



**U.S. MASTERS  
SWIMMING**  
OPEN WATER

## Open Water Safety Plan Application

### Event Information

#### General Information

Name of Host: Charles River Swimming Club, Inc.  
Name of Event: Eleventh Charles River One Mile Swim  
Event Location: The River Dock (On the Esplanade), Charles River (Near the Hatch Memorial Shell)  
City: Boston State: MA LMSC: NEMSC  
Event Dates: 6/13/2020, rain date 6/20/2020  
Length of Swim(s): 1 mile  
Dual Sanctioned with USA-Swimming: No

#### Key Event Personnel

Event Director: Katharine Radville Phone: 617-365-5501 E-mail: [kateradville@charlesriverswimmingclub.org](mailto:kateradville@charlesriverswimmingclub.org)  
Referee: Katharine Radville Phone: 617-365-5501 E-mail: [kateradville@charlesriverswimmingclub.org](mailto:kateradville@charlesriverswimmingclub.org)  
Certified Safety Director: Pat Costello Phone: 617-997-5075 E-mail: [pat@charlesriverswimmingclub.org](mailto:pat@charlesriverswimmingclub.org)  
Click to enter e-mail address

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

Tentative date: 6/13/2020 Time: 7:00a

Tentative agenda: The pre-race safety meeting will take place on June 13<sup>th</sup>, 2020 at 7a. In the case of rain date, the meeting will take place on June 20, 2020 at 7a. The race director, safety director, safety personnel (EMS, lifeguards) as well as all volunteers stationed on the dock and on the water (kayakers, safety launch crew) will attend the meeting. Additionally, Senior Members of the Safety Team (Safety Director, Zone Captains, Trailing Kayak, and the operator of each of the launches that will be on the race course) will meet to review the safety plan and designate responsibilities one week prior to the swim. Lastly, The Charles River Association of Boaters (CRAB) will collaborate with the Charles River Swimming Club, Inc. in advance of the swim to assist with notifying boaters of the event.

The following information will be reviewed during the pre-race safety meeting:

#### 1. Roles of Support Staff and Craft

##### A. On the Land

- The River Dock (Start and Finish Lines): The Race Director, Safety Director and a lifeguard will be positioned on the River Dock.
- EMT, provided by EMS, will be stationed on a second dock immediately adjacent to the River Dock and with a view of the race course.

## B. On the Water

- State Police Marine Unit(s) and/or the DCR Park Ranger Boat: Will monitor boat traffic during the event. A clear channel for safe passage of boat traffic will be designated during the swim. See map in later section.
- Safety Kayakers (8 minimum): Will monitor the course and the swimmers. These volunteers will be in 1 or 2-person kayaks, with certified lifeguards in each of the 2-person kayaks. Kayakers and lifeguards will be assigned to zones of responsibility (see below).
- Safety Launches / Evacuation Craft (Boston Whaler) (two minimum): Each with one certified lifeguard, a licensed boat operator and an additional volunteer to “spot” swimmers. The launches will have propeller guards.
- Trailing Kayak: A double kayak with a Lifeguard and paddler, who is a senior, returning member of the Safety Team, will trail the final swimmers and will make the determination, in coordination with each Zone Captain, that each zone is clear of swimmers.
- Lifeguards (7 minimum): One will be stationed on the dock (Start and Finish Line), another in each of the 2 Safety Launches and another in the trailing kayak. The rest will be on the course in double kayaks, paired with a paddler, for mobility. **Please note:** All lifeguards will be Red Cross or YMCA certified.
- Other Support Craft: Motorized launches stationed ¼ of a mile up river and ¼ mile down river in order to alert boat traffic to the presence of swimmers. While the river cannot be fully closed to boat traffic at any time, boaters will be notified of an open channel by which they can safely pass by the race course (see map).
- Pre-Event Notification of Boaters: The Charles River Swimming Club, Inc. collaborates with The Charles River Association of Boaters (CRAB). In advance of the swim, CRAB will facilitate notification of area boating clubs and relevant organizations of the swim such that boaters are aware of the event and are notified of the location of the vessel channel.

