



**R I V E R S
R O W I N G
A S S O C I A T I O N**

Safety Protocols & Procedures

March 2025

Updated: March 2025

2025 Rules & Guideline Updates

The following is a summary of rules updates that are in effect.

Updates	Summary
Annual Safety Meetings	<ul style="list-style-type: none">• ALL TRRA members are required to attend both the Spring and Fall safety meetings.
Swim Test Requirements	<ul style="list-style-type: none">• Updated language and new requirements added to the Swim Test procedure.
Cold Water Exemption	<ul style="list-style-type: none">• Updated language to add clarity to requirements and procedure.
Incident Reporting	<ul style="list-style-type: none">• Updated language to better define what constitutes an incident.
Flood Recommendation	<ul style="list-style-type: none">• Recommendations added to “Best Practices” for personal safety during flood clean up.

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Section 1: The Boathouse & Administration

Individual and organizational safety begins on land at TRRA. Every person who sets foot on any TRRA Campus or event site must have a “safety first” mindset at all times.

This section will focus on the protocols and procedures that all TRRA Community members must adhere to before getting their equipment or going on the water.

1.1: Registration

All TRRA Community members must be registered and in good standing for the current year and program in which they are participating. **All registrations must be completed via Regatta Central each year.** Registration must be completed each year to ensure that the most up to date information for each participant is on file with TRRA.

1.1.2: Personal Responsibility

Once registered and in good standing with TRRA, each rower and paddler must take personal responsibility for:

- Bringing a “Safety First”, community oriented mindset to every TRRA Campus every day.
- Being physically conditioned for the sport of rowing and paddling. Each TRRA Community member should consult a physician before starting any form of exercise. Before beginning to row or paddle, every Community member should go through a warm-up and/or basic set of stretching exercises.
- Ensuring that you have a water bottle and any medical devices (inhaler, epi-pen, etc.) needed for potential use while rowing or paddling.
- Being fully aware of the weather conditions and possible safety hazards prior to arriving on campus.
- Private Boat Owners & Logbook Scullers/paddlers: Reserving your launch time and equipment via iCrew prior to arriving on a TRRA Campus.

1.2: Community Safety Meeting

TRRA hosts two Community Safety meetings each year. The first meeting is scheduled during the first quarter of each new year and the second at the start of the fall season. These meetings are mandatory for the following groups:

Required Meetings (Q1 & Q3)

All TRRA Staff: Coaches & Administration	All Coxswains Youth, Adult, Adaptive/Para, Affiliate
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All members of TRRA Programs Youth, Masters, Adaptive/Para, Paddling	All Steerspersons Hearts of Steel & Paddlefish
All collegiate and scholastic affiliate staff and club leadership of non-varsity programs.	All members who are sculling and/or outrigger canoe certified.
All members who are Crew Leader certified.	

1.3: The U.S. Center for Safe Sport

The U.S. Center for SafeSport is an independent non-profit organization focused on ending all forms of abuse in sport. In 2018, the Center became a federally authorized organization that develops resources and policies to safeguard athletes from bullying, harassment, hazing, physical abuse, emotional abuse, sexual abuse and sexual misconduct. The U.S. Center for SafeSport is the exclusive authority to respond to reports of allegations of sexual abuse and sexual misconduct within the United States Olympic & Paralympic Committee (USOPC) and their recognized National Governing Bodies (NGB).

As an organizational member of USRowing (the recognized NGB for rowing by the USOPC) TRRA falls under the jurisdiction of the Center for SafeSport and is required to uphold the policies, procedures and proactive best practices to prevent abuse and misconduct.

All TRRA Community members are expected to know and follow the TRRA Safe Sport policy.

All adults (age 18 and up) who are members and/or athletes on a TRRA Campus must have an up-to-date Safe Sport certification (or equivalent) on record. Safe Sport training is free for all USRowing members and can be completed on-line by clicking on the link below:

[U.S. Center for SafeSport](#)

The Core Course is required to be taken every three years; there are annual refresher courses that are required for the years in between each Core Course.

1.4: Clearances & Certifications (All TRRA Staff and Volunteers)

All TRRA staff are required to complete the following clearances before their first day of work and are responsible for keeping all clearances and certifications up to date throughout their time working and/or volunteering at TRRA.

TRRA Clearances & Certifications:

Item	Notes & Detail
PA Child Abuse History Clearance	<ul style="list-style-type: none"> - Click Here - Can be done on-line - Fees may apply
PA State Police Criminal Record Check	<ul style="list-style-type: none"> - Click Here - Can be done on-line - Fees may apply
PA Mandatory Reporter	<ul style="list-style-type: none"> - Click Here - Can be done on-line - Free
FBI Fingerprinting	<ul style="list-style-type: none"> - Click Here - In-person, by appointment - Fees may apply
U.S. Center for Safe Sport	<ul style="list-style-type: none"> - Click Here - Can be done on-line - Free for USRowing members - Fee applies for non-USRowing members.

1.5: On-Water Certifications for Athletes and Community Members.

1.5.1: Swim Test

Every athlete that enters any type of boat at TRRA must complete a Swim Test to the extent they are physically able to do so. If not physically able, that athlete is required to wear a PFD at all times. All other athletes have 30 days from beginning a program on the water to complete the Swim Test or take swimming lessons. Until the Swim Test is passed, that athlete is required to wear a PFD at all times.

The TRRA Swim Test is comprised of the following elements:

- Continuous swim for 50 yards using any stroke. Athletes cannot touch the bottom, wall or use any swimming aids (kick boards, floats, etc.) during this portion of the test.
- Tread water continuously for 5-minutes wearing sweats.
- Put on a life-jacket and secure it while treading water.

[TRRA Swim Test Certification Form](#)

All Swim Tests are good for the lifetime of each athlete unless there has been a major life experience (heart attack, stroke, etc.) or a TRRA Coach determines that re-testing is necessary.

1.5.2: Sculling/Pair Certification (Rowing):

Every rower that sculls on their own and/or will be sculling in TRRA owned equipment must complete a TRRA Sculling/Pair Certification and Safety Assessment. This process is designed to ensure that all scullers rowing on their own or who are in a bow seat of a team sculling boat possess the knowledge and skills to have a safe and productive on-water experience.

The Sculling/Pair Certification has a three tiered structure:

- **Level 1:** Not able to complete portions of the Sculling/Pair Checklist but is determined by the coach/certifier that they can scull safely in a more controlled environment.
- **Level 2:** Able to complete the Sculling/Pair Checklist satisfactorily and meet all standards outlined.
- **Level 3:** Able to complete the Sculling/Pair Checklist with ease and meets or exceeds all standards.

The full Sculling/Pair Certification Protocol & Procedure can be found in the appendix of this handbook.

1.5.3: Outrigger Canoe Certification (Paddling):

Every paddler that takes an outrigger canoe out must complete a TRRA/Paddlefish Outrigger Canoe certification process. This process is designed to ensure that all outrigger canoe paddlers have the knowledge, skills and experience to have a safe and productive on-water experience.

The Outrigger Canoe certification has a two tiered structure:

- **Level 1: Novice Certification:** Permits Zone 1 paddling and Zone 2 paddling in an OC-2 with an Experienced Paddler.
- **Level 2: Experienced Certification:** Permits paddling in all Zones in accordance with the OC-Paddling Safety Matrix.

The full Outrigger Canoe Certification process can be found in the appendix of this handbook and additional information can be found on the [Pittsburgh Paddlefish website](#).

1.5.4: Crew Leader Certification

The Crew Leader Certification is for any individual who is interested in taking out a team boat (rowing or paddling) during an uncoached session. The Crew Leader Certification forms are linked in the appendix.

