

*Paddle Smart
Paddle Safe
Have Fun!*

Smart Start Safe Paddling for



2

*Chapter 2:
Smart Skills*



How To Use This Resource

Information presented in these slides support both the on-shore Smart Start for Safe Paddling program and the on-water Smart Start On-The-Water program.

- Those presenting the on-water program must hold, at minimum, an active ACA Level 1 Instructor Certification or Community Paddlesports Leader Certification.

These slides are designed to support instruction, not replace it. These slides are designed to accompany, not replace, teaching aids such as boats, paddles, and paddling equipment. Presenters should pair this content with real equipment, demonstrations, and discussion (not just lecture).

Select examples that match the craft, venue, and experience level of your participants.

When used on the water, instruction should include hands-on practice with the boats, paddles, and safety equipment participants will actually use.

**If this presentation is used to teach a course compliant with NASBLA's human-propelled boating standards, all slides must be used. If not, presenters should select slides that best meet their students' needs.*



Overview



The Smart Start for Safe Paddling program is a suite of resources that provides essential information to help novice paddlers stay safe and have fun while on the water. The comprehensive program book addresses each NASBLA core and human-propelled standard, and provides in-text citations for easy cross reference.

- Resource Book
- Student Workbook
- Facilitator's Guide
- Free Online Safety Course
- Presentation Slides (This Document)
- On-Water Course Outline
- Infographics
- And more!





Focus Areas



Smart Start for Safe Paddling gives paddlers a foundation for safe, enjoyable time on the water. This program presentation is organized into four focus areas. The following slides address Chapter 2: Smart Skills.

1

2



3

4

Smart Gear

Smart Skills

Smart Plan

Smart Decisions

② *Smart Skills*



In this chapter, we will focus on the practical skills that support safe paddling before, during, and after time on the water.

Safe paddling is comprised of more than paddling your boat forward and back. Think about the paddling experience as a system with four critical parts:

1. The preparation: loading and securing the boat safely
2. The transport: moving people and gear with care and planning
3. The launch: getting on and off the water smoothly and safely
4. The paddling: using strokes and boat control skills effectively

Every part matters, and each part should be designed to match the group members, water, weather, and trip plan.

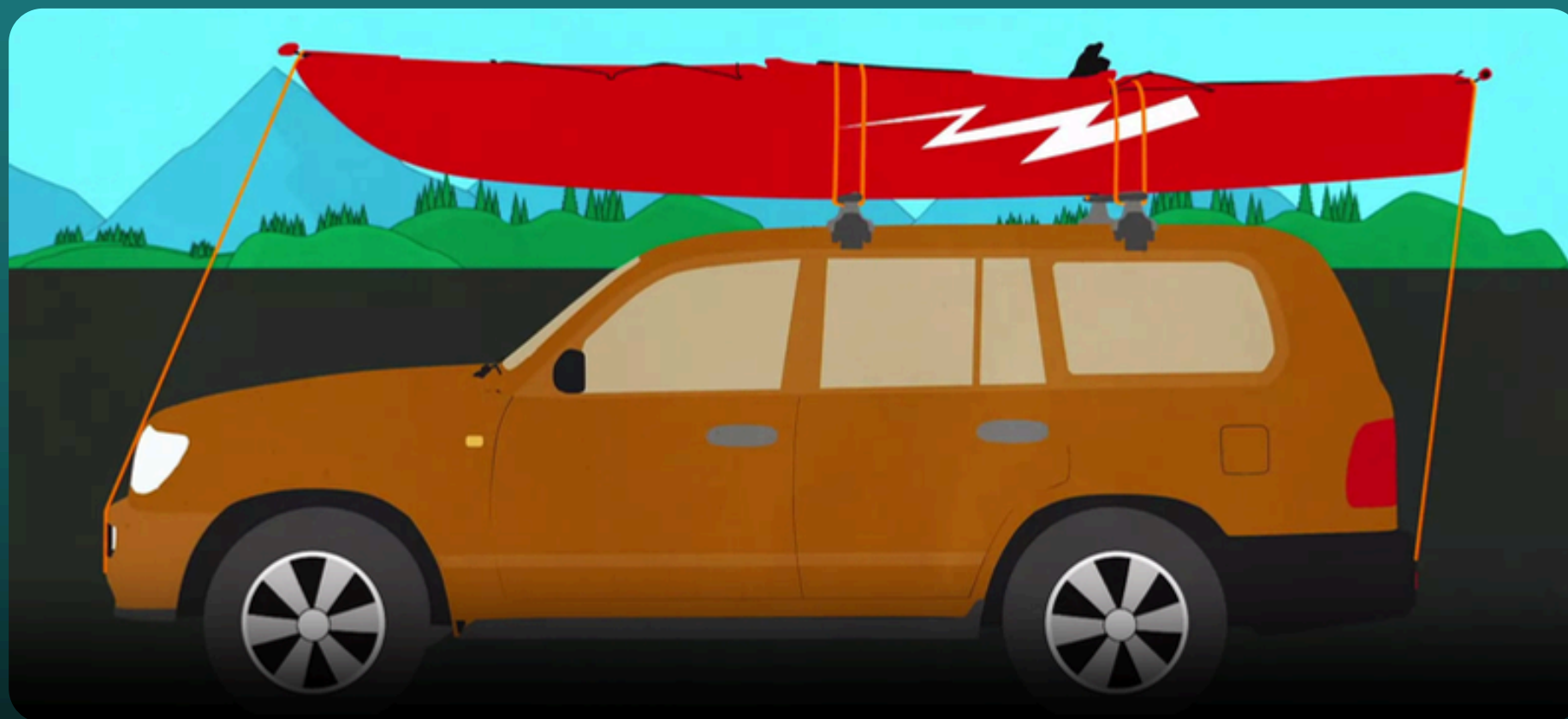
First Section:
Transporting Boats &
Boards

