

<u>South</u>

Open Water Safety Plan Application

Instructions

- Before applying for a USMS open water sanction, event hosts must review their event information and safety plans with their LMSC Sanctioning Officer. Upon approval from the LMSC Sanctioning Officer, the event host is then ready to apply for sanction.
- When applying for a USMS open water sanction, event hosts are required to submit their safety plan for review and approval by the Open Water Compliance Coordinator (OWCC) ON THIS APPLICATION through the online sanction process. We welcome additional supporting information—after all, many event hosts have developed extensive safety plans over years of hosting events—but everyone must submit this completed application to ensure that all pertinent points are covered in safety planning.
- Using a Google Earth map or equivalent, event hosts are also required to upload a map of the venue and course with the safety plan application. Maps must include locations of start & finish, guide & turn buoys, feeding stations, safety craft, lifeguards/first responders, on-site medical care, and evacuation points.
- In the best scenario, the Safety Director should assist the event host in the developing the event safety plan. If the Safety Director did not take part in developing of the safety plan (usually in the case of appointment after the sanction request or in the case of a substantially unchanged safety plan developed over years of experience), the event host must give the Safety Director a copy of the approved safety plan.
- Upon request, USMS OWCC Bill Roach will send you a copy of the approved safety plan. Contact Bill at <u>wfroach@att.net</u> or 317-989-3164.

Open Water Safety Plan Application

Event Information

General Information							
Name of Host:	Knoxville Open W	ater Swimmers					
Name of Event:	Bridges to Bluffs						
Event Location:	Knoxville, TN						
City:	Knoxville		State:	ΓN	LMSC: Southeastern		
Event Dates:	9/26/21 through 9/	26/2021					
Length of Swim(s):	10k Open Water						
Dual Sanctioned with USA-Swimming: No							
Key Event Personnel							
Director(s): Jack McAfee, Blaik Ogle							
Event Director: Jack	McAfee	Phone: 770.401.	1007	E-mail	: Knox.ows@gmail.com		
Referee: Kevin McDonnell		Phone: 000-000-	-0000	E-mail	: knox.ows@gmail.com		
Certified Safety Direc	ctor: Melissa Abbey	. Phone: 000-000-	-0000	E-mail	: Click to enter e-mail address		

Tentative date: 9/26/2021 Time: 9:00am

Tentative agenda: Discuss swimmer and pilot briefing details. Discuss weather and contingency plans. Discuss swimmer evacuation and special needs if any medical conditions exist.

Pre-Race Swimmer Meeting (required) all swimmers must attend to participate in race

Tentative date: 9/25/2021 Time: 6:00pm

Tentative agenda: Give overview of course, safety information, pilot information, plans for inclement weather.

Course & Event Conditions

The Course

Body of water: River Water type: Fresh Water Water depth from: 3 to: 100+

Course: Open - non-event watercraft allowed near swim course

If open course, please indicate the agency used to control the traffic while swimmers are on the course.

Agency name: US Coast Guard How to contact during event: USCG MSD Nashville/ 220 Great Circle Road, Suite 148 / Nashville, TN 37228 /Phone: 615-736-5421 Fax: 615-736-7315

Expected water conditions for the swimmers: (marine life, tides, currents, underwater hazards) There will be a downstream current. Marine life will be minimal. Various underwater hazards may present themselves, but there are no known hazards on the course. Swimmers will be starting off of the Paddleboat "Star of Knoxville", which includes a 5 foot jump from the bow of the boat. Swimmers will be seeded according to their entry time, and their times will not begin until they jump from the boat. It is estimated that each swimmer will begin roughly 5 seconds apart, in order to allow for the previous swimmer to surface and begin swimming. The depth of the water where the race will begin is estimated to be over 50+ feet deep, so diving will be allowed.

How is the course marked?

- Turn buoy(s): Height(s) 4 feet Color(s) Orange Shape(s) Triangle
 Guide buoy(s): Height(s) N/A Color(s) N/A Shape(s) N/A
- Approximate Distance between Guide buoys: Buoys will be placed along the curves of the river to prevent swimmers from swimming in the middle of the channel.

Number of Feeding Stations: 0

Type of structure(s) used as feeding station(s): It is planned for each swimmer to have a kayaker who will feed each swimmer as necessary.

Number of people the structure(s) can safely hold: Each kayak will hold a single person.

