



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: **Reston Masters Swim Team (RMST)**
Name of Event: **Jim McDonnell Lake Swims (JMLS)**
Event Location: **Lake Audubon**
City: **Reston** State: **VA** LMSC: **PV**
Event Dates: **9/25/2020** through **9/26/2021**
Length of Swim(s): **1 mile, 2 mile**
Dual Sanctioned with USA-Swimming: **No**

Key Event Personnel

Event Director: **Larry Paulson** Phone: **703-314-3697** E-mail: **laurence.paulson@gmail.com**
Referee: **Andrew Koons** Phone: **703-509-6713** E-mail: **askoons@email.wm.edu**
Certified Safety Director: **Kevin Hardy** Phone: **717-752-7576** E-mail: **wsshady@gmail.com**

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

Tentative date: **9/25/2021** Time: **0900 (tentative)** Location: **Lake Audubon boat ramp**

Tentative agenda:

- 1) Introduction (include key personnel)
- 2) Goals – One Team focused on Safety
- 3) Course – Review the course map/layout, course zones, guide and boundary buoys, Emergency Medical Services (EMS) (zodiacs) placement and staging, pontoons, paddleboards and watercraft, safety director/lifeguard placement, referee and marshal placement, timing and shore personnel associated with finish and swimmer tracking, COVID-19 safety procedures for start/finish
- 4) Lifeguard equipment and staging (Rescue Floatation Device (RFD), fanny packs, rescue board, throwables)
- 5) Communication (walkies, phone, flag, whistle, horn)
- 6) Roles/Procedures (expected)
- 7) Safety Rules
- 8) COVID Policy for race- Swimmers, Officials, Volunteers, Lifeguards and Safety personnel, as well as spectators.
- 9) Swimmer overview (race specifics, rules, cap colors)
- 10) Tracking swimmers and the flow of the race; scanning for issues (e.g. swimmer in distress, swimmer drowning, change in pace or stroke, tiredness)
- 11) Pulling swimmers when tired or past the cut off
- 12) Swimmer rescue (United States Lifesaving Association (USLA) standards), to include communication, changes in zone coverage and EMS engagement.
- 13) Procedures for course evacuation i.e. Emergency Action Plan, missing swimmer
- 14) Lifeguard practice/drill session in lake with rescue craft

Tentative date: **9/26/2021**

Time: **0700**

Tentative agenda: **Race Day Safety Briefing/Pre-race review**

- 1) roll call for race leadership, safety director, EMS, and lifeguards
- 2) paddleboards and equipment assigned
- 3) watercraft and safety volunteers accounted for and given final positions
- 4) final coordination with Fairfax County Fire & Rescue Department (FCFRD)
- 5) highlight aspects of the safety plan and COVID plan covered the day before and any final announcements related to water temperature or other race conditions.
- 6) last minute questions and concerns (all have a voice in Safety)

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

Date: **9/26/2021**

Time: **0730 for 1-mile/ 0915 for 2-mile**

Tentative agenda: Swimmers will be given a safety briefing before each race. They will also receive safety reminders at check in. Generally, these briefings contain race conditions, position of life guards, Standup Paddleboards (SUPs), pontoon boats and EMS zodiacs, course layout, race rules, description of hazards and emergency procedure (including EMS considerations), rolling start protocol, cut-off times for 1& 2 mile finish and mid cut-off time for 2-mile race to be strictly enforced. Times will be tracked by timer and color caps will help track pacing. Swimmers will need to check caps, markings and entry cards (no card, no entry rule). Because this year includes a new procedure with rolling starts, swimmers will be briefed on the process in registration confirmation and staged at check in to permit social distancing. Race times will begin and end when each athlete crosses the timing mats. Swimmers will be reminded of the importance of early recognition of fatigue and other limitations, proactive request for assistance, and courtesy to competitors and race officials. This main briefing should last 15-20 minutes depending on the number of questions from participants. Key points will be recapped with registration.