② *Transporting Boats & Boards*



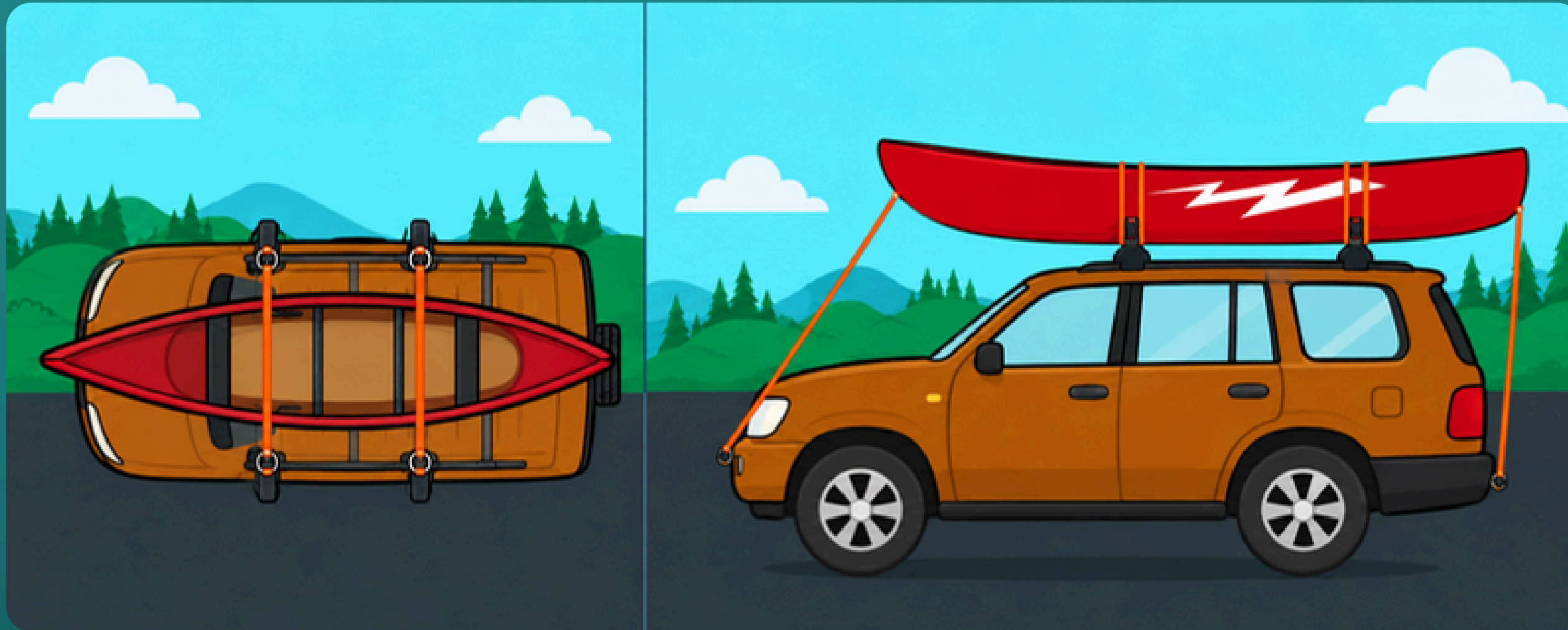
Knowing how to transport your boat is a critical skill. Loaded boats on top of a vehicle make it taller, impact how the vehicle handles, and often reduces gas mileage. It is important to consider these factors when navigating tunnels, parking decks, other areas with low overhead clearance, and while driving in crosswinds or winds from passing vehicles. Important: Drivers bear the ultimate responsibility for the load on, or towed by, their vehicle.