Section 2: The Boat Yard: The Bays, The Apron & The Docks

Both the Millvale and Washington's Landing Campuses of TRRA have their own unique Boat Yard layouts. Additionally, there are some universal protocols and procedures that should be followed on both Campuses and at all times.

2.1: Universal Protocols & Procedures for TRRA Campuses

Dock Usage: The docks at both TRRA Campuses are available to authorized users for the purpose of launching/landing rowing shells, kayaks, dragon boats, outrigger canoes, other approved rowing/paddling equipment, and safety launches.

- **Dock Closures:** The TRRA Executive Director has the authority and responsibility to close the docks at either, or both, campuses when necessary. When closing the docks, the Executive Director will consider criteria affecting boating safety as specified by these Safety Protocols & Procedures. When the docks are closed, no boats of any kind may be launched from TRRA docks or campus property by any user or individual. The docks shall remain closed until the Executive Director has opened them.
- **Safety Boards:** On each campus, there is a large red bulletin board with important safety information. Each board has a course map and a copy of the Safety Matrix for all boat classes. Additional safety updates will also be posted on these boards. All TRRA Community Members should check this board prior to going on the water.
- **Personal Behavior:** No rowdy behavior, horseplay, or any behavior likely to cause injury to persons or damage to property, is permitted on TRRA property.
- **Weapons:** No weapons, knives (spring-operated and/or a blade length over 4-inches), or firearms of any description are permitted on any TRRA Campus or in any equipment.

2.2: Millvale Campus

- [Address: 90 River Front Drive, Millvale, PA 15209](#)
- Located in the Millvale Riverfront Park, a public park with direct access to the Three Rivers Heritage Trail. There is a great deal of foot and bike traffic in the park and around our Campus.
- Campus consists of:
 - Indoor Training Center featuring a tank room, weight room, erg training space (both rowing and paddling ergs), locker rooms, offices and a conference room.

- The Boat Yard is located in between the Training Center and the Boat Shed and is the primary location for rigging, washing equipment and gathering of teams.
- The Boat Shed, featuring two bays, over 50 racks for various sizes of rowing and paddling boats, functional storage space, and is the primary home of TRRA paddling programs and several Affiliated high school programs.
- Outdoor Trailer Parking located behind the Boat Shed. Trailers and equipment can only be parked there with the permission and consent of the TRRA Executive Director; all items are parked at the owner's risk.
- Dock is located at the bottom of a hill on a portion of the Allegheny River known as the Back Channel (due to its location on the back side of Washington's Landing).

2.2.1: Millvale Campus Specific Safety Protocols & Procedures

- **Training Center and Boat Shed Access:** Access to both the Training Center and the Boat Shed is controlled by an electronic keypad that requires a 4-digit code. These codes are updated on an as needed basis. The keypad on the Training Center is located at the 2nd floor entrance on the Boat Yard side of the building and the keypad for the Boat Shed is located on the person door, also located on the Boat Yard side of the building.
- **Parking:** Users of the Millvale Campus can park in the main parking lot in front of the Training Center or along the side of the road closest to the train tracks across from the Boat Yard and Boat Shed. There is **NO PARKING** in the Boat Yard during any programming time.
- **Water for Cleaning:** The hose bib is located on the backside of the Training Center that can be used for all cleaning of equipment. There is no hose bib or running water in the Boat Shed.
- **Boat Shed Security:** All bays and doors must be closed and locked when there is no one in them, including when programs and/or individuals rowing/paddling out of the Boat Shed are on the water.
- **AED Locations:** There are 3 AED's on the Millvale Campus:
 - Location 1: Tank Room located on the center rail over the mirrors.
 - Location 2: Second Floor near the rear entrance door, mounted on the wall.
 - Location 3: In the Boat Shed located in the water-side bay near the upstream end of the bay.

2.3: Washington's Landing Campus

- [Address: 300 Waterfront Drive, Pittsburgh, PA 15222](#)
- Located on Washington's Landing, an island in the Allegheny River. Washington's Landing is the home to Herr's Island North Park, a multi-building office park, Washington's Landing Marina, RedFin Blues restaurant and a residential neighborhood. There is a nature trail that goes around the island, cutting through the Boat Yard area of

TRRA that connects to the Three Rivers Heritage Trail at the downstream end of the island.

- The Washington's Landing Campus consists of:
 - The Lambert Boathouse, featuring the administration headquarters for TRRA, an erg training room, a weight training room, locker rooms, and eight bays including a repair bay/workshop.
 - The Lower Boat Yard refers to the paved apron area between the bays and the docks.
 - The Upper Boat Yard refers to the access road and hill area in between Waterfront Drive and the Lower Boat Yard.
 - There are two dock locations on the Washington's Landing Campus, the Upstream Dock (a.k.a. the Sculling Dock) and the Down Stream Dock (a.k.a. the Sweep Dock).

2.3.1: Washington's Landing Campus Specific Safety Protocols & Procedures

- **Building Access:** Access to the Lambert Boathouse is controlled by a keypad at the entrance on the upstream side of the boathouse. This keypad is configured to be unlocked during the scheduled hours of operation. When staffed, the front entrance will also be unlocked during normal hours of operation.
- **Bay Access - Sculling Bay (Bay 1):** The sculling bay has a combination lock on it. If you have a boat in the sculling bay and are in good standing with TRRA, the combination will be provided to you.
- **Bay Access - Big Boat Bays (Bays 4-7, including Rosen Adaptive Bay):** These bays will be opened by the staff in accordance with TRRA's scheduled hours of operation.
- **Repair Bay/Workshop:** The Repair Bay/Workshop area is restricted to staff access only. Non-staff members of the TRRA Community may only enter the Workshop under the supervision of or specific guidance from a TRRA staff member.
- **Parking:** There are multiple parking options available around the Washington's Landing Campus:
 - **TRRA Lot:** The small lot located on the upstream side of the Lambert Boathouse is restricted to a maximum of 5 vehicles only.
 - **Upper Boat Yard:** Parking is available along the water side of the access road and at the top of the hill, space permitting. This parking area is subject to close during times when trailer access is needed. Notices will be sent out and signs posted during times when parking in this area will not be available.
 - **Lower Boat Yard:** There is no parking or driving in the Lower Boat Yard during programming hours. EXCEPTION: Adaptive/Para drop off and pick up under the supervision of a TRRA Staff member or volunteer.
 - **Neighboring Parking Lots:** Parking is available in the business lots directly next to and across the street from the TRRA Campus during non-business hours (weekdays before 7am and after 5pm) as agreed to between TRRA and the lot

- owners. Cars parked in these lots during business hours (weekdays between 7am and 5pm) are subject to be ticketed and/or towed at the owner's expense.
- **Herr's Island North Park:** Public parking is available in the lot just upstream of the railroad bridge past our Campus.
 - **Street Parking:** Per Pittsburgh Parking Authority and signage, there is no parking in the street on Waterfront Drive. Any cars parked in the street are subject to be ticketed and/or towed at the owner's expense.
 - **AED Locations:** There are two AED's on the Washington's Landing Campus:
 - Location 1: In the erg room, mounted on the wall between the bathrooms and the lounge.
 - Location 2: In the Work Bay, located on the wall right next to the side entrance door to the Work Bay.
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Section 3: The Water

The Allegheny River is the main body of water on which the majority of all rowing and paddling from the TRRA Campuses occurs. The Allegheny River provides approximately 7 miles of water within the Pittsburgh Pool (area between Lock & Dam #2 and Point State Park). The Allegheny River is a commercial waterway, with multiple marinas, 11 bridges, and multiple low water hazards. It is susceptible to high flow rates, low water temperatures and high wind conditions.