Course & Event Conditions

The Course

Body of water: **Lake** Water type: **Fresh Water** Water depth from: **3 feet** to: **25 feet**

Course: **Closed-only event watercraft allowed**

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

Agency name: **N/A** How to contact during event: **N/A**

Expected water conditions for the swimmers (marine life, tides, currents, underwater hazards):

Lake Audubon is an inland 43.5 acre man-made freshwater impoundment with an urban/sub-urban watershed. The lake is calm with minimal impact from wind. Snakeden Branch is the main tributary feeder providing little to no current to the lake. The lake has a mean depth of 9.5 feet with a primarily silt laden bottom accompanied by submerged natural debris. The course will traverse some of the deepest parts of the lake. The lake is home to natural fish and wildlife found in freshwater ecosystems of the Middle Atlantic States. Filamentous algae, hydrilla and spadderdock have been found in the lake and may be encountered the day of the race on the shallow end of the lake due to late summer season conditions. Should this be the case they it will be indicated in the safety briefing materials. At no time should these naturally occurring flora obstruct the main race course. It is anticipated that the race day water temperature will be between 72 and 78 degrees Fahrenheit with a mean visibility of 2.5-3.5 feet.

For race day conditions see: <http://www.restonmasters.com/jmls-lake-swim/lake-temperature/> The course will remain closed to non-race traffic, including swimmers and watercraft, throughout the event.

How is the course marked?

- Turn buoy(s): Height(s) **7ft** Color(s) **Yellow** Shape(s) **tetrahedron**
 - Guide buoy(s): Height(s) **6ft** Color(s) **Yellow** Shape(s) **cylindrical**
 - Guide buoy(s): Height(s) **3ft** Color(s) **Orange** Shape(s) **spherical**
- Approximate Distance between Guide buoys: **.2 mile**

Number of Feeding Stations: **0**

Type of structure(s) used as feeding station(s): **N/A**

Number of people the structure(s) can safely hold: **N/A**

Water & Air Temperatures

Expected air temp range: **80 F** Expected water temp range: **70-76 F** Wetsuits: **Optional based on race day conditions**

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.

Note: If the temperature is below 72, swimmers will be notified and encouraged to prepare for the colder weather e.g. stress response to cold shock, dizziness, cramps and hypothermia. Those who have them will be encouraged to consider using a wetsuit, neoprene cap (or double caps) If the temperature exceeds 78 swimmers will be advised of the cancelation of the wetsuit category and no thermal wear will be permitted in the race.

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.

The Reston Association (RA) will have the water tested in accordance with base swimming standards the week prior to race day as per RMST agreement with RA. Fredricktowne Labs Inc. (www.fredericktownelabs.com) provides a written report regarding water conditions, which is available a few days prior to and during race day.

Event Safety

Medical Personnel

Lead medical personnel (emergency trained) on site: **Dr. Chun Hong, M.D.**

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

Yes

Will medical personnel be located on the course?

Yes

How many medical personnel do you plan to have on site? **5**

Dr. Chun Hong, who serves as the Medical Director (MD), will be positioned at the race start/finish ramp. FCFRD personnel will be staged at a firetruck and/or ambulance parked approx. 40 feet away from the start/finish for quick venue access and departure. Emergency Medical Technicians (EMTs) will be staged in two zodiacs on the swim course. All FCFRD personnel are EMT certified. In addition all lifeguards and many volunteers have advanced first aid and Cardiopulmonary Resuscitation/Automated External Defibrillator (CPR/AED) training. USLA lifeguards have a minimum of public safety personnel Basic Life Support (BLS) emergency medical response training.

NOTE: FCFRD personnel must remain in service to the community. 1 Medical Doctor and 1 EMT will always be on site but it is possible the ambulance may need to respond to community emergencies. They have committed to stage at the race site for our needs. 911 permits access to an ambulance within 12-15 minutes or less if the staged ambulance is unavailable. Additional emergency medical personnel may be provided by Fairfax County Volunteer Fire and Rescue Association (FCVFRA) upon availability of that organization.

First Responders/Lifeguards & Monitors

Indicate the qualifications of the first responders: **ARC and Ellis Lifeguards**

Number on course: **15**

Number on land: **1**

At least half of the lifeguards will possess additional Waterfront Certification and open water safety credentials. Many maintain affiliation with a local USLA agency.