## 2. Review of Briefing Information: Emergency procedures, water conditions, any known hazards

- Swimmers are required to wear the fluorescent caps as provided by the race organizer.
  - In the case of a latex allergy, this requirement will be waived safely due to the additional provision of timing chips and body marking.
- Swimmers are briefed on the course, conditions, temperature, start and finish and emergency procedures.
- Swimmers are told to raise their hand, wave and yell if they need assistance.
  - A safety kayaker and lifeguard will respond and provide assistance rescuing the swimmer or will guide the swimmer to shore.
  - The kayaker will signal for assistance from the Safety Launch if needed.

- If necessary, the Safety Launch will take the person onboard and return to dock for medical assistance
- Should it be necessary to cancel the race after it has begun, the Safety Director will notify the Race Director, State Police/ Ranger Boat and Safety Launch via walkie-talkie.
  - The Safety Launches will assist with notifying the safety kayakers to clear the water.
  - The safety kayakers will blow their whistles for a prolonged period and will sound their air horns.
  - They will guide the swimmers to the dock (start/ finish line)
  - A headcount will be conducted via collection of timing chips as the swimmers arrive and checked against the electronic registration list to ensure each swimmer is accounted for.
- Neither warm up nor warm down is allowed.
- In case swimmers need non-emergency medical assistance, they will be directed to Massachusetts General Hospital, a few blocks away from the race site.
- Swimmers are checked in and checked out to make sure everybody is accounted for after the race. This will be facilitated in part by electronic, chip timing.
  - Swimmers will pass over a checkpoint upon entry to be checked in.
  - They will exit from the race course via tagging to finish line timing pad to be checked out.
    - They will return their timing chips to be racked in order by race number to augment ability to account for each swimmer.
- The club has established and enforces a cut-off time of forty minutes to round the final buoy (nearest to the finish line). Swimmers who do not meet the cut-off time will be escorted back to the dock or pulled from the water by the safety launch, at the Race Director's discretion.
  - Additionally, the race director has full discretion to pull swimmers from the water who pose a safety risk or who do not appear able to complete the race course in a reasonable amount of time.
- Kayakers and lifeguards will be equipped with air horns and walkie-talkies in order to communicate with the Safety Launch/ Evacuation Craft and shore (Race Director, Safety Director).
- A PA system is available for announcements.

**3. The following information will be specifically reviewed with the “safety team” in three ways prior to the race:**

- A. Email distribution: Prior to race day such that they can review the materials and included links.
- B. Safety Team Preparation Meeting, Senior Members: One week prior to the race, senior members of the Safety Team will go over roles, responsibilities, communication, equipment and potential scenarios. Senior members include the Safety Director, Zone Captains, Trailing Kayak, and the operator of each of the launches that will be on the race course.
- C. Pre-Race Safety Meeting: All Safety Related Volunteers, Immediately prior to the start of the race.
  - Familiarize yourself with the race course - a map is available at the end of this document. The race is a clockwise loop that starts and ends at the River Dock. <sup>[1]</sup><sub>[SEP]</sub>
  - Swimmers have been instructed to remove their caps and wave them if they need help. **However, it is not always the case that a distressed swimmer can do so!** Someone in trouble may be spending all their energy simply trying to keep their head above water. Read this link describing potential behavior of a distressed swimmer: <http://mariovittone.com/2010/05/154/> <sup>[1]</sup><sub>[SEP]</sub>
  - If you find a swimmer in need of removal from the water, sound your air horn until a lifeguard (in the case that you do not have one with you) and the Safety Launch arrive. <sup>[1]</sup><sub>[SEP]</sub>

- Lifeguards (7 minimum) will be positioned as follows:
  - One on the dock [SEP]
  - One on each safety launch [SEP]
  - One in the Trailing Kayak, along with a paddler, with the responsibility to declare each zone to be clear of swimmers.
  - The rest on two person kayaks with another paddler such that they can enter the water if need be while the other paddler maneuvers the kayak and signals for help. [SEP] Additional lifeguards will also be assigned to clear zones of responsibility.
- Kayakers and lifeguards will be assigned to zones of responsibility. Roles will be assigned prior to race day by the Volunteer Director and reviewed/ approved by the Safety Director and Race Director.
  - The distance between Turn Buoys will be designated a Zone. There will be three Zones.
  - Each Zone will be patrolled by a Safety Team and led by a Zone Captain. Each team will consist of at least:
    - A double kayak, with a lifeguard and paddler
    - One or more single or double kayaks
    - One of these kayaks will be designated as the zone captain
- Another double kayak will be designated as the Trailing Kayak and will be manned by the Trailing Captain and a lifeguard.
- Kayakers are to remain in their zones of responsibility until the zone is declared clear of swimmers by the agreement of the Zone Captain and the Trailing Kayak.