It is the responsibility of all coaches, rowers, paddlers, coxswains and steers persons to account for all of these factors in relation to their own rowing/paddling abilities before launching for any on water experience.

3.1: The Safety Matrix:

To account for the many safety factors on our body of water, the TRRA Safety Committee has created a Safety Matrix for the various types of rowing and paddling that take place on our campuses. All rowers and paddlers must abide by the provisions of the published Safety Matrix, which represents the minimum acceptable standard for water temperature and flow for safe rowing and paddling conditions.

The Safety Matrix does not cover all conditions relevant to safety. Each rower, paddler, coxswain, steers person, crew leader or coach is responsible to assess all conditions and decide whether, even if permitted by the Matrix, it is advisable to launch.

All coaches, rowers, paddlers, coxswains, steers persons and crew leaders are required to use common sense at all times.

All Safety Matrices are posted on the Red Bulletin boards in the Boat Yard of each TRRA Campus.

Rowing & Canoe	Dragon Boat
Rowing Safety Matrix	10-Person Dragon Boat
Out Rigger Canoe & Kayak Matrix	20-Person Dragon Boat
Mini-Matrix for Scullers	

3.1.2: River Flow Rates

The Flow Rate of the Allegheny River is a measurement of how much water is moving past a given point at a given time, in other words, the speed at which the current in the river is moving. Flow is measured using thousands of cubic feet per second (KCFS).

The Flow Rate for the TRRA Safety Matrix is measured at Sharpsburg and can be found by clicking on this link:

[TRRA Safety Page](#)

3.1.3: Water Temperature

The water temperature is a key factor in determining the safety of on water activities and is measured in degrees Fahrenheit.

The Water Temperature for the TRRA Safety Matrix is measured at Lock & Dam #3 in Acmetonia, PA and can be found by clicking on this link:

[TRRA Safety Page](#)

3.1.4: Cold Water Exemption Request

Program coaches or individuals that wish to coach or row/paddle small boats once the water temperature has gone below 50 degrees can apply for an exemption if the following criteria are met:

- The combination of the water and the air temperature is 90 degrees Fahrenheit or higher.
- Individual scullers or paddlers are TRRA Sculling/Paddling Level 3 certified and have opted to complete the “right and re-enter” portion of the certification.
- River Flow is 29.9 KCFS (Zone 1) or below.
- For uncoached sessions, the water temperature must be over 45.0 degrees.

The application must be submitted to the TRRA Executive Director, who shall have the discretion to grant or deny any request for exemption.

[Cold Water Exemption Request Form](#)

3.1.5: Best Practices and Weather Considerations

All TRRA Community members have the responsibility to be aware of the weather conditions prior to and during their scheduled on-water session.

- Each person should check the weather conditions using the [TRRA recommended weather apps](#).
- Watch for gathering clouds, changes in wind speed and/or direction.
- Wind & Waves: Waves are generated by winds, tides, currents and/or wakes from passing boats.
 - Do not row in whitecaps under any circumstances. Paddlers should exercise extreme caution when paddling in white caps.
 - If sudden winds come up, and it is safe to do so, return to a TRRA campus by finding the calmest water.
 - If it is unsafe to row/paddle back to a TRRA campus, find the nearest suitable shore and wait for the winds to lessen until it is safe to return to a TRRA campus.
 - There is a list of safe take out points in the Appendix of this handbook.
- Fog: Do not row or paddle in fog in which visibility is less than 100 yards.
 - Be sure to have land reference points in front of you and at least one shoreline in sight at all times.
 - If fog sets in while you are on the water, move slowly and be prepared to stop quickly.
 - If the fog becomes very dense, use your sound-making device (horn/whistle) to advise other boats of your location (see chart in Appendix).
- Air quality: There may be cases where air quality can be dangerous for individuals with certain conditions. Air quality can be checked here: [airnow.gov](#)

- **Lightning:** There is **no rowing or paddling** during an electrical storm.
 - The docks on both campuses are closed from the first sign of lightning until at least 30 minutes after the last visible lightning flash.
 - If you are on the water and see lightning, or hear thunder, prepare to take immediate action.
 - If the storm is not yet upon you, stay as close as safely possible to the shore and return to a TRRA campus. If you cannot make it to campus, get to the closest safe take out point.
 - If the storm is upon you, get to the closest shore and wait for the storm to pass. If your boat is damaged while seeking shelter on shore, use your cell phone to call TRRA after the storm.
 - TRRA recommends the use of the WeatherBug mobile app that has a lightning detector component. The browser version of WeatherBug can be found here: [WeatherBug-Pittsburgh](#).
 - There is no rowing or paddling if there is lightning 20 miles or less away. NOTE: using the app, identify which way the weather front is moving to determine if the 20 mile threshold could be crossed and plan accordingly.

3.2: Safety Equipment Requirements

All rowing shells, kayaks, outrigger canoes, dragon boats, safety launches and other approved rowing and paddling vessels must be equipped with fully functional and accessible safety equipment. These requirements vary by boat class as outlined below.

It is the responsibility of the person in charge of each boat to ensure that it is in proper operating condition and that all required safety equipment is on board and properly deployed.

3.2.1: Personal Floatation Devices (PFDs)

PFDs must be worn at all times when required by the Safety Matrix or when an athlete is unable to pass the Swim Test requirements as outlined in Section 1.5.1. TRRA has various types of approved PFDs for use by those using TRRA equipment. Private boat owners and TRRA Affiliate programs are responsible for providing their own PFDs.

Low profile PFDs (vest and/or belt packs) are allowed. However, note that many low profile PFD manufacturers do NOT recommend the use of CO2 inflatable PFDs in air or water temperatures below 40 degrees Fahrenheit.

Rowing oars are no longer recognized as PFDs or as emergency floatation devices.

PFD Requirements by boat class or role:

- **Safety Launches:** All Safety Launch drivers and passengers must have a Coast Guard approved PFD on at all times while on the water.

- **Rowing Shells:**
 - **Coxswains:**
 - All coxswains must wear a Coast Guard approved PFD at all times between November 1st and April 30th.
 - It is strongly recommended that coxswains wear a Coast Guard approved PFD at all times, in all Safety Matrix Zones and in all conditions, throughout the year.
 - These PFDs can take the form of float suits, float coats, life vest or a low profile vest.
 - If the coxswain is in a bow-loader boat, they must wear at least a low profile vest or belt PFD in Safety Matrix Zones 4 and 5.
 - **Log-Book Rowers: Private Boat Owners and Certified TRRA Scullers**
 - All scullers must carry a PFD in the boat with them at all times if rowing without an accompanying safety launch.
 - **Rowers:**
 - Any rower, regardless of age, who has not yet passed their swim test, must wear a PFD until the test has been passed.
- **Paddling Boats:**
 - **Kayaks**
 - All Kayakers must wear a PFD at all times.
 - **Outrigger Canoe**
 - All Outrigger Canoe paddlers must have a Coast Guard approved PFD with them at all times.
 - PFDs must be worn in Safety Matrix Zones 2, 3 and 4.
 - **Dragon Boat**
 - All Paddlers must wear a Coast Guard approved PFD at all times between November 1st and April 30th as well as at all other times as dictated by the Safety Matrix for the respective boat class (10-person or 20-person).
 - Coast Guard Approved vest PFD's must be worn at all times by paddlers 18 and under, steerspersons, drummers, camp/corporate participants, Summer League participants, and paddlers with special needs.*
 - *TRRA paddlers (athletes participating in either the Heats of Steel and/or Paddlefish programs) are exempt from wearing PFDs between May 1st and October 31st IF they have a swim test completion form on file with TRRA and all other criteria of the Safety Matrix are met. If a person meets these criteria and a PFD is not worn, it must be close at hand while paddling.
 - All Dragon Boats must contain at least one PFD per person on board at all times.
 - Steerspersons and drummers are required to wear a PFD at all times and in all conditions.

