

Wader Safety Procedures

Roger Williams University faculty, staff, and students may need to use waders and associated wading equipment to access specific water-based work areas and conduct specific water-based tasks. These tasks may take place on-campus or at off-campus locations. These tasks may be related to classroom instruction, maintenance, or research. These procedures provide requirements and guidance on safe wader usage.

Wading Safety

Wading Equipment Requirements

- All wader users must use the following equipment when wading:
 - Properly-fitting waders with either built-in boot feet or separate wading boots
 - Boots must have good treads to promote good traction. Do not wear flat-soled boots or boots with significantly-worn treads.
 - A wading belt worn around the waist
 - A US Coast Guard approved life vest for water above knee height
 - A whistle
 - A wading staff, except in the instance that its use would create a greater hazard due to the task (e.g., manual handling of materials that requires use of both hands)
- Wader users are strongly encouraged to have a second set of clothing, including long-sleeves and/or pants, as well as a blanket or towel available, in the event they get wet or fall in the water.
 - Cold water exposure can lead to hypothermia, even on warm days
 - A second set of dry and warm clothes, plus blankets or towels, is particularly important for wader users who are wading off-campus and may not have ready access to dry clothing otherwise.
 - Wader users who get wet or fall into the water are strongly encouraged to dry off and change clothing as quickly as possible to prevent hypothermia.
- Wader users are strongly encouraged to wear bright colors and/or reflective gear to improve visibility to others
- Always visually examine your waders/boots and other equipment prior to use. Never use damaged equipment. Report any damaged equipment to your shop/studio technician, faculty member, or supervisor, and they will place the equipment out of service.
 - Look for visible tears or holes, warps/dents/bulges/discoloration that may indicate weathering, etc.
- All wading equipment must fit properly, particularly the boots.
 - Boots that are too big for the wader are a trip hazard.
 - Boots that are too small can cause discomfort or injury.
- Do not wear wet or muddy waders indoors. Please remove wet/muddy waders outside and follow rinsing/cleaning procedures (see below).
 - Always wash your hands with soap and water for at least 30 seconds (proper handwashing procedures) after wading and rinsing your wading equipment.

Wading Two Person Integrity and Emergency Services Contact Requirements

- Never wade alone. All wader users must wade in pairs, in a group, or with a wader safety-trained observer watching the wading session and handling the emergency phone or radio.
- Always have a phone or radio available and readily accessible to contact emergency services.
 - If using a cell phone for the purpose, confirm reception and signal strength prior to wading, and place cell phone into waterproof carrier or holder to protect it from getting wet.
 - If using the Learning Platform blue light phone, or other campus emergency phone, for this purpose, test the phone prior to use to confirm ability to connect with RWU Public Safety.
 - If using a handheld radio for this purpose, test the radio prior to use to confirm ability to connect with emergency services.
 - If using a VHF marine radio for this purpose, test the radio prior to use to confirm ability to connect with emergency services, and a wader safety-trained observer must remain in the boat with the radio immediately accessible.

Wading Condition Safety (During Wading)

- Be aware of the weather and check conditions before you begin your wading session.
 - Avoid wading during thunderstorms or heavy precipitation.
 - Reschedule wading sessions if thunderstorms/heavy rain is forecasted when possible
- Plan your water entry and exit points.
 - Winter weather may create a slippery shoreline/dock due to ice, frost, or snow/sleet. Take additional care when entering/exiting the water, including using a wading staff and/or available handrails or other supports.
- Avoid fast-moving water and areas with strong currents. Fast-moving water and strong currents can make it difficult to maintain your balance and footing.
- Never wade above your waist, and reduce that depth based on weather and water/wading conditions as needed.
- Check the water depth and walking surface prior to wading in. Use the wading staff to check the depth and the walking surface for hazards such as drop-offs, loose or tipping rocks, pinch points or crevices where your foot could get wedged, sludgy or muddy bottoms where you could get stuck or slip, sharp rocks or debris, etc.

Wading Emergency Procedures

- In the event of injury or illness while wading:
 - Call emergency services right away (**401-254-3333** for RWU Public Safety, **911** for off-campus assistance, **VHF Channel 16** for Coast Guard MAYDAY channel)
 - Get the wade user out of the water: If the wade user is conscious and able to move, assist them in getting out of the water as quickly and safely as possible. If they are unconscious or unable to move, do not attempt to move them without proper training and equipment.

