



The Potomac River Safety Committee

Rules and Guidelines



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Safety Rules & Guidelines

Version 2023a

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OVERVIEW

The purpose of this document is to provide safety rules and guidelines for the clubs, programs, and individual athletes involved in water sports on the Georgetown section of the Potomac River from Fletcher's Cove to the 14th Street Bridges.

The goal of the following information is to prepare river users and educate them in daily practices and safety procedures.

Members of Washington Canoe Club (WCC), Potomac Boat Club (PBC), and the programs housed at Thompson Boat Center (TBC) (including GWU, Georgetown, VASRA, and WMIRA Scholastic programs) have contributed to the creation of this document.

The information contained herein should be considered supplemental to the laws and regulations, and safety requirements created and shared by the United States Coast Guard (USCG), DC Metropolitan Police- Harbor Patrol, USRowing, and the American Canoe Association.

Further, it should be understood that our community includes not only rowers and paddlers, but SUP users, and recreational anglers. We are one community.

KEY POINTS

- *The Potomac is a big and powerful river that demands respect.* Conditions can change suddenly, and rapidly for the worse. All river users must pay attention to any changing weather conditions, and be aware of the unique features (profile, depth, river bottom topography, and hazards) of the river, both above and below the surface, that can combine to turn a good day into a tragic one.
- We are a community and as such it is essential that we support each other. Following the safety guidelines allows everyone to enjoy their time on the water with a minimum of a hindrance.
- Following the traffic pattern is absolutely essential to preventing accidents and allowing all users to efficiently use their time on the water.
- Knowing and checking current weather conditions is critical for minimizing the chances of emergency situations.
- Every athlete or user, no matter their sport, role, experience, skill level, or fitness level is responsible for being prepared before launching.
- Safety practices, including proper care and use of equipment, how to navigate the river in all its conditions, and how to handle an emergency situation is the responsibility of all users.

SAFETY RULES

RIVER TRAFFIC PATTERNS

What must be emphasized from the start is that following traffic patterns is *critical* for maintaining the safety of all users. Collisions of any sort can be physically devastating to athletes and costs thousands of dollars in medical bills and equipment losses. If we were to offer any single bit of advice it would be to consider there is a “double yellow line” going down the middle of the river that must not be crossed except when properly crossing in to reverse direction on the river. Stay away from the “middle” of the travel lanes at all times. It is far better to come to a stop until an obstruction ahead of you clears than it is to swerve around and cross into oncoming traffic!

These are directions for rowers/crews. (Map at end of section) Paddlers and kayakers should contact the Washington Canoe Club Aquatics Committee for guidelines. Users of rental boats should consult the rental agency for information. Notation of river traffic starts at Fletcher's Cove and works progressively downstream. Most information concerns rowing shells. Paddlers are asked to use the river closest to the D.C. shore from Key Bridge to Fletcher's Cove and to use the prescribed traffic pattern downstream.

For simplicity *US*= upstream, and *DS*= downstream.

Fletcher's Cove

Traffic Pattern

- *US* crews should turn no more than 10-20 strokes above the end of the island on the starboard side (or the DC Harbor Police Buoy if it has been put in place) that signals the beginning of the cove.
- Crews should be aware that there are many rock hazards on the DC side of the cove.
- Paddlers: Boaters that are primarily stationary should try to avoid congesting the area that is a straight line from the bottom to the top of the cove area - this is a thoroughfare for paddlers and rowers traversing through the cove to get either from downriver to Chain Bridge or the reverse. Paddlers should follow “rules of the road” traffic patterns when traversing through Fletcher’s Cove and should try to stay in the traversing lane (and should try to stay away from the inside/protected section of the cove where fishing boats and others may be stationary or slow moving).

Hazards

- *Warning-* DC MPD Harbor Patrol can enforce the PFD requirement for the Fletcher's Cove area. You can be ticketed.
 - U.S. Rule [33 CFR 175.17\(b\)](#) (USCG) notes that rowing shells do not fall under the requirement for PFDs, but DC Harbor Patrol has the jurisdiction to make such requirements and enforce them.
 - MPD Harbor Regulation 1026 states: All persons aboard any vessel in the area from the southernmost point of the cove commonly known as Fletcher's Cove in the Georgetown Channel of the Potomac River upstream to the District of Columbia boundary line at Little Falls shall wear a Coast Guard-approved personal floatation device at all times.
- The DC side of Fletcher's Cove is very rocky, though it appears otherwise.
- Going US there are several rocks about 200 meters before the island that forms the entrance to Fletcher's Cove.
- Many fishing and recreational craft are either stationary or very slow-moving in this area. It is imperative that moving craft stay aware of this and exercise caution when operating around other craft. Please use good communication and judgment to avoid collisions and close calls.
- Above Fletcher's Cove to Chain Bridge exist a number of large rocks that are barely visible and just underneath the waterline. Depending on the time of the year, these rocks can be in the traffic lane. Please exercise caution in and above Fletcher's Cove on both sides of the river.
- The river flow is MUCH stronger in and above Fletcher's Cove in comparison to near Key Bridge. Additionally, many eddies and whirlpools exist in this section of the river. River users are encouraged to use sound judgment when using this section of the river and understand their skill and boat limitations. This section also becomes drastically more dangerous during and after rainfall and high river flow/level periods

Hens and Chickens

Traffic Pattern

- DS Crews must closely follow the VA shoreline at all times. The area is prone to congestion and is narrow.

- *US* Crews should follow a nearly straight line from Three Sisters Islands to the Hens and Chickens. In the area between the Three Sisters Islands, and the Hens and Chickens, slow-moving crews or crews wishing to do drills should slide to the DC side of the river to avoid faster-moving traffic going *US*.
 - However, crews must be aware that the river area 250 meters from the DC shore is used by and domain of canoes and kayaks.
- All crew must be aware of the “centerline” of the river in this area and stay to the starboard side of the line! Due to the narrowness of the area, obstacles, and natural profile of the river, the risk of head-on collisions is high!
- Paddlers: should use the “rules of the road” as they traverse through the Hens and Chickens area, staying on the DC side of the main travel lane going up river, and when going down the river on the VA side. Paddlers should try to not stop in the travel lane at Hens and Chickens. If you need to stop or gather, please stay on the DC shore downriver or upriver of Hens and Chickens and out of the travel lane.

Hazards

- There are many submerged rocks around Hens & Chickens that are visible only at different tides. No crews should *ever* go to the DC side of these islands!
- This area is problematic and can be very congested. The curvature of the river, the change in width of the river on either side of the rocks, the angles of approach both from up and downstream, as well as the narrowness of the space when passing these rocks contribute to the hazards of the area. Specific care should be taken including
 - *DS* crews should hug the DC shore. The shoreline drops off quickly so depth is not an issue.
- Heading *US* there is a rock on the DC (20 meters) shore approximately 400 meters downstream from Hens & Chickens. It is sometimes marked with a white buoy. It is known as “Turtle Rock” or “Mile Rock” and is very capable of destroying the bottom of a boat. Depending on the tide/level of the river, this rock is partially visible. A large portion of the rock is not visible and extends both to the VA and DC sides of the visible portion. River users should pass this rock with ample room on each side.
- Paddlers should not gather/stop in the travel lane at Hens and Chickens. Instead, gather upstream or downstream of the bottleneck/rocks and on the DC side of the river.
- Paddlers should use extreme caution when paddling through the Hens and Chickens rocks on the DC shore side of the rocks. There are a large number of rocks that can hit boats, rudders, skegs, and paddles. It is not recommended to use this travel lane.

Three Sisters Islands to Key Bridge

Traffic Pattern

- When passing between the Three Sisters Islands and the VA shore team boats (4's and 8's) should be no more than 3 abreast, smaller boats no more than 4 abreast.
- *DS* Crews should follow the curve of the VA shore and pick a course through the second arch from starboard of Key Bridge only after passing the Three Sisters Islands.
- *DS* Exiting Key Bridge, crews should aim for the point of land on Roosevelt Island that is directly opposite Thompson Boat Center at the bend of the river.
- *US* crews should go through the 2nd arch from DC on Key Bridge and aim for the Three Sisters Island that sits farthest towards the VA shore. The 1st arch of Key Bridge on the D.C. side is reserved for Potomac Boat Club crews who are landing.
- *US* After passing through Key Bridge, crews should pick a point just to the port side of the Three Sisters Islands. Crews should work together so that they may pass the islands as closely as possible and still remain out of the path of crews headed downstream.
- Three Sisters Islands to Key Bridge are very popular amongst all craft. At times, there are also many leisure boats moored in large groups (called "rafting"), which cause congestion and lack of vision up and down the river.
- *Potomac Boat Club* (PBC) crews and scullers: when launching from the PBC dock, athletes and coaches should proceed slightly upstream from the dock, towards the Washington Canoe Club (WCC), before turning to head across the river to head *DS*. Boats should be far enough from the WCC dock to not interfere with paddler launching and landing. Athletes and coaches should give special attention to crews headed *US* so as not to interfere with them and potentially compromise safety.
- Paddlers: From Key Bridge/Washington Canoe Club, paddlers should stay on the DC shore side of the river to avoid too much congestion on the VA side of the river where rowers use the river. This includes staying on the DC shoreside of Three Sisters and Mile Rock. If paddlers need to use the VA side of the river, follow the rowing traffic pattern referenced in this document ("rules of the road", but specific to the travel lane on the VA side of the river). Paddlers should keep eyes, ears, and heads up for other boat traffic, including rowers, other paddlers, and motorboats. These boats can come up on paddlers (and vice versa) very quickly.

Hazards

- An agreement between the member organizations of the PRSC dictates that no rowing shells should travel between the DC shore and the islands for the following reasons:
 - Although the area is navigable it is narrow, shallow in spots, and contains unmarked rocks that can cause serious damage to shells and launches alike.
 - The area is part of the training lanes and race course for WCC paddling athletes. Leaving this area open to paddlers helps protect them from wakes and faster-moving traffic in the narrow space.

- At the Three Sisters Islands there are several rocks that sit just below the surface. One sits on the VA side directly next to the most upstream island. Upstream of the main islands, there are several large rocks that are almost never visible. What appears to be a single rock is actually a rock shelf that angles towards DC and the top of the islands. The highest point, and most often hit point on this rock shelf is sometimes marked by a buoy placed by the rowing community. Crews should move a minimum of 25 strokes past this area above the Sisters before cutting into the DC shore (as warranted) when heading *US*.



Image and graphic courtesy of Margie Orrick, Rock Creek Rowing

- Directly downriver of Three Sisters Island is an ever-growing mudflat that extends about 100 meters from the last rock. This can bottom out most boats, can get boaters stuck, and can damage boats/equipment. Boaters should use caution in this space.
- Paddlers are encouraged to use the DC side of Three Sisters Islands in order to have their own travel lanes separate from rowers that use the VA side.
- Paddlers that are using the DC side of the river above Three Sisters that wish to join the main traffic pattern at/below Key Bridge should cross from DC to VA sides of the river below Three Sisters Islands. Paddlers should only cross when there is no oncoming boat traffic and there is a clear lane. Paddlers should cross quickly and obviously to show other boaters the intention to join the VA side traffic pattern.
- There are mud flats with rocks that appear at low tide located on the VA shore about 200-300m upstream of Key Bridge.