Once the final swimmer touches the timing pad (finish line), Zone # 3 will be determined to be clear. This will be done by the related Zone Captain and Trailing Kayak in collaboration with the Race Director and Safety Director by scanning the water and by verifying that all timing chips have been re-racked. Then, all Safety Team members will return to their point of entry to return kayaks and stow equipment. At that time, the Safety Director will lead a post-race debriefing.

- Swimmers may occasionally veer off course. As necessary, kayakers will get into their field of view (notice which side they breathe from) and direct them back to the course. [SEP] Kayakers, in particular those assigned to paddle with a lifeguard, should do their best not to leave their zones of responsibility when assisting with swimmer navigation. They should assist with swimmer navigation only when a swimmer is clearly veering out of the race course. Their primary role is safety, not navigation.

- In the unlikely event that the race is cancelled due to lightning: The Safety Director will inform the two Safety Launches and Zone Captains to clear the course. Zone Captains will inform all other Safety Personnel. Kayakers will continuously blow whistles and sound air horns in order to gain the attention of every swimmer. Swimmers will be directed to return to the dock as efficiently as possible.

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

Tentative date: 6/13/2020

Time: 7:40a

Tentative agenda:

**All swimmers will be briefed on the following safety considerations and requirements:**

- Swimmers are required to wear the fluorescent caps provided by the race organizer.
- Swimmers should have their timing chips firmly attached to their wrists. A fee will be assessed for lost chips.
- Keep the buoys on your right. You will swim around two large buoys and three smaller, intermediary buoys in a clockwise triangle. See attached map for swimmers.
- All swimmers must pass over the timing mat to enter the race course (positive check in) and must tag the finish line upon completing the swim course (in-water finish)
- Body marking should be completed for each swimmer (hand and upper arm if no wetsuit, hand only if wetsuit) prior to the race start and is mandatory.
- A feet-first entry in to the water (or use of the dock ladder) is required.
- No diving.
- In water start in two, 100-person self-seeded waves. Swimmers will submit approximate mile times at registration and faster swimmers will swim in wave one. This will address safety concerns related to stronger swimmers overtaking/ colliding with slower swimmers as they pass. The waves will start 3 minutes apart.
  - Wave one swimmers must round the final buoy by 8:40a.
  - Wave two swimmers must round the final buoy by 8:43a.
  - Swimmers who do not meet those time cutoffs can also be pulled from the water per the discretion of the Race Director.
- Slower swimmers should take caution to start near the back of the group to avoid collisions/ unnecessary difficulty.
- Swimmers are briefed on the course, conditions, temperature, start and finish procedures (e.g. in water start, immediate exit from the water upon race completion) and emergency procedures.

- Raise your hand and wave and yell if you need assistance. A safety kayaker will respond and, if necessary, guide you to shore or away from other swimmers, where the Safety Launch can take you onboard and return you to the dock for medical assistance, if necessary.
- Should it be necessary to cancel the race after it has begun, the safety boaters will blow their air horns for a prolonged period and guide the swimmers to the dock or the closest shore. A headcount will be conducted as the swimmers arrive via timing chip collection.
- When exiting the water at the conclusion of the swimmer's swim, they are to use one of the ladders affixed to the dock. Exiting from the shore is not permitted.
- Warm up and warm down are not allowed.
- In case swimmers need non-emergency medical assistance, they will be directed to Massachusetts General Hospital, a few blocks away from the race site.

Swimmers will be checked in and checked out to make sure everybody is accounted for after the race via use of electronic chip timing.

## Course & Event Conditions

### The Course

Body of water: River Water type: Fresh Water

Water depth from: 12 to 30 feet

Course: Open Course

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

Agency name: State Police via Marine Unit and/ or DCR Ranger Boat

How to contact during event: PA System and Cellular Telephone

\*Vessel traffic cannot be fully blocked from traversing the river during the event. Therefore, all vessel traffic will be notified of the swim and directed to the vessel channel, which is marked on the attached map.