Water & Air Temperatures						
Expected air temp range: 70-95	Expected water temp range: 70-80	Wetsuits: Not allowed				
USMS Water Temperature Index for sanctioned open water events: - Below 57°F (Very Cold) – heat retaining swimwear and a Thermal Plan for Cold Water Swims is REQUIRED - 57°F-60°F (Cold) - heat-retaining swimwear is required <u>or</u> a Thermal Plan for Cold Water Swims is REQUIRED - 60°F-66°F (Quite cool) - Thermal Plan for Cold Water Swims is RECOMMENDED - 66°F-72°F (Fairly cool) - Thermal Plan for Cold Water Swims is ENCOURAGED - 72°F-78°F (Cool) - No Thermal Plan required - 78°F-82°F (Optimal) - Heat-retaining swimwear & neoprene caps are not permitted above 78°F. - 82°F-85°F (Warm) - Thermal Plan for Warm Water Swims is RECOMMENDED - 85°F-87.8°F (Very warm) - Thermal Plan for Warm Water Swims is REQUIRED - 87.8°F-95°F (Hot) - Sanctioned open water swims cannot be held - Over 95°F (Extremely hot) - Any swimming is ill advised						
USMS Water Temperature Meas to five measurements at various places on	urement Procedure: Using an accurate th the course—12 to 18 inches below the water su	ermometer, the event host should take three rface and no closer to the shore than 25				

meters (if possible)—within one hour before the start of an open water swim. The host should average these measurements, post and/or announce the resulting average temperature at least 30 minutes before the start of the swim, and announce it during the pre-race staff safety and swimmers' meetings.

Unfortunately, there is no live link to water temperature anywhere along the Tennessee River. However we have kept data from race temperatures each September during ther race, 72 degrees. Current on the Tennessee River presents the same challenges. Bridges to Bluffs is a downstream swim on a dam-controlled river. The release is controlled by TVA Douglas dam. While we cannot predict what the current will be for a particular day in the future, we will be given an estimated release 2 days in advance. On the day of the swim, there could be zero CFS being released over the Douglas dam, or, there could be an excess of water if there has been ample rainfall in previous days. Throughout the summer of our swims last year, there was a fairly consistent average of 10,000 CFS release from the dam each day during the morning and the evening. For comparison, 10,000 CFS is roughly equivalent to an increase in speed of 1 mph while swimming.

Water Quality

It is recommended that one week before the event, check water quality. If results returned are inconsistent with the local governing body's standards, notify swimmers who participated in the event of any known exposures post-race. If an exceptional event such as heavy rain or flooding affects the water quality, the Event Director, Referee, or Safety Director shall have the authority to postpone or cancel the race. It is recommended to take and retain water samples on race day and retain for reference.

We do bacteriology testing via MicroBac laboratories in Maryville, TN for total coliform and fecal ecoli counts. We have used the same testing and company since 2017.

Event Safety

Medical Personnel	
Lead medical personnel (emergency trained) on site: Spencer Leong, M.D.	
Experience in sporting events (Marathon, Triathlon, Open water swim, etc.):	Yes
Will medical personnel be located on the course?	Yes

The number of medical personnel will be dependent on the course layout, number of swimmers in the water, expected conditions, etc. How many medical personnel do you plan to have on site? 2

First Responders/Lifeguards & Monitors

Indicate the qualifications of the first responders: YMCA/American Red Cross Lifeguard

Number on course: 1

Number on land: 0

Indicate their location on the Race Plan Map. They will be located on the pontoon boat at the 5k halfway point.

On-site Medical Care & Facilities

Describe onsite set up for medical care, such as medical treatment tent, heating/cooling tent or facility. etc., and indicate locations on the Race Plan Map. We have a medical tent, operated by a EMS volunteer at the finish area. Rural Metro (local ambulance service), police, and fire are all on notice for the event with two major trauma centers within a mile of the course. We have two boat ramps for emergency exit. We have a lifeguard, medical doctor, and nurse anesthesiologist on staff for race day.

Ambulance/Emergency Transportation

Ambulance(s) onsite: 865-982-3544 On Call: 000-000-0000

Have you spoken with local emergency response agency regarding potential emergencies? Yes

Nearby Medical Facilities Closest medical facility: UT Medical Center Phone: 865-305-9000 Type of medical facility (urgent care, hospital, etc.): Hospital Distance to closest medical facility: 2-5 miles Approximate transport time: 10 minutes Watercraft Motorized Watercraft: Owned/operated by government agencies (Coast Guard, police, fire & rescue, etc.): 1 Owned/operated by volunteers or hired individuals: 2 Will all motorized watercraft with a propeller owned/operated by volunteers or hired individuals be equipped either with a propeller guard or a swimmer monitor? Yes Other motorized watercraft: 0 With propellers fore of the rudder: With impeller motor (jet ski, jet boat): 0 Anchored from start to finish: 1 Allocation of Watercraft: Safety Watercraft: 1 1st Responders: Motorized: 1 Non-motorized: 0 Ο 2nd Responders: Motorized: 0 Non-motorized: 0 Watercraft for race officials: Motorized: 0 Non-motorized: 0 Watercraft for race supervision: Motorized: 0 Non-motorized: 0 Non-motorized: Same as number of swimmers Watercraft for feeding stations: Motorized: 0 Watercraft for escorted events: Motorized: 0 Non-motorized: 0 Other event watercraft: None

Emergency Signal Flag Color for all watercraft: Red

Communications

Primary method between event officials: Cell Phone Secondary method: Radio

Primary method between medical personnel, first responders & safety craft: Cell Phone

Secondary method: Radio (separate channel from Meet Officials)

Swimmer Counting & Accountability

Describe method of swimmer body numbering: Permanent marker on shoulders.