Key Bridge looking downstream

DC

VA

US
Travel
Arch

DS
Travel
Arch

Key Bridge looking upstream

VA

DC

DS
Travel
Arch

US
Travel
Arches

PBC-WCC
KBB
Return
Traffic
Only

Key Bridge to Theodore Roosevelt Bridge

Traffic Pattern

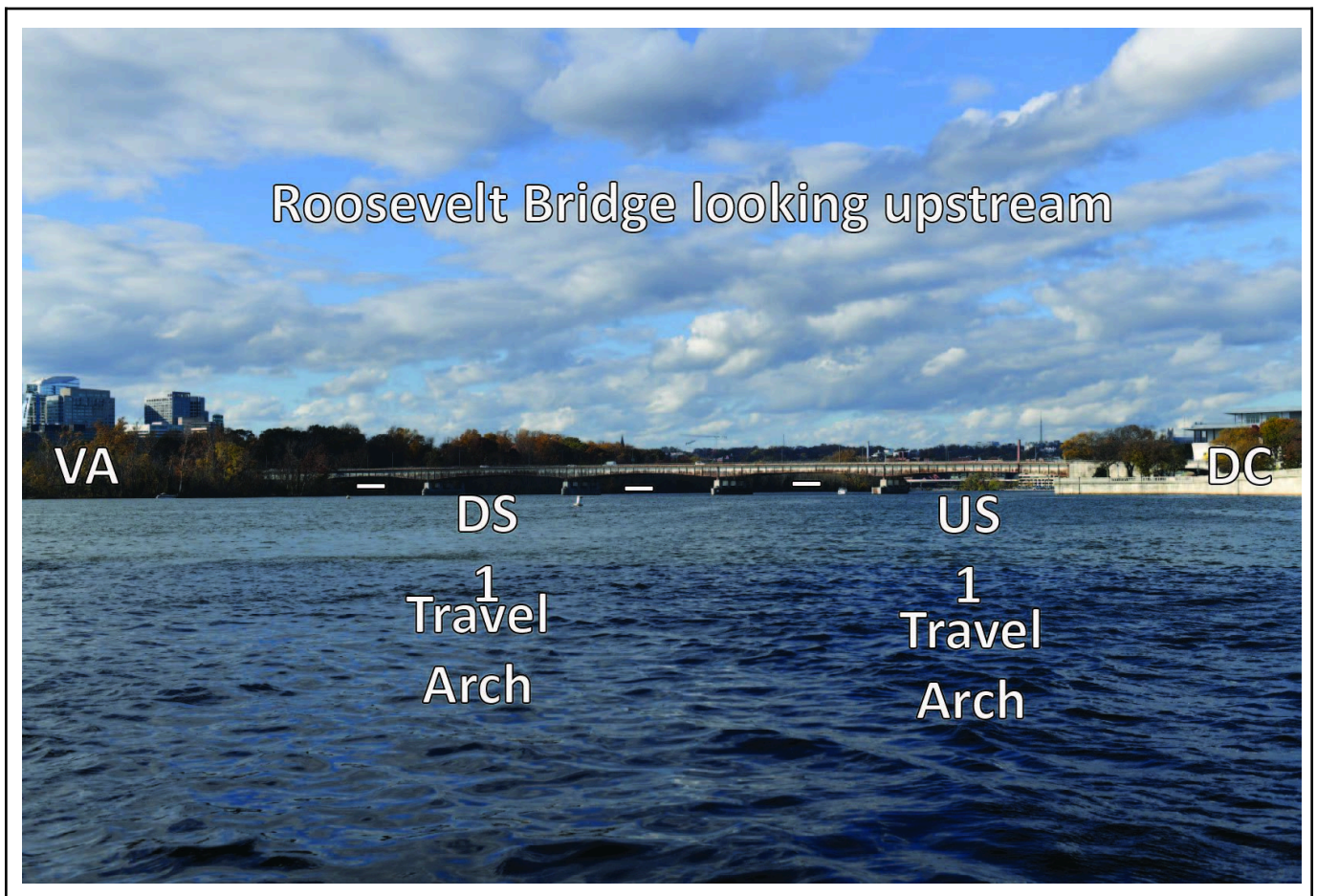
- After passing through the 2nd arch from VA of Key Bridge going *DS* crews should maintain a straight course that takes them towards the corner of Roosevelt Island, across from TBC. Crews should maintain a course that keeps them as close to the Island as possible, with faster crews passing to port.
- If a crew plans to stop after passing through the bridge while heading *DS* they should move towards and across from the sandy beach area on Roosevelt Island.
- Heading *DS* crews should round the corner of the island, across from TBC, and immediately line up on the first arch of Roosevelt Bridge. It is critical that crews not round the turn and stop immediately after, but go another 50-100m *DS* so following crews can clear the area and stopped crews without large and sudden course corrections. This reduces the chances for collisions!
- *DS* crews headed to TBC should round the corner of the Island. per above, and then cut to the other side of the river in front of the Kennedy Center to enter the docking traffic pattern. Crews cutting directly across the river, as if following the 2k course, to line up for docking is *dangerous and should be avoided* because of the potential for interference with crews headed upstream.
- *US* crews headed from Memorial Bridge should line up on the 1st arch from DC on Roosevelt Bridge.
- Crews headed to TBC for docking should hug the seawall and those headed farther upstream should stay towards the port side of the arch.
- Coxswains at the point should point to the *US* end of the TBC docks. As they pass the middle of the Kennedy Center they should line up on the “tower” that sits in the Georgetown Harbor complex.
- Crews should stay wide on the turn headed *US* so as to stay closer to DC, but remain aware of crews launching from TBC. Cutting the turn too tightly puts crews into the oncoming traffic of the *DS* travel pattern.
- Once parallel with the DC shore coxswains and sculler should line up with the starboard side of the 2nd arch from DC on Key Bridge.
- The first arch from DC on Key Bridge when headed *US* is for crew landing at PBC or WCC only!

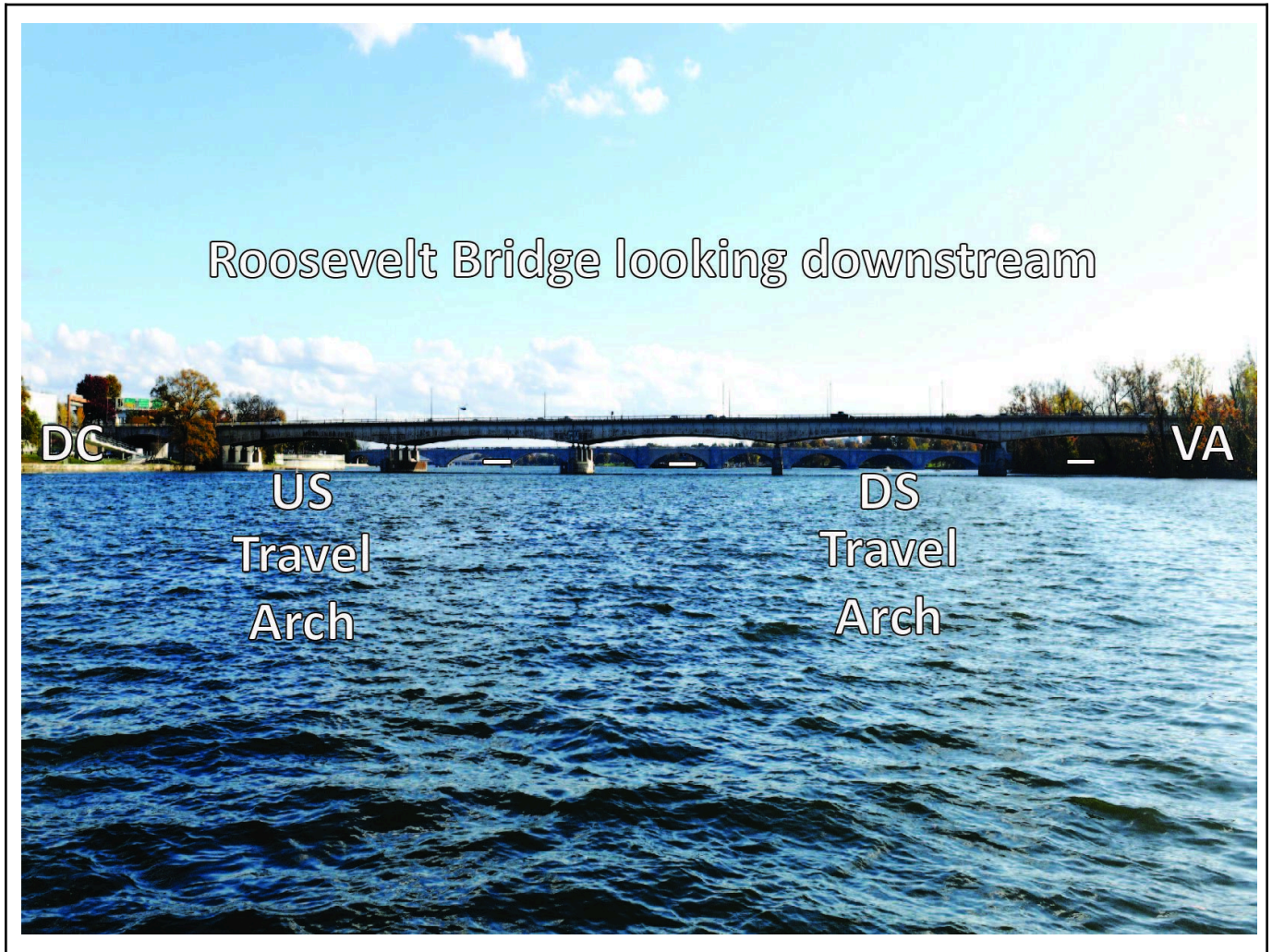
Hazards

- The area around TBC and the Georgetown waterfront is a designated DC no-wake zone. The no-wake zone runs from Memorial Bridge to Chain Bridge upstream. MPD Harbor Patrol understands that our safety launches following rowers and paddlers are for just that- *safety*. If launches wake the waterfront and the vessels docked there MPD Harbor Patrol can and will ticket

any and all craft leaving a wake. It is best to ensure that when you move through this area you do it with courtesy to all users of the river, and have as minimal an impact on others as possible. If you must slow down or go wide so as not to disturb others, please do so. MPD Harbor Patrol's deference to us is a *courtesy* to our community that could be revoked at any time by any officer, which could then cripple coaching activities as we know them. *Your behavior in this regard impacts the entire community!*

- On low tide/water flow days the corner of Roosevelt Island becomes a mudflat. Crews are advised to make sure to maintain a slightly wider turn around the point so as not to beach on the island.
- There are several submerged rocks and pipes near a rocky outcrop on Roosevelt Island across from Wisconsin Avenue in Georgetown.
- There is a sunken canal barge approximately 250 meters above Theodore Roosevelt Bridge next to Roosevelt Island. The entire T.R. Island shoreline is full of debris. Crews should stay around 50 meters offshore.
- DS of T.R. Island is a mud flat at low tide that also contains several hidden rocks.
- The DC shore between T.R. Bridge and Memorial Bridge (in front of the Lincoln Memorial Stairs) is shallow and often full of snags and debris.





Little River

- The area between the VA shore and T.R. Island known as —Little River“ is shallow and contains snags along either shore.
- Rowing by large boats (8+, 4+, 4x) *is discouraged* by members of the PRSC because of the limited space and the large impact wakes to have on users in the area.
- The space offers a sheltered space for small boats and paddlers to practice that is outside of the normal traffic patterns where wakes from power boats and wind can have a serious impact on their safety.
- Users entering from the Key Bridge inlet to Little River should stay closer to the VA side of the imaginary centerline of the waterway so as to avoid the rocks near Roosevelt Island.
- Users should travel in the middle third of the river to avoid snags and water plants.

- Heading *DS* users should exit the main channel by taking the arch closest to the Island. The middle arch may be used as well.
- Once through, crews should proceed towards the VA shore before adjusting the course to parallel the shore. The area between the end of the island towards Memorial Bridge is shallow with rocks.
- Crews should aim for the 2nd arch from VA on Memorial Bridge to reenter the main Potomac Channel headed *DS*.
- Heading *US* crews should carefully move towards the VA shore and proceed towards the TR Bridge overpasses.
- As crews arrive at the bridge, they should stay to starboard and take the arch closest to the island. The arch to the port side, which is more in the middle of the channel may also be used, but the approach angle is more severe.
- Once through the bridge, users should move towards the center of the channel and proceed towards the main body of the river. When exiting the channel users should remember:
 - The two large rock formations close to the shore of the island, near the mouth of the channel.
 - Be aware of crews heading *DS* through Key Bridge, or upstream on the DC side. Crews in the main river channel *have the right-of-way!* You must yield.

Memorial Bridge to 14th Street Bridges

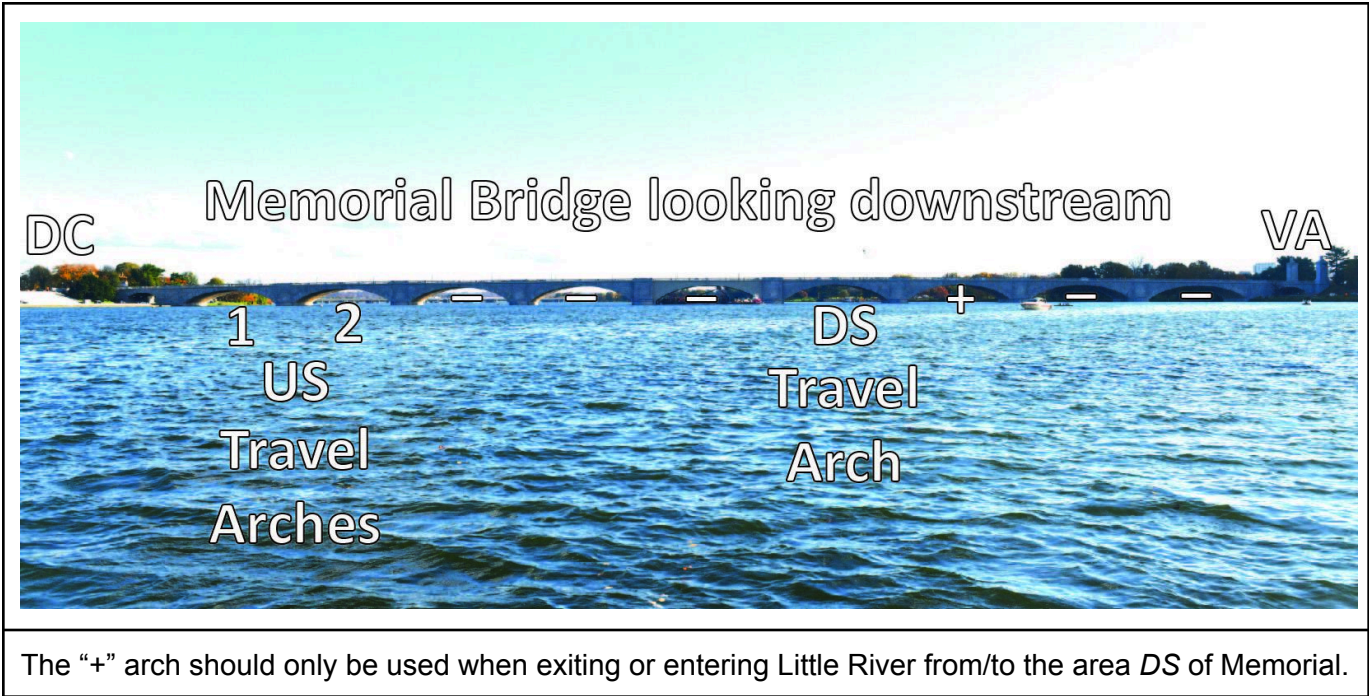
Traffic Pattern

- *DS* Use one arch to the right of the “dark gray” center arch. The gray arch is the navigation channel for power boats.
- After passing through the bridge *DS* crews should move slowly towards the VA shore and parallel the shore. As crews progress downstream they should aim to go through the arch to the right of the “wooden” navigation channel arch.
- *US* crews should stay towards DC and try to line up on the 2nd arch from DC. The 1st arch from DC is acceptable but can be tight when many crews approach at the same time. The area after the bridge can be narrowed when the mud flat below the Lincoln steps is exposed.
- Paddlers should follow the general traffic pattern.