Expected water conditions for the swimmers: (marine life, tides, currents, underwater hazards): The Charles River One Mile Swim uses an in-water start and finish adjacent to the River Dock, where the water is relatively deep, to avoid any potential hazards at the bottom of the river. Swimmers are required to use a foot first jump off the dock to get to the starting line. There is no expectation of any interference or danger from marine life or of any significant impact of tides or currents on swimmer performance or safety. There is little to no current in the river.

How is the course marked?

- Turn buoy(s): Height(s) 3 feet      Color(s) Orange      Shape(s) Tetrahedron
- Guide buoy(s): Height(s) 2 feet      Color(s) Yellow      Shape(s) Cans
- Approximate Distance between Guide buoys: Turn buoys are ¼-1/2 miles apart (additional guide buoys will be used on the longest leg of the course, see map 2)

Number of Feeding Stations: 0

Type of structure(s) used as feeding station(s): 0

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



**Water & Air Temperatures**

Expected air temp range: 65-75 degrees

Expected water temp range: 68-72 degrees

Wetsuits: Optional (not permitted if the water temperature is above 78 degrees)

**Water Quality**

**Water quality:**

Although the water quality of the Charles River has improved significantly over the past decade, many sections of the river still experience bacterial concentration variability that sometimes exceeds the swimming standard. The variations in bacteria levels are typically tied to prior levels of rainfall. Our event permit, which will be issued by the MA Department of Conservation and Recreation (DCR), is contingent upon water quality meeting

high standards for safe swimming. We work with the MWRA and DPH on pre-race water quality testing. The race will only take place if the applicable state standards are met. Water quality will be assessed during the week leading up to the swim.

### **Debris and bottom sediment:**

The Charles River One Mile Swim uses an in-water start and finish adjacent to the River Dock, where the water is relatively deep, to avoid any potential hazards at the bottom of the river. Swimmers are required to avoid diving off the dock to get to the starting line. They are required to avoid touching the bottom of the river.

## **Event Safety**

### **Medical Personnel**

Lead medical personnel (emergency trained) on site: Boston EMS, specific name of EMT on site TBD per race day availability.

Experience in sporting events (Marathon, Triathlon, Open water swim, etc.): Yes

Will medical personnel be located on the course? Yes (EMT)

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?

One EMT provided by Boston EMS, a minimum of 7 lifeguards, Park Rangers (provided by the Department of Conservation and Recreation) and the State Police (Marine Unit).

### **First Responders/Lifeguards & Monitors**

Indicate the qualifications of the first responders: American Red Cross Certified Lifeguards

Number on course: A minimum of 7 (3 on kayaks in each zone, 1 on each Safety Launch, 1 on the River Dock)

Indicate their location on the Race Plan Map (see below for description and corresponding map).

Based on the course map below, lifeguards and kayakers will be assigned to zones. This information is also provided above, within the section titled “Pre-Race Safety Meeting”. The assignments will be as follows:

- One paired kayaker/ lifeguard designated as the “Trailing Kayak”- described in earlier sections. Specific job will be to ensure the back pack of swimmers have cleared each buoy.
- A paired kayaker/ lifeguard in Zone 1
  - Minimum one additional kayak in this zone
- A paired kayaker/ lifeguard in Zone 2
  - Minimum one additional kayak in this zone



- A paired kayaker/ lifeguard in Zone 3
  - Minimum one additional kayak in this zone
- Any additional kayakers will be assigned to zones and will assist with swimmer spotting/ general oversight
- A lifeguard on each motorized safety launch
- A lifeguard at the River Dock (start and finish lines)

### **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.

- EMS (1 EMT) will be on-site. In case swimmers need non-emergency medical assistance, they will be directed to Massachusetts General Hospital, a few blocks away from the race site. EMS will be located on a second dock immediately adjacent to the River Dock and with a view of the race course. The River Dock appears in the aerial view of the course as pictured above (immediately to the lower right of the two closely positioned red, start/ finish buoys).

### **Ambulance/Emergency Transportation & Nearby Medical Facilities**

Ambulance(s) onsite: Phone number: TBD On Call: TBD<sup>[1]</sup><sub>[SEP]</sub>

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

Closest medical facility: Massachusetts General Hospital Phone: 617-726-2000 Type of medical facility (urgent care, hospital, etc.): Urgent Care/ Hospital/ Trauma Center Distance to closest medical facility: 1/4 miles  
Approximate transport time: 2-3 minutes via ambulance

Star on map denotes race start and finish and location of emergency medical personnel.