Indicate their location on the Race Plan Map: **Lifeguards will be primarily on SUPs evenly spaced in zones; Safety Director and lead guard will be on pontoons centered in alternating zones; EMTs will be in two zodiacs on the upper and lower ends of the course; Volunteer monitors will utilize a minimum of 4 paddle craft to watch turn buoys and/or traverse the outer edges of the course keeping swimmers on track. Additional volunteer monitors may be stationary on pontoons or paddle craft to alert responders to trouble.**

FCFRD personnel will be staged at a firetruck and/or ambulance parked approx. 40 feet away from the start/finish for quick venue access and departure. EMTs will be staged in two zodiacs on the swim course. Should FCVFRA volunteer EMTs become available they will be staged at the finish line and/or first aid tent.

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.

Primary medical care will be provided for the duration of the races by the MD and 1-2 assistants at a medical tent near the entrance/exit to the lake. It is clearly marked for first aid. It is marked as M on the map. The tent will be medically equipped by the MD. Cots and chairs will be available for use. Ice and blankets, will also be available as needed. The FCFRD firetruck and/or ambulance will at minimum carry Basic Life Support (BLS) equipment, but likely will be Advance Life Support (ALS) equipped. Should FCVFRA EMT's become available they will bring an additional BLS ambulance and staff the first aid tent. Additional BLS bags will also be carried by EMTs in zodiacs and the Safety Director on a pontoon. All lifeguards will carry fanny packs stocked with CPR masks and personal protective equipment.

Ambulance/Emergency Transportation & Nearby Medical Facilities

Ambulance(s) onsite: **Fairfax County Fire & Rescue Department (1 or 2 ambulances and/or 1 fire engine)**

On Call: **911 / (703) 437-7575**

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

Closest medical facility: **Reston Hospital Center**

Phone: **(703) 689-9000**

Type of medical facility (urgent care, hospital, etc.): **Hospital**

Distance to closest medical facility: **2-5 miles** Approximate transport time: **9 Minutes**

Watercraft

Motorized Watercraft:

- Owned/operated by government agencies (Coast Guard, police, fire & rescue, etc.): **1-2 Zodiacs**
- Owned/operated by volunteers or hired individuals: **2-4 pontoons**

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: **2-4**

Allocation of Watercraft:

- Total Safety Watercraft:
 - 1st Responders: Motorized: **0** Non-motorized: **19-23 (SUPs, rescue boards, canoes, kayaks)**
 - 2nd Responders: Motorized: **3-6 (Zodiacs & pontoons)** Non-motorized: **0**
- Watercraft for race officials: Motorized: **1 (pontoon)** Non-motorized: **2**
- Watercraft for race supervision: Motorized: **2-4 (pontoon)** Non-motorized: **19-23 (SUPs, rescue boards, canoes, kayaks)**
- Watercraft for feeding stations: Motorized: **0** Non-motorized: **0**
- Watercraft for escorted events: Motorized: **0** Non-motorized: **0**
- Other event watercraft: **All watercraft (22-29) are tasked with race safety. A minimum of 15 lifeguards will individually staff SUPs or Rescue Boards. An additional 4-8 canoes and/or kayaks will be staffed with volunteer monitors who may shadow weak swimmers. 2-4 pontoons will remain stationary as secondary rescue/observation platforms. 1-2 Zodiacs will serve as primary medivac watercraft.**

Emergency Signal Flag Color for all watercraft: **Orange**

Communications

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

Primary method between medical personnel, first responders & safety craft: **Radio (separate channel from Meet Officials)**

Secondary method: **Megaphone/Bullhorn**

Swimmer Counting & Accountability

Describe method of swimmer body numbering: **Shoulders or hands (if a full-arm wetsuit); and cap**

Describe method of electronic identification of swimmer (Recommended): **Chip**

Describe different bright cap colors for various divisions (Recommended): **4-6 Different cap colors based upon entry time.**

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

Entry/Exit checklist with entry card collection, body numbering, numbered swim cap collection, redundant chip reading, data entry upon entry/exit, and manual counting will all be used to account for swimmers. Athletes will check in at a registration table where they will receive an entry card and a colored swim cap with number and timing chip that are pre-assigned. They will proceed to body marking for numbering. Swimmers will hand their card to an accountability volunteer just prior to entering the water through a timing chute where the chip will register with timing software connected to two redundant timing mats. The exit will also be across separate timing mats connected to the same timing system. All swimmers must ingress/egress the course across the mats. Any early dropouts will either cross the mat or have their chip turned over to a race official to register at the mat. Each entering and exiting swimmer will be counted manually and their cap will be collected to match with the entry cards and checklist.