Hazards

- This is an open speed/wake zone! That means that power boats of any class can go as fast as they would like and they often do. Their wakes can be large, and the wakes bounce off the rocky shores and bounce back toward the center of the river creating conditions that can endanger crews.

- The biggest hazard in this area is wind. This wide space can go from glass flat to choppy and white caps if the wind comes up quickly. Coaches and individual users should be aware of wind speed, direction, and forecasts.



Memorial Bridge looking upstream



14th Street Bridges and Below

Traffic Pattern

- *DS* crews should use the arch to the right of the Channel Arch (the one with lights and wood buttressing) on both sides. Proceed straight through the remaining bridge piers.
- Once through the bridges users have important choices to make. If heading towards the Anacostia River, crews should aim towards the DC shore and Haines Point to proceed *DS* and to round the corner where the rivers meet.
- If headed towards the Alexandria waterfront *DS*, users should stay to the VA shore and follow it around the curve.
- Crews aiming for Haines Point (on the DC shore) should give right-of-way to any crews headed upstream!
- *US* Crews should follow the seawall on the DC shore of Haines Point and pick a line through the bridges that will give them a clean line through the bridges. About a third of the way from DC shore along the railroad bridge there are two sets of arches that line up and give a straight, unobstructed shot through to the other side.

- Paddlers are encouraged to follow the general traffic pattern.

Hazards

- It is important to remember that this is also an open speed area so power boats can throw large wakes that are dangerous to rowers and paddlers.
- Wind is also a significant consideration, and conditions can change quickly to be dangerous.
- Crews headed towards Haines Point/Anacostia River or towards the Alexandria waterfront area of VA need to be aware that they will be going against the established traffic patterns for rowers in both areas. It is possible that they will encounter crews approaching head on who will have the same level of visibility as they do. Be aware! Further, it is advisable if traveling to these different areas that you consult the traffic pattern information found on the websites for [Capital Rowing Club](#) or [Alexandria Community Rowing](#).

The Potomac River Safety Committee

Map of the Upper Potomac

Approximately 7000m = 4.5 miles
1000m = .62 miles.

	Shallow/ dangerous areas
	Congested Areas: No Stopping
	Large rocks
	Sunken barges, piers, & pilings
	Shell traffic pattern
	Traffic for landing shells
US/DS	Upstream/ Downstream
Blue	Text & marks are distance values

Fletchers Cove

Note: PFD's are required by law beyond the buoy at the entrance to the cove. D.C. Harbor Patrol will ticket.

"Hens & Chickens"

D.C. Side

Virginia Side

0m Start of 2k race course

Three Sisters Islands

Note: The D.C. shore from the Washington Canoe Club to "Hens & Chickens" is reserved for paddlers and kayakers. Shells should follow traffic pattern.

Key Bridge

Note: Key Bridge is just below the 1K mark on the 2K course.

- Arch 1: Special usage
- 2: DS traffic
- 3: No traffic
- 4: US traffic
- 5: PBC docking

- Georgetown University
- Washington Canoe Club
- Potomac Boat Club

T. Roosevelt Bridge

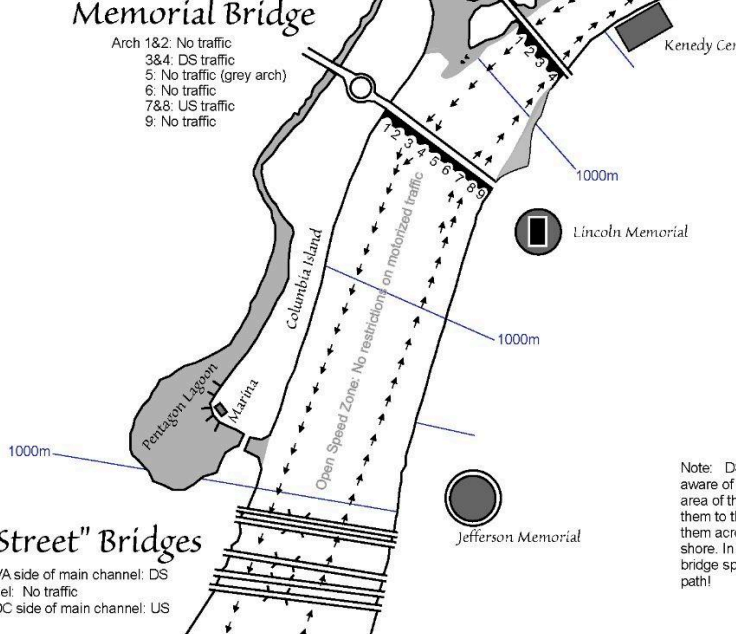
- Arch 1: Downstream (DS) traffic
- 2: No traffic
- 3: No traffic
- 4: Upstream (US) traffic

- Washington Harbor
- Thompson Boat Center

Memorial Bridge

- Arch 1&2: No traffic
- 3&4: DS traffic
- 5: No traffic (grey arch)
- 6: No traffic
- 7&8: US traffic
- 9: No traffic

Downstream



"14th Street" Bridges

Arches on VA side of main channel: DS
Main Channel: No traffic
Arches on DC side of main channel: US

Note: DS traffic heading US on the VA side from the Alexandria area of the Potomac. They use a differing traffic pattern that keeps them to the VA shore. DS traffic is advised to set a point that aims them across the river at the tip of Haines Point on the far DS D.C. shore. In addition, be aware that the abutments for the multiple bridge spans do not line up, in most cases, for a perfectly clear path!

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COACHES, ATHLETES & LAUNCHES

It is important that coaches, athletes, and launch drivers are prepared and well-versed before heading out on the water.

It is also critical to have a well-equipped and working safety launch whenever working with crews, especially high school and college squads.

Coaches should have the necessary training and be certified in first-aid and CPR. Coaches should work to minimize potential accidents and should work in a responsible and prudent fashion at all times, and this includes *being aware of others* on the water around them and how their actions impact the safety of paddlers and crews.

Coaches

Club or program leaders should ensure that coaches are meeting the following standards. Coaches should endeavor to be prepared, professional, and knowledgeable.

- Coaches themselves adhere to the following:
 - *Completed a boating safety course specific to Washington D.C.
 - *Have a D.C. boating license
 - Be wearing a life jacket at all times
 - Rowing coaches should have USRowing coaching certifications
 - Be SafeSport certified
 - CPR/AED certification
 - First-aid certification
 - Have a working phone and/or marine band radio
 - Engine kill-switch
 - Appropriate clothing for the conditions
- *The first two items, above, are a *requirement* for anyone operating a launch.
- **Please refer to [33 CFR 175 Subpart B](#)
- Coaches should be fully versed with the traffic patterns discussed in this document, including all hazards.

- *It is the responsibility of any coach boat to provide assistance to any capsized boat, even if from another sport or a pleasure boat.* Coaches are reminded to stop at a safe distance and offer assistance. Approach with caution and in a controlled manner. Be aware of your prop!
- Coaches should make sure that for each athlete that is part of their training session that they have on hand a record of the following:
 - Name and date of birth
 - Address
 - Name and phone number for a relative or another emergency contact
 - Height, weight, list of allergies and other important medical information
 - Name of medical insurance provider, and pertinent insurance information

Athletes

All programs and coaches should ensure that all athletes meet the following qualifications before going on the water:

- Physical, health evaluation, or other certification from their governing body, program, or club, as appropriate. It is important that athletes ensure their health will allow them to safely go on the water and engage in any of the planned activities they expect to participate in.
- Swim test- have taken a defined swim test and be checked off by their governing body, program, or club as appropriate. (i.e. tread water for 2 minutes, followed by 100m swim [any stroke, no time limit], followed by treading water while putting on a life jacket). Pass/fail should be kept on file with the club/program. An athlete should either be kept off the water or required to wear some form of USCG-approved PFD until such time that they can pass the swim test.
- Rowers/scullers should watch the [USRowing safety video](#) once a year to familiarize themselves with emergency procedures and safety precautions.
- Carry any needed medications (inhaler, EpiPen, seizure or heart medication, hard candy for diabetics etc.), sufficient water for the conditions, appropriate clothing (including a spare set on land to change into), and food as needed for the effort.
- Appropriate skill, as determined by their club, program, or facility, for the current and expected weather and river conditions.
 - People who are primarily 1x scullers or paddlers should go through basic training and testing to prove that they can:
 - safely remove a boat from a rack
 - launch their boat, row/paddle competently including turning
 - re-enter a flipped shell (or at least know what do in the case of an emergency)
 - return the scull to the dock upon completion of their outing.

If rowing/paddling solo:

- Sign out/in with your club or facility.
- Make sure you let someone know your practice plan including start time, general distance, and initial direction of travel.
- Carry a cell phone with you in a watertight case.
- Carry identification.
- Carry an audible alert device like a whistle.

Coxswains

- It is advised that all coxswains wear a PFD, especially in cold weather months. Inflatable suspender-type units are the most practical, however, a survival suit is extremely useful in the winter months for both floatation and warmth.
- Coxswains should be encouraged to wear warm layers (non-cotton) and waterproof outer garments, as appropriate to the conditions. This is especially important in the cold weather months or when rain is expected.
- In any shell the coxswains should have a designed "buddy" in the event of an emergency who will account for their safety and help monitor them until rescue has occurred (understanding that the coxswain's job is to monitor the safety of the entire crew who has buddied up.).

Launches

In general, training groups should include a safety launch, especially in colder weather. Having a launch present reduces the risk of a fatality or life-altering injury in the event of an accident as quicker access to emergency support is possible.

- Specific guidelines for use of a coaching launch:
 - High school and collegiate program crews or scullers should have a coaching launch with them at all times. This is for safety and liability reasons. The coach is responsible for these individuals at all times during practice.
 - A coach sitting in the coxswain's seat does not count as a safety launch!
 - The presence of a coaching launch with club programs is at the discretion of said clubs. However, again, the use of a safety launch with organized practices is highly encouraged.
- *Occupants of a coach's launch should be kept to a minimum.* One extra person in addition to one coach should be the maximum for a safety launch (14'). Preferably launches should be large enough to hold all members of a given crew in the event of an emergency. 16' foot launches are suggested. "V-hull," or skiff style (Carolina Skiff) is recommended. Aluminum "john boats" are not recommended because of their instability with several passengers and less than stellar poor

weather performance. Wakeless launches are acceptable if they are of a size that meets the above requirements.

- All launch occupants should wear a USCG PFD.
- Each launch should have the following items:
 - ***Registration sticker for the current year and identification #
 - *Life jacket for each person in the launch
 - PFD/Life jacket for each member of a crew on the water
 - *A throwable PFD
 - A megaphone (powered or cheerleader type)
 - Emergency Space blankets for each member of a crew on the water
 - Signaling device (flares, horn, whistle)
 - Paddle
 - Tools
 - Water bailer
 - 50ft. Safety line (for swimmer assistance or towing of shells)
 - **Fire extinguisher
 - should be marked with the name of the owner/organization

*As required by U.S. Rules [33 CFR 175 Subpart B](#)

**As required by U.S. Rules 46 CFR 25

***Required by MPD Harbor Patrol. See [regulation section 1004](#)

- Operators of launches should have an uninterrupted 360 view at all times. Use of heavy ballast in the bow of the launch (log, a tire with rim, cinder blocks, passenger, etc) can be used to trim the launch so it rides level. See the section on rowing Before Sunrise/After Sunset for more visibility issues.
- *Coaches need to be aware of the wake their launch throws!*
 - Coaches should do their best to minimize wakes when passing other crews when at all possible.
 - At no time should a launch's wake be allowed to swamp or endanger a shell/canoe/kayak.

- If a launch needs to pass or maneuver around a crew the coach should clearly communicate his/her intentions.
- There should be a minimum of one coach's launch for every three 8s in a given practice.

PADDLER-ROWER SAFETY

An important point to remember is that we all share the river: rowers and paddlers often share the same goals in regard to learning their respective sports and training at the highest level possible. This is in addition to simply enjoying time on the water. It is critical that the two communities work together to support each other through safe practice and mutual respect. Please consider the following information specific to paddling safety.

SPECIAL NOTE: Launch Wakes And Their Danger To Sprint Canoes And Kayaks

Sprint (racing) canoes and kayaks are less stable than the least stable shell. A large wake from a distant launch can capsize a sprint canoe and kayak. The launch operator may not even be aware of canoes and kayaks paddling along the DC shore, or that their wake has capsized a boat. In cold weather, a capsized canoe or kayak is a life-threatening situation. In warmer weather, even moderate launch wakes can seriously disrupt practice or capsize beginning to intermediate paddlers. Larger wakes from fast launches at close range can capsize even experienced (Olympic-level) paddlers.

THINGS TO BE AWARE OF FOR CANOES AND KAYAKS

- The area reserved for canoe and kayak and paddling is on the DC side, from the upstream end of the Potomac Boat Club dock to The Hens and Chickens (see Traffic Pattern Map). The highest concentration of canoe and kayak practices are along the DC shore from Potomac Boat Club to just past the Three sisters.
- Please exercise special care to minimize wakes when your launch passes the canoe and kayak area:
 - Crew boats and launches should refrain from using these areas, and in particular traveling between the Three Sisters and the DC shore.
 - Try to reduce speed and wake when passing the canoe and kayak area
 - If you must travel at speed try to stay as far as practical from the DC shore
 - Consider using a wakeless launch (the Washington Canoe Club and some crew teams already wakeless launches to reduce wake and improve the river experience for all users.)
- Launch operators should try to remain close to their boats. A significant portion of large/dangerous wakes that capsize canoes and kayaks come from launches that have been separated from their boats and then must travel at high speed to catch up and in some instances,

a launch is zooming at high speed with no apparent team boat in the vicinity. Unfortunately, these large wakes frequently occur in the canoe and kayak paddling area and capsize boats.

