**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**

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## Event Information

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| **General Information** |

Name of Host: Blue Wave Aquatics

Name of Event: Swim Defiance

Event Location: Owen Beach, Point Defiance Park, Commencement Bay, Tacoma, WA

City: Tacoma State: WA LMSC: PN

Event Dates: 6/3/2017 through 6/3/2017

Length of Swim(s): 3K and 5K

Dual Sanctioned with USA-Swimming: No

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| **Key Event Personnel** |

Event Director: Zena Courtney. Phone: 2066510823 E-mail: swimdefiance@bluewave-aquatics.com

Referee: Jim Davidson Phone: 253698047 E-mail: jedavidson98001@yahoo.com

Certified Safety Director: Steve Courtney Phone: 253-715-4725 E-mail: breacher2@hotmail.com

| **Pre-Race Safety Meeting (required):** **all o3/17fficials & safety personnel must attend** |
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Tentative date: 4/15/2017and 6/3/17 Time: 10AM/6:30AM

Tentative agenda: Introductions, Review DOR Schedule/Course Map /Safety Plan, Radio communications plan

| **Pre-Race Swimmer Meeting (required):** **all officials & swimmers must attend to participate in race** |
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Tentative date: 6/3/2017 Time: 6:45AM

Tentative agenda: Review 5K and 3K course Maps and tide information, Read SWIMMER RESPONSIBILITIES HANDOUT

**Course & Event Conditions**

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| **The Course** |

Body of water: Bay Water type: Salt Water Water depth from: 60 to: 200

Course: Open - non-event watercraft allowed near swim course

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

Agency name: Port of Tacoma Police and USCG How to contact during event: VHF Radio: Race channel 14 and Marine channel 9

Expected water conditions for the swimmers: (marine life, tides, currents, underwater hazards): Weather temperatures in Tacoma WA for June 2017, based on the Farmer’s Almanac, show the Pacific Northwest summer will be warmer and rainier than normal, with the hottest temperatures in late June and early to mid-July, from late July into early August, and in mid- to late August. The beginning of June the air temperature is expected to be 70° (1.0° above avg.); precipitation 0"; Water temperature will vary between 58 and 66 °F. Tide Predictions provided by NOAA, shows the race to be conducted shortly before the peak of low tide. A low tide of 2.64 feet is expected on 3 June 2017 at 0819 moving to a high tide of 8.24 feet at 1409. Maximum tides range in Commencement Bay from 5.12 feet to 16.8 feet. Ebb tide is expected 1.5 hours before the start 0536 at-.53knots, moving to max slack tide at 0742 at 0knots. Sea State 4 (small waves, fairly frequent small white caps, wind speed 11-16 knots, wave height 3.3feet or 1 meter) is typical of the water conditions on the race course and is what is expected on race day. Marine life will include jelly fish and curious seals. There are no underwater hazards on course.

How is the course marked?

* Turn buoy(s): Height(s) 5 ft Color(s) yellow Shape(s) cylinder
* Guide buoy(s): Height(s) 3 ft Color(s) orange Shape(s) triangular
* Approximate Distance between Guide buoys: lead kayaker for lead swimmers only

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

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| **Water & Air Temperatures** |

Expected air temp range: 70°F Expected water temp range: 58-60°F Wetsuits: Required

**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**

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| **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. |

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| **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. |

Consult current advisories posted by Department of Ecology, State of Washington:

<https://fortress.wa.gov/ecy/coastalatlas> and Tacoma-Pierce County Public Health Monitored Beach Reports at <http://www.tpchd.org/environment/surface-water-lakes-beaches-shellfish/swimming-beaches/salt-water-marine-beaches>

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## Event Safety

| **Medical Personnel** |
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Lead medical personnel (emergency trained) on site: Fire Captain Rapozo, EMT

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

Will medical personnel be located on the course? Yes

The number of medical personnel will be dependent on the course layout, number of swimmers in the water,

expected conditions, etc. How many medical personnel do you plan to have on site? 6

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| **First Responders/Lifeguards & Monitors** |

Indicate the qualifications of the first responders: ARC Lifeguards

Number on course: 6 Number on land: 2

Indicate their location on the Race Plan Map. 2 at finish line and 6 along course in kayaks/paddleboards

| **Onsite Medical Care & Facilities** |
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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. Heating pads, warm fluids, warming tent and car at finish with experienced volunteers.