Describe method of accounting for swimmers who do not finish:

Electronic and back up electronic systems will account for Did Not Finish (DNF) swimmers, plus body numbers will be matched to cap and card numbers. Any early dropouts will either cross the mat or have their chip and cap turned over to a race official to register at the mat. DNF swimmers collected mid-course without medical emergencies will be held on a pontoon craft until race end. The accountability manager will be notified of the drop out and DNF swimmers will be directed across the timing mat upon exiting the boat.

Warm-up/Warm-down Safety Plan

Describe safety plan for warm-up/warm-down, include number and location of lifeguards and designated watercraft.

Do to current COVID restrictions swimmers will be not able to use the 6 lane Lake Audubon community pool facility, adjacent the lake, at the race start/ finish. However should these restriction relax before race day the pool may be utilized. Per agreement with RA, they will provide at least one lifeguard to staff their facility before and during the race IF COVID Restrictions are lifted to permit this.

Swimmer Management

Maximum number of swimmers on course at a time: **300**

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?

There is a cut off at 300 swimmers per race. There are no walk on "deck" entries except personal swimming guides for disabled swimmers may be added.

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

Most watercraft will flank the race course corridor. See map. Pontoons and EMS Zodiacs will be used to recover swimmers. The Zodiacs will be used to medevac those with medical emergencies back to the start/finish line. A few canoes/kayaks will be used to steer swimmers from outside boundaries back onto the course. Lifeguards will be staged on SUPs and/or rescue boards in 4 quadrants, on the outside of each tetrahedron buoy, and by the drain at the finish end of the swim. All lifeguards will be assigned a zone. Positioning will be distributed evenly across the course. Zones assignments will overlap to ensure full coverage. As swimmers return, coverage may be shifted to adjust for progress along the course. All safety personnel will be reminded the characteristics of tired, distressed, and drowning swimmers at the pre-race briefing. The emergency action plan will be followed for each.

NOTE: FCFRD zodiacs are part of a national emergency response task force. If they are deployed on race day, an additional motorized rescue craft will be utilized and staffed by a USLA lifeguard. Should this boat also be unavailable the 2-4 pontoon craft will be utilized to medevac swimmers with medical emergencies back to the start/finish and medical doctor. These vessels will otherwise be stationary in quadrants.

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

Any authorized watercraft on the course may be deployed for a swimmer to hang onto. All safety personnel will be directed to query athletes of concern. Lifeguards on SUPs will be able to move easiest among pack swimmers to access troubled athletes. Lifeguards may effect swimming rescues with RFD if most efficient (Rescue-Signal-Save). Other watercraft may extend paddles or deploy throwables to initially access troubled swimmers. EMS zodiacs will medevac swimmers as necessary.

Swimmers will be informed to use the universal “hand in air” signal for help during the pre-swim safety briefing. They will also be encouraged to float on their back if in distress. A ‘Pulling swimmers’ protocol will be established at the pre-race briefing, and the lifeguards on SUPs, safety officials on pontoons, and EMS in zodiacs will have the authority to remove any swimmer from the race for signs of distress. Weak swimmers will be encouraged to stay closer to watercraft and will be tracked closely when identified. Race officials will be alerted with whistle and flag signals in accordance with the Emergency Action Plan.

We will follow USLA protocol for observed submergence of swimmers that are not immediately recovered. In these situations a pre-identified subset of the lifeguard team (“search team”) will vector to the Last Known Position (LKP) and perform surface dives as trained. A zodiac or pontoon (if close by) will deliver mask and fins that will be staged on the center lake pontoon. LKP buoys (small floats on a line) will be staged on watercraft in each quadrant to mark the last position observed. The organized grid search will be conducted around the LKP buoy as soon as the bulk of the search team arrives. FCFRD will activate additional county resources as needed.