Let's look at transportation in two parts:



1. **Transit:** Securing your craft to a vehicle or trailer using appropriate knots, ropes, and straps.
2. **Carrying to the water's edge:** Moving a sometimes heavy or awkward craft over uneven terrain without causing injury to the paddler or damage to the boat.

② *Securing Craft to a Vehicle*



When driving with a boat on the roof of your vehicle:

- Allow extra time and distance to slow or stop
- Expect sluggish acceleration and decreased gas mileage
- Your loaded vehicle will be more vulnerable to cross winds

It is critically important that the boat be anchored to the vehicle rack with at least two lines running perpendicular to the boat's midline. **Attach lines connecting the front and back of the boat to the front and back of the vehicle, to keep the boat from sliding off during acceleration and braking.**



② Carrying Boats to Water's Edge



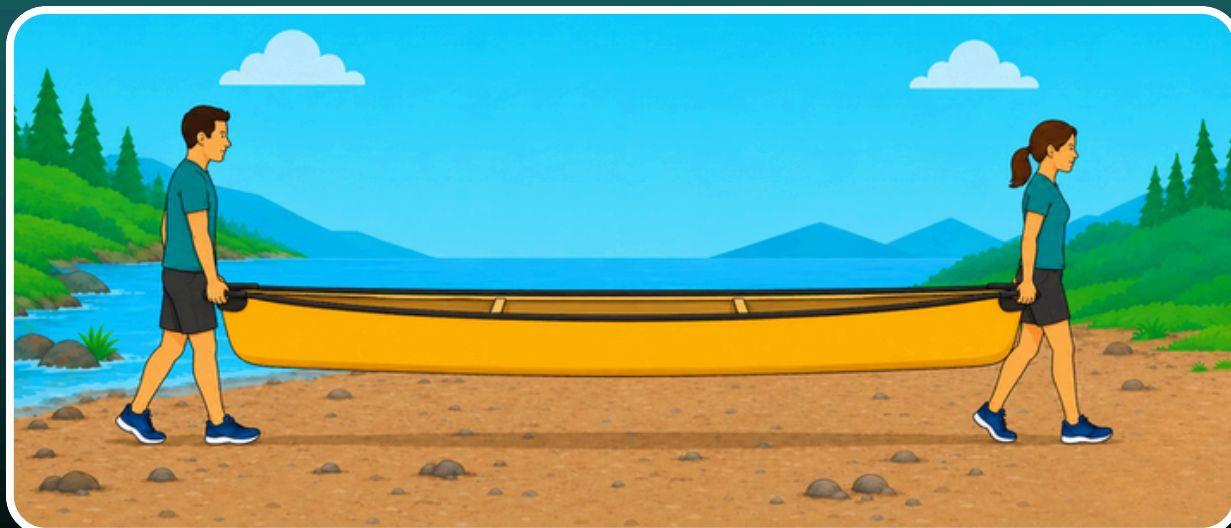
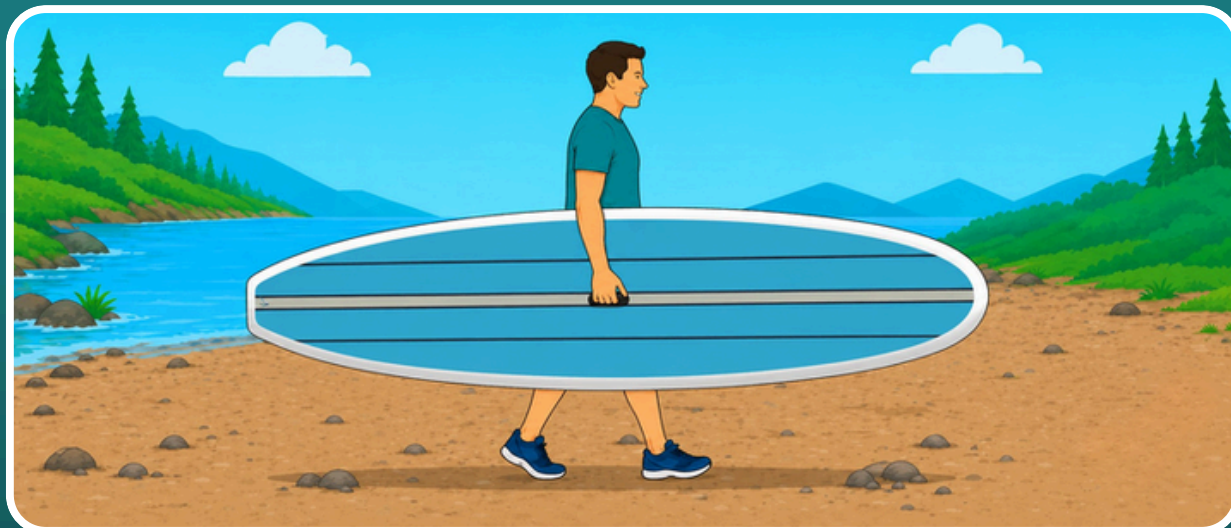
Boats are often heavy and awkward to carry, but don't drag them on the ground - dragging risks damage to the boat.



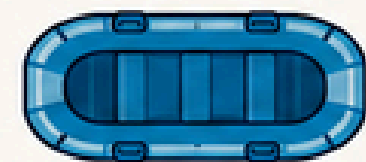
Lift with your legs! Your lower back is vulnerable, so use your larger leg muscles to carry the load.



2 Carrying Boats to Water's Edge



Carry your craft carefully to protect both yourself and the boat, and always set it down away from paths used by people, boats, or vehicles so it does not create an obstruction or hazard. We'll dive into launching your boat on the following slides.

 CRAFT TYPE	 OPTIMAL TEAM	 PRIMARY GRIP POINT
 Canoe	2 People	Deck plates (bow/stern)
 Kayak	2 People	Grab loops (bow/stern)
 Raft	4 People	Perimeter holds
 SUP	1 Person	Center handhold or carry strap

Second Section:

Launching

② Launching - Water Access Etiquette



Constraints

Larger boats are forced to use ramps. Paddlers can launch almost anywhere.

Boating is more fun than clashing with other waterway users, right?!



Drop Off Protocol

Drop your boat alongside the ramp (not on it). Go park your vehicle, and then come back to the launch site.

Encourage positive interactions among boaters. This may help when land managers consider paddler access in the future.

② *Launching - Getting Into Your Boat*



Three things can help you safely board your boat:



Keep A Low Center of Gravity: while getting into your boat and loading gear



Use Three Points of Contact: when getting into your boat, be sure to use every stable touch point possible - hands, feet, paddles, other people, etc.

