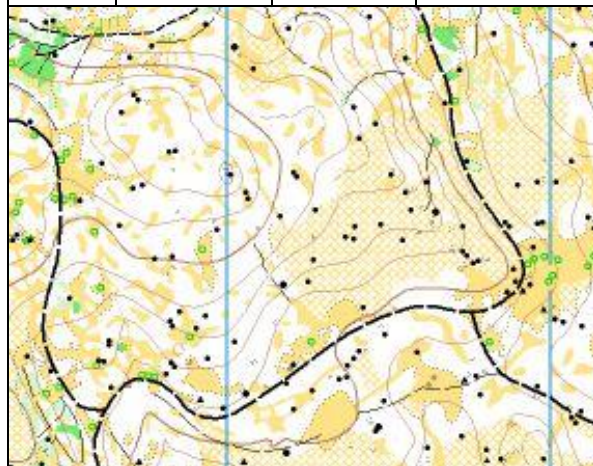
Embargoed area





Stage 6 Independence Creek NAOC Long WRE July 26

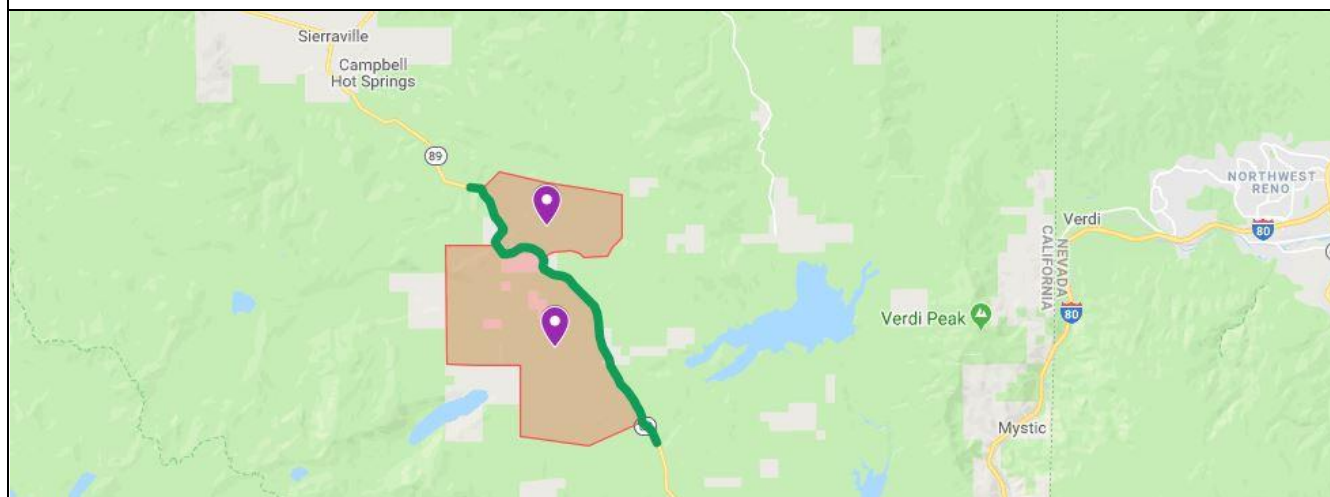
Stage	Map Name	Location	Distance from Event Center	Event	Event Date	Embargo starts	Scale	Contour
6	Independence Creek	Truckee	25 km	Long WRE	Sunday July 26	April 1, 2019	1:7,500 1:10,000 1:15,000	5 m