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

Ambulance(s) onsite: No On Call: 911

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

Closest medical facility: [MultiCare Tacoma General Hospital](http://www.google.com/url?url=http://www.tacomageneral.com/&rct=j&frm=1&q=&esrc=s&sa=U&ei=QMmQU-CFB4XioASUxYGwBw&ved=0CCIQoAIwAA&usg=AFQjCNH4WRTAOQ36QxsZS-Qnt6jWwsVDLA)  Phone: 253-403-1000

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

Distance to closest medical facility: 5-10 miles Approximate transport time: 10 minutes

| **Watercraft** |
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Motorized Watercraft:

* Owned/operated by government agencies (Coast Guard, police, fire & rescue, etc.): 10
* Owned/operated by volunteers or hired individuals: 0

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: 5
* With impeller motor (jet ski, jet boat): 3
* Anchored from start to finish: 0

Allocation of Watercraft:

* Safety Watercraft:
* 1st Responders: Motorized: 2 Non-motorized: 6

# 2nd Responders: Motorized: 6 Non-motorized: 0

* Watercraft for race officials: Motorized: 1 if desired Non-motorized: 0
* Watercraft for race supervision: Motorized: 7 Non-motorized: 12
* Watercraft for feeding stations: Motorized: 0 Non-motorized: 0
* Watercraft for escorted events: Motorized: 0 Non-motorized: 0
* Other event watercraft: Click here to enter text.

 Emergency Signal Flag Color for all watercraft: ORANGE

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| **Communications** |

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

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

Secondary method: Cell Phone

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| **Swimmer Counting & Accountability** |

Describe method of swimmer body numbering: NUMBERS ON HANDS

Describe method of electronic identification of swimmer (Recommended): CHIP TIMING ON ANKLE

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

Describe method of accounting for all swimmers before, during and after swim(s): Chip timing and manual popsicle stick collection

Describe method of accounting for swimmers who do not finish: Verbally supplied to on-site chip timing personnel

| **Warm-up/Warm-down Safety Plan** |
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Describe safety plan for warm-up/warm-down, include number and location of lifeguards and designated

watercraft. Swimmers free to warm-up/warn down with lifeguards in water near finish area close to event start time due to water temp.

| **Swimmer Management** |
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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? Registration has yet to exceed Safety plan limit, but we would add more heats to manage number of swimmers in the water at one time

How will you deploy the safety staff and crafts distributed to supervise this event to ensure swift recognition, rescue, and treatment of any swimmer? Race has 4 Layers of safety. Safety Layer 1 is Coast Guard for shipping container sized ships, Safety Layer 2 is TMI Power Safety Boats with swimmer observer, Safety Layer 3 i1 one TMI zodiac, 1 Tacoma Police boat and 1 PCFD13 Zodiac with aquatic rescue boards Safety Layer 4 is lifeguards on paddleboards/kayaks and kayak volunteers. Race has provided laminated ‘signs of hypothermia guides for safety layer 4 personnel. SL 4 personnel contacts troubled swimmer first and have whistles and orange flags to wave to indicate assistance needed. They do not leave swimmer until swimmer taken by recue team.

How will you deploy the safety staff to maximize rapid response to a troubled swimmer? Zodiacs and jet skis respond to SF4 call and can bring swimmer to shore or transport to large power craft with on RNs to ambulance extraction at pre-identified public pier

How will you alter the event if insufficient safety personnel/craft are available on the day of the swim(s)? Change course to alternate course paralleling shoreline

Describe your missing swimmer plan: IF a swimmer is missing, finish line announcer will repeatly announce name to report to finish line while Port of Tacoma Police deploys rescue divers at estimated location.

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| **Severe Weather Plan** |

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

Describe your plan for severe weather or natural disaster: Cancellation triggers are conditions that would make it unsafe to proceed with the swim, and may either be present at the start of the swim or have a high probability of developing during the swim. Cancellation triggers include: Visibility: less than 2 miles (distance of course, required since course is being navigated visually, not with instruments or guides). Factors may include fog, rain, smoke, or haze. Rain: Hard rain that affects course visibility, makes sighting/navigation difficult for swimmers, or affects ability of crew to monitor swimmers. Wind: Strong wind, advisably Force 5 (http://en.wikipedia.org/wiki/Beaufort\_scale), or wind that makes sighting/navigation difficult for swimmers, or affects ability of crew to monitor swimmers. Traffic: Swimmers will be pulled from water if immediate danger from commercial shipping or private boating is present. Swimmers may resume swimming after hazard is removed. Other: Severe weather, such as lightning; Coast Guard determination of unsafe conditions; race director or safety director determination of unsafe conditions. Thunderstorm activity in the area will be tracked and potential time of arrival at the race site will be monitored to determine if it is safe to start the race or if the course must be evacuated. Time estimates for completion of course evacuation will be a prime consideration in making this decision.