Describe method of electronic identification of swimmer (Recommended): Electronic timing system

Describe different bright cap colors for various divisions (Recommended): There will be separately colored neon caps for men and women

Describe method of accounting for all swimmers before, during and after swim(s): Each swimmer will be marked off a master list according to their body marking number.

Describe method of accounting for swimmers who do not finish: If a swimmer withdraws from the race, their kayaker will call the provided contacts and inform them of the swimmer's decision. They will call the motorboat to come pick the swimmer up.

Warm-up/Warm-down Safety Plan

Describe safety plan for warm-up/warm-down, include number and location of lifeguards and designated watercraft. There will be no warmup available.

Swimmer Management

Maximum number of swimmers on course at a time: 100

If more swimmers show up on the day of the swim(s), how will you adjust the safety plan to accommodate the increased number of entries? Registration will close a week before the race, so no additional swimmers will be allowed to race on race day. The event director(s) will have sole discretion on allowing race day entrants.

How will you deploy the safety staff and crafts distributed to supervise this event to ensure swift recognition, rescue, and treatment of any swimmer? Each swimmer will have a personal kayaker, ensuring utmost safety. In addition, MD and lifeguards on a power boat will traverse up and down the course for additional coverage.

How will you deploy the safety staff to maximize rapid response to a troubled swimmer? The boat will be immediately available to respond to distressed swimmers.

How will you alter the event if insufficient safety personnel/craft are available on the day of the swim(s)? Notify the nearest hospital and inform them of the race, conditions, and possible location of an emergency. Swimmers would still have a personal kayaker to aid them in an emergency.

Describe your missing swimmer plan: Check with timing to see if all swimmers are accounted for. If they are not, alert the motor boat pilots to start a search on the water. Call the swimmer (they could be in their car), call their pilot. If nobody answers, call the swimmer's emergency contact. Leave voicemails and texts.

Severe Weather Plan

Is a lightning detector or weather radio available on site? No

Describe your severe weather plan: In case of lightning or other severe weather, the motor boats will patrol the course and announce with a bull horn to clear the course while kayakers will alert the swimmers with a 3 whistle clear the course. Each kayaker will be given a whistle.

Describe your course and site evacuation plan, including accounting for all swimmers and other participants: All swimmers and kayakers to exit the water on river left and wait on land. Swimmers should have some warm clothes in their personal kayak to try to stay warm. If it does not thunder for 15 minutes, the motor boats will patrol and tell swimmers to allow the race to start again.

Thermal Plan for Cold Water Swims

General Information

Thermal Plan for Cold Water Swims: USMS Rules for Open Water Swims state:

302.2.2A (1) A swim shall not begin if the water temperature is less than 60° F. (15.6° C.), unless heat-retaining swimwear is required of all swimmers or a USMS-approved thermal plan is in place.

302.2.2A (2) A swim in which heat retaining swimwear is required of all swimmers shall not begin if the water temperature is less than 57° F. (13.9° C.), unless a USMS-approved thermal plan is in place.

Remember that the average masters swimmer does little or no acclimatization to cold water, so even a small drop in water temperature—especially in the colder ranges—dramatically increases the odds of thermal issues: Cold Shock Response, Cold Incapacitation, Hypothermia, and Circum-rescue Collapse). Be Prepared!

- If your swim course has a remote chance of water temperature less than 60° F., you are **REQUIRED** to complete the thermal plan below, showing your specific commitment to increased swimmer preparation before the event, reduced swimmer exposure during the event, and maximize mitigation & treatment of thermal issues during & after the event.

- If your swim course has a chance of water temperature between 60° F & 66° F., a thermal plan is **RECOMMENDED**.

- If your swim course has a chance of water temperature between 66° F & 72° F., a thermal plan is ENCOURAGED.

How will you assist swimmer preparation before the event:

The following methods are among the ways you can do this:

- 1. Emphasize & stress on entry information of possible cold water swim conditions.
- 2. Require prior cold water swim experience.
- 3. Require swimmer cold water preparation plan.
- 4. Refuse entry if swimmer is not acclimated to cold water swimming.

What method(s) of swimmer preparation will you take: Emphasize & stress on entry information of possible cold water swim conditions.

What action will you take to reduce swimmer exposure to thermal issues:

The following methods are among the ways you can do this:

- 1. Cancel the swim(s).
- 2. Shorten swim(s) or institute/shorten time limits.
- 3. Encourage wetsuits for all swimmers.
- 4. Require wetsuits for all swimmers.