Alpine forest;
2000 m altitude



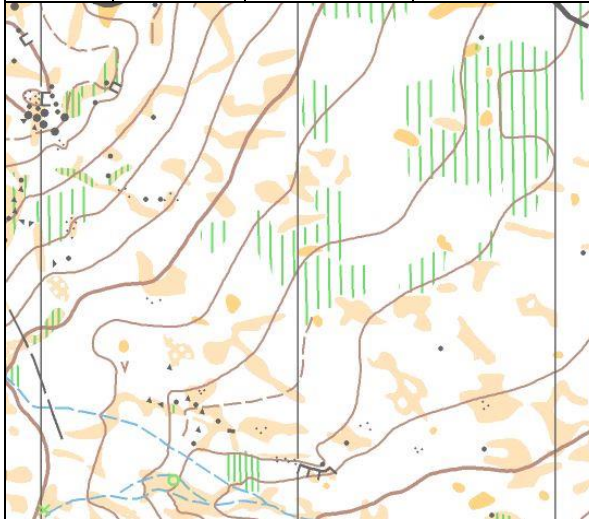
Embargoed area





Stage 7 Northstar NAOC Relay July 27

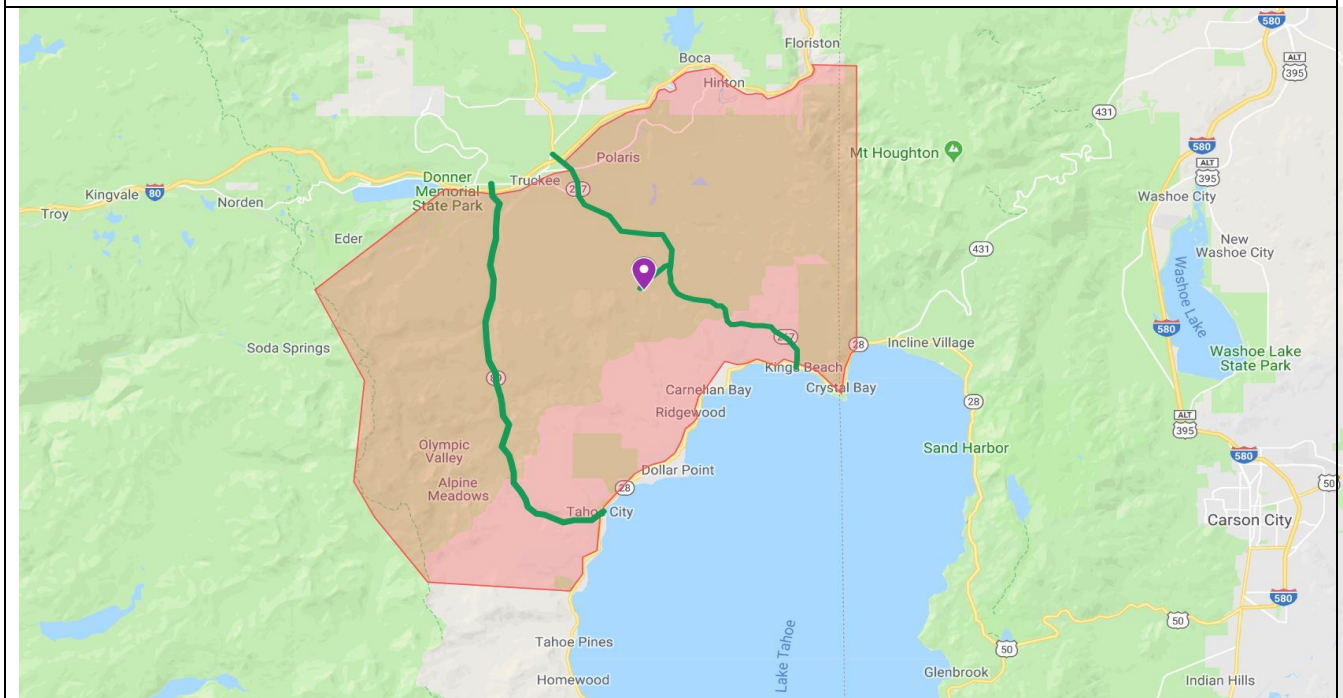
Stage	Map Name	Location	Distance from Event Center	Event	Event Date	Embargo starts	Scale	Contour
7	Northstar	Northstar California Resort	0 km	Relays	Monday July 27	April 1, 2019	1:7,500 1:10,000	5 m



Alpine forest;
2000 m altitude



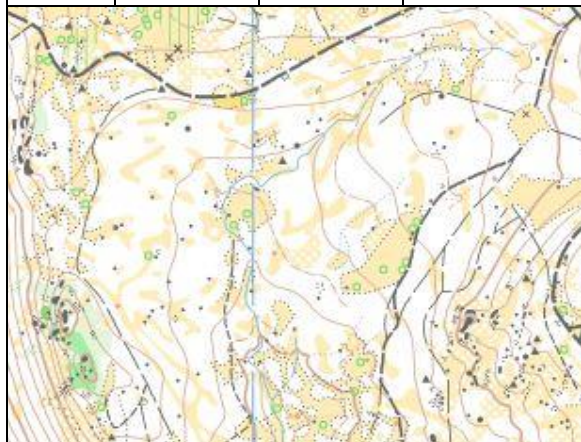
Embargoed area





Stage 8 Little Truckee Summit Middle NRE July 29

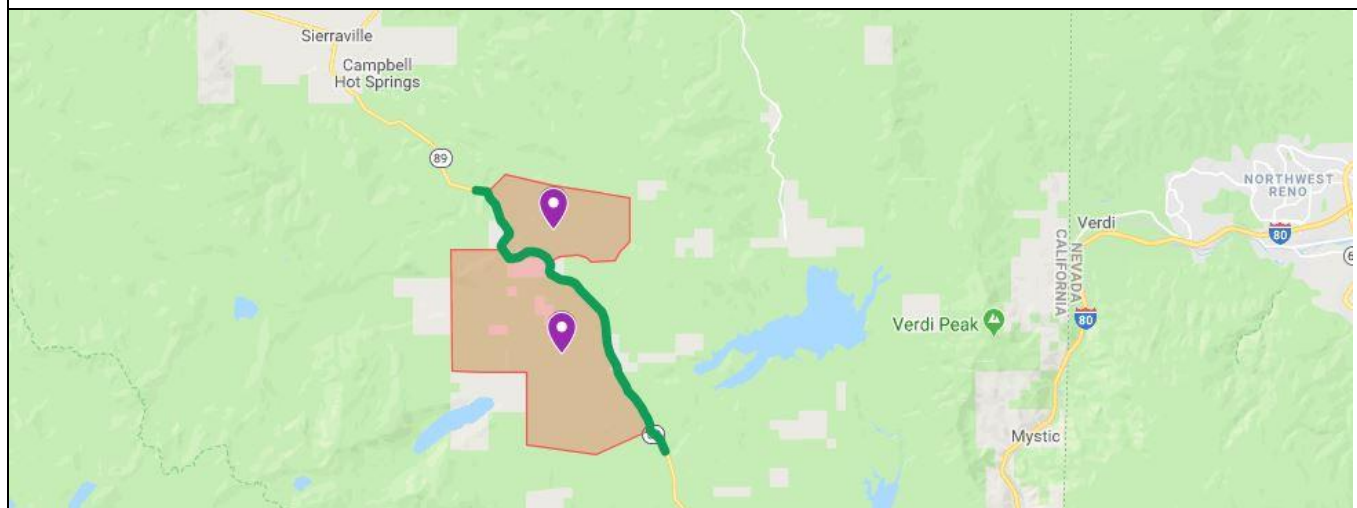
Stage	Map Name	Location	Distance from Event Center	Event	Event Date	Embargo starts	Scale	Contour
8	Little Truckee Summit	Truckee	35 km	Middle NRE	Wednesday July 29	April 1, 2019	1:7,500 1:10,000	5 m