### **Watercraft**

Motorized Watercraft:

- Owned/operated by government agencies (Coast Guard, police, fire & rescue, etc.): 1 (State Police Marine Unit)
- Owned/operated by volunteers or hired individuals: 2 (Safety Launch: Boston Whaler)

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: 2 (Safety Launches) Non-motorized: 0
  - 2nd Responders: Motorized: 0 Non-motorized: Minimum 8 (kayakers)
- Watercraft for race officials: Motorized: 0 (Safety Launch: Boston Whaler) Non-motorized: 0
- Watercraft for race supervision: Motorized: Launches stationed ¼ mile up and down river, see below Non-motorized: Minimum 8 (kayakers)
- Watercraft for feeding stations: Motorized: 0 Non-motorized: 0
- Watercraft for escorted events: Motorized: 0 Non-motorized: 0
- Other event watercraft: We will have mandatory assistance from kayaks, some with lifeguards and some without. We will also have mandatory assistance from two Safety Launch/ Evacuation Craft (Boston Whalers with propeller guards) with a lifeguard and spotter aboard. In addition to this, we will have a State Police Marine Unit and/or DCR Ranger patrol boat available to monitor boat traffic during the swim. In addition, there will be launches stationed ¼ of a mile up river and ¼ mile down river in order to monitor and notify river traffic during the duration of the race.

Emergency Signal Flag Color for all watercraft: Orange

**Communications**

Primary method between event officials: Walkie-talkies

Secondary method: Cell phones and air horns.

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

Secondary method: Walkie-talkies and air horns.

**Swimmer Counting & Accountability**

Describe method of swimmer body numbering:

- Volunteers will be recruited to mark all swimmers at check-in with their respective race numbers.
- Caps will be numbered to match body marking.
- Upper arms as well as hands will be marked with use of a permanent marker.
- Hands only will be marked for those swimmers wearing full wetsuits.

Describe method of electronic identification of swimmer (Recommended):

- Electronic chip timing will be provided by AllSportsEvents, Inc.
- This will help to facilitate safety via positive check-in and check-out.
- At the time of check-in, swimmers will be provided with timing chips in the form of wrists bands that correspond to their race numbers.

Describe different bright cap colors for various divisions (Recommended):

- Fluorescent orange and yellow caps will be provided to all swimmers and will be assigned based on waves. Caps will be marked with race numbers.

Describe method of accounting for all swimmers before, during and after swim(s):

- A positive check-in/ out system will be strictly enforced at the beginning and at the conclusion of the race.
- Swimmers will check in via walking on to the River Dock and over the entry timing pad while wearing their timing chip on their wrist.
- This will provide an accurate list of swimmers who enter the water.
- Upon the conclusion of the race, all swimmers will be required to tag a timing pad with the hand on which the timing chip wrist band is attached to electronically register their finishing time.
- Volunteers will then guide them to exit the water at a single ladder and check out with a volunteer via returning racking their timing chips.
- Swimmers will not be allowed to enter the water during the event for warm-up or warm-down.
- As back up to the use of electronic timing chips to facilitate accounting for swimmers, volunteers will count swimmers as they enter the dock/ water and as they exit the race course.

Describe method of accounting for swimmers who do not finish:

- If a swimmer is unable to finish the race, they will be escorted/ assisted to the River Dock via either the motorized support craft (Boston Whaler) or via assistance of a kayaker and lifeguard, depending on the nature of the difficulty.
- Positive check-out will then be achieved via registering with the race volunteer staff that the swimmer has in fact been accounted for.
- A time of “DNF” will be recorded for the swimmer by the timing crew.
- The timing chip will be returned to the race staff and organized via racking it with its corresponding number.

## **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?

- No race day registration or bandits. Therefore, not applicable.

How will you deploy the safety staff and crafts distributed to supervise this event to ensure swift recognition, rescue, and treatment of any swimmer?

Lifeguards will be positioned in kayaks and assigned to zones of responsibility (at regular intervals between race buoys). Please see above regarding additional information in terms of how lifeguards will be instructed to patrol the swim course and as to how kayakers will be trained to guide swimmers to remain within the boundaries of the course.

How will you deploy the safety staff to maximize rapid response to a troubled swimmer?