3.2.2: High-Visibility(Hi-Vis) Clothing

At least one item of high-visibility clothing or reflective material is required to be worn in all rowing and paddling boats that launch from a TRRA Campus. The increased visibility, even during daylight hours, is a critical safety enhancement.

Hi-Vis/Reflective Clothing Requirement: All sculling, paddling and/or crew boats must Hi-Vis apparel on as a top layer, above the waist, at all times, as follows:.

- Sculling (1x, 2x): All seats must wear a Hi-Vis top layer/item above the waist.
- Out-Rigger Canoe: All seats must wear a Hi-Vis top layer/item above the waist.
- Kayak: All seats must wear a Hi-Vis top layer/item above the waist.
- Dragon Boat: The drummer and the steers person must wear a Hi-Vis top layer above the waist.
 - Recommended that all seats have a Hi-Vis top layer/item above the waist.
- Sweep Rowing (2-): All seats must wear a Hi-Vis top layer/item above the waist.
- Crew Boats (4+,4-, 4x, 8+): The bow seat and the stern most seat (stroke or coxswain) must have a Hi-Vis top layer/item above the waist.
 - Recommended that all seats have a Hi-Vis top layer/item above the waist.
- **Approved Hi-Vis/Reflective Colors:** Bright Yellow, Bright Orange, Bright Green, Bright Pink and/or reflective silver.

3.2.3: Boat Lighting

All boats (rowing shells, kayaks, out-rigger canoes, dragon boats, launches, etc.) are required to have properly functioning marine navigation lights for use between the hours of sunset and sunrise and during periods of restricted/limited visibility, such as fog and heavy rain.

- **Marine Navigation Lights:** All boats must be equipped with properly configured Coast Guard certified navigation lights:
 - Bow Light: Red / Green navigation light
 - Stern Light: Solid or flashing white light
- **Mounting of the Lights - Rowing Shells**
 - **All Rowing Shells - Bow Lights:** All bow lights must be mounted directly to the rowing shell. It is recommended that they are mounted using the lane marker holder or a suction cup system.
 - **Sculling Shells - Stern Lights:** All stern lights in sculling boats must be mounted directly to the boat. Lights can be mounted directly to the stern deck using a lane marker or suction cup system or, if the shell has a stern facing wing rigger, the light can be attached to the rigger.
 - **Sweep Shells - Stern Lights:** In a bow-coxed shell, all stern lights must be mounted directly to the stern deck using a lane marker or suction cup system or, if the shell has a stern facing wing rigger, the light can be attached to the rigger. In a stern-coxed shell, a light may be worn by the coxswain provided that it faces in the correct direction, is locked in a fixed position and is not obscured in any way whatsoever.

- **Mounting of the Lights - Kayaks and Out-Rigger Canoes**
 - Bow and stern lights must be mounted directly to the boat during non-daylight hours and/or low visibility conditions.
- **Mounting of the Lights - Dragon Boats**
 - Bow lights should be attached directly to the back of the Drummer’s seat.
 - The Stern Light must be fixed in an elevated position on the stern of the boat.

TRRA requires that all programs and private boat owners that row in non-daylight hours and/or during reduced visibility conditions, invest in [RowKraft](#) lighting systems (or technological equivalent as determined by the Executive Director) in non-daylight and/or low visibility conditions.

- **Mounting of the Lights - Safety Launches**
 - **Bow Lights:** All safety launches must have a Red/Green lighting system on the bow of their boat.
 - **Stern Lights:** All safety launches must have a solid White light on the stern of their boat.
 - **Spotlights:** Spotlights are required in the Safety Launch for coaches to illuminate hazards, such as buoys, bridges, debris, and for signaling other on-water craft such as other boats and barges.
 - Spotlights must be at least 1000 lumen in brightness.

3.2.4: Communication Systems

All boats are required to have functional communication systems in the event of an emergency. These communication systems can take various forms:

- **Marine Radio:** Each Safety Launch must have either a built-in or handheld marine radio that can be used on Channel 16 in the event of an emergency.
- **Cell Phone:** Cell phones in waterproof cases are **required** to be carried by all coaches, and **recommended** for coxswains and rower/paddlers who are on the water without a safety launch. All cell phones should have the following numbers saved in their contacts:

Who	Phone Number	Action
Emergency	911	Ask to be connected with River Rescue
TRRA Main Line	412-231-8772	Call ONLY AFTER emergency services have been notified.

- **Whistle:** A whistle is **recommended** to be carried by all coaches, coxswains, and dragon boat steersperson and **required** to be carried by rowers/paddlers who are on the

water without a safety launch. In low visibility and emergency situations, whistles are very effective communication systems to advise other boats of your location. Use the following signals:

Type of Boat	Signal
Shells, Kayaks, Out-rigger Canoes & Dragon Boats	1 prolonged blast followed by 2 short blasts at 2' intervals
Safety Launches in Motion	1 long blast every two minutes
Safety Launches stopped in the water	2 long blasts, with 2 seconds between blasts, every 2 minutes.

- **Megaphone:** All coaches should have either a powered megaphone or cone megaphone in the launch at all times. Powered megaphones often have a horn or whistle function on them as well. All megaphones must have enough power to get through a given session.

3.2.5: Safety Launch Protocols

- All Safety Launches must have the following items at all times:
 - Valid registration stickers
 - PFDs appropriate to the number of rowers/paddlers who are not already wearing or carrying a PFD.
 - At least 9 Emergency Blankets in a water tight container
 - A tool kit with:
 - Standard (1/2 and 7/16) and/or metric wrenches (10mm)
 - At least one adjustable wrench
 - Pliers
 - Electrical tape
 - A First Aid Kit
 - A Fire extinguisher
 - A flashlight and/or spotlight, of at least 1000 lumens
 - A bailer
 - A throwable rescue device such as an approved floating seat cushion
 - An anchor with at least 50-feet of anchor line attached to the launch
 - At least one oar or paddle
 - Communication device
 - Cellphone
 - Marine radio
 - Whistle/horn
- Defective and/or damaged equipment must be reported via the iCrew Damage Report as soon as practicable.

3.3: Traffic Patterns

All boats must be operated in compliance with the relevant boating regulations, including General Marine Right of Way, as promulgated by the PA Fish & Boat Commission and the US Coast Guard. TRRA specific traffic patterns, particularly in the Back Channel are all derived from and adhere to the regulations of the governing agencies.

3.3.1: General Marine Rules of Right of Way:

- Vessels with the least maneuverability have the right-of-way, but should also be cautious and take action to avoid all other types of boats.
- Non-powered boats have the right of way over powered boats.
- Barges have very limited maneuverability and therefore always have the right of way over rowing shells, kayaks, outrigger canoes, dragon boats, safety launches and any other vessel that launches from a TRRA Campus.
 - **IMPORTANT:** Barge pilots cannot see small craft easily and their radar will not pick up rowing shells, kayaks, outrigger canoes, dragon boats or most safety launches. Be aware that there is a significant “blind spot” in front of the barge and never stay in the direct course of a moving barge.
- When in doubt, always safely yield the right of way.

3.3.2: Three Rivers Rowing Association Traffic Patterns

All TRRA Traffic Patterns are based on the right-hand rule: all boats should stay to the right (as you face the bow) of the center of the waterway at all times. All traffic patterns are posted on the Pool Map located on the bulletin board of each campus.

Should there be a need to temporarily change a traffic pattern, a notice will be sent out to all members and an update will be posted on the bulletin board of each campus.

Any boat not complying with the posted traffic patterns must yield the right of way to boats in the pattern, except in cases of emergency.