Alpine forest;
2000 m altitude



Embargoed area





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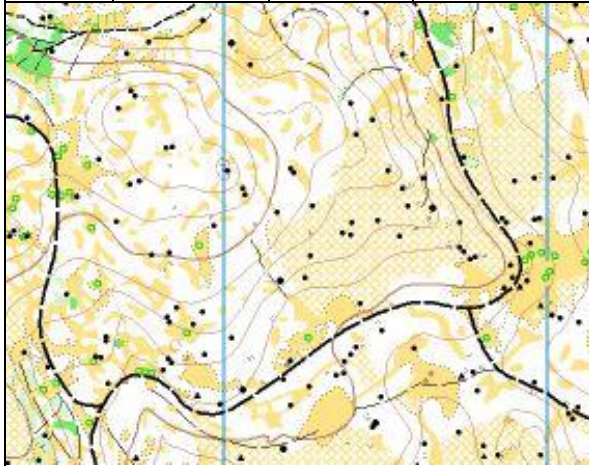
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Stage 9 Independence Creek Long NRE July 30

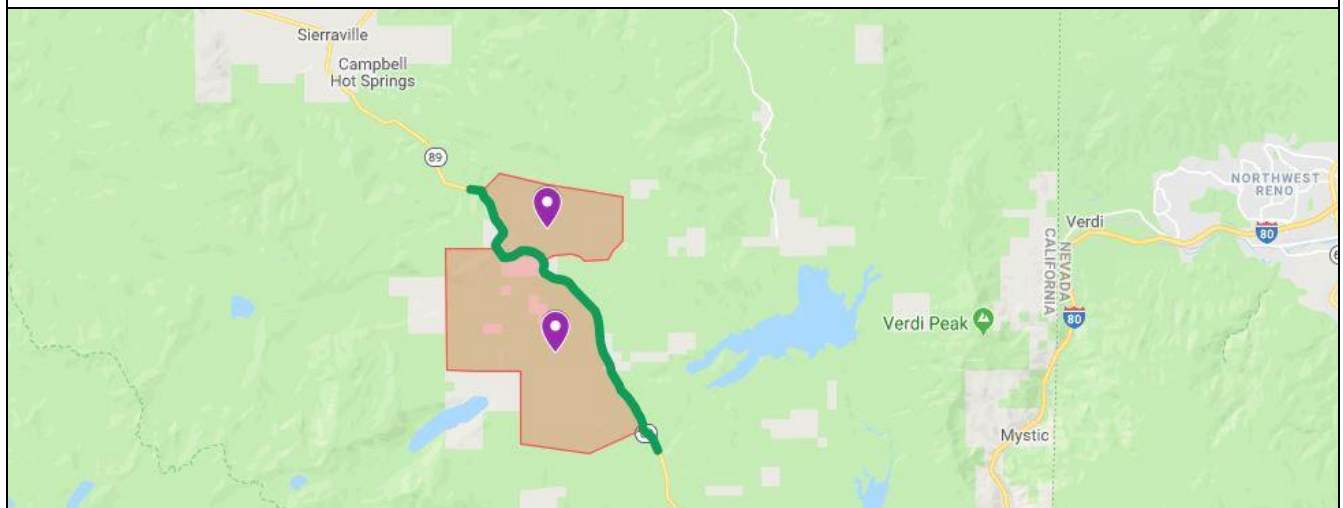
Stage	Map Name	Location	Distance from Event Center	Event	Event Date	Embargo starts	Scale	Contour
9	Independence Creek	Truckee	25 km	Long NRE	Thursday July 30	April 1, 2019	1:7,500 1:10,000	5 m



Alpine forest;
2000 m altitude



Embargoed area





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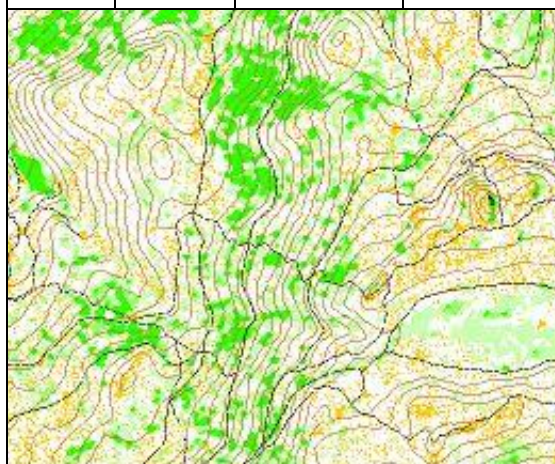
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Stage 10 Northstar World Rogaining Championships August 1-2

Stage	Map Name	Location	Distance from Event Center	Event	Event Date	Embargo starts	Scale	Contour
10	Northstar	Northstar California Resort	0 km	World Rogaining Champs WRC	Saturday August 1- Sunday August 2	April 1, 2019	1:25,000	10 m