- Check for injuries: Once the wader user is out of the water, assess their injuries. If there are any life-threatening injuries, such as bleeding or difficulty breathing, prioritize those first.
- Provide first aid: If the wader user has any injuries that require first aid, administer it as quickly and effectively as possible. If you are not trained in first aid, wait for emergency services to arrive.
- Keep the wader user warm: If the water is cold, the wader may be at risk of hypothermia. Cover them with blankets or warm clothing to help them retain body heat.
- Monitor their condition: Keep a close eye on the wader user's condition and be prepared to administer CPR or other lifesaving measures if necessary.
- In the event of a slip/fall in the water where the wader user loses footing:
 - Do not attempt to swim.
 - Immediately tuck your knees up to your chest (this traps air into the waders) and roll onto your back.
 - Either tread water or float in an upright position.
 - You should be able to use a backsculling action to return to shore.
 - If being carried by the current, face downstream (feet first).
 - Immediately check for injuries, dry off, and change clothes once you have exited the water

Wader Training Requirements

All wader users must complete the following safety training requirements:

- Have a current Shop and Studio Safety Agreement on file
- Have current completions for all relevant general safety training for the work area, as listed on the [RWU Laboratory, Shop, and Studio Safety Training Requirements Links](#) for the current academic year
- Have current completion for the Wader Safety Training on the [RWU Laboratory, Shop, and Studio Safety Training Requirements Links](#) for the current academic year
- Have completed a documented hands-on wader safety training session with an approved faculty member, technician, or monitor for the current academic year

Wader Recordkeeping Requirements

- The shop/studio safety technician (RWU employee – not a student monitor) is responsible for maintaining the following records and providing a second set of copies to EHS on a monthly basis:
 - Any student and staff training records
 - Any wader replacement/repair/maintenance/visual inspection records

Wader Purchase Requirements:

- Wader boots/foot gear must be made of completely non-porous material with no felt soles or similar sole material

- Rhode Island **prohibits** the use of wader boots/foot gear with external felt soles or any other natural or synthetic material capable of absorbing liquid in all freshwater areas

Wader Maintenance Requirements

- The shop/studio safety technician (RWU employee – not a student monitor) is responsible for visually inspecting the waders on a routine basis and scheduling maintenance and repairs, including replacement as needed
- Rinse all wading gear in fresh water after each use and hang or lay flat to dry
- Follow manufacturer's instructions for maintenance and repair
- Use only qualified personnel to perform maintenance on the waders (either RWU shop/studio technician following manufacturer's instructions, or an outside vendor)

Additional Supervisor or Faculty/Staff Planning Requirements Prior to Wader Use

Faculty/staff and supervisors who are planning wading work must check their work area conditions for water/sediment safety before beginning the proposed work (long-term conditions), and before each work shift (temporary conditions).

Long-Term Conditions to Check Before Project Work Begins

- Some areas of New England are former industrial, commercial, or agriculture sites, and the **water body sediment** in these areas can contain pollutants such as heavy metals, pesticides/herbicides, solvents, etc.
 - Disturbing these water body sediments can release the trapped pollutants and the pollutants can collect on your body or wading gear and cause an exposure either (1) during wading, or (2) when wearing the wading equipment again, if it was not decontaminated properly.
 - **Supervisors/Faculty: Please coordinate with RWU Environmental Health and Safety if you are going to be working at an offsite location that has the potential for industrial/commercial/agricultural pollution in the sediment.**
 - Sites with a known/potential for residual pollution are called brownfields. **Not all potentially contaminated areas are listed in these resources, but these resources provide guidance known information:**
 - RIDEM Brownfields Overview: <https://dem.ri.gov/environmental-protection-bureau/land-revitalization-and-sustainable-materials-management/state-0>
 - Environmental Protection Agency (EPA) Brownfields Overview: <https://www.epa.gov/brownfields/r1>
- Some New England **water bodies (surface waters)** are impaired (contain certain pollutants above a certain level). Some of these pollutants can include bacteria (fecal coliform, Enterococci (*E. coli*)) and heavy metals. Many of these water bodies have a Total Maximum Daily Load (TMDL) report listing the impaired water body, the pollutant(s), and the steps being taken to reduce the pollutant levels.
 - These pollutants can collect on your body or wading gear and cause an exposure either (1) during wading, or (2) when wearing the wading equipment again, if it was not decontaminated properly.

- **Supervisors/Faculty: Please coordinate with RWU Environmental Health and Safety if you are going to be working at a location that has a TMDL in place.**
 - RIDEM TMDL List: <https://dem.ri.gov/environmental-protection-bureau/water-resources/research-monitoring/restoration-studies-tmdl-documents>
 - EPA Impaired Waters and TMDLs in New England (EPA Region 1): <https://www.epa.gov/tmdl/impaired-waters-and-tmdls-new-england-region-1>

Temporary Conditions to Check Before Each Work Shift

- Some water bodies can have **temporary bacterial or other pollutant conditions** that could be harmful for waders and/or contaminate your wading gear. Check for and avoid wading in areas with:
 - **Active cyanobacteria (Blue-Green Algae) blooms**
 - Rhode Island Department of Environmental Management (RIDEM) Cyanobacteria website and advisory list: <https://dem.ri.gov/environmental-protection-bureau/water-resources/research-monitoring/cyanobacteria-blue-green-algae>
 - Rhode Island Department of Health (RIDOH) Cyanobacteria website: <https://health.ri.gov/healthrisks/harmfulalgaeblooms/>
 - RIDEM Cyanobacteria Fact Sheet: <https://dem.ri.gov/sites/g/files/xkgbur861/files/programs/benviron/water/quality/surfwq/pdfs/bgalgae.pdf>
 - **Active beach closures**
 - RIDOH Beach Closure Advisory Website: https://www.ri.gov/press/?agency_id=97