- **Traffic Patterns @ TRRA Docks**
 - All boats should launch and land with the bow facing upstream.
 - When launching, use the most upstream section of available dock space and walk boats up the dock as space becomes available.
 - When landing, use the most downstream section of the available dock.
 - Once clear from the dock, proceed upstream to exit the Back Channel at the top of the island.

- Incoming (landing) boats have the right of way over launching boats.
- Boats may not turn in front of or between the docks at Washington's Landing unless there is no other traffic in the Back Channel.
- **Traffic Patterns in the Back Channel**
 - Once clear of the dock, keep to the right hand/starboard side (from the coxswain or paddlers' perspective) of the channel.
 - Exit the Back Channel as quickly and safely as possible
 - Avoid drills that use less than all rowers at full slide until out of the Back Channel, especially if other boats are following you.
 - Observe right of way when exiting the Back Channel.
 - Boats without coxswains/steers persons have the right of way over boats with coxswains/steerspersons.
 - When exiting the upstream end of the Back Channel, boats must either cross to the right hand side (Pittsburgh side) of the river OR spin to head downstream in between the upstream side of the 40th Street Bridge and the first upstream green buoy.
 - The right hand rules of the Back Channel extend to the first upstream green buoy.
 - When entering the upstream end of the channel, boats should turn towards the channel after passing through the center arch of the 40th St. Bridge and before the bottom dock of the sternwheeler boats.
 - Boats should only enter the upstream end of the Back Channel during an emergency/safety circumstance during peak programming hours.
 - Peak programming hours are defined as weekdays between 5:30-8am, and 4-7pm and on weekends from 5:30am - 12 noon.
 - Boats entering the upstream end of the Back Channel must yield to boats exiting the Back Channel.
 - When exiting the downstream end of the Back Channel, boats that choose to go back upstream should cross to the Pittsburgh Side of the river in between the bottom of the overhead power wires and the shipwrecked boat on the North Shore.
 - Power pieces are only allowed in the Back Channel downstream of the 31st Street Bridge when the course is clear and safe to do so.
 - Boats doing power pieces must ALWAYS yield the right of way when in the Back Channel.
 - If you choose to stay in the Back Channel for the duration of your session, you must row/paddle in a counterclockwise direction and observe all right of way rules.
 - Boats staying in the channel should spin above the railroad bridge but below the downstream edge of the Millvale docks. When heading downstream, boats staying in the channel should spin above the pedestrian bridge.

- Boats staying in the channel must yield the right of way to boats entering and exiting the channel, and should be mindful of crews launching off of any of the docks.
- **Traffic Patterns on the Allegheny River**
 - Whenever safely possible, all rowing and paddling should take place on the Allegheny River. In recent years, we have seen an increase in pleasure boat and jet ski traffic making it even more imperative that we follow all regulated traffic patterns and safety procedures.
 - Be aware that the center of the Allegheny River is a federally designated commercial waterway and is frequently used by barges.
 - Always keep to the right hand/starboard side (from the coxswain and paddlers' perspective) of the river.
 - **EXCEPTION:** the area between the top of the Back Channel and the first upstream green buoy. Here, boats may proceed upstream on the left hand/port side of the river until the first green buoy on the upstream side of the 40th St. Bridge.
 - River buoys generally mark the navigation channel for larger commercial traffic. There are two buoys, however, that mark low water hazards upstream of the 40th St. Bridge.
 - The first green buoy, as you go upstream, in front of the Millvale Marina marks shallow water between the North Shore and the buoy.
 - The third green buoy, as you go upstream, near Etna, also marks a shallow water area between the North Shore and the buoy.
 - **NOTE:** Take note of these buoys as you row upstream so that you can plan your downstream course accordingly.
 - In all other cases, the preferred and safest course is to the North Shore (when going downstream) of the buoys, outside of the navigation channel.
 - Additional Safety considerations when on the Allegheny River:
 - All boats, including launches, must stay a minimum of 50' away from all marina and boat slips.
 - Do NOT directly engage with any reckless power boater or watercraft intentionally jeopardizing the safety of your vessel. If safely possible, get the PA Registration number (located on the bow of the boat) and a description of the vessel and report the incident to the TRRA Executive Director or the PA Fish & Boat Commission.
 - Note that there are hard walls on both sides of the river once you are downstream of the railroad bridge. This can lead to very rough water conditions on days when there is high boat traffic.

[TRRA River Tour Map - Video](#)

3.3.3: Safety Matrix Zone 5 Procedures

If any programs (youth, collegiate, Masters, Para/Adaptive etc.) wish to row in Zone 5 of the TRRA Safety Matrix, the following steps must occur:

- The Head/Lead Coach of the requesting program must meet with the Executive Director of TRRA to ensure that everyone has a full understanding of the rules and emergency procedures. The coach should come prepared with their safety action plan for their program while rowing in Zone 5 and a complete roster with updated emergency contact information for each rower, coach and coxswain.
 - Coaches must have a meeting with participants and guardians (if participants are under 18 years of age) highlighting the circumstances and risks of rowing in Zone 5 and informing them of the appropriate safety procedures.
 - Each program must have all coaches, participants and guardians (if applicable) sign a letter acknowledging the risk and agreeing to participate in Zone 5 rowing, and return the letter to the Executive Director.
 - The Executive Director will notify the coach if the request to row in Zone 5 has been approved in a timely manner.
 - Additional Zone 5 Criteria:
 - Crews rowing in Zone 5 must be strong enough to row upstream through the top of the Back Channel with only $\frac{3}{4}$ of the crew rowing.
 - Crews must have no less than 2-hours of on-water time during the immediately preceding 5-day period.
 - Rowing in Zone 5 may only occur during daylight hours as defined by Appendix 1 of the Safety Matrix, and with no other visibility restrictions (fog, heavy rain, etc).
 - Rowing in Zone 5 is prohibited in the face of visible whitecaps.
 - For youth (U-18 organizations, a parent group safety representative must attend each TRRA Safety meeting.
 - Zone 5 approval is only good for the season (spring, summer or fall) in which it is approved.
-

Section 4: Incidents, Infractions & The TRRA Safety Committee

4.1: Incidents

Incident reports are defined as any occurrence of personal injury, unintentional entry into the water, equipment damage (minor or major), and/or a collision with other boats.

- Any Incident must be reported immediately to the Executive Director, who in turn will inform the Safety Committee Chair as soon as practicable.
- The involved parties will submit an Incident Report form using the form in the iCrew app.
- In the case of an Incident requiring police, river rescue, EMS and/or hospitalization, and/or the media, the Executive Director must be notified as soon as practicable. The

ED will then inform the TRRA Board Chair and the Chair of the Safety Committee, in addition to any other required notifications.

- Should any IncidentReports be required by any governmental authority, the reports must be filed in a timely fashion and the TRRA Executive Director must be copied on all reports.
- All minor equipment damage must be reported via the iCrew app as soon as practicable.

4.2: Infractions:

Infractions are defined as violations of any of Safety Protocols & Procedures, including any SafeSport violation, by any member of the TRRA Community.

- Once made aware of an infraction, the Executive Director will follow the steps outlined in the Safety Violations & Penalties in Section 5 of this handbook.
- In addition to the procedures outlined in the Safety Violations & Penalties document, if the Executive Director determines, based on prior conduct and/or penalties, or based upon a new IncidentReport, that the individual, coach or program shows a disregard for the these Safety Protocols and Procedures, the Executive Director shall request a meeting with the individual, coach or representative of the program. The chair of the Safety Committee shall be informed prior to the meeting taking place.
- Following the meeting, any penalties issued shall be consistent with the structure of the Safety Violations & Penalties document, with notice to all appropriate individuals.