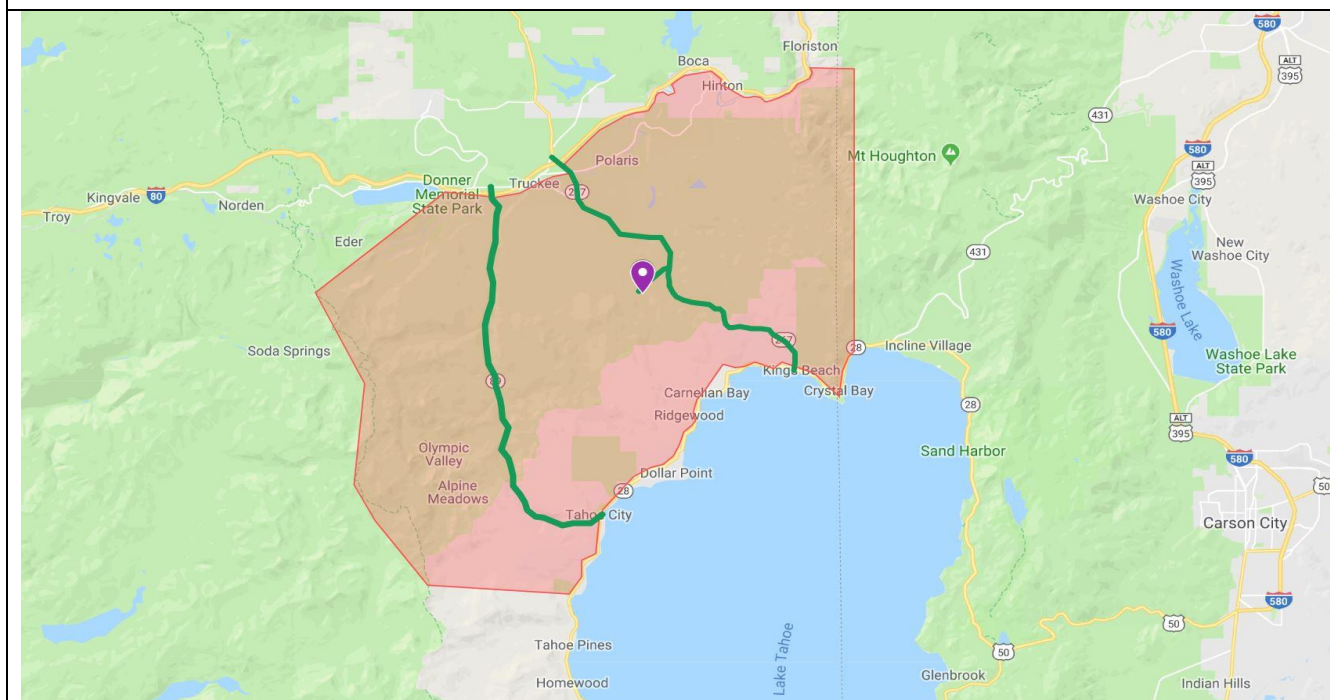


Alpine forest and meadows;

1900 – 2700 m altitude



Embargoed area





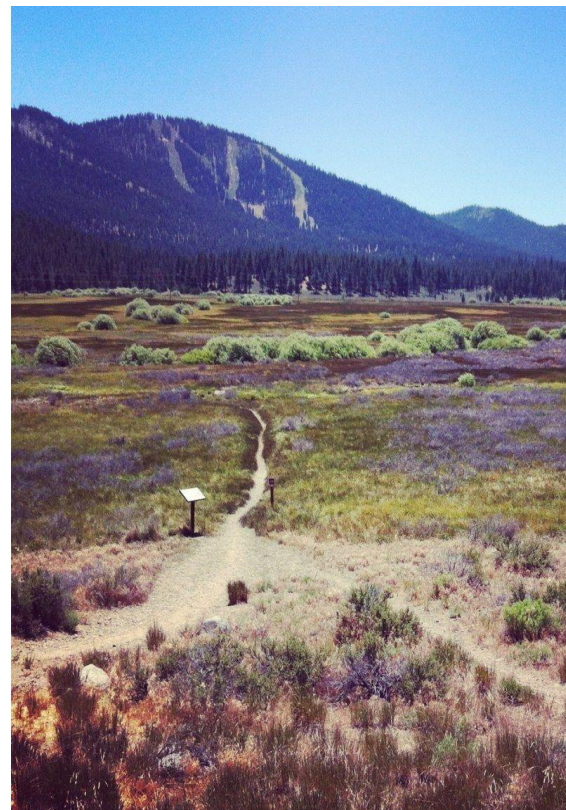
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The World Rogaining Championships competition area is about 200 km² in size located in the Sierra Nevada mountain range north of Lake Tahoe, in California. The average altitude in the area is around 2300m, the highest point is 2700m, and the lowest point is about 1900m. Slopes are mostly hilly with some steep areas and deep ravines. Snow covers the area for 7-8 months of the year which contributes to the forest being very open and runnable with just small patches of thick vegetation. The forest ranges from open grassy areas to mainly pine forest and some rocky outcrops. Streams in the area will be mostly low during the summer.





7. Event Center

The event centers for Stages 1-3 will be announced in Bulletin 2.

The event center for Stages 4-10 is Northstar California Resort, an all-weather recreation center in the beautiful Lake Tahoe region of California. It is 300 km north-east of San Francisco, and 60 km south-west of Reno, Nevada, both of which have major airports. The competition area is in the Sierra Nevada mountains, and is readily accessible by major roads.

Tourism and recreation are a major part of the area economy, with so many opportunities for adventure and fun that many participants will choose to schedule significant time before and/or after the events to participate in many activities. The following images give an indication of the appeal of this area to outdoors sports enthusiasts of every kind:



Northstar California Resort Hotel



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Emerald Bay, Lake Tahoe



8. Transportation and accommodation

Passports are needed to enter the United States. For visa information, please visit the federal travel website: <http://travel.state.gov/content/visas/en.html>

Transport to the Northstar Event Center is by car or bus from Truckee, California or Reno, Nevada or from Sacramento, San Francisco, San Jose or Oakland, California. All airports have many rental car agencies, and Uber or Lyft (private taxi service) are also available. Amtrak can get you by rail to Truckee, Reno, San Francisco, Sacramento, San Jose or Oakland from US major cities.

The Northstar event center is about 60 km, or 45 minutes by car, from Reno, Nevada, and about 1½ hours by frequent commercial bus. There is a reservable shuttle that operates daily from Reno-Tahoe airport to Northstar. Uber or Lyft private taxi fare from Reno-Tahoe Airport is about \$59.00. Interstate Highway 80 northeast through Sacramento and Truckee is the fastest driving route to Northstar resort complex from the San Francisco bay area. Driving time is about 3½ hours for 300 km.

Buses will be available to get from the event center to each event arena when the distance between the two is not zero. Parking may not be available at all the arenas.

Your travel agent or airline should be consulted to customize your planning for your travel and vacation time in this very popular area for tourists, both winter and summer. Many orienteering events are planned in the area to welcome Rogainers to an extended vacation period.

Accommodations are plentiful in the area nearby the event center. There are a wide range of different holiday options available, including camping, cabins, private homes, motels, hotels from 1- to 5-star, condominiums, flats, plus Airbnb, VRBO and other rental homes throughout the area.