Describe your course and site evacuation plan, including accounting for all swimmers and other participants: **Prior to the event start** The Safety Director is responsible for determining event cancellation after consultation with the Race Director, Fire Department Water Rescue and U.S. Coast Guard. The Race Director is responsible for announcing the event cancellation. If Owens Beach is closed, the race will be cancelled. No other finish area will be considered and all entrants will have been accounted for, if cancellation occurs. Check in the athletes and hand out any caps and shirts. Announce plans for rescheduling if possible. If cancellation is due to something completely beyond the control of the event hosts (i.e. weather), any refund will be calculated from any funds saved with cancellation. If the cancellation is a result of the host’s organizing (or lack of), a reasonable refund, or credit toward the next race will be made.  **During the event** The Safety Director is responsible for determining event cancellation after consultation with the Race Director, PCFD13 Water Rescue Captain and U.S. Coast Guard. The Race Director is responsible for announcing the event cancellation. Owens Beach is a large stretch of Beach. If the initial finishing area becomes unusable, the Race/Safety directors may choose to move it to another area along the beach but still within the Metro Parks designated Owens Beach area. There will be no other finish beach considered. If the race is cancelled after it starts, the Safety/Race Directors will immediately notify U.S. Coast Guard, PCFD13 staff and Power Boat pilots, lead kayak and lead lifeguard by radio (or cell phone) that the event has been canceled and finish area staff and all boats will issue five x 1 second blasts (=danger) from air horn until all swimmers and volunteer staff are notified. This may be repeated several times to be sure all water safety crew volunteers are informed. Jet Skis/Zodiacs shall notify lifeguards and kayakers immediately. Kayaks and lifeguards shall inform swimmers of cancellation and where to go. Swimmers farthest from shore will be picked up by roving power boats first. Other swimmers by either shore will be stopped and asked to swim to the closest shore as quickly and safely as possible. Supplies will be staged at Vashon Island beach for stranded swimmers to say warm/fed until the Ferry arrives to take them back to Pt. Defiance. From there, they will be asked to walk the 1K back to the race start unless carpools can be quickly arranged for transportation. It is estimated that it will take 40 minutes to complete course

## Thermal Plan for Cold Water Swims

| **General Information** |
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| 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**. |

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| **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: Website has clear information on how to conduct cold water preparation. Escorted preparatory cold water swims are hosted free of charge starting up to 1 months before the event.

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| **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: Website has clear information on how to conduct cold water preparation. Escorted preparatory swims are hosted free of charge starting up to 2 weeks before the event. All swimmers that chose NOT to wear a wetsuit must complete waiver stating previous cold water experience/training and be approved by Safety Committee.

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| **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: Warming tent and warming car both available

Specify what extra listed items you will provide: Click here to enter text.

Comment on how you will be prepared to care for multiple medical issues: We have a federal agency trained first responder as Safety Director who works multiple medical issue scenarios on regular basis. We will follow his direction regarding care for multiple issues.

**If the water temperature is below 72° F, will you be prepared to deal with cold water medical issues:** yes, previous Army nurse volunteer and finish line volunteers will assess each swimmer at finish line; If issues are evident, swimmer will be whisked off to warming tent or car, dried and plied with warm fluids using friendly registration volunteers while nurse returns to finish line. Swimmer friends/family will be alerted to monitor swimmer. Announcer will continuously encourage swimmers to seek medical attention at warming tent if issues are delayed in manifestation.

## Thermal Plan for Warm Water Swims

| **General Information** |
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| 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**.  |

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| **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: Click here to enter text.

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| **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: Click here to enter text.

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| **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: Click here to enter text.

**Comment on how you will be prepared to care for multiple medical issues:** Click here to enter text.

**If the water temperature is above 82° F, will you be prepared to deal with heat-related medical issues:** Click here to enter text.