4.3: The Safety Committee

The TRRA Safety shall consist of:

- A member of the Board of Directors or designate who will serve as chair unless he/she declines to serve as chair and then an alternate will be selected.
- The TRRA Executive Director (non-voting, consistent with TRRA bylaws).
- A representative of one of the major collegiate tenants (Pitt, CMU, or Duquesne) on a rotating basis.
 - Note: It is the responsibility of this rotating member to ensure all other college programs are consulted and kept up to date on the activity of the Safety Committee.
- Representatives from each of the adult teams using the Boathouse, including the Para/Adaptive team.
- The Three Rivers Director of Rowing.
- A representative from the paddlers program.
- A representative from the scholastic programs.
 - **NOTE:** It is the responsibility of this member to ensure all other scholastic programs are consulted and kept up to date on the activity of the Safety Committee.
- Other interested members and program representatives by invitation ONLY.

The Safety Committee shall:

- Meet at least twice per year, or as needed, to review safety matters.
- Recommend to the TRRA Board of Directors (Board) any rules/guideline changes as needed.
- Interpret rules, assess penalties and the like to assist staff in their day-to-day implementation.

TRRA Staff shall be responsible for:

- With the assistance of the Safety Committee, holding spring and Fall seasonal safety meetings with mandatory attendance as indicated in Section 1.2.
- Responding to breaches of the Rules and Guidelines or other unsafe practices as set out in the Rules.
- Maintaining and posting as appropriate, listings of crew leaders and certified scullers.
- Alert Executive Director to all Incidents.
- Holding a Coxswains' Training, and a Steerers' Meeting once a year.

Section 5: Safety Violations & Penalties

ALL VIOLATIONS SHALL BE REPORTED TO THE SAFETY COMMITTEE

Levels of Violations for Rowers/Participants, Coaches and/or Programs Using TRRA Facilities

Level One Violation:

- Any first-time violation of the safety rules, except for violation of the parameters of Zones 3-5 of the Safety Matrix (see below).
- Any first-time violation of the parameters of Zones 1 & 2 of the Safety Matrix.
- Any first-time incident involving minor bodily injury and/or minor equipment damage due to negligent behavior.
- Any minor action not specifically defined in the safety rules or safety matrix which, at the discretion of the Executive Director, affects or could affect the safety of another person, team or crew.

Level Two Violation:

- Any second-time Level One Violation within a one-year period from the date of the first incident.
- Any action not specifically defined in the safety rules or safety matrix which, in the discretion of the Executive Director and/or Safety Committee, affects or could affect the safety of another person, team or crew.

- Any first-time incident involving bodily injury and/or equipment damage due to negligent or reckless behavior.

Level Three Violation:

- Any second-time Level Two Violation within a two-year period from the date of the first incident.
- Any third-time Level One Violation within a two-year period from the date of the first incident.
- Any violation of the parameters of Zones 3-5 of the Safety Matrix.
- Any incident involving serious bodily injury and/or substantial equipment damage due to negligent or reckless behavior.
- Any action not specifically defined in the safety rules or safety matrix which, in the discretion of the Executive Director and Safety Committee, seriously affects or could seriously affect the safety of another person, team or crew.

Level Four Violation:

Any second-time Level Three violation within a three-year period from the date of the first incident

Penalties for Rowers/Participants, Coaches and/or Programs Using TRRA Facilities*

- *Penalties shall be evaluated on a case-by-case basis and the ranges set forth below are discretionary and to be decided by the Executive Director, Safety Committee or TRRA Board, according to the level and severity of the violation.

SAFETY COMMITTEE SHALL BE ADVISED OF ALL PENALTIES IMPOSED

Level One Violation:

- Warning is issued by the Executive Director to the violator and, if applicable, the coach of the program.

Level Two Violation:

- Executive Director reviews and determines appropriate sanction; ED shall notify the violator and, if applicable, the coach of the program of the sanction;
- Possible sanctions depending on nature and severity of offense, including consideration of past violations within the preceding one-year period:
 - Prohibition from participating in one or more TRRA programs for a period ranging from 1 day to 3 weeks
 - Prohibition from rowing from TRRA docks for a period ranging from 1 day to 3 weeks
 - Prohibition from using any TRAA facilities/equipment for a period ranging from 1 day to 3 weeks
 - Temporary revocation of crew leader status not to exceed six months; coach or ED must sign off on new application for reinstatement which may include requirements for retraining.

Level Three Violation:

- Violation is referred to the Safety Committee for review and determination of appropriate sanction; ED shall notify the violator and, if applicable, the coach and governing body of the program of the sanction.
- Possible sanctions depending on nature and severity of offense, including consideration of past violations within the preceding two-year period:
 - Prohibition from participating in one or more TRRA programs for a period ranging from 1 week to 6 months
 - Prohibition from rowing from TRRA docks for a period ranging from 1 week to 6 months
 - Prohibition from using any TRAA facilities/equipment for a period ranging from 1 week to 6 months
 - Temporary or permanent revocation of crew leader status; coach or ED must sign off on new application for reinstatement of temporary revocation which must include requirements for retraining.

Level Four Violation:

- Violation is referred to the Safety Committee for review and recommendation of appropriate sanction to the TRRA Board of Directors, which shall determine the sanction; the Board Chair shall notify the violator and, if applicable, the coach and governing body of the program of the sanction.
- Possible sanctions depending on nature and severity of offense, including consideration of past violations within the preceding three-year period:
 - Prohibition from using any TRAA facilities/equipment for a period of one or more months
 - Revocation of membership, crew leader status, program, and/or coaching privileges on a temporary (minimum of one month) or permanent basis. For temporary revocations, conditions for reinstatement shall be established upon request for reinstatement.

Section 6: Safety Scenarios & Best Practices

Safety Scenarios

Hyperthermia:

Hyperthermia occurs when there is an increase in body temperature, usually when the air temperature is above 76 degrees, and the victim is exposed to sun and heat in combination with a decrease in fluids. It may occur when sweat cannot easily evaporate; the body is being heated

by the environment; or water loss from sweat and respiration is not replaced and dehydration occurs. Two serious conditions may result:

- **Heat exhaustion**; signs are throbbing headache, nausea, cool skin, chills, sweaty, and pale pulse.
 - Action: drink water, shade from sun, and treat for shock.
- **Heat Stroke is life threatening**; signs are behavior changes, unconsciousness, hot but not sweaty, flushed warm skin and rapid pulse.
 - Action: douse with cool water, shade from sun, fan, ensure the airway is open, get medical assistance as soon as possible.

To avoid these problems in hot and humid weather:

- Maintain a high fluid level. Drink water before leaving the dock and frequently while on the water. Take an individual water bottle for easy access.
- Avoid sunburn by using sunscreen and wear a hat or visor to keep the sun off the face and out of the eyes.
- Wear light Hi-Vis clothing.
- Remain in the shade when off the water.
- Plan activity level consistent with the degree of heat and humidity.

Hypothermia:

Hypothermia occurs when a victim is subject to cold temperatures, cold water, ice or snow. There is potential danger for hypothermia when the water temperature is below 80 degrees and very dangerous when the water temperature is below 50 degrees.

Hypothermia can occur without the victim being in the water; rowing in extremely cold weather can cause symptoms. Symptoms include feeling cold, turning bluish and shivering, and followed by numbness, apathy, lethargy, disorientation and loss of mental capacity.

When air is below 40 degrees and /or water below 50 degrees, safety launches must be within 100 yards of all shells.

NOTE: Make sure the coxswain is warm but safe. They are not moving. Many layers are not safe, if the boat flips they can drown. Mustang Survival (or similar) suits are a better warming option.