Rogaine camping will be available at the event center from July 30 to August 3.

See Appendix or do internet searches for facilities around Northstar, Truckee, and North Lake Tahoe, California.



9. Competition classes

Orienteering classes - women				
Class (age at 31 Dec 2020)	Technical Difficulty	Winning Time Sprint	Winning Time Middle	Winning Time Long
F10-	■	10-12	20-25	25-30
F12-	■	10-12	20-25	30-35
F14-	■ ■	10-12	20-25	35-45
F16-	■ ■ ■	10-12	20-25	40-50
F18-	■ ■ ■ ■ ■	10-12	25-30	50-60
F20-	■ ■ ■ ■ ■	12-15	25-30	60-70
F21 Elite	■ ■ ■ ■ ■	12-15	30-35	70-80
F21+	■ ■ ■ ■ ■	12-15	30-35	60-70
F35+	■ ■ ■ ■ ■	12-15	30-35	50-60
F40+	■ ■ ■ ■ ■	12-15	30-35	45-55
F45+	■ ■ ■ ■ ■	12-15	25-30	40-50
F50+	■ ■ ■ ■ ■	12-15	25-30	40-50
F55+	■ ■ ■ ■ ■	12-15	25-30	40-50
F60+	■ ■ ■ ■ ■	12-15	25-30	40-50
F65+	■ ■ ■ ■ ■	12-15	25-30	40-50
F70+	■ ■ ■ ■ ■	12-15	25-30	40-50
F75+	■ ■ ■ ■	12-15	25-30	40-50
F80+	■ ■ ■ ■	12-15	25-30	40-50
F85+	■ ■ ■ ■	12-15	25-30	40-50
F90+	■ ■ ■ ■	12-15	25-30	40-50

F16- and F18- are eligible for North American Youth Orienteering Championships

F20- are eligible for North American Junior Orienteering Championships

F21 Elite are eligible for North American Orienteering Championships

Women may compete in Men's classes

F20- and F21 Elite are eligible for WRE points and must have an IOF ID



Orienteering classes - men				
Class (age at 31 Dec 2020)	Technical Difficulty	Winning Time Sprint	Winning Time Middle	Winning Time Long
M10-	■	10-12	20-25	25-30
M12-	■	10-12	20-25	30-35
M14-	■ ■	10-12	20-25	35-45
M16-	■ ■ ■	10-12	20-25	45-55
M18-	■ ■ ■ ■ ■	10-12	25-30	55-65
M20-	■ ■ ■ ■ ■	12-15	30-35	70-80
M21 Elite	■ ■ ■ ■ ■	12-15	30-35	90-100
M21	■ ■ ■ ■ ■	12-15	30-35	70-80
M35+	■ ■ ■ ■ ■	12-15	30-35	65-75
M40+	■ ■ ■ ■ ■	12-15	30-35	60-70
M45+	■ ■ ■ ■ ■	12-15	25-30	55-65
M50+	■ ■ ■ ■ ■	12-15	25-30	50-60
M55+	■ ■ ■ ■ ■	12-15	25-30	45-55
M60+	■ ■ ■ ■ ■	12-15	25-30	45-55
M65+	■ ■ ■ ■ ■	12-15	25-30	45-55
M70+	■ ■ ■ ■ ■	12-15	25-30	45-55
M75+	■ ■ ■ ■ ■	12-15	25-30	45-55
M80+	■ ■ ■ ■	12-15	25-30	45-55
M85+	■ ■ ■ ■	12-15	25-30	45-55
M90+	■ ■ ■ ■	12-15	25-30	45-55

M16- and M18- are eligible for North American Youth Orienteering Championships

M20- are eligible for North American Junior Orienteering Championships

M21 Elite are eligible for North American Orienteering Championships

Women may compete in Men's classes

M20- and M21 Elite are eligible for WRE points and must have an IOF ID



Orienteering classes - open		
Class	Technical Difficulty	Similar to
Open 1 White	■	M/F 10-
Open 2 Yellow	■ ■	M/F 14-
Open 3 Orange Short	■ ■ ■	F 16-
Open 4 Orange Long	■ ■ ■	M 16-
Open 5 Beige	■ ■ ■ ■	F 75+ / M80+
Open 6 Brown	■ ■ ■ ■ ■	F55+ / M70+
Open 7 Green	■ ■ ■ ■ ■	F45+ / M60+
Open 8 Red	■ ■ ■ ■ ■	F35+ / M50+

Open classes are non-competitive and not eligible for awards.
There will be no pre-assigned start times for open classes.



Orienteering classes - Elite relay		
Class	Technical Difficulty	Recommended Winning Time (total)
NA National Youth Women's Team	■ ■ ■ ■ ■	75-85 minutes
NA National Youth Men's Team	■ ■ ■ ■ ■	75-85
NA National Junior Women's Team	■ ■ ■ ■ ■	95-105
NA National Junior Men's Team	■ ■ ■ ■ ■	100-110
NA National Senior Women's Team	■ ■ ■ ■ ■	105-135
NA National Senior Men's Team	■ ■ ■ ■ ■	105-135

NA National relay team members must be from the same Federation in order to be eligible for titles.

Women may compete in the Men's National Team relay.

All Junior Team members' Orienteering age must be 20 or younger.

All Youth Team members' Orienteering age must be 16 or younger.



Orienteering classes – Club relay		
Class	Technical Difficulty	Recommended Winning Time (total)
Club 12+ points team	■■■	35-45 minutes
Open 12+ points team	■■■	35-45
Club 8+ points team	■■■■	35-50
Open 8+ points team	■■■■	35-50
Club 4+ points team	■■■■■	45-65
Open 4+ points team	■■■■■	45-65
Club Select team	■■■■■	65-85
Open Select team	■■■■■	65-85

Club relay team members must be members of the same club in order to be eligible for Club prizes.

Club and Open teams compete based on points class, and can be mixed gender.