NOTE: FCFRD zodiacs are part of a national emergency response task force. Should they be deployed on race day, an additional motorized rescue craft will be utilized and staffed by a USLA lifeguard. Should this boat also be unavailable, the 2-4 pontoon craft will be utilized to medevac swimmers with medical emergencies back to the start/finish. These vessels will otherwise be stationary in quadrants.

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

We will shorten the course layout to consolidate swimmers and concentrate coverage. We also may modify the time between individual starts. In the event the ratio of swimmers to lifeguards exceeds 50:1 over a shortened course the event will be canceled.

Describe your missing swimmer plan:

If a swimmer is not recorded as finished (electronic records, numbered cap collected, the entry/exit checklists) or has not been recorded as a “DNF” by any race official and cannot otherwise be accounted for, the missing swimmer emergency action plan will be initiated. The identity of the swimmer will be determined, the FCFRD incident commander will be alerted, and a coordinated search will be conducted by all persons on course and shore. Public address systems (megaphones, PA speaker, etc...) will be utilized to announce name, age, gender, and bib number for all to assist with searching. The FCFRD incident commander in coordination with Fairfax County Police Department (FCPD) personnel will activate county resources as necessary. In addition, the swimmer’s contact card will be called, including emergency contacts.

In the incidence of a witnessed submergence of a swimmer that does not reappear and is not immediately recovered, the aforementioned “search team” will be activated with 5 long air horn blasts. A coordinated search will be conducted by trained lifeguards as described above. FCPD search and recovery resources will be utilized, if necessary, to locate the body of the submerged swimmer.

The event will not be cleared and declared complete until ALL swimmers are accounted for.

Severe Weather Plan

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

Describe your plan for severe weather or natural disaster:

The Safety Director will monitor weather forecasts via weather radio, weather apps, and news media as well as on site observations. Witnessed lightning, audible thunder, and indication of electrical storms within 10 miles of the race site will initiate a weather action plan. Upon indication of this or other severe weather and/or natural disaster affecting the race, the Safety Director will immediately contact all relevant officials and safety observers to postpone, cancel, or suspend the race. Pre-race decisions will be posted on the JMLS website and social media. Race day on-site decisions will be communicated via public address systems. If the race is in progress the evacuation action plan will be implemented and safety personnel will clear the course using watercraft, whistles,

and air horns. Accountability will be maintained through the collection of timing chips, bib numbers/strips, data recording, and swimmer entry/exit checklists. Swimmers must transfer chips and numbered cap to a race official who will transfer that information to the start and finish recorders located at the Lake Audubon pool. Swimmers, spectators, and race officials will be directed to the nearest safety shelter as described on the site evacuation plan. In most cases the Lake Audubon pool building, at the start/finish, will be the best shelter. Swimmer vehicles may be identified as alternative shelter locations. Every effort will be made to keep people safe and ensure swimmer accountability.

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

When safe and feasible all swimmers, lifeguards, race officials, and safety personnel will egress from the boat ramp so as to use a positive check-in/ check-out system of accountability. Should conditions warrant immediate evacuation, swimmers will be directed out of the water at pre-identified docks, the turn buoys on either end of the course and/or onto water craft in the middle of the course. Athletes will be directed to follow the walking path back to the start/finish. Names, swim caps, and timing chips will be collected by race officials at each point of egress to be transferred to start/finish recorders. After accountability all race participants will be directed to the pool facility, personal vehicles, or the nearby South Lakes shopping center, which is one block away.

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:

The lake water temperature is measured daily and posted on the JMLS website. Swimmers will be notified and encouraged to prepare for the colder weather/water e.g. stress response to cold shock, dizziness, cramps and hypothermia. Swimmers will be encouraged to consider using a wetsuit (available onsite), neoprene cap (or double caps), neoprene socks, ear plugs, and pouring warm water into their wetsuit pre-race. Temperatures have rarely been in the 60s in recent years. This plan is not expected to be implemented.