What to do if cold and shivering:

- Get out of the water quickly, even on top of the capsized boat. Heat loss is 25 times greater when in the water.
- If unable to get out of the water, huddle with others. Keeping as much of the body out of the water as possible.
- Move to shelter quickly, remove wet clothing and re-warm the body. In mild hypothermia conditions, re-warm in a shower, tub or with warm blankets.
- Do not give any liquids to drink, treat for shock.
- Continue to re-warm and always obtain medical assistance as soon as possible.

What to do if shivering has stopped:

- Call or assign someone to call for EMS.
- Treat as above but DO NOT RE-WARM EXTREMITIES!

If the victim is no longer shivering, the torso must be re-warmed to avoid circulation of cold blood to the heart, as it could kill a person. Wrap the victim in a warm blanket and apply heat to the underarms and groin area; wrap again in a separate blanket. Wrap each arm and leg separately to prevent rapid re-circulation of blood to the heart. Hot packs should not be placed directly on the victim, a thin layer should be used to protect the victim from burning. If possible, place the victim in a sleeping bag with a warm person.

- Administer artificial respiration and CPR if necessary. Always obtain medical assistance as soon as possible.

In a situation of cold water immersion; be aware that in very cold water people have survived as long as one hour underwater. Recover a victim immediately and even though there may be no sign of life, administer CPR efforts until medical assistance is obtained.

Flood Remediation:

Occasional flooding inundates our docks, ramps, and equipment bays with debris and potential hazardous materials contained in the mud and silt. All persons participating in flood cleanup should follow CDC guidelines for personal protective equipment such as face masks, eye protection, gloves, suitable footwear, etc.

Emergencies

Who to call:

- Calls for Help - To EMS (Emergency Medical Service), Pittsburgh River Rescue
 - DIAL 911, or
 - CHANNEL16 (Marine Radio)

What to Say:

- You will be asked, "What is your emergency?"
- You should report the nature of the accident.
 - For example, "There has been a boating accident and there are rowers in the water"
- You may be asked:
 - Your location (name of river, landmarks)?
 - How many people are involved and is anybody missing?
 - Age and ability of people?
 - Are victims conscious or unconscious?
 - Are victims breathing or not breathing?
 - Is CPR being performed?
 - Is CPR required?
 - Time of incident?
 - How many boats are involved?
 - The name of a contact person and the contact information?
 - Will there be someone to meet the paramedics?

- If you are at the boathouse or on shore, request that a land based crew be sent.
- If you are in the middle of the river and need to have rescue sent by water, you need to specify a water rescue. An EMS supervisor will make the decision.
- IDENTIFY YOURSELF AND YOUR LOCATION:
 - If you are at the boathouse, you may say: "I am calling from the Three Rivers Rowing Boathouse. The boathouse is located at the upstream end of Washington's Landing (Herr's Island) on the Allegheny River, accessible from the north end of the 31st Street Bridge. The boathouse docks are located in the Channel between the island and the north shore of the river" or
 - "I am calling from Three Rivers Rowing Association, at the end of Riverfront Park in Millvale."
- IDENTIFY THE MEANS BY WHICH EMS WILL CONTACT YOU:
 - You may say, " My mobile/cell phone number is..."
 - The office telephone number at Three Rivers Rowing Boathouse is 412- 231-8772.
 - Indicate your use of marine radio and channel, if applicable.
- IDENTIFY WHICH TELEPHONE YOU WILL BE ATTENDING:
 - Cell Phone or
 - Office phone or
 - Marine Radio
- REQUEST AMBULANCE AND/OR RIVER RESCUE AS REQUIRED

Best Practices

General Best Practices:

- Under no circumstances should a rower or paddler in the water leave the floating boat.
 - If a swamped boat seems to be a swimmable distance from shore, the rower or paddler should swim the boat to shore. Do not leave your flotation, even if you consider yourself to be a strong swimmer.
 - The only exception to this guideline would be if you are faced with a worse life-threatening danger by staying with the boat, for example if you are in the path of a barge and cannot swim the boat away fast enough to avoid being hit.
- When someone gives the command "Hold the boat" or "WAY ENOUGH - HOLD WATER". Don't ask questions; just respond immediately by stopping all forward body movement. Square the blades/paddles quickly into the water to bring the boat to a halt.
- Use these distress signals to communicate to other boats:
 - wave your arms or a shirt above your head
 - raise one oar or paddle in the air (this method preferable only in eights or doubles and quads)
 - use an air horn/whistle, or marine radio.
- The safety of life is more precious than a few more minutes of practice.

- One of the greatest dangers while on the water is collision caused by limited vision or carelessness - either yours or another boat's.
- Great care should be taken when rowing or paddling in darkness or near darkness. Take extra care to look and listen.
- Before launching and after landing, place all oars clear of the dock.
- Do not get too close to shore and known hazards, including marinas along the river. All shells and paddle boats should stay at least 50-feet away from all marinas whenever practicable. It is imperative that there be a clear line of sight between our boats and any boats entering/leaving marinas or docks/moorings.
- Only paddle or row in familiar waters.
- Warm-Up: Outings should gradually and safely build up to full intensity. Under no circumstances should a crew race or sprint upon initially entering the boat.
- Rowers in multi person boats should always be quiet and attentive to the Coxswain, Steerer, Coach or Crew Leader. All users of TRRA equipment must comply with instructions given by a Coach, Coxswain, Steerer or Crew Leader.
- Keep oarlocks locked until the boat is securely alongside the dock.
- Keep at least one hand on the oar while on the water.
- Cool Down: Always 'paddle-down' at the end of your workout. It is important to your health that you do not race up to the dock.
 - Once the boat and oars or paddles have been stored, it is important to take another few minutes to go through your basic stretching exercises to heal any unnoticed strains or sprains that began during your paddle or row, thus eliminating soreness and unnecessary pain.

Person Overboard Guidelines:

- If a rower or paddler, drummer, or steerer is unexpectedly thrown from a boat, immediately call the command "Hold the boat" or 'WAY ENOUGH - HOLD WATER' and signal the safety launch.
- In a dragon boat, the person in the water should swim or move to the center of the boat; with paddlers on the opposite side leaning slightly out, the paddlers in rows 5 and 6 pull the ejected person in together.
 - The command for all other paddlers not directly involved in the retrieval to have their paddles on the water is also recommended.
- In an eight or quad, the rower should remain close to the shell and not try to swim away, but tread water, moving no more than necessary.
 - When the safety launch retrieves the rower, the Coach determines whether the rower will return to the shell.

Rower or Paddler Injured Guidelines:

- Immediate command "Hold the Boat" or 'WAY ENOUGH'.
- Signal launch if first aid needed.

- Know who, if anyone, on your crew has first aid training
 - The crew leader, drummer, or steerer is in charge until the crew member with first aid training takes charge.

Shell Afloat but Damaged Guidelines:

- Immediate command - 'WAY ENOUGH'.
- Make adjustments or signal launch for assistance.