Club and Open teams are deemed to compete in all lesser points classes.

Relay teams have 3 runners. Teams with less than 3 runners are not eligible for awards.

Relay points						
Age	Women	Men		Age	Women	Men
12-	7	5		75+	7	5
14-	6	4		65+	6	4
16-	5	3		55+	5	3
18-	4	2		45+	4	2
20-	3	1		35+	3	1
21+	2	0		21+	2	0



World Rogaining Championships Classes		
Class	Abbreviation	Description and Age on August 1, 2020
Women Open	WO	2 or 3 women, no age restriction
Men Open	MO	2 or 3 men, no age restriction
Mixed Open	XO	At least one man and one woman, no age restriction
Women Youth	WY	2 or 3 women, all under 23
Men Youth	MY	2 or 3 men, all under 23
Mixed Youth	XY	At least one man and one woman, all under 23
Women Veteran	WV	2 or 3 women, all 40 or over
Men Veteran	MV	2 or 3 men, all 40 or over
Mixed Veteran	XV	At least one man and one woman, all 40 or over
Women Super Veteran	WSV	2 or 3 women, all 55 or over
Men Super Veteran	MSV	2 or 3 men, all 55 or over
Mixed Super Veteran	XSV	At least one man and one woman, all 55 or over
Women Ultra Veteran	WUV	2 or 3 women, all 65 or over
Men Ultra Veteran	MUV	2 or 3 men, all 65 or over
Mixed Ultra Veteran	XUV	At least one man and one woman, all 65 or over

Any team that has a member under 14 years of age shall also have a member 18 years of age or older.

All participants under 18 must have permission from their legal guardian to take part in the competition.

Teams are deemed to compete in every category for which they are eligible.



10. Awards

North American Orienteering Championships

M/F21+ Elite, Junior F/M20-, Youth F/M18-, Youth F/M16-

- The top three qualifying elite women and men in each discipline (sprint, middle, long) will receive IOF medals.
- The top six qualifying elite women and men in each discipline (sprint, middle, long) will receive IOF certificates.

All other age classes

- The top three qualifying women and men in class and discipline (sprint, middle, long) will receive Championship awards.

World Ranking Event

- Women and men who participate in and finish any F/M21+ Elite course will automatically receive World Ranking points.

Relay

- The top three Club and Open Relay Teams in each points category (Select, 4+, 8+ and 12+) will receive an award.

North American Regional Floating Trophies

- The top NA Senior National Team will receive the Bjorn Kjellstrom Cup
- The top NA Junior National Team will receive the Future Champions Cup

World Rogaining Championships

- *The winning team in each class will receive an IRF floating trophy and WRC2020 personal trophies.*
- *Second and third place teams in each class will receive WRC2020 personal trophies.*

California Orienteering Festival

- The top three women and men in each class will receive Festival awards. Points will be computed using the Scottish scoring system, best 5 of 8 individual orienteering stages.

The Coolest Orienteer-Rogainer Of North America (CORONA)

- Everyone who successfully completes all 10 stages (including the Rogaine) of the California Orienteering Festival in their proper age and gender class will forever be known as a CORONA, and will receive a CORONA award.



11. Description of Punching system and Results display

The SPORTident electronic punching system will be used. Touch free mode (Air+) will be activated in addition to classic SPORTident punching. Both traditional and SIAC (SI-Air) touchless electronic systems will be supported on all courses.

M/F21 Elite, M/F20-, M/F18- and M/F16- are required to use SIAC (SI-Air) cards for the North American Orienteering Championship events. Contactless SIAC (SI-Air) cards will be available for rent to all competitors.

The contactless SI-Air system will be set to register within approximately 0.4 meters of the control station. Per IOF and OUSA rules, as always it is the competitor's responsibility to ensure that their punch is recorded, using the audio and visual confirmations of the punching system.

There are two fallback positions if a contactless punch fails to be confirmed:

- a. Insert or re-insert the electronic card into the control unit and check for confirmation.
- b. A manual pin-punch will be provided at each checkpoint in case the electronic system fails to work.

Western Race Services will provide near-real-time display of results on large computer screens, as well as printouts of split times. Results will be available on-line within 48 hours of the end of the event.

Additional considerations for the World Rogaining Championships:

- *Checkpoints will have reflectors.*
- *Each competitor shall wear one SportIdent electronic punch. The SI-Air card will be attached to each competitor with a non-removable unique wrist band, and it must be carried by the competitor from start to finish. Proper attachment will be checked when entering the start corral.*
- *For safety and in accordance with the rules, teams must stay together at all times. Team members must punch within 60 seconds of each other. Team members should arrive at checkpoints together and leave immediately after punching so that there is no chance of the SI Air system unexpectedly punching due to proximity and thus violating the 60-second rule.*
- *The manual pin-punch will only be used to award points if there has been a failure of the SI station or SI-Air card, or the SI station was missing.*
- *GPS trackers will be provided as part of mandatory equipment for selected teams. Others teams may order GPS trackers for a fee at registration time. GPS trackers will be handed out when entering the start corral, and must be returned at the finish for download and publication.*



12. Registration

- Registration will open in October 2019.
- Registration will be taken via online entry form.
- Registration for the entire Festival will be provided at one online web site.
- A link to the registration system will be provided at www.Cal-O-Fest.com
- There is no limit to the number of Orienteering participants for each stage.
- Relay entries will be accepted at registration time.
- ***World Rogaining Championships entries and entry process:***
 - *Team size shall be 2 or 3 people.*
 - *The number of entries for WRC2020 is limited to 1000 competitors.*
 - *Entries will be taken online when registration opens for the Festival.*
 - *Teams must be declared at registration time, and can be changed later.*
 - *The entry criteria will generally follow the guidelines provided by the International Rogaining Federation. An example of these guidelines may be found at <https://tinyurl.com/y3vnp7oo>*