- Launches should have the name of the club/team clearly visible in large letters on both sides of the boat so that it can be read at 1,000 ft (the approximate width of the Potomac above Key Bridge).
 - Far too often it is impossible to identify launch owners/operators generating large wakes and traveling in an unsafe manner. It is important to improve river safety that the river community is able to identify and communicate with launch operators and correct potentially dangerous situations.

FLETCHER'S COVE & ANGLERS

The following is information for all river users regarding usage of the Fletcher's Cove area by anglers, both private and via rental.

- The Fletchers rental season is from April to October.
- Rowboats with anglers start in March
- Kayaks, canoes, and paddleboards start in April

Coaches in safety launches should be aware that wakes have a profound impact on rowboats and the anglers enjoying their sport. Please endeavor to keep wakes to a minimum and when at all possible go too far past Walkers Point (and past the buoy) into the cove when the rental season opens at Fletchers and anglers are on the river. Scullers are advised to be extra vigilant by looking around frequently. Keep race-level pieces in the cove to a minimum when anglers are out. Beware of fishing lines, and when possible stay 50ft from any vessel with rods out.

For anglers, please understand that the role of the chase boats following the crews is one of safety. They are there primarily to assist crews in the event of an emergency, especially high school athletes. The secondary purpose is for coaching and monitoring training. It is often a fine balance trying to minimize wake while maintaining a connection with the crews the coaches are following. It should be of interest that a number of the adult scullers and paddlers on the Potomac are either training for or are Olympic-level athletes hoping to represent our country.

Lastly, everyone should be aware that during inclement weather, especially in the spring months, the current appreciably picks up as one passes the Hen's & Chicken's and proceeds towards the cove. The area around the mouth of the cove has strong currents that will pull rowers toward and along the VA shore. Rowing above the top of the cove towards Chain Bridge is discouraged.

INCLEMENT WEATHER

OVERVIEW AND RISK MANAGEMENT

The influence of weather and conditions on safety, especially on our stretch of the Potomac River should not be underestimated. The river is prone to fast currents, concentrated winds, quick-moving thunderstorms that move down the river, and challenging lighting in the early morning and late afternoon hours. Coaches and individuals should make a concerted effort before launching to determine whether doing so is a wise choice and how best to be prepared once launched. All river users are advised to consult up-to-the-minute weather conditions and predictions before launching. Likewise, it is critical that users consider their or those they are coaching's skill level in the given conditions.

It is very easy to get into trouble quickly, even with "experienced" athletes and coaches involved. Living to row another day, protecting lives and equipment, should be the rule, not the exception.

Do not launch if the potential for trouble exists.

ROWING BEFORE SUNRISE OR AFTER SUNSET

Rowing before sunrise or after sunset, which is most common in the fall and early spring seasons, requires care and attention, as well as quality lighting.

Do not launch in darkness without proper and fully functioning lighting!

Users should be aware that the areas above Washington Canoe Club get progressively darker because of the lack of lighting on the shore. From Key Bridge downstream conditions have a tendency to be brighter because of lighting on the shore, but these static lights can blend in by reflecting off the water and be confused with the lights of river users.

All users should do the following:

- Take extra precautions to look around frequently. When in doubt, assume what you see is another river user!
- Per USRowing, have a red/green (port/starboard) light on the bow of their boat, and a white light on the stern. This follows standard USCG requirements and helps indicate to others the direction travel is being taken which helps others take appropriate course corrections to avoid a collision.
 - Lights should be bright but diffused, and should not blink.
 - Lights should not be obscured by equipment or athletes in the boat.
- It is advised that scullers, the bow-seats of crews, coxswains, and paddlers wear brightly colored shirts that offer a contrast to the surrounding darkness. Clothing that includes reflective elements offers additional possibilities for catching the attention of others.

- River users should take care to listen carefully for the sound of other athletes paddling or rowing coaches' launch engines, and the voices of coxswains and coaches giving instructions.
 - In addition, coxswains, and a member of straight (non-coxed) crew should carry a whistle or other noise maker for audible warnings. Whistles should be used to alert others of imminent danger, or collision.
- If you are in doubt about whether someone can see you, speak up! Yell, and take any necessary action to get the attention of the approaching boat(s).
 - Coxswains and coaches who are sitting still *must remain alert and be prepared to call out or move quickly in the event another crew does not see you!*

Inclement Weather

The Potomac reacts in particular ways depending on conditions, and can easily surprise a crew. Coaches should use common sense in the face of inclement weather. Fast currents, wind, debris, extreme temperatures, lightning storms, and fog are all reasons for not practicing on the water. Currents and wind can quickly combine to create dangerous conditions. Crews should not launch if such conditions exist or are seriously threatening. It is highly advised that coaches and scullers listen closely to NOAA weather channels routinely. Real-time, localized, atmospheric conditions can be found here:

- [Potomac Boat Club weather station with lightning detection](#)
- [Fletchers Cove weather station with lightning detection](#)
- [National Weather Service- Washington/Reagan National Airport forecast](#)
- [Weather Spark Average Weather Data for D.C.](#)

Storms, in general, travel in our area from South East to North West and usually move from well upstream of our rowable area down and across into the NW area of the city and Bethesda, MD. Depending on the tracking of the storm it can follow a path that mimics the direction of the river and in the worst of cases move directly downstream towards the bend in the river near TBC. It is not uncommon for river users to be able to see the storm front moving towards them as the leading band of wind and rain forms a “wall” of strong weather energy. It is *imperative* in these situations that crews get to the nearest facility they can safely reach, and in the worst possible scenario consider beaching on a sandy shore. Users on land at area facilities should be prepared to support users chased off the river by such a storm. In all cases, the lives of the athletes are more important than the equipment!

Wind

Coaches and rowers should keep in mind that oftentimes it is easy to launch from the dock but much harder to land in windy conditions. This is especially true with novices and small boats. Waves or swells generated by strong winds can quickly swamp a crew. This is especially true in wide parts of the river (i.e. between Memorial Bridge and the 14th Street Bridge or the area just downstream of TBC). However, the direction of the wind has the greatest impact on how the river will react.

- The river between TBC and Fletcher’s Cove runs Northwest to Southeast.

- South winds steady over 10mph generally create white caps below Key Bridge.
- North winds steady over 15mph generally create white caps above Key Bridge.
- Winds coming from the Southeast will be blowing upstream against the current. In this situation, larger swells and white caps can be created. This can also when combined with a rising tide create greater flooding of the river. Wind blowing upstream against an outgoing tide can create significant chop, hazardous to small boats.
- The intensity of wind blowing downstream can increase upstream towards Hens and Chickens and beyond because of the topography of the surrounding shorelines.

What seems like a comfortable breeze on the dock can have a much greater effect once on the water.

Heavy Rains & Fast Currents

After heavy periods of rain currents can increase in speed and strength quickly. The river usually will rise over a period of 1-3 days after the cessation of precipitation and recede in about the same amount of time after peaking, barring further rain. At these times extreme caution should be taken. Areas for special consideration are:

- Around and upstream of the Three Sisters Islands with increasing seriousness as one approaches and passes the Hens and Chicken islands (see river traffic map).
 - It is strongly advised that novice crews be kept below the Hens and Chickens during these times. In all cases, the currents can be quite swift and unpredictable due to the depth and topography of the river bottom.
- Special attention should also be paid to all bridge arches as currents are accelerated as they pass through them. There is a tendency for crews to be pulled towards the abutments, so care must be taken to keep a good distance from them.
- Lastly with heavy rains and currents on the Potomac comes heavy debris in the form of large logs, tires, and water-logged animals.

River height and flow information can be found here:

- [Little Falls Gauge Height Prediction](#) (predictive)
- [Little Falls Height Gauge](#) (active)

The Little Falls gauge height determines the general row ability of the river. The PRSC, when considering USGS predictions offers this advice for the viability of safe rowing:

Gauge Height	USGS Stage	PRSC Observations
3-4 feet	Normal river conditions	
5 feet	Action stage	Current picks up, minor “swirlies” DS of the “Hen’s and Chickens”
5.5 feet		Current increases. Care should be taken, especially with

		more novice crews and scullers.
6 feet		Forceful currents, large “swirlies” DS of “Hen’s and Chickens.” Small boats are unadvised, and large boats are only crewed by experienced athletes.
7 feet		Rowers and paddlers are advised not to launch.
10 feet	Flood stage	Washington Harbor flood gates up. Water on PBC apron.
12 feet	Moderate flood-stage	Water inside PBC boat bays.
14+ feet	Major flood-stage	Water through PBC to the street level and beyond.

“Swirlies” are defined as currents moving in a circular pattern that has a distinct visual appearance, and can physically move a shell or launch passing through them. The community is reminded that the river is tidal and tides will impact the river's height and conditions.

Lightning Storms

Lightning storms are very dangerous to any river user. Sadly, rowers and paddlers in the U.S. have been struck by lightning. *Crews should return immediately to their home dock or if they are too far away proceed immediately to the closest boathouse (TBC, PBC, WCC).*

- If weather reports indicate the potential for a storm, river users are advised to regularly monitor a local lightning monitor or website that displays this information. If lightning is detected returning to the dock is advised.
- River users should hold off from launching for 30 mins after the last rumble of thunder, and/or the lightning/storm is at least 8 miles away from your location.
- Use of the shore if a boat house is too distant is acceptable.
- There does not have to be rain or thunder to have lightning! If the sky begins to look bad, it probably is.
- Lightning can travel and strike miles from its source.
- Coaches and individuals should use a lightning app on their phone or reference the links found above (under the Inclement Weather heading) to track storms and lightning strikes.

Fog

When in doubt don't launch! Fog is often thicker upstream of Key Bridge. Crews should not launch into fog if visibility is less than 500m. Keep in mind that conditions can worsen even after appearing to improve, thus closing in on athletes already on the water.

Visibility is extremely reduced, and sounds are muted.

If caught in fog it is recommended that crews proceed with extreme caution and appropriately slower speeds in the direction of the boat house. Try to identify landmarks if possible, stay within sight of the shoreline, and move towards home.

If the fog is too extreme it may be better to sit still. Be sure to make some noise so that others on the river can be alerted to your presence. Do not assume fog that appears to be thinning will continue to do so!

Cold Weather/Winter Rowing

Cold weather presents a number of hazards to athletes, Chief amongst them being hypothermia. Consideration should be given before launching in cold weather and proper precautions should be taken to minimize risks. Users should be aware that cold temps, especially when combined with precipitation or accidental immersion in the river can create immediate life-threatening conditions. Hypothermia can occur even in individuals who are not immersed in water. (see Appendix A).

The PRSC endorses the Cold Weather Rule of 100: a sustained water temperature of 50 degrees or less occurs, combined with a daytime high ambient (no windchill) air temperature that will not exceed 50 degrees. When this rule is activated the following protocols and guidelines should be followed:

- Rowing with a safety launch is advised and the launch should stay within 100m at all times.
- Scullers rowing without a safety launch should row in groups or with a buddy.
- Wear an inflatable, compact, life vest or wetsuit.
- Stay closer to shore
- A noise maker of some kind should be carried in each shell and be attached in some manner so as not to be lost if the shell capsizes.

However, the only true safety device or practice other than common sense is a support/coaching launch. In the event of an emergency, a well-prepared safety launch can assist the individuals in question and transport them to safety. Even then hypothermia is an issue.

All individuals should ask themselves before launching if being on the water is the best and only way to train. See Appendix A for information on Hypothermia and other weather-related emergencies.

Other Safety Considerations

The following are suggestions that should be referenced with all of the above-stated material. These suggestions would help to increase safety and organization on the water so that all users of the river will know what to expect from each other.

- Coaches are advised to show the [USRowing's Safety Video to](#) all athletes each year (and with all new athletes in a season), and go over it each year with all athletes. In addition, it is advised that the coaches go over emergency procedures with their rowers each season.

- All shells should be equipped with emergency, quick releases for foot stretchers. This includes heel tie-downs and quick-release laces/velcro closures. Likewise, each rowing shell must be equipped with a secure and undamaged bow ball.
- Each boat (coach or athlete) has the responsibility of watching where it is going and avoiding collisions. Boats without a coxswain must be aware and alert other river users of potential hazards or collisions!
- Once crews or paddlers in a given practice have been launched they should row to and wait at a spot specified by the coach that is no more than 500m away from the dock. High school and college crews should not warm up or row without a coach's supervision!
 - A common place for crews launching from TBC to stop and wait is the stairs on the Georgetown shoreline near Wisconsin Avenue.
 - Crews from TBC that are going downstream should wait adjacent to TR Island, taking care to move at least 250m beyond the corner of the island at the bend in the river so crews headed downstream are clear of stopped crews.
- Coaches should avoid taking out crews of differing speeds and skill levels. Having several crews spread over 1000-2000m or more may as well not have a coach's safety launch with them. Furthermore, the coach can not adequately supervise or coach crews in this fashion.
- Coaches should keep all crews at "racing distance" apart. That is the distance (width) between two crews. Coaches should limit the distance across all crews in a practice to 3 abreast.
- Coaches must keep their crews on the right side of the river at all times! Please refer to the information concerning traffic patterns for the river. *Do not* cross the "centerline" of the navigable portions of the river.
- Slow-moving crews should yield to faster crews by shifting their course further to the right and allowing the overtaking crew to pass. Larger shells have right away over smaller shells due to their decreased maneuverability.
- Coaches who wish to stop and work with crews should do so only in areas where they are not impeding the flow of traffic. Please refer to the River Traffic Patterns section.
- Boats should not turn upstream from bridges unless they are at least 300m from the bridge (more if stronger currents are present). Swift currents can pull shells into bridge abutments very quickly!
- Boats wishing to turn should make sure that no other crew is approaching first. Do not cut in front of oncoming crews! Furthermore, crews should make sure to complete their turn only after moving to the other side of the river first, before proceeding in the opposite direction.
- Crews that are landing on a dock have priority over crews wishing to launch. This is especially true in inclement weather.
- Landing shells should use all available dock space; they should not wait for the very end of the dock to become open if there is space further up the dock. Crews should endeavor to walk their

boat up so that other crews can land unless asked by a coach not to (i.e. another boat is going around them to fill open dock space above them).

