



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 David Miner will send you a copy of the approved safety plan. Contact David at openwateradvisor@usmastersswimming.org or 941-545-9709.

Open Water Safety Plan Application

Event Information

General Information

Name of Host: [Knoxville Open Water Swimmers](#)
Name of Event: Bridges to Bluffs
Event Location: Knoxville, TN
City: Knoxville State: TN LMSC: SE
Event Dates: 9/27/2025 through 9/28/2025
Length of Swim(s): 10km open water
Dual Sanctioned with USA-Swimming: Yes

Key Event Personnel

Event Director: [Lana Burl](#) Phone: 865-567-0244 E-mail: knox.ows@gmail.com
Referee: [Helen Naylor](#) Phone: [615-414-6072](tel:615-414-6072) E-mail: helen.naylor@vumc.org
Certified Safety Director: [Chris Burl](#) Phone: 321-695-7776 E-mail: knox.ows@gmail.com

Pre-Race Safety Meeting (required): all officials & safety personnel must attend

Tentative date: 9/28/2025 Time: [8:00 am](#)

Tentative agenda: **Current and forecasted weather, water conditions, status of course, communication, contingency plans, participant evacuation and participant special needs, if any medical conditions exist.**

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

Tentative date: 9/27/2025 Time: [5:30 pm](#)

Tentative agenda: **On Saturday night, all swimmers and pilots receive the full safety briefing, including forecasted weather and river conditions, communication, contingency plans, participant evacuation and course preview. On Sunday, on the Riverboat prior to the start, we will update all swimmers with day-of observed conditions (water temperature, river current, weather) and safety reminders. On Sunday, at Suttree Landing Dock, our Pilot Captain will update all pilots/kayakers with the same information.**

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, 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**

Expected water conditions for the swimmers: (marine life, tides, currents, underwater hazards): **The race will move along with the downstream current. Marine life is minimal. Various underwater hazards may present themselves, but there are no known hazards on the course. Swimmers will start from the “Star of Knoxville” river boat, which includes an 8-foot first entry into the water 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 6-10 seconds apart, 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 40+ feet deep, with feet-first entry required.**

How is the course marked?

- Turn buoy(s): Height(s) 5 ft Color(s) Orange Shape(s) Triangle
- Guide buoy(s): Height(s) 5 ft Color(s) Orange Shape(s) Triangle
- 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, at variable distances between.**

Number of Feeding Stations: 0

Type of structure(s) used as feeding station(s): **No structure is provided. Each swimmer is required to have a kayaker who feeds each swimmer as necessary.**

Number of people the structure(s) can safely hold: n/a

Water & Air Temperatures

Expected air temp range: 65 – 85 degF Expected water temp range: 70 – 80 degF Wetsuits:
Swimmers wearing wetsuits for the 10K swim will not be eligible for awards. Optional

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 or 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 Measurement Procedure: Using an accurate thermometer, the event host should take three to five measurements at various places on the course—12 to 18 inches below the water surface 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.

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 will have our river water conditions tested approximately one week before the race. All swimmers will be notified if the water conditions are unsafe for swimming before the event takes place. (For this event's past seven years, our water conditions were well in the safe zone for recreational swimming, and no cautionary warnings were in place by other local or regional governing bodies or municipalities.

Event Safety

Medical Personnel

Lead medical personnel (emergency trained) on site: Katie Baker, NP

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: Equivalent water certified first responder

Number on course: 1

Number on land: 1

Indicate their location on the Race Plan Map. **Two patrol boats will contain the lead Medical Person, the Safety Director, and the Race Director – they will be split between the two boats with other observers and the race Referee. The boats will be present at the start of the race, will patrol the river during the race, and will be present at the finish as swimmers finish and exit the water.**

Onsite 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. **N/A. We will not have on-site medical care facilities, as professional facilities are only 10 minutes away. We will have a first aid kit, AED, supplies and water on hand at the finish.**

Ambulance/Emergency Transportation & Nearby Medical Facilities

Ambulance(s) onsite: none onsite On Call: **865-573-5799** or 911

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

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: 2-3

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:

- With propellers fore of the rudder: 0
- With impeller motor (jet ski, jet boat): 0
- Anchored from start to finish: 1 (at the finish, for timing)

Allocation of Watercraft:

- Safety Watercraft: 2
 - 1st Responders: Motorized: 1 Non-motorized: 0
 - 2nd Responders: Motorized: **1-2** Non-motorized: **0**
- Watercraft for race officials: Motorized: same boats as safety Non-motorized: 0
- Watercraft for race supervision: Motorized: same boats as safety Non-motorized: 0
- Watercraft for feeding stations: Motorized: 0 Non-motorized: Same as the number of swimmers (100 max)
- Watercraft for escorted events: Motorized: 0 Non-motorized: 0
- Other event watercraft: **There is a 1-1 swimmer to kayak ratio during the event.**

