

## **Open Water Safety Plan**

## **Application Instructions**

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

## **Open Water Safety Plan Application**

### **Event Information**

#### **General Information**

Name of Host: Tri Valley Masters

Name of Event: Del Valle Open Water Festival

Event Location: Lake Del Valle

City: Livermore State: CA LMSC: PMS

Event Dates: 6/8/2019 through 6/10/2019

Length of Swim(s): 1.2k, 2.5k, 5k, 10k

Dual Sanctioned with USA-Swimming: Yes or No

#### **Key Event Personnel**

Event Director: Bill McCracken Phone: 925-216-7918 E-mail: mccracmiler@pacbell.net

Referee: Markus Daene Phone: 865-742-9028 E-mail: markus.daene@gmail.com

Certified Safety Director: Erik Hektner. Phone: 503-504-5509 E-mail: e.hektner@gmail.com

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

Tentative date: 6/8/2019 Time: 45 minutes before race start each day

Tentative agenda: Overview of on water safety procedures and athlete accountability plan

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

Tentative date: 6/8/2019 Time: 30 minutes before each race

Tentative agenda: Swimmer safety, start, and finish instructions

### **Course & Event Conditions**

#### **The Course**

Body of water: Lake Water type: Fresh Water Water depth from: 10ft to: 50ft

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: NA How to contact during event: NA

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

N/A

How is the course marked?

- Turn buoy(s): Height(s) 5.5ft Color(s) 5 Orange/1 Yellow Shape(s) Tetrahedron
- Guide buoy(s): Height(s) 5ft Color(s) yellow Shape(s) cylindrical
- Approximate Distance between Guide buoys: 200k-300k

Number of Feeding Stations: 1 Only applies to 5k/10k

Type of structure(s) used as feeding station(s): pontoon boat anchored for duration of race

Number of people the structure(s) can safely hold: 8

#### **Water & Air Temperatures**

Expected air temp range: 60-90 Expected water temp range: 68-72 Wetsuits: Optional

#### **USMS Water Temperature Index for sanctioned open water events:**

- Below 57°F (Very Cold) heat retaining swimwear and a Thermal Plan for Cold Water Swims is REQUIRED
- 57°F-60°F (Cold) heat-retaining swimwear is required or a Thermal Plan for Cold Water Swims is REQUIRED
- 60°F-66°F (Quite cool) Thermal Plan for Cold Water Swims is RECOMMENDED
- 66°F-72°F (Fairly cool) Thermal Plan for Cold Water Swims is ENCOURAGED
- 72°F-78°F (Cool) No Thermal Plan required
- 78°F-82°F (Optimal) Heat-retaining swimwear & neoprene caps are not permitted above 78°F.
- 82°F-85°F (Warm) Thermal Plan for Warm Water Swims is RECOMMENDED
- 85°F-87.8°F (Very warm) Thermal Plan for Warm Water Swims is REQUIRED
- 87.8°F-95°F (Hot) Sanctioned open water swims cannot be held
- Over 95°F (Extremely hot) Any swimming is ill-advised

**USMS Water Temperature Measurement Procedure:** Using an accurate thermometer, the event host should take three to five measurements at various places on the course—12 to 18 inches below the water surface and no closer to the shore than 25 meters (if possible)—within one hour before the start of an open water swim. The host should average these measurements, post and/or announce the resulting average temperature at least 30 minutes before the start of the swim, and announce it during the pre-race staff safety and swimmers' meetings.

#### **Water Quality**

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

Water Quality is managed by the East Bay Water Management Department Details can be found at: http://www.ebparks.org/stewardship/water/del\_valle\_water\_quality

Water Quality is checked weekly as noted above. We will request the water be checked the day before the event.

## **Event Safety**

#### **Medical Personnel**

Lead medical personnel (emergency trained) on site: Eric Nurse, EMT / Aaron Roth, EMT

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

Will medical personnel be located on the course?

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? 3

#### First Responders/Lifeguards & Monitors

Indicate the qualifications of the first responders: USLA

Number on course: 18-19 Number on land: 3 to 4

Indicate their location on the Race Plan Map. A minimum of 18 lifeguards with training required by the State of California and meeting the United States Lifesaving Associations recommended guidelines for open water lifeguards. They are spread out evenly along 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. Races will be fully staffed by East Bay Parks certified lifeguards located on beach in addition to lifeguards on paddleboards in water. An emergency evacuation boat will be available on site and entire swim area will be "blocked off" near boat launch so that other watercraft may be restricted from swim area. Persons in trouble may be transported away from race area and directly towards the start/finish area and/or to emergency evacuation boat, whichever is closer. Standby ambulatory services will be provided by Norcal and may provide emergency services on-site and/or transport individuals to Valley Memorial Hospital located at 1133 East Stanley Blvd. In Livermore, CA (11.21.2Ks from site). Phone number: (925) 447-7000. A distressed swimmer station will be located at the end of the finish chute to assist with various health issues such as hypothermia, post-race cramps etc.