Shell or Dragon Boat Swamped Guidelines:

- A boat is swamped when the interior water reaches the gunwales.
- Immediate command - 'WAY ENOUGH' or Hold the Boat.
- If rowers stay in the boat, the flotation in the bow and stern ends may cause the boat to break apart.
- If the boat is taking on excessive water, signal the safety launch and decide whether to get the paddlers, drummer, steerer, rowers and coxswain out of the boat. This decision will depend on various factors, including water temperature
- If the decision is made to get out of the boat:
 - Command - 'UNTIE' (Rowers)
 - Be prepared to assist someone who is having difficulty releasing his or her feet from the foot stretchers.
 - Then unload by pairs - starting in the middle of the boat - as soon as possible to avoid damage to the boat.
 - Pairs should form 'buddies' and keep watch on each other. Be certain all athletes are accounted for. The Coxswain should buddy with the stern pair. In a dragon boat, the drummer should buddy with the bow pair and the helmsman buddy with the stern pair.
 - If rescue is not imminent, take the following steps :
 - Remove oars or place them parallel to the shell. Do not worry if the oars float away.
 - All persons should move to the ends of the shell (it is dangerous to roll a shell near riggers).
 - Roll the boat to form a more stable floatation platform, so rowers can either lie on top of the hull or buddies can hold onto each other across the hull.
 - Remember that body heat loss occurs 25 times faster in water.
 - Do not attempt to roll the boat if rescue is on the way as a launch can shuttle rowers to the nearest shore.
 - If the ends of the shell have filled with water, they must be drained before the boat can be removed from the water.
 - Remove the shell carefully to avoid injury or damage.

Sculler Falls into Water Guidelines:

- Entering the shell directly from the water can cause splashboard damage, so if re-entry is difficult, swim the boat to shore, lying on the stern, using the shell as a paddleboard.
- In cold weather, you can abandon your shell and lie on the stern deck of your buddy's boat to be taken to shore.
 - Loss of muscle control can occur very quickly and dramatically in cold water - stern deck rescue may be your only option.

Shell or Dragon Boat Capsized Guidelines:

- Immediate command for shell - 'UNTIE'.
- For all boats: be sure that all paddlers, rowers and coxswain, drummer/steerer are accounted for.
- Stay with the boat until assistance arrives.
- Follow the same procedures as for a swamped shell.

Shell Broken and Sinking Guidelines:

- Immediate command - 'UNTIE'.
- Get out of the boat and follow the same procedures as for a swamped shell.
- Do not leave the floating boat.

Another Boat in Distress Guidelines:

- If a distress signal is seen and insufficient assistance is nearer that craft, maneuver your boat to the distressed boat.
- Attempt to summon other launches or stable boats with distress signals.
 - Call 911 or use Channel 16 on your Marine Radio
- Assist in any way that does not jeopardize the lives in your boat.

Launch Guidelines for Rowers/Paddlers in the Water:

- The launch should approach rowers or paddlers in the water from the leeward side, keeping the propeller away from anyone in the water.
- The engine should be turned off as soon as contact with the boat is made.
- Avoid overloading the launch.

On Water Repairs Guidelines:

- Shells should stay within hailing distance of the launch (or within radio contact).
- The launch has been outfitted to provide assistance to rowers and/or the shell if needed.

- The tool box and coach's expertise are available for small equipment adjustments or breakdowns, which allows the shell to continue rowing after a short stop.
- If more serious needs arise, the launch and experts are there for rapid transportation.

Dragon Boat Safety Rules for Emergency Situations

Please view this link for Dragon Boat and Paddler Rules & Procedures:

[Dragon Boat Rules & Guidelines](#)

Best Practices: Commands

Before getting into the boat, be sure you know:

- Which seat and which side you are paddling or rowing - by seat number, and whether you are in the bow or stern pair/four.
- For rowers, the following basic rowing terminology:
 - BOW and STERN; PORT and STARBOARD
 - TIE IN and UNTIE; READY ALL , ROW; WAY ENOUGH; HOLD WATER
 - PORT (OR STARBOARD) TO ROW, STARBOARD (OR PORT) TO BACK
 - The terms WAY ENOUGH - HOLD WATER are used when the Coach, Crew Leader or coxswain wants a crew to stop immediately because of danger.
- Paddlers should be familiar with the “Hold the boat” or “Hold water” command, used by the drummer or steerer when the boat must stop immediately.

Best Practices: Clothing

- Wear several layers of clothing in cold weather.
- Wear flexible, moisture-wicking fabrics.
- Avoid loose-fitting clothing in rowing shells, which can get stuck in the tracks.
- Wear high-visibility top layers whenever possible and as required in Section 3.2.2 above.

Best Practices: Coxswains, Steerers, Kayakers and Scullers

- All coxswains, steerers, kayakers, and scullers should know the hazards and traffic patterns of the Allegheny, Monongahela and Ohio Rivers, and where practices are planned.
- Stay clear of bridge abutments, barges and other man-made or natural obstacles.

- Do not stop or turn under any bridges or near any such obstacles.
 - Make frequent checks on both sides of the boat and to the rear and listen for other river traffic.
 - Each rower is responsible and accountable for their own rigging, foot stretcher, seat, slide and blade, and must check to ensure that all equipment is functioning properly before leaving the dock.
 - If in doubt, ask the Coach or Crew Leader.
 - Any deficiencies that may result in further damage to the equipment or endanger safe operation must be repaired before launching.
 - Check the following before launching:
 - there is no damage to the hull, steering mechanisms, or structural support sections of the boat
 - the shell is equipped with a bow ball, heel tie-downs, and any other safety equipment appropriate to the shell
 - you have the correct oar and the collar is tight
 - nuts on the rigging are tight, the position of the foot stretcher and the smoothness of your slide are correct
 - forward ends of the slides are blunt and will not gouge your calves
 - you are wearing socks.
 - **personal shoes should not be worn in any seat of any boat that already has a set of shoes.**
 - water bottles, gloves, tape, sun glasses, sun screen, extra clothing and hats are in the boat, if needed.
 - When turning in waves, turn the boat into the wind whenever possible. Spend as little time as possible perpendicular to the wind/current. Keep the boat level throughout the turn.
 - In rowing team boats, use half the crew to turn and half the crew to stabilize the boat.
 - Paddlers should turn their boats into the wake and keep paddling at a steady pace.
 - Rowers, when the wake is...
 - ...lower than the gunwale of the boat and widely spaced, continue to row without a course adjustment.
 - ...is deep, closely spaced and lower than the gunwale of the shell, turn the boat so it is at a 90-degree angle to the wake.
 - ...higher than the gunwale, the shell should be turned parallel to the wake, rowers should stop rowing and lean away from the approaching wake.
-

Appendix:

A1: Safety Matrices:

- [Rowing Safety Matrix](#)
- [Out rigger Canoe/Kayak Safety Matrix](#)
- [10-Person Dragon Boat Safety Matrix](#)

- [20-Person Dragon Boat Safety Matrix](#)

A2: River Maps

- [TRRA River Tour Map - Video](#)

A3: Recommended Locations to have an Emergency Landing / Beach a Boat:

- Acrisure Stadium, 100 Art Rooney Avenue, Pgh, PA 15212 (40.4448 Lat, -80.0147 Long)
- Sharpsburg Island Marina (Allegheny River at Sharpsburg), 110 13th Street, Sharpsburg, PA 15215 (40.4933 Lat, -79.9295 Long)
- Newport Marina (Ohio River at West End Bridge), 929 W North Ave, Pgh, PA 15233 (Approx. 40.4503 Lat, -80.0305 Long)
- Southside Riverfront Park, Pittsburgh, PA 15203 (40.4324Lat, -79.9750 Long)
- South Shore Riverfront Park, 2701 S Water St, Pgh, PA 15203 (40.4293 Lat, -79.9647 Long)

A4: Safety Violations & Penalties

- See Section 5.

A5: Zone 5 Application Letter Template

- [PDF version of Zone 5 Letter Template](#)
 - Make sure all updates are made to each new letter.

A6: Dragon Boat Safety Rules & Guidelines for Emergency Situations

- Click here for the current version: [Dragon Boat Rules & Guidelines](#)

A7: Sculling Certification Protocol

- [Sculling/Pair Certification: Upgraded Classification System](#)

A8: Crew Leader Certification Protocol

- [Crew Leader: Sculling / Pair](#)

A9: Steersperson / Helm Certification (Dragon Boat):

- [Steering Basics](#)