



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: Bussell Island Swim
Event Location: **200 Tellico Pkwy, Lenoir City, TN 37772**
City: Lenoir City State: TN LMSC: SE
Event Dates: 5/31/2025 through 5/31/2025
Length of Swim(s): **5.2-km, 2.6-km, 1-mile 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: 5/31/2025 Time: [7:00 am](#)

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

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

Tentative date: 5/31/2025 Time: [7:15 am](#)

Tentative agenda: **Overview of course, safety information, plans for inclement weather, rules.**

Course & Event Conditions

The Course

Body of water: River Water type: Fresh Water Water depth from: 3 ft to: 80 ft

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): **Current will be negligible. Marine life will be minimal. Various underwater hazards may present themselves, but there are no known hazards on the course. Surface winds may create small waves or chop. Swimmers will start in-water from the permanent floating yellow buoys located at the beach of the Tellico Recreation Area.**

The water will be 7-12 feet deep and swimmers will be treading for about one minute prior to starting, and required to have a hand on the buoy.

How is the course marked?

- Turn buoy(s): Height(s) 5 ft Color(s) Orange & Yellow Shape(s) Triangle
- Guide buoy(s): Height(s) 2 ft Color(s) Orange & Yellow Shape(s) Round
- Approximate Distance between Guide buoys: 200m

Number of Feeding Stations: 0

Type of structure(s) used as feeding station(s): none

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

Water & Air Temperatures

Expected air temp range: 65-85 degF
Optional

Expected water temp range: 70-78 degF

Wetsuits:

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.

TEMPERATURE. Unfortunately, there is no live link to water temperature anywhere along the Little Tennessee River. A triathlon (under various names and race production companies) has been held annually in this same area of water for the past several years in the months of April, May or June. During the months of May and June in years prior, water temperatures have been recorded in the range of 67 – 77 degF.

CURRENT. The location of the swim is adjacent to an earthen and coffer Tellico Dam, used only for emergency diversion of water in extreme situations and is not planned or anticipated to be used during our event. This location is also in a shallow bay off of the main channel of the Little Tennessee River and demonstrates little to no presence of current.

WATER QUALITY. This swim location has a TVA recreational beach and another enclosed swimming area that are both open year-round for swimmers and non-swimmers alike to use. TVA will publicly announce and post closures when unsafe swimming conditions exist due to water quality. We will work closely with TVA to communicate any issues they identify that would close this popular recreation area. If TVA makes accessible a water quality test report, we will utilize the information to advise our plans.

Event Safety

Medical Personnel

Lead medical personnel (emergency trained) on site: Heather Wight, D.O.

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? 1

First Responders/Lifeguards & Monitors

Indicate the qualifications of the first responders: YMCA

Number on course: 3 Number on land: 0

Indicate their location on the Race Plan Map. **Lifeguards will be located on at least three motorized boats, patrolling the course. The Safety Director will also be on a motorized boat patrolling the course.**

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. Our Medical Director will be available during the race onshore at the finish area. We will have a first aid kit and AED at the finish. The venue features abundant shade trees and a large permanent pavilion.**

Ambulance/Emergency Transportation & Nearby Medical Facilities

Ambulance(s) onsite: none onsite On Call: 911

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

Closest medical facility: **Fort Loudon Medical Center** Phone: **865.271.6000**

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.): 0-1
- Owned/operated by volunteers or hired individuals: 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: 0

Allocation of Watercraft:

- Safety Watercraft:
 - 1st Responders: Motorized: 3 Non-motorized: 0
 - 2nd Responders: Motorized: **0** Non-motorized: **0**
- Watercraft for race officials: Motorized: 2 Non-motorized: 0
- Watercraft for race supervision: Motorized: 2 Non-motorized: 20-25
- Watercraft for feeding stations: Motorized: 0 Non-motorized: 0
- Watercraft for escorted events: Motorized: 0 Non-motorized: 0
- Other event watercraft: n/a

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: Megaphone/Bullhorn

Swimmer Counting & Accountability

Describe method of swimmer body numbering: **Click Permanent marker on caps, and shoulders and/or hands.**

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

Describe different bright cap colors for various divisions (Recommended): **There will be three bright cap colors (blue, green, pink), with one color per each of the three race distances.**

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) line up in their start corral on the beach, 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, a motorized boat captain will call the Safety Director or Race Director and inform them of the swimmer's decision. This motorboat will collect the swimmer and bring them to the finish area.**

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 a warm-up area located within a permanent yellow buoy located next to the concrete steps adjacent to the race finish. A minimum of two kayaks with safety monitors will be assigned to the area during warm-up. The same area will be available for warm-down once swimmers finish the race, but it will not be monitored by a lifeguard – note that this area is already denoted with signage to be an unmonitored TVA-designated swim area.**

Swimmer Management

Maximum number of swimmers on course at a time: 200

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 five days before the race; no additional swimmers will be allowed on race day.**