- All boats should take not more than a minute and a half on the dock once the boat has either been placed in the water or has returned from a row. If the boat has serious equipment problems or missing rowers, the shell should be removed from the water. Novice crews are allowed some leeway but should be taught how to function quickly on the dock. Boat and oars come before shoes!

CONTACT INFORMATION

EMERGENCY CONTACTS

- **Emergency: 911 or Channel 16 on marine band radios**
 - Callers should inform EMS dispatchers that they need help from D.C. EMS services as sometimes 911 calls will connect to the Arlington County dispatch system.
- Key Bridge Boats: 202-337-9642
- Potomac Boat Club (PBC): no staff, no monitored phone. Contact security@potomacboatclub.org
- Thompson Boat Center (TBC): 202-333-9543
- Washington Canoe Club (WCC): no staff, no monitored phone. Contact board@washingtoncanoecub.org
- DC Harbor Police: 202-727-4582
- U.S. Park Police: 202-619-7310
- Georgetown University Hospital, Emergency Room: 202-784-2118
- GW Hospital, Emergency Room: 202-994-3211

CLUB ADDRESS INFORMATION:

- Key Bridge Boathouse: 3500 Water St NW, Washington, DC 20007
- Potomac Boat Club: 3530 Water Street NW, Washington DC 20007
- Thompson Boat Club: 2900 Virginia Ave NW, Washington, DC 20037
- Washington Canoe Club: 3700 Water St NW, Washington, DC 20007

LOCAL WATER SPORT FACILITIES NOT ON THE UPPER POTOMAC:

- Alexandria Community Rowing (ACR)/ Alexandria HS Crew: 1 Madison St, Alexandria, VA 22301
- Algonquin Regional Park Boat Launch: 47001 Fairway Dr, Sterling, VA 20165
- Anacostia Community Boathouse: 1900 M St SE, Washington, DC 20003
- Bull Run Marina and Rowing Facility: 12619 Old Yates Ford Rd, Clifton, VA 20124

- Oxford Boathouse: 12380 Cotton Mill Dr, Woodbridge, VA 22192
- Sandy Run Regional Park/Occoquan Boat Club: Van Thompson Rd, Fairfax Station, VA 22039

LINKS TO LOCAL REGULATIONS

- [DC MPD Harbor Title 19 Regulations](#)
- 33 CFR 175 [Code of Federal Regulations regarding PFDs](#)

GLOSSARY

The following are terms that are used in the sport, as well as those used specifically to help navigate the Potomac River. Any term in italics identified a command used by a coxswain, coach, or rower giving direction in a straight/blind boat.

14th Street Bridge: a grouping of three bridges (vehicular, train, and Metro) downstream from Memorial Bridge.

Back-it-Down: Tells the rowers to square their blades in the water and drag them so the boat slows to a stop. Used in emergencies. See Hold-Water below. Syn. Check-it-down.

Blind Boat: A crew having no coxswain, Steered by the bow seat. Commands given to the crew during rowing may come from the bow seat or the two-seat.

Bow: The front of the shell. Also the rower in the seat in the very front of the shell.

Bow Ball: The rubber ball at the tip of the bow helps prevent damage to people or shells if they hit something. This is a USRowing requirement. Must be round, white rubber, and firmly attached to the boat.

Bowloader: a four-person shell with coxswain where the coxswain lies on their back in front of the bow seat rower, in the bow of the boat. They steer using a lever and must use the athletes to provide information about what is happening around them as they cannot see to the rear beyond their peripheral vision.

Catch: The point, at the end of the recovery, when the blade is placed into the water.

Coxswain: The athlete who steers a shell, gives direction to the crew, acts as an onboard coach, and executes race strategy. They sit in the rear of the boat in an eight, facing the crew, or often in the bow of a shell, lying down, in a four. See Bowloader.

Drive: the portion of the rowing stroke where the blade is in the water and the athlete is pulling on the oar.

Easy-all: when a crew completes a stroke and stops rowing while sitting at the finish. Simultaneously they move the oar handles to the gunnel of the boat and balance the shell until being told to drop their blades into the water.

EMS: the acronym for Emergency Medical Services. This can, generally, be considered medical personnel, the fire department, or the police department when they are involved on the water. When you dial 911 you are “activating EMS.”

(#) Fall-out, (#) Fall-in: These commands tell the rower(s) to either stop rowing or to start rowing with everyone else. (#)= the number of the rower(s) to start or stop. i.e. "Bow pair Fall out, stern

pair Fall in, in two. . ."

Finish: the point in the rowing stroke where the athlete brings their hands to their body. Oftentimes where an athlete stops rowing when the crew is told to stop.

Fletcher's Cove: the cove located upstream of Hens and Chickens. It marks the farthest upstream location for safe rowing. Often frequented by anglers. Harbors strong currents during heavy rains.

Georgetown Waterfront: the area along the DC shore in Georgetown, adjacent to TBC, that hosts docking of water taxis and private vessels.

Gunnel or Gunwale: Top part of the hull, where the riggers attach.

Hens-and-Chickens: a grouping of rocks downstream from Fletcher's cove.

Hold-Water: Tells the rowers to stop rowing and square their blades immediately! Used to avoid Collisions.

Key Bridge: the bridge connecting Georgetown and Arlington, VA.

Key Bridge Boats: a public paddler sports rental facility owned by the National Park Service located on the DC shore directly next to Key Bridge on the DC shore.

Let-it-run: This tells the rowers to stop rowing.

Little River: the narrow inlet between Roosevelt Island and the VA shoreline. Shallow, with rocks in the Key Bridge entrance.

Memorial Bridge: the bridge is just downstream from the TR Bridge, and is made of stone with a center metal span. Begins the open wake zone headed downstream and the no wake zone headed upstream.

Potomac Boat Club (PBC): green, white, and red-colored private rowing facility located on the DC shore upstream of Key Bridge. Home to Washington-Liberty high school crew.

Port: From the coxswain's point of view, the left side of the boat. Traditionally even-numbered seats are on the port side.

Racing Distance: the distance between two shells that allows free movement, but allows no other crew or launch to pass between them. One should imagine racing in lanes on a buoyed course for reference.

Release: the point in the rowing stroke where the oar handle has reached the athlete's body and is then pressed down to remove the blade from the water.

Roosevelt Island: the island located across from Arlington on the VA shore, just downstream of Key Bridge. Owned by the NPS. Navigation hazards can be found along its entire shoreline.

Spout Run: discharge of a stream on the VA shore located directly across from the Three Sisters Islands. Storms can create stronger currents in the area.

Starboard: The right side of a shell when viewed from the coxswain's seat. Traditionally odd numbered seats are on the starboard side.

Stern: The very end of the boat.

Straight Boat: A crew having no coxswain, Steered by the bow seat. Commands given to the crew during rowing may come from the bow seat or the two seat.

Stroke: The rower farthest to the stern of the boat who sets the pace for the rest of the crew. Also, the sum total of the motion of the oar, from the catch to the release. Also the term for the person who sits closest to the end of the boat and sets the rhythm or pace for a crew.

Swirlies: are defined as currents moving in a circular pattern that has a distinct visual appearance, and can physically move a shell or launch passing through them.

Thompson Boat Center (TBC): public rowing facility located on the DC shore at the end of the Georgetown Waterfront, at the bend of the river near the Kennedy Center. Home to Georgetown University Crew, George Washington University Crew, TBC Racing, Rock Creek Rowing Club, the Grey Knights Rowing Club, McLean, Whitman, Wilson, Holton-Arm, Georgetown Visitation, Bethesda Chevy-Chase (BCC), O'Connell, Yorktown high school rowing programs.

Theodore Roosevelt Bridge: aka TR Bridge. Connects DC to Arlington, located near the Kenedy Center.

Three Sisters Islands: The islands upstream of Key Bridge, and across from Spout Run on the Virginia side. A major choke point on the river. Made up of many submerged rocks and rock shelves in addition to three visible ones.

Turtle Rock: a low-sitting rock on the DC shore, located upstream of the Three Sisters Islands, and just downstream of Hens and Chickens. It is often marked by a buoy.

Ugly Step Sister: a submerged rock just upstream of the largest of the Three Sisters Islands. Actually comprised of several ridges of rocks on the river bottom, and known for destroying boats and skegs.

Way-enough: Tells the rowers to stop rowing.

Washington Canoe Club (WCC): private paddling facility just upstream of PBC on the DC shore.

Note- When given the command to *Way-enough* or *Let-it-run*, one must be aware of how a crew has been told to react given either command. Some crews stop rowing and put their blades in the air (an easy-all) and wait for the command to drop them into the water, while others just stop rowing with their blades on the water. If it is an emergency, be very specific about what you want the crew to do.

Seat Numbering:

In rowing shells, basic seating is broken down by number into individual seats, pairs or fours from the bow of the boat to the stern. The order in an 8+ goes like this: Bow seat, 2 seat, 3, 4, 5, 6, 7, Stroke, Coxswain. The pairs are then joined together in different combinations to indicate exactly who should be rowing. In an eight, you would have:

Bow+2= bow pair, 3+4 5+6 Stroke+7= Stern Pair

or Bow+2+3+4= Bow four

3+4+5+6= Middle four 5+6+7+Stroke= Stern four

or All 8.

APPENDIX A: PROCEDURES FOR HANDLING EMERGENCY SITUATIONS

An emergency situation, whether it is one you are involved in or one you are responding to can be a very stressful time. The following information is provided as a guide to help ensure your best outcome. Note: It is the responsibility of any coach boat to provide assistance to any capsized boat- even if from another sport, or a pleasure boat.

FOR COACHES

- Foremost, stay calm. How you approach a situation either in action or tone of voice will impact your actions and how others you are interacting with will respond.
- Assess the situation. Are you the first person on the scene or are others already engaged in supporting others involved in the situation?
 - Identify what has occurred, and what needs to be done to ensure the safety of all involved, starting with anyone in the water.
 - If it is *your athletes* involved in the situation, determine quickly whether you will need assistance or the support of others. (A capsized 1x may be relatively easy to recover, but a 4+, 8+, someone having a medical emergency, crews involved in a collision, etc. may need more help than you offer on your own.
 - **Dial 911**, and/or flag down the support of others on the river if you need assistance! It is best to err on the side of caution than it is to give it a go and run into trouble.
 - If you are supporting another coach or lead person, ask how you can help before engaging. It is best if one person coordinates any rescue efforts.
 - This changes if the lead person is not able in some way to coordinate the situation, in which case communicate clearly how you are going to start helping.
- If you dial 911 make it clear to the dispatcher that you need support from DC EMS. Cell systems will often redirect you to Arlington EMS dispatch if you are close to the VA shore.
 - If you get Arlington EMS ask to be transferred to DC because your issue is taking place on the river.
 - Be prepared to give the dispatcher a location or landmarks for responding to EMS services.
- *Be aware of your prop!* Move slowly, keep track of individuals in the water, and how wind and current could possibly swing your motor prop towards individuals. If conditions allow, cut your engine while extracting individuals from the water.

FOR SCULLERS OR PADDLERS

This section is presented for river users who are without a safety launch present.

- Individuals or small groups are encouraged to bring a cell phone with them in a waterproof, floating case, or a case that can be attached to the boat.

- Carrying a noise-making device (i.e. an emergency whistle) is advised as well. Ensure the whistle is easily accessible in an emergency.
- When possible it is best to practice with a partner or small group who can act in support of an individual in an emergency situation.
- If the sculler or paddler is unable to self-extricate themselves from the emergency situation, they should **dial 911**, and/or flag down the support of others on the river if you need assistance! It is best to err on the side of caution.
 - Others in the training group should remain with the athlete who is experiencing the emergency and offer what assistance they are able. They should not, however, put their safety at risk.
- If no help is available then the sculler or paddler should consider swimming the boat to shore.
 - *At no time should the athlete leave their boat and swim for shore!*

FOR COXSWAINS

- A coxswain's job is to first ensure their safety, and then that of the members of their crew.
 - If no safety launch is present, activate EMS by trying to attract the attention of other river users, or if possible, dial 911.
 - Stay calm and keep your head. Keep chatter to a minimum- you want the athletes to pay attention when you give commands.
 - Keep your commands simple and succinct.
 - Listen for and follow coach or EMS instructions.
- Take a headcount of all your athletes, and have them count down from the bow.
 - Remind the athletes to stay with the boat during whatever comes next, and to look out for each other.
- If the shell has swamped, instruct the athletes to exit the shell in pairs, one pair at a time, on your call.
 - Bunch the athletes up together at either end of the shell.
- If the shell has flipped, start by accounting for everyone in the shell.
 - Count down, and then buddy up everyone as above.

SHELL CAPSIZING OR SWAMPING RECOVERY PROCEDURE

All crew members should be fully aware of what actions to take when a crew swamps, flips, or capsizes. In any of these events, the crew should remain with the shell! The shell will float (an important reason to close bow and stern ports before going on the water). (NOTE- oars are not watertight and will not work as a USCG-approved floatation device!) If for some reason the shell sinks below the surface, the shell should be rolled so the bottom is facing the sky ("keep up, guts down"), as this traps air underneath the shell and increases buoyancy. *At no time should any crew member leave the boat* to swim to shore! A short swim can be far longer due to currents, wind, water temperature, or fatigue.

Stay calm. The first thing that should be done in a team boat is for the coxswain or bow person to get a headcount to make sure all rowers are accounted for. The crew, while holding onto the shell, should attempt to get the attention of other crews, or coaches on the water. Waving and making as much noise

as is necessary to attract attention. If no crews or launches are on the water nearby, attracting the attention of people on shore is the next step.