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 will encourage wetsuit use for all swimmers if the water is in the 60s. We will require wetsuits if water conditions are below 60. Post-race warming will be available in the Lake Audubon pool building. Wetsuit rental will be available on site.

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: A medical doctor will be stationed at the lake

Specify what extra listed items you will provide:

A medical doctor will be at the race site with 1-5 EMTs. These personnel have backup resources on call to be available as needed. The pool facilities will be used to shield people from the elements and provide warming. Warming can be provided through hot showers, hot drinks, and blankets.

Comment on how you will be prepared to care for multiple medical issues:

The safety director is National Incident Management System (NIMS) trained and certified with 28 years of fire and EMS experience. Mass Casualty triage will be utilized to prioritize medical issues. Additional fire and EMS resources are available from nearby FCFRD stations and can be on site in less than 10 minutes. The FCFRD on-site duty officer will assume incident command, while the Medical director will have medical command, and the safety director will handle operations command until relieved by FCFRD battalion command. Multiple BLS assets with equipment will be on site to address immediate medical needs. Reston Hospital Center is a level II trauma center less than 10 minutes away. INOVA Fairfax Hospital is the closest level I trauma center located 16 miles to the southeast and is a 25 minute drive. A helicopter Landing Zone (LZ) for medevac purposes could be established as necessary in any number of nearby open spaces.

If the water temperature is below 72° F, will you be prepared to deal with cold water medical issues:

If the temperature is below 72, swimmers will be notified and encouraged to prepare for the colder water e.g. stress response to cold shock, dizziness, cramps and hypothermia. They will also be advised that they should consider using a wetsuit, neoprene cap under their race cap or wearing double caps.

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:

The lake water temperature is measured daily and posted on the website. It is anticipated that the lake race day temperature will be low to mid 70s however it is acknowledged that Lake Audubon has experienced water temperatures in the upper 80s during late summer months and temperatures may be slow to cool if September days are warm. Swimmers will be made aware of the hazards of overheating and dehydration. RMST states directly on race information that “wetsuits or any other heat-retaining swimwear may be allowed at the discretion of the event director when the water temperature does not exceed 78 degrees Fahrenheit...” This 78 degree limit will be enforced i.e. **NO WETSUITS will be allowed if Lake temperature is above 78 degrees Fahrenheit.** Swimmers will be encouraged to keep hydrated. Coolers of water will be available at the race start/finish and on pontoons. Volunteer monitor watercraft will also carry bottles of water for the purpose of swimmer hydration.

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 keep open the option to implement some of the above based on conditions. Swimmers will be encouraged to “flush” caps with cool water or ice. Athletes and race support staff will have access to drinking water and ice. Shade tents will be made available at the start/finish. Misting devices could be implemented as necessary using the hose bib at the pool facility. Late September weather does not indicate temperatures that may require these measures.

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: Ice will be provided

Specify what extra listed items you will need to provide:

A medical doctor will be at the race site with 1-5 EMTs. These personnel have backup resources on call to be available as needed. The pool facilities and tents will be used to shield people from the sun and provide cooling. Cooling can be provided through cold showers, cold drinks, ice packs, shade tents, and fans.

Comment on how you will be prepared to care for multiple medical issues:

The safety director is NIMS trained and certified with 28 years of fire and EMS experience. Mass Casualty triage will be utilized to prioritize medical issues. Additional fire and EMS resources are available from nearby Fairfax County Fire and Rescue Department stations and can be on site in less than 10 minutes. The FCFRD on-site duty officer will assume incident command, while the Medical Director will have medical command, and the safety director will handle operations command until relieved by FCFRD battalion command. Multiple BLS assets with equipment will be on site to address immediate medical needs. Reston Hospital Center is a level II trauma center less than 10 minutes away. INOVA Fairfax Hospital is the closest level I trauma center located 16 miles to the southeast and is a 25 minute drive. A helicopter LZ for medevac purposes could be established as necessary in any number of nearby open spaces.

If the water temperature is above 82° F, will you be prepared to deal with heat-related medical issues: We will utilize the above stated plan. When the water temperature is over 87, the event will be canceled.

JMLS Course Map