How will you deploy the safety staff and crafts distributed to supervise this event to ensure swift recognition, rescue, and treatment of any swimmer? **There will be a minimum of 20 kayakers stationed along the race course, approximately 100-meters apart to monitor swimmers. The kayakers will paddle to their locations prior to the start of the swim race, stay in their area for the duration of the swim, and follow final swimmers to the finish, sweeping the course as they return to the finish. In addition, our medical personnel, lifeguards, a race director and safety director will be spread on at least two motorized boats which will traverse the course for additional coverage.**

How will you deploy the safety staff to maximize rapid response to a troubled swimmer? **A kayaker will make the initial response, and signal for a motorized boat, if needed, to respond to distressed swimmers. All kayakers will have cell phones, paddles and whistles to relay signals.**

How will you alter the event if insufficient safety personnel/craft are available on the day of the swim(s)? **If the motorized boats used to carry the lifeguards and race staff are not available, alternates will be selected. If insufficient safety kayakers are available, the race course may be shortened to ensure adequate visual coverage of the entire race course and all participants.**

Describe your missing swimmer plan: **First confirm that the swimmer checked in and entered the water. Total headcounts of each wave will also be taken. Once the race has started, check with timing to see if all swimmers are accounted for. If they are not, alert the kayaks and motor boat pilots to start a search on the water. Call the swimmer (they could be in their car). If nobody answers, call the swimmer's emergency contact. Leave voicemails and texts. Alert local emergency personnel and request Coast Guard assistance.**

Severe Weather Plan

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

Describe your plan for severe weather or natural disaster: **We will utilize lightning detector apps and have it active the mobile phones of the Race Director, Safety Director, and Medical Person. In case of lightning, dense fog or other severe weather at the planned start of the event, the event start will be delayed 30 minutes. If the conditions have not improved, a second 30-minute delay will be in effect and the 5.2-km race will be shortened to 2.6-km, with a 90-minute time limit. A third delay of up to 30 minutes may be employed. If conditions are still unsafe after 3 x 30-minute delays, the Race Director and Safety Director may agree to cancel the event. If during the event, lightning or other severe weather suddenly forms, the lead motor boat will patrol the course and announce with a bull horn to clear the course while kayakers will alert the swimmers with a 3-blast whistle to clear the course. Swimmers will be directed to exit to land nearest their location, or they may be collected by the nearest motorized craft. Kayakers will also be directed to exit to land nearest their location, following any swimmers and ensuring the swimmers have safely reached land in front of them.**

Describe your course and site evacuation plan, including accounting for all swimmers and other participants: **All swimmers and kayakers exit the water and wait on land. If it does not thunder or lightning for 20 minutes, the motor boats will patrol and tell kayakers swimmers to allow the race to start again, re-entering the course from the same point they exited. If the severe weather continues or worsens, swimmers and kayakers will be advised to shelter in place, until they can be collected with motorized boats and returned to the start area and shelter.**

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. Inform swimmers that a wetsuit may be optional or mandatory on race day. Encourage swimmers to bring additional warm clothing and beverages for post-swim re-warming.**

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: **We may shorten the swim distance (ex: eliminate the 5.2 km option) and/or enact a shorter time limit. If the water is below 60 degF on race day, we would require wetsuits, and/or cancel the swim.**

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 warm beverages after the swim. If forecasted conditions have a cold risk, we will procure warm beverages and “hot hands” for race day to be carried on boats as well as stock at the start/finish. Conditions will be communicated to all volunteers and participants, with instructions to bring additional warm clothing, beverages, and encourage the use of wetsuits.**

Comment on how you will be prepared to care for multiple medical issues: **We will engage with local emergency services via 911 and the Coast Guard.**

If the water temperature is below 72° F, will you be prepared to deal with cold water medical issues: Swimmers will be encouraged to bring and stage warm clothing and towels at the swim exits. Swimmers will be directed into all available personal vehicles for warming. Warm beverages will be provided. If a swimmer shows signs of sever hypothermia, we will engage with local emergency services via 911.

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: **We will emphasize and stress the possibility of warm water conditions on our registration site, as well as at the safety briefing. We will share the signs of over-heating and what actions to take.**

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 emphasize and stress the possibility of warm water conditions on our registration site, as well as at the safety briefing. We will state the signs of over-heating and what actions**

to take. We will encourage all non-swimming participants to use sunscreen, wear wide-brimmed hats, and clothing designed for hot temperatures, and we may rotate duties to allow for breaks in the shade. We will provide water and ice. We will remind everyone to manage pace and exertion. We may shorten the race length (e.g. cancel the 5.2-km option) and/or implement a shorter time limit.

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 buckets at both the 2.6-km and 5-km points of the swim. Cold drinks and ice will also be provided at the finish. The venue has an abundance of tree-shaded areas to reduce sun exposure for affected persons.**

Comment on how you will be prepared to care for multiple medical issues: Swimmers will be directed to shady areas, as well as into available personal vehicles for cooling. We will engage with local emergency services via 911 and the Coast Guard.

If the water temperature is above 82° F, will you be prepared to deal with heat-related medical issues: Yes, medical staff will be on site. We will be prepared to shorten or cancel the swims.