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

Ambulance(s) onsite: Determined by EBPRD on day of event On Call: N/A

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

Closest medical facility: Valley Memorial Hospital Phone: 925-447-7000

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

Distance to closest medical facility: 10-20 miles Approximate transport time: Via helicopter – very fast

#### Watercraft

Motorized Watercraft:

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

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: None
- With impeller motor (jet ski, jet boat): 2
- Anchored from start to finish: 1

Allocation of Watercraft:

- Safety Watercraft:
  - o 1st Responders: Motorized: None Non-motorized: 18/19
  - o 2nd Responders: Motorized: 1 Non-motorized: None
- Watercraft for race officials: Motorized: None Non-motorized: None
- Watercraft for race supervision: Motorized: None Non-motorized: None

• Watercraft for feeding stations: Motorized: 1Non-motorized: None

Watercraft for escorted events: Motorized: NA Non-motorized: NA

• Other event watercraft: NA

Emergency Signal Flag Color for all watercraft: Red

#### **Communications**

Primary method between event officials: Radio Secondary method: Radio

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

Secondary method: Other

#### **Swimmer Counting & Accountability**

Describe method of swimmer body numbering: Click Right and left shoulder, right calf

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

Describe different bright cap colors for various divisions (Recommended): 2 colors of caps for Saturday, 5 colors / Sunday

Describe method of accounting for all swimmers before, during and after swim(s): *Athlete Accountability Plan*: All swimmers are marked with their chip number on their right and left shoulders. Electronic timing chips worn on the ankle are mandatory for all swimmers. For all races (1.2K, 2.5k, 5k, 10k) each swimmer crosses a mat which registers their chip as they enter the water. In addition, we manually count the swimmers as they enter the water. We reconcile this with the number of swimmers exiting though the finish mat or are pulled by the guard staff.

East Bay Parks Aquatics staff will develop and execute an emergency action plan which will be employed to account for any missing athlete. All subsequent waves or heats of the race will be halted until the missing athlete is accounted for.

Describe method of accounting for swimmers who do not finish: See Athlete Accountability Plan described above.

#### Warm-up/Warm-down Safety Plan

Describe safety plan for warm-up/warm-down, include number and location of lifeguards and designated watercraft. Athletes are allowed to warm up in roped in monitored swim area.

#### **Swimmer Management**

Maximum number of swimmers on course at a time: 400

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? Add a wave

How will you deploy the safety staff and crafts distributed to supervise this event to ensure swift recognition, rescue, and treatment of any swimmer? In accordance with United States Lifesaving Associations recommended guidelines for open water lifeguards

How will you deploy the safety staff to maximize rapid response to a troubled swimmer? In accordance with United States Lifesaving Associations recommended guidelines for open water lifeguards

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 conducted if insufficient safety personnel/craft are available on race day.

Describe your missing swimmer plan: See Athlete Accountability Plan described above.

#### **Severe Weather Plan**

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

Describe your plan for severe weather or natural disaster:  $\square$  *Severe Weather Plan:* The East Bay Parks Aquatics staff monitors the weather and is responsible for insuring no one enters the water when conditions are not safe. In the case of severe weather, the race will be halted or cancelled until conditions are safe. Weather systems in the Lake Del Valle area are typically slow to develop. The East Bay Aquatic Staff Monitors conditions. If lightning were to occur the event would be delayed until it was safe to enter the water as determined by the East Bay Aquatic Staff. Generally in order for an event to take place there cannot be thunder of lightning in previous 20 minutes. The second severe condition would be white caps, swells or chop. The East Bay Aquatic Staff would stop or delay the event if swells/white caps or chop of 2ft were to arise.

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

# Thermal Plan for Cold Water Swims (Not Applicable for the Del Valle Event)

#### **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: Not Applicable – We have a distressed swimmer station with blankets and hot water available in case of an unexpected occurrence of hypothermia

#### 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: Not Applicable – We have a distressed swimmer station with blankets and hot water available in case of an unexpected occurrence of hypothermia

#### 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: Not Applicable We have a distressed swimmer station with blankets and hot water available in case of an unexpected occurrence of hypothermia

Specify what extra listed items you will provide: Warm beverages, thermal treatment gear and on-site stand-by EMT

Comment on how you will be prepared to care for multiple medical issues: We have 60 volunteers, on-site EMT and EBPRD guards to assist. If the water temperature is below 72° F, will you be prepared to deal with cold water medical issues: Yes, we have hot water and warm blankets at the finish should a participant exhibit hypothermic symptoms.

# Thermal Plan for Warm Water Swims (Not applicable for Del Valle Event

#### **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  $29.45^{\circ}$  C.  $(85^{\circ}F.)$ . A swim of less than 5K shall not begin if the water temperature exceeds  $31^{\circ}$  C.  $(87.8^{\circ}F.)$ ."

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: Not applicable for Del Valle Event

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: Not applicable for Del Valle Event

#### 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: Cool beverages, cool showers on-site stand-by EMT

Comment on how you will be prepared to care for multiple medical issues: We have 60 volunteers, on-site EMT and EBPRD guards to assist.

If the water temperature is above  $82^{\circ}$  F, will you be prepared to deal with heat-related medical issues: Not Applicable