If the water and air temperatures are low, then the crew members should move along the shell and huddle together in pairs near the middle of the shell. Efforts should be made to keep as much of the body out of the water as possible. This can include draping one's self over the top of the hull. A minimum of movement is key to retaining body heat. Constantly check on crew mates and keep up one on one communication.

To recap procedures:

- Stay calm.
- Stay with the shell.
- Take a headcount.
- Pair up and keep communicating with each other.
- Attract the attention of launches, crews, or people on shore.
- If need be, roll the shell over and drape the body across the hull. (Sinking shell or cold conditions)
- Wait for help.

There is one other event that should be addressed that is similar to what was mentioned above: man overboard. A violent crab by an oarsman can throw them out of the boat. In this situation, it is up to the ejected rower to stay below the surface of the water till the shell has passed (this avoids getting hit in the head by a fast-moving rigger(s)). The crew should stop rowing and hold water immediately so they can lend assistance. The crew should get the attention of the coaches' launch while the rower treads water. In the event that a launch is not nearby, the crew can back up to the rower in question so the rower can use the shell as a floatation device. It is also feasible to pass an oar to the ejected rower, using the oar as a floatation device. Once removed from the water, the rower should be evaluated to determine if the rower is fit to continue or if a medical emergency is present.

CAPSIZED OR SWAMPED SHELL RECOVERY

Recovering a shell that has capsized or has swamped requires care so that damage doesn't occur doing so. Follow these steps for an effective outcome:

- People come before equipment! Ensure the athletes are safe and being taken care of, then focus on equipment recovery.
- Assess the shell for damage. The type and extent of damage will determine whether the shell has the potential to be rowed back to the dock (small boats).
- Remove oars and place them in a launch. Recovery cox boxes as appropriate.
- The shell should be rolled so it is keel down, "guts up."
 - Position the launch parallel to one side of the boat.
 - Grab the riggers and lift them up and away from you.

- Switch to grabbing the riggers that are swinging up from below and push the launch away to allow the riggers to continue to rise to the surface, righting the shell into the proper position.
- With the shell righted, it is now ready to be drained, reboarded, or towed as appropriate.

Singles and doubles:

- If possible they should be drained of water. They may be carefully lifted to drain water or a pump may be used. Craining can occur as the shell is being righted.
- The shell can then be carefully lifted into a launch for transport back to the dock or if conditions allow and the athletes are OK (i.e. warm weather) then they may reboard the shell. Place oars into the shell first, followed by the athlete(s) (one at a time).

Big boats (4x, 4+, 8+):

- You should not attempt to lift a big boat to drain it as the weight is too extreme. Use of a bailer or pump is required.
- If the boat cannot be drained it still may be towed, but it must be done so slowly and carefully to ensure damage does not occur. This method is not ideal.
- Generally, it is best to tow a big boat rather than to reboard the shell. Here is the method for towing:
 - Use the 50ft rope that should be in your launch safety kit.
 - Loop the rope through the bow pair riggers and secure to itself forming a triangle beyond the wash box.
 - Loop the rope around the bow of the shell, closer to the bow ball end of the shell, and “tie it off” by threading the line through itself (like one does when starting to tie their shoes) so that the loose end is inline with the centerline of the shell, and on top of the deck. Doing so will ensure the shell tracks straight behind the launch as it is towed.
 - Tie the loose end of the rope to a cleat on the launch, or to another sturdy fixture on the launch. Do not secure to any part of the outboard engine, to anything that may be pulled loose (the shell is heavy, even without water), and will not interfere with any launch passengers.
- Move away slowly and monitor the tow rope so it does not become entangled in the engine prop!
- Keep in mind that the shell is free-floating, so if you stop suddenly the shell will continue on into the back of your safety launch or the dock. All driving motions should be smooth, subtle, and made with care.
- Upon arrival at the dock, as much water as possible should, again, be removed from the shell.
- If the shell is submerged, use this procedure to empty the shell:

- You will need as many hands as possible to help with this process.
- The outboard riggers should be tilted towards the sky. You will need to push the dockside riggers away from the dock. You will tilt the boat and raise it just enough to get water to drain from the internal structure. After this is complete, return the shell to a normal position alongside the dock.
- Again use bailers or pumps to remove more.
- After as much water as possible has been removed, line up people along the length of the shell and gently lift it from the water.
- Lift to waists and drain more, or if possible to heads.
- Alternate by lowering the bow and raising the stern, and vice-versa, to help drain the remaining water. The shell may also be rocked from side to side (gunnel up/down) to free more water.

After these steps are complete any shell should be placed in slings and gone over carefully to check for damage. The bow, stern, and deck caps should be opened and left so overnight to allow for the shell to completely dry out.

Appendix B: Weather-Related Health Consideration and Emergencies

The purpose of this section is to educate river users on the challenges of river use in extreme temperature or humidity ranges common in the DC area.

COLD WEATHER CONCERNS

River use in cold weather involves air and water temperatures, as well as wind chill. All three elements need to be considered before launching as the impact on the comfort and safety of an individual. Hypothermia is the biggest danger and can quickly impair an individual. In cold weather, it is strongly advised one consider the effectiveness and safety of practicing on the river. The following should be taken into consideration:

- A safety launch is always advised. When not possible, a partner system should be used so others are available to assist in an emergency.
- Someone should be made aware of your rowing/paddling plan including duration, and general travel path. Clubs are advised to keep a log of launch and landing times for any crew going out.
- Carry a cell phone with you in a waterproof and floating case. Secure it to your boat.
 - Carry an emergency whistle that is easy to access and secured to the boat or your person.
- Scullers, paddlers, and coxswains should consider wearing some form of floatation device, be it an inflatable suspender-style PFD, a survival suit, or a wet suit as appropriate. These will offer support in the event of a water immersion situation, but will not necessarily prevent life-threatening hypothermia.
- Any individual who is not adequately prepared for the conditions or suffers a cold water immersion is susceptible to hypothermia and frostbite.
 - Individuals who are not actively exercising are at great risk as they are not generating heat on their own (i.e. people “sitting out” in an 8+ or 4+)
 - Sweat or wet clothes can contribute to hypothermia, even if the individual is not immersed in cold water.
- All participants should dress in layers, consisting of wool or synthetic fibers, and wear a windproof outer layer.
 - Having more layers as necessary, and allowing time for athletes to remove layers, allows for proper heat regulation and limits the amount of sweat trapped against the body which can substantially cool the body.

- In wet conditions individuals should wear waterproof clothing that is also breathable.
- Cotton clothing should be avoided by all users as it offers no protection against the cold when wet.

WIND CHILL

Wind chill increases the impact of cold on the body, and effectively lowers the temperature for the individual. The lower the temperature and the higher the wind speed, the greater the wind chill effect. This is true both for participants, as well as those riding in safety launches. Individuals who are involved in an accidental immersion, who are out in the rain, or athletes who are simply wet from being splashed or from sweat, are even more susceptible to hypothermia through hypothermia.

The following wind chill chart is based on practical rowing temperatures and wind speeds, and is based on NOAA formula and chart which can be found here:

<https://www.weather.gov/safety/cold-wind-chill-chart>

Practical Wind Chill Chart For Rowing And Paddling						
	Temperature in Fahrenheit					
Wind Speed	50	45	40	35	32	30
5	48	42	36	30	27	24
10	46	39	33	27	23	21
15	44	38	31	25	21	19
20	43	37	30	23	20	17

HYPOTHERMIA

Hypothermia is a condition that occurs when the temperature of the human body is lowered to a dangerous point due to exposure to cold and/or wet conditions. Cold temperatures, wet conditions, and wind chill work together to pull heat away from the body, lowering the body's core temperature. Even in mild conditions, adding rain or submersion in cold water can sufficiently reduce body warmth to trigger hypothermic conditions in the body. A person's condition can degrade rapidly impairing breathing and coordination making it impossible to swim or keep one's head above water. Emergency action needs to be taken no matter the level of hypothermia.

Early Hypothermia

- *Symptoms:* Rapid shivering, numbness, loss of strength and coordination, semi-consciousness.
- *Action:* Maintain an open airway. Transfer to a warm environment as soon as possible. Remove wet clothing.

- Use blankets to help warm the individual or if available a warm shower. Warm torso area first.
- Seek medical attention.

Profound Hypothermia

- *Symptoms:* The person will be pale, stiff, and cold. Unresponsive to stimuli, and possibly unconscious. Little or no cardiac or respiratory activity will be present.
- *Action:* Move or manipulate as gently as possible. Prevent further heat loss, but *do not* attempt to rewarm. Maintain open airways, and activate EMS procedures.
- Call for emergency help immediately!

HEAT-RELATED CONCERNS

Rowing in hotter temperatures, including the humidity that is present in our area in the summer months can be life-threatening to anyone on the water who does not take adequate precautions. Consider these factors when temperatures rise:

- Everyone handles the heat differently. It also takes time to acclimate to increasing temperatures and humidity.
- Humidity impacts the body's natural ability to cool itself since the evaporation of sweat is diminished.
- The best way to avoid heat-related injuries is to practice at cooler times of the day: early morning or late afternoon.
- Intake of fluids is key and should be encouraged. Dehydration further impairs the body's ability to cool off.
 - Water is the best fluid for most outings on the river. Sports hydration drinks are useful only after 60-90 minutes of consistent activity. Mild sugar solutions in those drinks, along with electrolytes, encourage the process of hydration, as well as drinking by the individual.
- Light-colored clothing that breathes well is recommended.
- Hats, which can be dunked in the water, offer sun protection for the face and offer a passive cooling effect while moving.
- Unrelated to temperature, but to the time of year of heat-related emergencies, the use of sunscreen should be encouraged. Doing so protects from burns (which do dehydrate the body), but also for long-term protection against skin cancer.

WET BULB TEMPERATURE AND HEAT INDEX

When considering working out in heat and humidity, it is important to consider both together. Rather than looking at only ambient temperatures, one should consider Wet Bulb temperatures, which are the most accurate method for determining the body's ability to adapt the heat/humidity. The following link goes to a National Weather Service (NWS) map of the area that provides Wet Bulb heat temps. The map offers a risk level of low, elevated, moderate, high, and extreme, which one should use for determining whether to practice, the time of day, and the duration:

<https://digital.mdl.nws.noaa.gov/?zoom=9&lat=38.76874&lon=-76.96633&layers=FB000TTTTFTT®ion=0&element=8&mxmz=false&barbs=false&subl=TFFFFF&units=english&wunits=nautical&coords=latlon&units=localt>

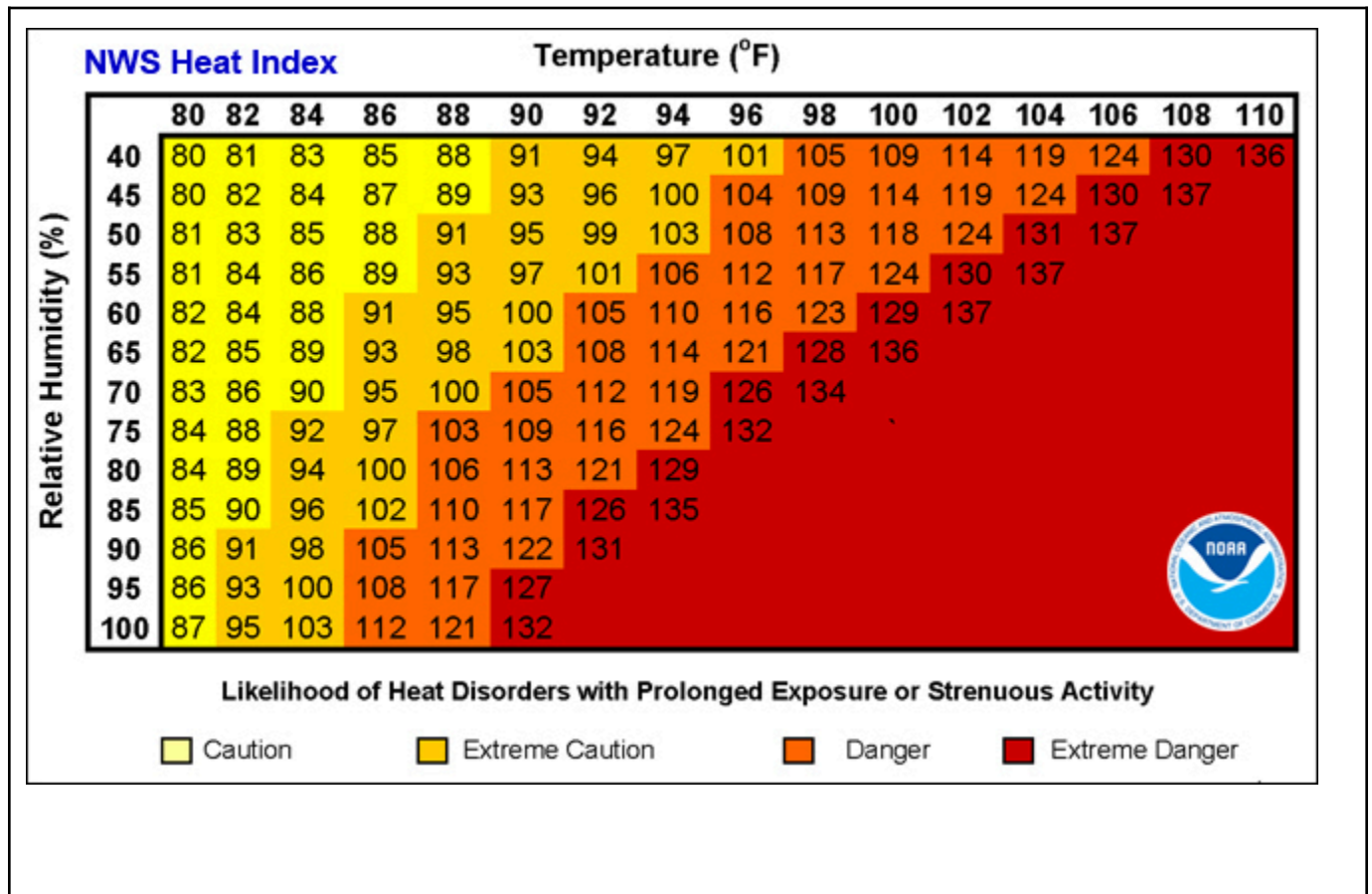
Here is a simple wet bulb temperature from an approximate formula that which only depends on heat and humidity:

Wet Bulb Globe Temperature (WBGT) from Temperature and Relative Humidity																
Temperature in Degrees Fahrenheit																
	68.0	71.6	75.2	78.8	82.4	86.0	89.6	93.2	96.8	100.4	104.0	107.6	111.2	114.8	118.4	122.0
0	58.6	60.9	64.3	65.5	67.7	69.9	72.1	74.3	76.4	78.5	80.6	82.6	84.7	86.6	88.6	90.5
5	59.6	62.1	65.6	67.0	69.3	71.7	74.0	76.4	78.6	80.9	83.1	85.3	87.5	89.9	92.1	94.2
10	60.7	63.3	66.9	68.4	70.8	73.3	75.8	78.2	80.7	83.0	85.5	88.0	90.3	92.8	95.1	97.6
15	61.7	64.5	68.1	69.6	72.2	74.8	77.4	80.0	82.6	85.2	87.8	90.2	92.8	95.4	98.0	
20	62.7	65.6	69.4	70.9	73.6	76.3	79.2	81.8	84.5	87.1	89.8	92.5	95.2	97.8		
25	63.8	66.7	70.5	72.2	75.1	77.8	80.6	83.4	86.2	89.0	91.8	94.6	97.4			
30	64.8	67.6	71.7	73.4	76.3	79.2	82.1	84.9	87.8	90.8	93.6	96.6	99.4			
35	65.6	68.6	72.7	74.6	77.5	80.5	83.5	86.4	89.4	92.4	95.3	98.3				
40	66.7	69.6	73.8	75.7	78.8	81.8	84.8	87.8	90.9	94.0	97.0					
45	67.5	70.6	74.8	76.8	79.9	83.0	86.1	89.2	92.3	95.4	98.6					
50	68.4	71.5	75.8	77.8	81.1	84.1	87.4	90.5	93.7	96.9						
55	69.3	72.4	76.7	78.8	82.1	85.3	88.5	91.9	95.1	98.3						
60	70.1	73.3	77.7	79.8	83.2	86.4	89.8	93.1	96.3	99.6						
65	70.9	73.8	78.6	80.9	84.2	87.5	90.8	94.1	97.5							
70	71.7	75.0	79.5	81.7	84.9	88.6	91.9	95.3	98.6							
75	72.4	75.9	80.3	82.7	86.1	89.6	92.9	96.4								
80	73.2	76.7	81.2	83.6	87.1	90.4	93.9	97.4								
85	74.0	77.4	82.0	84.5	88.0	91.5	94.9	98.5								
90	74.7	78.2	82.9	85.3	88.9	92.3	95.9	99.4								
95	75.5	78.9	83.6	86.1	89.6	93.2	96.8									
100	76.1	79.7	84.4	86.9	90.5	94.1	97.7									

NOTE: This chart is calculated using temperature and humidity, assuming a very clear sky (maximal solar load), and atmospheric pressure of 1ATA (760 mmHg). Chart A was developed by Professor Yoram Epstein to be used in Ariel's Checklist for hikers in Israel.

Temperature, humidity, solar radiation (i.e. how sunny or cloudy it is), and wind speed all come together to give this recommendation. All these elements impact how the body reacts to heat.

The NWS heat index is another method of determining the impact of heat and humidity on the body. It is not as accurate as wet bulb temperature but can be used as a quick guide. You only need to know the temperature and relative humidity to use the following chart:



More information about the heat index can be found here: <https://www.weather.gov/ama/heatindex#:~:text=The%20heat%20index%2C%20also%20known,for%20the%20human%20body%27s%20comfort.>

HEAT EXHAUSTION

Heat exhaustion is an early sign of the body suffering from heat-related stresses. Heat exhaustion is a progressive and dangerous condition if not addressed. It should be taken seriously and the athletes should be removed from the water to a cool, shaded place with haste.

- *Early Symptoms:* heavy sweating, cramps, tiredness, weakness, malaise, and mild decrease in performance. Action: rest and fluid replacement.

- *Advanced Symptoms:* Profuse sweating, muscle incoordination, impaired judgment, emotional changes.
- *Action:*
 - Stop physical activity.
 - Move the individual to a cool, shaded location.
 - Provide cool liquids ingested slowly- water, sports drinks, and popsicles.
 - If there is mild temperature elevation, an ice pack may be used to help cool the body to normal temperatures.
 - Several days of rest may be necessary and rehydration is a priority.
 - If symptoms are more advanced, consider activating EMS and being evaluated by medical professionals.

HEAT STROKE

Heat stroke is when the body advances past heat exhaustion, and can no longer properly cool itself or adjust to the heat and humidity conditions. It is a *life-threatening* condition!

- *Symptoms:* Confusion, nausea, vomiting, seizures. The victim loses consciousness. Body temperature rises as high as 106. Skin is dry and clammy.
- *Action:* **Dial 911.** Get medical help immediately!
 - Move the individual to a cool, shaded location.
 - Lower body temp by immersing in water, and maintaining the horizontal position of the victim.

ADAPTING TO THE HEAT AND TRAINING

Recommendations adapted from an 8/11/22 Washington Post article and the National Athletic Trainers Association

It is important for teams and individuals to take time and precautions when starting to workout in higher heat and humid conditions so that they can properly adapt and lessen the chances of injury or heat-related illness. The following considerations should be taken:

- Risk is about more than the temperature — it's also about humidity, sun, and wind. Humidity hinders sweat evaporation, the body's primary heat dissipation mechanism. So when humidity is high, no matter the air temperature, that creates a heat safety concern.
- Athletic trainers often use wet bulb globe temperature to determine when teams should shorten or cancel practice and how often rest and cooling breaks should be required. It's a better gauge of risk than the heat index, which uses only air temperature and humidity.

- Teams should use a heat acclimation plan that gradually increases the length of training sessions and the intensity of workouts.
- Workouts should be avoided during the hottest part of the day, between 10 a.m. and 6 p.m.
- Consistent hydration and breaks to do so should be allowed.
 - Coaches should consider having spare cold water available in the event an athlete runs out or an athlete feels unwell.
- Encouraging good nutrition and sleep are important factors in adapting to the heat and being able to effectively and safely train in the heat.
- Providing athletes with proper rest time during the workout is also important.
- Athletes should consider weighing themselves pre and post-workout to determine the level of fluids being lost during a workout, which can be used to inform hydration needs during practice.

Practice-Structure Considerations

- Exercise heat acclimatization can be achieved via repeated heat exposure:
 - At least 10 training sessions over 14 consecutive days of heat acclimatization are recommended.
 - A total of 60 to 90 minutes of training per day in the heat is advised to induce and optimize the physiological adaptations associated with heat acclimatization.
- The length of any single training session during days 1 through 7 of the heat-acclimatization period should last ≤ 120 minutes.
- The length of any single training session during days 8 through 14 of sport activity should be ≤ 150 minutes.
- For days 1 through 6 of the heat-acclimatization period, only 1 training session per day is permitted. An additional 60-minute walkthrough session is permitted on days 1 through 6 for instructional or strategy purposes only and should be separated from the training session by at least 3 hours of continuous rest in a cool (eg, indoor, air-conditioned) environment.
- Two training sessions per day are not permitted before day 7 of the heat-acclimatization period; once initiated, double practices may not occur on consecutive days. The time between training sessions must be at least 3 hours, with student-athletes allowed to recover in a cool environment.
- If a conditioning session that includes high-intensity work is planned during the heat-acclimatization period (days 1–14), it should either (a) be planned as a separate session and constitute the only training on that day or (b) occur at the beginning of practice to reduce the risk of exertional heat illness.

- During the heat-acclimatization period, practice sessions that are solely dedicated to conditioning (rather than sport-specific skills) should occur indoors in an air-conditioned environment or during times of the day (early morning or evening) when the environmental heat is low and in conjunction with environment-based activity modifications. Conditioning that is outside of the normal sports practice (eg, punishment conditioning sessions) should be prohibited.
- Athletes with a recent illness or injury that required significant time loss (>5 days) may experience the loss of heat-acclimatization adaptations. Once physical fitness and function have been restored during the return-to-play process after illness or injury, these individuals may need to restart the heat-acclimatization process.
- Recovery between training sessions should occur in a comfortable (ie, air-conditioned) environment to ensure that body temperature returns to baseline before the next training session. Adequate sleep (7–9 hours) will also help optimize recovery between training sessions.

APPENDIX C: SPECIFIC LAUNCH PASSENGER CONSIDERATIONS

CHILDREN & INFANTS IN COACHING LAUNCHES

- (1A) “No person may operate a recreational vessel underway with any child under 13 years old aboard unless each such child is below decks, in an enclosed cabin, or wearing a Coast Guard approved personal flotation device of the proper size.”
- Coast Guard guidance is that babies should not travel on any kind of boat until they are at a weight (~18 lbs) to be able to wear their own well-fitted PFD. All children under age 13 must wear a USCG-approved PFD.
- No one under the age of 18 may operate a launch without having passed a boating safety class. [MPD Harbor regulation 1026.5](#) In general junior athletes should not be allowed to drive safety launches.
- Infants in child carriers (i.e. bucket seats, car seats) are not permitted as they are not USCG-approved PFDs and are not considered stable while sitting unattached to the launch.

REGARDING PETS AND OTHER PEOPLE IN A LAUNCH

Neither USCG nor DC regulations provide information pertaining to pets, but if coaches are bringing pets into their launch, they are doing so acknowledging that those pets are diminishing the weight limit that might otherwise be used for persons in distress. Every time a coach launches with another living person or creature in their launch, they should be doing so fully understanding that they are solely responsible for that person’s or creature’s well-being, in addition to that of their athletes, until they return to the dock. The launch should be kept with a minimum of passengers to allow for room in the event individuals need rescue from the water is necessary.

APPENDIX D: VHF RADIOS

VHF radios are an important safety tool endorsed by the PRSC. Use of VHF radios allows for quick and easy calls for emergency assistance from both MPD Harbor Patrol and other programs on the water. Using a radio to call for assistance can rapidly reduce the response time for receiving help.

WHY VHF RADIOS?

VHF radios provide the following benefits over cell phones while on the water.

- Cell phones generally cannot provide ship-to-ship safety communications or communications with rescue vessels. Only one party you call will be able to hear you on a cell phone while VHF channels have many listeners including emergency personnel and nearby boaters who may be able to assist.
- It is not uncommon for a call to 911 while on the water to go to the wrong jurisdiction delaying assistance (i.e. you call from the launch near the VA shore, which is relayed through the cell network to a dispatcher in Arlington, VA, instead of D.C. MPD Harbor and DC Fire respond to on the water emergencies along our stretch of the river.
- VHF radio transmissions can be located in fog or low light conditions while cell phones cannot be easily triangulated.

VHF RADIO CHANNELS

There are a set group of radio channels that are for use in open communication by the public. (A complete [list of channels](#) and their usage is available at [boatsafe.com](#)) Using other channels beyond those listed below is against the law and could result in fines. Listed below are the appropriate channels and their purpose:

- Channel 16: Used for Emergencies and routine initial calling and answering. Once contact has been established, transfer to a working Channel. Channel 16 is monitored by San Diego Life Guards, US Coastguard, and all other vessels with VHF radios.
- Channel 9: Pleasure-boat hailing channel.
- Channels 68, 69, 71, 72 and 78A: Recreational working channels. General use for programs.

COMMUNICATING EFFECTIVELY

EMERGENCY:

In the event of an on-water emergency, press the RED 16/S button, press the PTT button and identify yourself by your club or program name, your location using well-known names for landmarks, and the nature of your emergency.

Emergency example– when there is imminent danger to crew and/or vessel:

- PBC: MAYDAY, MAYDAY, MAYDAY, This is PBC, PBC, PBC. Position 100 meters downstream of Fletcher’s Cove. Racing shell swamped and sinking (or crew member is injured, unconscious, or another medical issue). Require immediate assistance. Over.
- TBC Coach: This is Sam with TBC. Mayday acknowledged. I am gathering help and heading upstream to assist ASAP. Standby.

NON-EMERGENCY:

For non-urgent calls, use one of the recreational non-commercial channels listed above. This is when you are communicating with other coaches in your programs or coaches of other programs. Press the PTT button and identify yourself and indicate to whom your message is intended. Keep your conversations brief as these channels are shared with other VHF users.

Non-emergency example between two launches on channel 71 (not on channel 9 or 16):

- PBC launch: TBC Coach Sam, TBC Coach Sam, this is PBC Coach Kington, OVER
- TBC launch: Kington, this is Dougherty what is your message, OVER
- PBC launch: Sam, just to inform you we are changing the practice from the 2k stretch to the beyond Memorial Bridge due to heavier than normal pleasure boat traffic, OVER
- TBC launch: Pat, confirmed. Practice changed to below Memorial Bridge. OVER
- PBC launch: Sam, Okay, see you there. OUT

APPENDIX E: RACE COURSES

The following information is subject to change. There are a number of race courses that are set up and used on the river by crews and paddlers. This section defines some of the known start and finish lines, as well as traffic patterns used during events.

Rowing

George Washington Race Course- 3 Sisters to Thompson Boat Center

- When the GW Racecourse is in place during the mid to late spring, the following rules apply during non-regatta days.
- *DS* Crews should use lanes 2-4 (lane 4 is closest to VA shore) only! No crew heading *DS* should use lane 1. *US* crews should stay off the course except when passing around the Three Sisters Islands.
- Slow-moving crews using the course above Key Bridge should give way to faster crews. No crew should stop and impede traffic while on the course.
- Crews should leave the course and take a standard course on the river once they have reached the upstream end of the "Black Wall" (where crews have their team color painted).