13. Weather and climate conditions

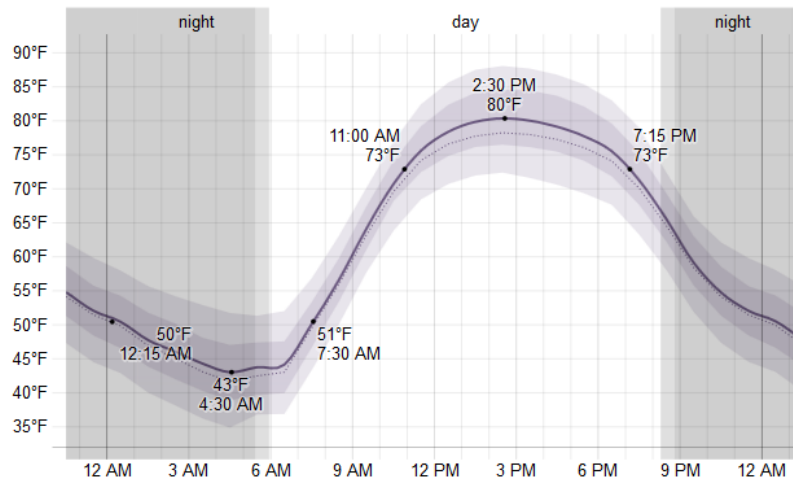
The San Francisco Bay Area has a Mediterranean Climate, with winter rainfall and very dry summers. High summer temperatures in the Bay Area increase rapidly with distance from the sea. Renowned author Mark Twain (Samuel Clemens) once said: "The coldest winter I ever saw was the summer I spent in San Francisco." This is because the city of San Francisco experiences a strong cooling effect from the Pacific Ocean during the summer. Average high temperature at Golden Gate Park and the Presidio in July are just 15 degrees Celsius (60 F), although occasionally highs are 37 degrees Celsius (100 F). There is almost no chance of rain, and very little chance of cloud cover. Morning fog is common in the summertime.

The Ancient Redwoods Park is also close to the Pacific Ocean, and is thus also cooled considerably in the summer. The tall trees provide plenty of shade from the sun, and temperatures are usually pleasant, with daytime highs around 24 degrees Celsius (75 F).

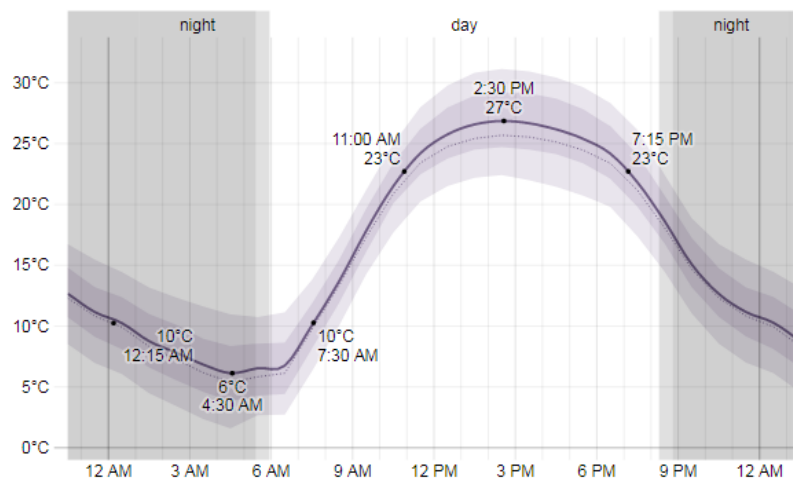
The Lake Tahoe area has typical mountain weather. Precipitation occurs predominantly in the winter, in the form of plenty of snow (the 1960 Winter Olympics were held at Squaw Valley, a few km from the event center at Northstar). The competition areas have warm and typically dry weather in the mornings, with a possibility of afternoon showers. The Arenas are 1950 m (6400 ft) above sea level. For a week starting July 23 at Northstar, there is an average high of 27 Celsius (80 F), with an average low of 6 Celsius (43 F). Temperatures can range (in the extremes) between 37 Celsius (99 F) and -4 Celsius (25 F). For any day in this period, there is 11% chance of cloud cover, and 3% chance of some precipitation. Cumulative rainfall for the entire month of July is 7 mm. Humidity every day is less than 15%. The sunshine, altitude, temperature and humidity make it important for competitors to hydrate well.



Average temperatures and lighting for Northstar, CA: July 23 - 30



The hourly average temperature (purple line), with 25th to 75th and 10th to 90th percentile bands. The thin dotted line is the hourly average perceived temperature. Civil twilight and night are indicated by shaded overlays.



The hourly average temperature (purple line), with 25th to 75th and 10th to 90th percentile bands. The thin dotted line is the hourly average perceived temperature. Civil twilight and night are indicated by shaded overlays.



Average weather Lake Tahoe, CA – August 1-2

Average high temperature:	74.6°F	23.7°C
Average low temperature:	49.6°F	9.8°C
Average temperature:	62.1°F	16.7°C
Average precipitation:	0.67 inch	17 mm
Average snowfall:	0 inch	0 mm
Highest average max temperature:	76°F	24.4°C
Lowest average max temperature:	71.9°F	22.2°C
Highest average min temperature:	51°F	10.6°C
Lowest average min temperature:	48°F	8.9°C

14. Lighting

At Northstar	Saturday, August 1	Sunday, August 2
Civil twilight* starts	5:32 am	5:33 am
Sunrise	6:02 am	6:02 am
Sunset	8:11 pm	8:10 pm
Civil twilight* ends	8:41pm	8:40 pm
Day length	14:09	14:07
Moon	Full	Full
Moonrise	7:14 pm	8:02 pm
Moonset	3:48 am	4:48 am