Explain your plan of action: If the water is below 60 on race day, we would cancel the swim or allow it to be wetsuit legal.

What extra medical care will you provide to mitigate & treat symptoms of thermal issues:

The following methods are among the ways you can do this:

- 1. Bring in more emergency trained medical personnel and/or ambulances.
- 2. Bring in more volunteers to assist medical personnel.
- 3. Bring in more emergency craft and first responders on the course.
- 4. Increase warm beverages before the swim and at feeding stations.
- 5. Have special procedures (different than normal) for removing swimmers from the water & venue.
- 6. Increase warm beverages after the swim.
- 7. Increase thermal treatment gear (blankets, hot water bottles, etc.)
- 8. Make warm showers available on-site.

- 9. Make warming facilities (buildings, tents, vehicles, etc.) available on-site.
- Other: Specify 10.

Specify what extra listed items you will provide: Encourage warm beverages during the swim, as well as increase the warm beverages after the swim.

Comment on how you will be prepared to care for multiple medical issues: We will have three physicians on site working as volunteers (in non-medical roles) at the start and finish parks (as well as the Race MD who will be on the safety boat during the swim). We also have a volunteer paramedic and nurse practitioner on site. In total we have 6 first aid kits. Combined with the close proximity of both major trauma centers, we should be well equipped for any issues that arise.

If the water temperature is below 72° F, will you be prepared to deal with cold water medical issues: Yes. Our first aid kits contain dry towels and blankets.

Thermal Plan for Warm Water Swims

General Information

Thermal Plan for Warm Water Swims: USMS Rule 302.2.2A(3) for Open Water Swims states: "A swim of 5K or greater shall not begin if the water temperature exceeds 29.45° C. (85°F.). A swim of less than 5K shall not begin if the water temperature exceeds 31° C. (87.8°F.)."

Remember that the average masters swimmer does little or no acclimatization to warm water, so even a small increase in water temperature—especially in the warmer ranges—dramatically increases the odds of thermal issues: Dehydration, Heat Stroke, and Hyperthermia. Be Prepared!

- If your swim course has a chance of water temperature from 85° F to 87.8° F, you are **REQUIRED** to complete the thermal plan below, showing your specific commitment to increased swimmer preparation before the event, reduced swimmer exposure during the event, and maximize mitigation & treatment of thermal issues during & after the event.

- If your swim course has a chance of water temperature between 82° F & 85° F., a thermal plan is **RECOMMENDED**.

How will you assist swimmer preparation before the event:

The following methods are among the ways you can do this:

- Emphasize & stress on entry information of possible warm water swim conditions. 1.
- 2. Require prior warm water swim experience.
- 3. Require swimmer warm water preparation plan.

What method(s) of swimmer preparation will you take: Temperatures usually do not warrant warm water acclimation. We will update on website/social media weather/water temps, and have a swim coach who offers plans for B2B to registered athletes.

What action will you take to reduce swimmer, official, and staff exposure to heat-related issues: The following methods are among the ways you can do this:

- 1. Cancel the swim(s).
- 2 Shorten swim(s) or institute/shorten time limits.
- Remind all participants to stay well hydrated. 3.
- Remind swimmers to select appropriate pace. 4.
- Make swim caps optional or use Lycra swim caps. 5.

Explain your plan of action: All of the above. Volunteer aid station for hydration at start and finish.

What extra medical care will you provide to mitigate & treat symptoms of heat-related issues:

The following methods are among the ways you can do this:

- 1. Bring in more emergency trained medical personnel and/or ambulances.
- 2. Bring in more volunteers to assist medical personnel.
- 3. Bring in more emergency craft and first responders on the course.
- 4. Increase cool beverages before, during and after the swim (for swimmers and staff, including extra cool beverages on watercraft and feeding stations)
- 5. Increase heat exhaustion and heat stroke treatment gear (iced water, ice chips, cold water bottles, misting tents/fans, etc.)
- 6. Make cool showers available on-site.
- 7. Make shade and cooling facilities (buildings, tents, etc.) available on-site.
- 8. Other: Specify

Specify what extra listed items you will need to provide: We will have a large 4-x40 tent for shade at the finish. There's a covered pavilion at the starting park. Both parks are fitted with restrooms and water fountains. Our primary sponsor provides coolers of ice and ice water/gatorade, and sunscreen. We estimate 3 bottles of water per person associated with the event.

Comment on how you will be prepared to care for multiple medical issues: We have multiple doctors, nurses as staff and volunteers. We have multiple first aid bags, and have access to emergency vehicles/services.

If the water temperature is above 82° F, will you be prepared to deal with heat-related medical issues:

Yes, but we never see water temps this high due to bottom releasing dams that control our river.