Emergency Signal Flag Color for all watercraft: RED

Communications

Primary method between event officials: Cell Phone Secondary method: Megaphone/Bullhorn

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 both hands

Describe method of electronic identification of swimmer (Recommended): none

Describe different bright cap colors for various divisions (Recommended): **There will be a variety of bright colored caps, but they will not differentiate divisions.**

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 when they 1) board the boat, 2) enter the water, and 3) exit the water.**

Describe method of accounting for swimmers who do not finish: **If a swimmer withdraws from the race, they or their pilot/kayaker will call the Safety Director (provided in contacts) and inform them of the swimmer's decision. The Safety Director will direct one of the motorboats to collect the swimmer, if needed (there are other safe exits along the course).**

Warm-up/Warm-down Safety Plan

Describe safety plan for warm-up/warm-down, include number and location of lifeguards and designated watercraft. No warm-up and no warm-down are planned.

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 3-4 weeks before the race, so no additional swimmers will be allowed to enter on race day. The event director will have sole discretion on allowing entrants after registration closes.**

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 (pilot), ensuring utmost safety. In addition, our medical personnel and staff will be stationed on motorized patrol boats which 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 closest 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)? **If the motorized boat used to carry the lifeguard and medical person is not available, alternates will be selected. Every swimmer will have a dedicated kayaker in support. No swimmer will be allowed to participate who does not have an escort kayaker (pilot).**

Describe your missing swimmer plan: **Check with the Referee and timing to see if all swimmers are accounted for. If they are not, alert the motorboat pilots to start a search on the water. Call the pilot and the swimmer (they could be in their car). If nobody answers, call the swimmer's emergency contact. Leave voicemails and texts. Notify local emergency personnel (via 911).**

Severe Weather Plan

Is a lightning detector or weather radio available on site? **We will utilize a lightning detector application (local weather apps) on cell phones on all motorized support boats. Yes**

Describe your plan for severe weather or natural disaster: **In case of severe weather or other disaster, the motorboats will patrol the course and announce with a bull horn to clear the course while kayakers will alert the swimmers to clear the course. All pilots will be issued a whistle to wear on race day; they should repeat a three-whistle blast to help communicate the message to evacuate the water.**

Describe your course and site evacuation plan, including accounting for all swimmers and other participants: **All swimmers and kayakers to exit the water on downstream nearest shore and wait on land. Swimmers will be advised during the safety briefing to have some warm clothes with their pilot in their kayak. If the risk abates and it does not thunder/lightning for 20 minutes, the motorboats 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. The race website & results pages contain water temperature and flow information for all prior events, available for public view.**

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 degF 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.
10. Other: [Specify](#)

Specify what extra listed items you will provide: **Encourage that swimmers carry and use warm beverages during the swim, as well as the race would offer warm beverages after the swim. Swimmers and pilots personal vehicles will be located at the race finish and offer the best warming – the race would escort and support swimmers/pilots to warm vehicles.**

Comment on how you will be prepared to care for multiple medical issues: **We are especially prepared because of our requirement that each swimmer has their own pilot. Each swimmer will have immediate assistance within 20 seconds. A pilot can provide immediate and basic aid until the watercraft can be notified and arrive on scene.**

If the water temperature is below 72° F, will you be prepared to deal with cold water medical issues: Yes, medical staff will be on-site, and we will provide warm beverages at the finish. During the Safety Briefing we would review the symptoms of hypothermia for both swimmers and pilots to monitor. We will be prepared to tell swimmers that wetsuits may be required, or that we may need to cancel the 10k portion of the swim.

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:

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

What method(s) of swimmer preparation will you take: Emphasize & stress on entry information of possible warm water swim conditions. We will discuss precautions during the Safety Briefing, including the symptoms of heat over-exposure and encourage swimmers to use iced beverages during the swim. No thermal gear (neoprene, wetsuits) will be permitted above 78 degF.

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.
3. Remind all participants to stay well hydrated.
4. Remind swimmers to select appropriate pace.
5. Make swim caps optional or use Lycra swim caps.

Explain your plan of action: We will remind all participants to stay well hydrated, carry ice or iced beverages. We will encourage swimmers to not over-exert and employ an appropriate pace and effort level. Pilots will be encouraged to also hydrate, wear wide brimmed hats, sun-protective clothing and sunscreen.

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 ice and iced water bottles on the motorized boats patrolling the swim. We have large tents and shade trees at the finish area. Cold drinks will also be provided at the finish.

Comment on how you will be prepared to care for multiple medical issues: With the 1:1 pilot to swimmer ratio, we have immediate assistance for all swimmers in place. We would call 911 for additional assistance at the finish or where we are able to extract swimmers from the water.

If the water temperature is above 82° F, will you be prepared to deal with heat-related medical issues: If the water temperature is above 82 degF we would either cancel or shorten the event to 8k or less.