* the sun is 6° below the horizon; maps can be read without lighting assistance



15. Training Possibilities and Related Events

Date	Event	Type	Location	Contact
Sept 6-8, 2019	US Nationals Orienteering Championships	Sprint, Middle, Long, plus a relay and trail O	Big Basin Redwoods East, Santa Cruz County, California	www.baoc.org
Sept 14-15, 2019	2019 North American Rogaining Championships	4, 8, 24-hour Rogaines	Dinkey Creek, California	www.navxchallenge.com
October 19-20, 2019	US Nationals Masters Orienteering Championships	2-day combined Long	Gilford, New Hampshire	www.upnoor.org
April 18-19, 2020	US Nationals Junior Orienteering Championships	Sprint, Middle, Long	Fort Ebey and Fort Casey Parks, Washington	www.cascadeoc.org
May 2020	2020 North American Rogaining Championships	24-hour Rogaine	Scablands, near Sprague, Washington	www.navraces.com
July 19, 2020	Map trek	2, 4, 6-hour Rogaines	Donner Summit, California	www.navxchallenge.com
July 20, 2020	Leg Stretcher and 2020 warm-up	Urban park sprint	San Francisco, California	www.terraloco.com



16. Rules

The North American Orienteering Championships will follow the rules laid out by the IOF, titled **“COMPETITION RULES FOR INTERNATIONAL ORIENTEERING FEDERATION (IOF) FOOT ORIENTEERING EVENTS”** with particular reference to Appendix 12.

www.orienteering.sport/orienteering/competition-rules/

The World Rogaining Championships will follow the rules laid out by the IRF, titled **“INTERNATIONAL ROGAINING FEDERATION RULES OF ROGAINING”** with particular reference to Part D.

www.rogaining.org/index.php?option=com_content&view=category&id=27&Itemid=172

Anti-doping

Please refer to the IOF anti-doping rules at <http://orienteering.org/anti-doping/>

Indemnity

All participants will be required to sign a release of liability.

Insurance

Participants are expected to provide their own medical insurance.



17. Contacts

Events California Orienteering Festival 2020
[North American Orienteering Championships](#)
[World Rogaining Championships](#)

Web site www.cal-o-fest.com
Information info@cal-o-fest.com

Steering Committee	Director:	Gavin Wyatt-Mair
	Registrar:	Gary Kraght
	Technical quality:	Erin Schirm
	Technology:	Jay Hann
	Volunteers:	Marie-Josée Parayre
	Publicity:	Stephanie MacLean
	Consulting:	Tapio Karras
	Consulting:	Mats Jansson
	Treasurer:	Sharon Evans
	IOF advisor:	Erik Blake
	IRF advisor:	Merv Trease
	IRF advisor:	Vic Sedunary



18. Glossary

Cal-O-Fest	California Orienteering Festival
IOF	International Orienteering Federation
IRF	International Rogaining Federation
NA	North America Region
NAOC	North American Orienteering Championships (incorporates NAJOC and NAYOC)
NAJOC	North American Junior Orienteering Championships
NAYOC	North American Youth Orienteering Championships
NRE	National Ranking Event (applies to the United States only)
OUSA	Orienteering USA
USA	United States of America
WRC	World Rogaining Championships
WRE	World Ranking Event



19. Appendix: Sample list of activities in the Lake Tahoe area

Lake Tahoe Boating and Water Sports

<http://www.tahoevacationguide.com/Activities/watersports.html>

Lake Tahoe area hiking trails

<http://www.tahoevacationguide.com/Activities/hiking.html>

Rafting

(easy) <http://www.truckeerriverrafting.com/index.php>

(moderate) <https://whitewatertours.com/lake-tahoe-truckee-river-rafting/>

(Class 3+) <https://whitewaterexcitement.com/?gclid=CNyl-MWxpdICFRBEfgodNnkKaQ>

Outdoors Theatre Arts

<http://laketahoeshakespeare.com/>

Casinos

<http://newtoreno.com/casinos.htm>

ATV, Jeep, and Hummer rentals and tours

<http://laketahoeadventures.com/>

Bicycle adventures

<https://www.tahoevacationguide.com/Activities/biking.html>

Shopping

<https://www.visitrenotahoe.com/reno-tahoe/what-to-do/shopping>

Alpine Mountain Coaster (you have to watch this video!!) at Heavenly (South Lake Tahoe)

https://www.youtube.com/watch?v=fRR_pZ7WpnQ

Reno Hot August Nights – the biggest classic car festival in the United States

<https://hotaugustnights.net/>

Glider rides

<https://www.soartruckee.org/new-to-soaring.html>

Virginia City, Nevada

<https://visitvirginiacitynv.com/>

Gold Panning (get \$1200/oz. if you find it):

<http://traveltips.usatoday.com/gold-panning-coarsegold-california-40561.html>



20. Appendix: Transportation and accommodation information

Reno to Northstar shuttle: <https://www.northlaketahoeexpress.com/routes/>

Reno-Tahoe visitors guide: <https://www.visitrenotahoe.com/>

California visitors guide: <http://www.visitcalifornia.com/visitors-guide-request>

Northstar resort web page: <http://www.northstarcalfornia.com/>

Free guidebook and map: <http://www.visitcalifornia.com/visitors-guide-request>

Representative air fares: At 2019's rates a round-trip flight from St. Petersburg, Russia to Reno, NV is about \$1300, and 20 hours with 2 stops. Non-stops from Scandinavia to Oakland on Norwegian Air can be under \$1,000. From Melbourne, Australia, it is about \$2000, and 16 hours with 1 stop. www.expedia.com

Forest Service: <https://www.fs.usda.gov/main/ltbmu/home>

Area topo map: http://www.mytopo.com/maps/?gclid=CIH_26W2rdlCFYmffgodTzkB5Q

Trip Advisor map and guide: <https://www.tripadvisor.com/LocalMaps-g33191-Truckee-Area.html>

Guidebooks: Fodor and Lonely Planet among others have guidebooks on Central and Northern California. Some guides can be downloaded to book readers like Kindle for convenient carrying.

Amtrak train service: <https://www.amtrak.com/find-train-bus-stations-train-routes>