Swimmers are told to raise their hand and wave and yell if they need assistance. However, this will not always be possible for the swimmer to accomplish in the case of a true emergency. Regardless, a safety kayaker (with a lifeguard aboard) will respond immediately to any emergency/ sign of a struggling swimmer and, if necessary, guide the swimmer either to shore or away from other swimmers, where a safety launch can take the person onboard and return to dock for medical assistance, if necessary. Should it be necessary to cancel the race after it

has begun (due to a swimmer management or weather related issue), the safety boaters will blow their whistles and sound their air horns for a prolonged period (single long whistle blast) and guide the swimmers to the dock or the closest shore. A headcount will be conducted as the swimmers arrive.

How will you alter the event if insufficient safety personnel/craft are available on the day of the swim(s)?

- The race will not be held should extenuating circumstances lead to insufficient availability of safety personnel/ craft on race day.

Describe your missing swimmer plan:

- Should it be determined at any time during the event that a swimmer might be missing, the emergency action plan will be implemented which will include clearing the course with a single, long blast of an air horn (as described above).
- Positive check-in will have been completed, and positive check out will be completed in full as swimmers exit the water.
- Then, a search will be conducted per the specific standards of the American Red Cross lifeguarding curriculum/ guidelines. EMS and the State Police, as well as DCR Park Rangers, will be present and involved.
- Emergency contacts for the missing swimmer will be called (this information is collected at registration)

### **Severe Weather Plan**

Is a lightning detector or weather radio available on site? Yes, weather radio.

Describe your plan for severe weather or natural disaster:

- In the case of severe weather, the race course will be cleared of swimmers as quickly as possible under the direction of the safety team and the motorized crafts via a single, long blast of an air horn.

Lifeguards and kayakers will be instructed as follows: “In the unlikely event that the race is cancelled due to lightning you will be informed by the safety launch and are to continuously blow your air horn and direct swimmers and immediately return to the dock. Thereafter immediately return to dock yourself and seek shelter.”

Describe your course and site evacuation plan, including accounting for all swimmers and other participants:

All swimmers will access the course for entry and exit via the River Dock (such as to adhere to use of a positive check-in/ check-out system and to maximize safety). Should the greater site need to be evacuated, participants will be directed to local establishments and to Massachusetts General Hospital in the case of a true, severe emergency.

## **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.

## General Information

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: All of the above. Our pre-race information, emailed to all swimmers and covered during the swimmer safety meeting on race day, covers the necessity of swimmer preparedness as well as the potential effects of becoming both cold and hot during a swim race.

## 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: Should the water be below the estimated temperature range, we will encourage wetsuits for all swimmers and will place extra emphasis on the importance of preparedness prior to participation in cold water events.

## 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: We will have multiple first responders on the course regardless of the water temperature. We always have thermal blankets available regardless of weather conditions. Extra volunteers are available at the race finish to distribute thermal blankets regardless of water temperature.

Comment on how you will be prepared to care for multiple medical issues: Presence of lifeguards, EMS, State Police (e.g. multiple trained individuals at the race course/ site).

**If the water temperature is below 72° F, will you be prepared to deal with cold water medical issues:** Yes. Our comprehensive safety plan is fully adequate to address cold water medical issues regardless of the water temperature. We are aware that swimmers can become cold during a race in a wide range of weather and water temperature situations.

## **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: All of the above. Our pre-race information, emailed to all swimmers and covered during the swimmer safety meeting on race day, covers the necessity of swimmer preparedness as well as the potential effects of becoming both cold and hot during a swim race.

### **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: Should the water be warmer than expected, we will remind participants to stay well hydrated, select an appropriate pace and we will make swim caps optional. While we provide brightly colored swim caps as an extra safety precaution, they are not essential in tracking swimmer numbers due to our use of body marking and chip timing. Therefore, they are optional.

### **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 always staff our swim with extra volunteers. Regardless of the weather and water temperature, it is fully staffed by EMS, lifeguards, the State Police, DCR Rangers and extra volunteers at the start/ finish. A cool, fresh water shower is available. Should the weather be excessively hot, we will use tents to provide shade although trees provide ample shade immediately adjacent to the swim site.

**Comment on how you will be prepared to care for multiple medical issues:** Multiple first responders including EMS and Red Cross trained lifeguards will be at the race regardless of weather conditions.

**If the water temperature is above 82° F, will you be prepared to deal with heat-related medical issues:** Yes, via the methods described above.