1500m Scholastic Events (VASRA/WMIRA) and Collegiate 2k Course

- The start of this course is at approximately the middle of the Three Sisters Islands with the finish being at the downstream end of the Georgetown Waterfront Park adjacent to Washington Harbor.
- Racing lanes use arches two and three from the VA shore.
- Traffic headed upstream uses the 2nd arch from DC.
- The 2k course adds 250m to either end of the course, so the start is near the top of the Three Sister's Islands, and the finish is at the far end of Washington Harbor.

PBC Sculler's Head of the Potomac (2022 version)

The SHOP course continues to have small alterations to it, but generally follows this pattern:

- The starting line is around or slightly above the Hens and Chickens. The marshaling area is above in the straight between the rocks and the cove.
- Crews follow the VA shore through gates and past buoys downstream, through the 2nd arch of Key Bridge, around the corner of Roosevelt Island across from TBC, and then finishes between gate buoys just before the first arch of Theodore Roosevelt Bridge.
- Crews headed upstream to follow the normal river traffic to the start.
- This is usually a very busy day on the river! Be aware of other river traffic that is not part of the regatta.

Potomac Boat Club

Sculler Head of the Potomac Race Course

Fletchers Cove

- • Course Gates
- Course Buoy- stay to starboard
- ← Racing traffic pattern
- ⋯ Non-racing traffic pattern
- Shallow/ dangerous areas
- Large rocks
- ⋮ Sunken barges, piers, & pilings



Starting Line
For Full Course

"Hens & Chickens" Rocks

Virginia Side

D.C. Side

Race Downstream



Three Sisters Islands

Starting Line
For Half Course

Washington Canoe Club

Potomac Boat Club

Key Bridge

T. Roosevelt Bridge

Little River
Theodore Roosevelt Island

Construction barge
Stay to port

Thompson Boat Center

Finish Line

Construction barge
Stay to port

return post race

Last 500m

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Old PBC 2K Course

There is a rarely used 2k race course that runs from just below Hens and Chickens and PBC. Crews align the start using markers on the DC shoreline. The angle of the river requires crews to line up close together on the VA shore to allow a straight line past the Three Sisters Islands with the course taking crews towards the middle of the river with a finish in front of PBC. Because this course causes crews to cross into oncoming traffic and finish in the middle of the river it is **not** recommended for use. It is noted here for reference only,

Paddling

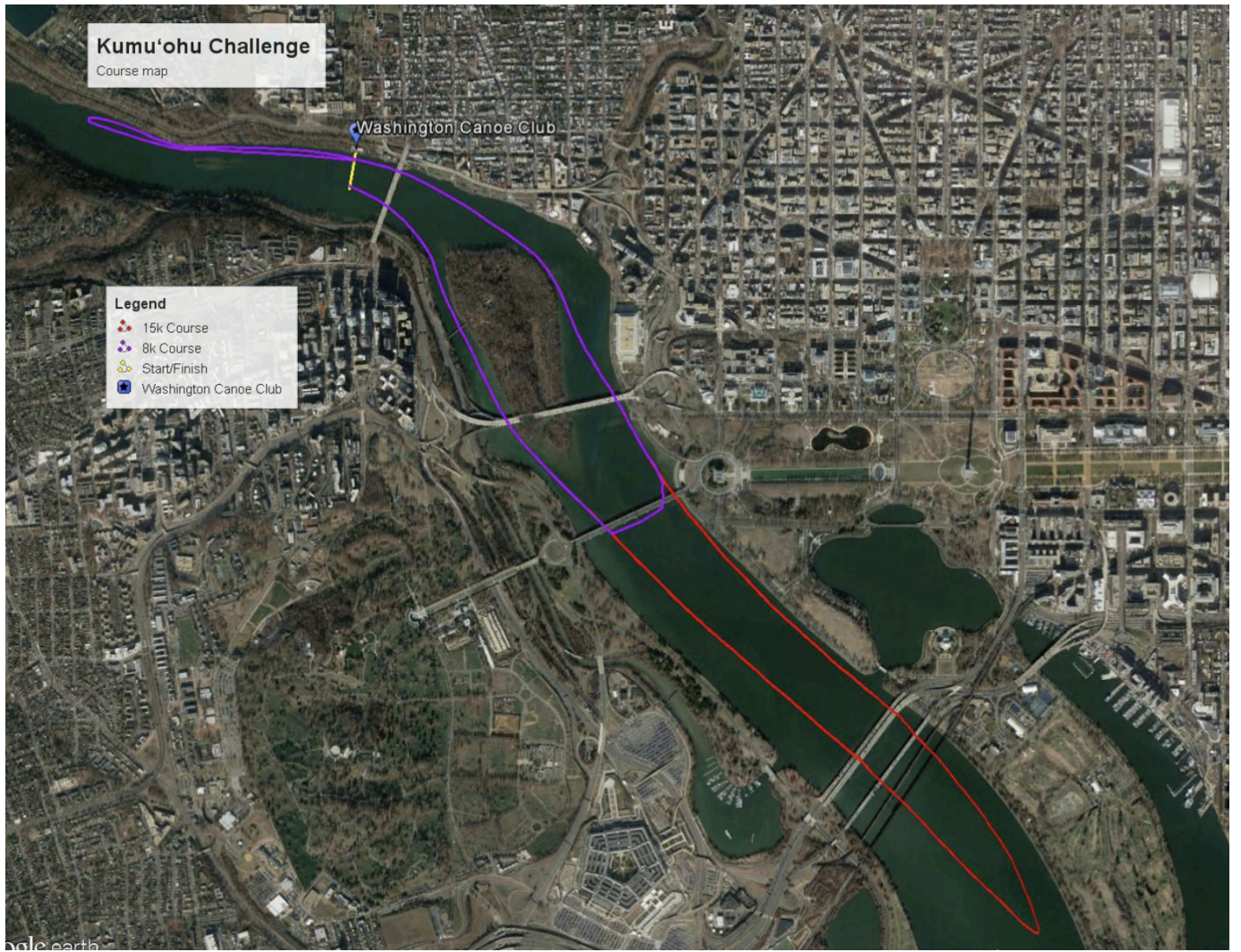
WCC Kumu'ohu Challenge (Spring) Race Course

15K Race: OC1/OC2, surf ski, and sea kayaks.

The start line will be a line from the timers on the WCC dock to a buoy in the river. After starting, paddle along the Virginia shore behind Roosevelt Island, continue downstream past 14th St. Bridge, and turn counterclockwise on the first red channel marker on the DC side of the river. Remain on the DC side of the river back toward WCC. Continue upstream, turn on the buoy at "mile rock" (don't cut short and hit the rock!), and paddle back to WCC, finishing at the WCC dock.

8K Race: SUP and sprint canoe/kayaks.

The start line will be a line from the timers on the WCC dock to a buoy in the river. After starting, paddle along the Virginia shore behind Roosevelt Island, continue downstream, and turn around the second arch on the Virginia side of Memorial Bridge. Then work your way to the buoy in front of the Kennedy Center and follow DC shore back to WCC. Continue upstream, turn on the buoy at "mile rock" (don't cut short and hit the rock!), and paddle back to WCC, finishing at the WCC dock.



WCC Middle States (Fall) Regatta Race Course



WCC Frank Havens 10k (Fall) Race Course

Follows the Middle States Regatta long course up/down DC shoreline to/from Mile Rock.

WCC Marcy Garland (Fall) Race Course

Generally follows the Middle States Regatta long course up/down DC shoreline. Usually involves a portage in Fletcher's Cove to/from C&O Canal.

APPENDIX F: INCIDENT REPORTING

The goal of the PRSC is not to “police” the community but rather to help create a community by providing guidance and standards for everyone to follow. As a group, we are here to help the community in the event of an incident or accident. We are willing to work with any and all stakeholders to bring resolution and better understanding to an issue and by doing so improve safety practices on the river. With that said we would offer the following:

1. In the event of a safety incident on the river involving rowing shells we would encourage you to use [USRowing’s Safety Incident Reporting Form](#) which will allow you to document what occurred. This report can be used to meet the requirements by insurance companies for filing a report. Further, the information will be reviewed and cataloged by the [USRowing Safety Committee](#) for the purpose of supporting those involved and keeping statistics on incidents that can be used to improve safety educational practices in the sport.
2. The [PRSC Incident Reporting Form](#) which may be used by any stakeholder in our community to alert the committee of a problem or incident. Doing so helps keep us informed of the facts, gives us the information necessary to help stakeholders negotiate a situation, and allows us to keep our own statistics so we can focus and improve our safety efforts on the Potomac for the community.

Although it may appear to be redundant, using both forms of communication will allow for the best outcomes and improvements in an effort for making our sport(s) safer, both locally and nationally. You will receive a response, if desired, using both forms.

General questions can be directed to potomacsafety@gmail.com or via the Potomac River Safety Committee email group on Google. **NOTE-** [SafeSport](#) concerns should **NOT** be sent to our committee. Please follow [SafeSport](#) guidelines for mandatory reporters.

APPENDIX G: CHARTER & IMPLEMENTATION

In the spring of 1998, a safety committee was established with the agreement and cooperation of all major programs that participate in watersports on the Georgetown section of the upper Potomac River (between Haines point and Fletchers Cove). This was deemed necessary to deal with increasing river traffic caused by the explosive growth in rowing, canoeing, and kayaking. The purpose of the committee is to provide the rowing/ paddling community with guidelines for the safe use of the river and to provide an avenue for concerns. The committee will do this by supporting enforcement by the Metropolitan Police Department of existing legal requirements for equipment and boat safety through aggressive awareness, educational, and self-help initiatives.

The information found in the following pages has been drafted by the committee with the greatest concern for safety. The guidelines are based on DC Government laws enforced by MPD Harbor Patrol, U.S. Coast Guard regulations, and USRowing guidelines in addition to the extensive experience brought to the committee by its members. The committee considers safety to be the number one priority of all organizations, coaches, coxswains, paddlers, and rowers who use the river. It is often easy to underestimate the potential for disaster. This document is meant as a means to educate and provide the tools for the safe use of the river. These rules are written for everyone's benefit. Furthermore, it is emphasized that all coaches should go over regularly with their program's proper safety procedures and ways to handle emergency situations of all kinds.

All coaches and individual scullers/paddlers are expected to make themselves familiar with the guidelines and work to make sure others are aware of them also. Throughout the fall and spring members of the safety committee will be actively reminding users of the river if they are not following the guidelines. Frequent disregard for the rules may prompt the committee to inform the governing authority for the individual, be it a club president, boat house manager, athletic director, or police of the person's actions.

The safety committee shall be composed of representatives of:

- Georgetown University Crew
- George Washington University Crew
- Potomac Boat Club
- Thompson Boat Center
- Washington Canoe Club
- Representatives of the VASRA and WMIRA scholastic rowing programs

Individuals on the committee are volunteers appointed by their respective organizations with extensive experience with boating and/or coaching on the Potomac river in addition to an interest in river safety. The current members of the committee can be found on the Safety Committee web page at <http://www.w-lcrew.org/safety/safety.html>.

Tasks of the Safety Committee shall include:

- Develop and maintain the water rules and recommendations
- To meet a minimum of 3 times per year, prior to each season to review safety issues
- To hold fall and spring safety meetings with mandatory attendance by all coaches
- Sponsor safe boating and other educational classes
- Respond to breaches of rules and other unsafe practices referred to it for action

Implementation:

The major programs and organizations shall be responsible for implementation and enforcement of on the water rules issued by the safety committee. Violations should be dealt with within the sanctions available. Recurring incidents evidencing blatant disregard of the rules may be referred to the Safety Committee for resolution in accordance with the following procedures:

Individuals or organizations not satisfied with the resolution of reported violations by individual organizations should refer the matter to the Safety Committee. Referrals should be in writing and should describe the incident in as much detail as possible.

The Safety Committee will review the referral as follows:

- A. Review the facts of the incident(s) at issue
- B. Establish the seriousness of the matter against the relevant rule or safety protocol
- C. Determine action to be taken, including
 - Dismissal of complaint with reasons
 - Meet with the individual or organization who/which is the subject of the complaint
 - Formulate action to be taken with the parent organization

The safety committee will make decisions binding on organizations, and/or individuals and be subject to institutional rules with which he/she is affiliated. If sanctions are imposed they could involve the following:

- Revocation of privileges, e.g. Limitations on use of facility and/or equipment
- Denial of entry to sponsored regattas

Any questions concerning the committee or issues requiring resolution should be first addressed to the Safety Committee member who represents your governing club. In the event that an individual is unavailable, contacting another committee member is acceptable.

Founding Members

The following is the list of charter member organizations and their representatives. Starting in the Spring of 1998, this group of individuals laid the groundwork and created the standards used by the organization today.

- Matt Butcher- Commodore, Washington Canoe Club
- Martin DUBY- Thompson Boat Center (TBC) Manager
- Gretchen Ellsworth- Regatta Director and Vice President of GLOC for the NCASRA
- Tony Johnson- Head Coach, Georgetown University Crew
- George Kirschbaum- Head Coach, Gonzaga College HS Crew, coxswain, PRSC Secretary & draftsman
- Steve Peterson- Head Coach, George Washington University Women's Crew
- Allen Rosenberg- U.S. Olympic rowing coach
- Matt Russell- TBC Assistant Manager, and George Washington University asst. Men's Rowing Coach
- Margot Zalkind- Potomac Boat Club, and Chairperson, USRowing Masters Committee
- Bryan Tylander- Wilson High School Coach (GLOC), TBC asst. Manager
- John White- USRowing Judge/Referee