Stay Centered: Keep the weight of yourself and your gear centered both side-to-side and forward / backward in the boat

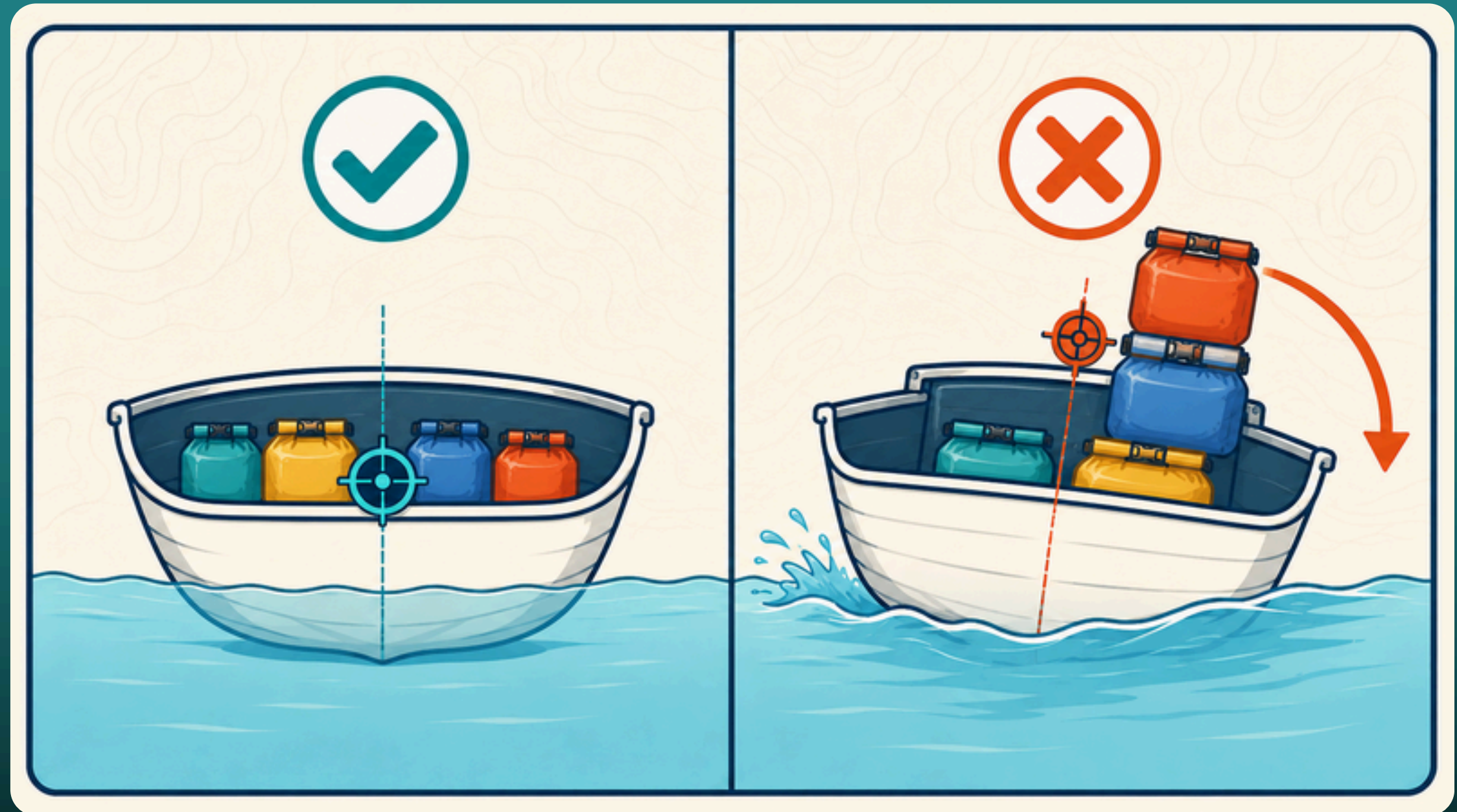
② *Launching - Loading Gear & Staying Balanced*



Keep A Low Center of Gravity and keep gear evenly distributed from front to back and side-to-side.

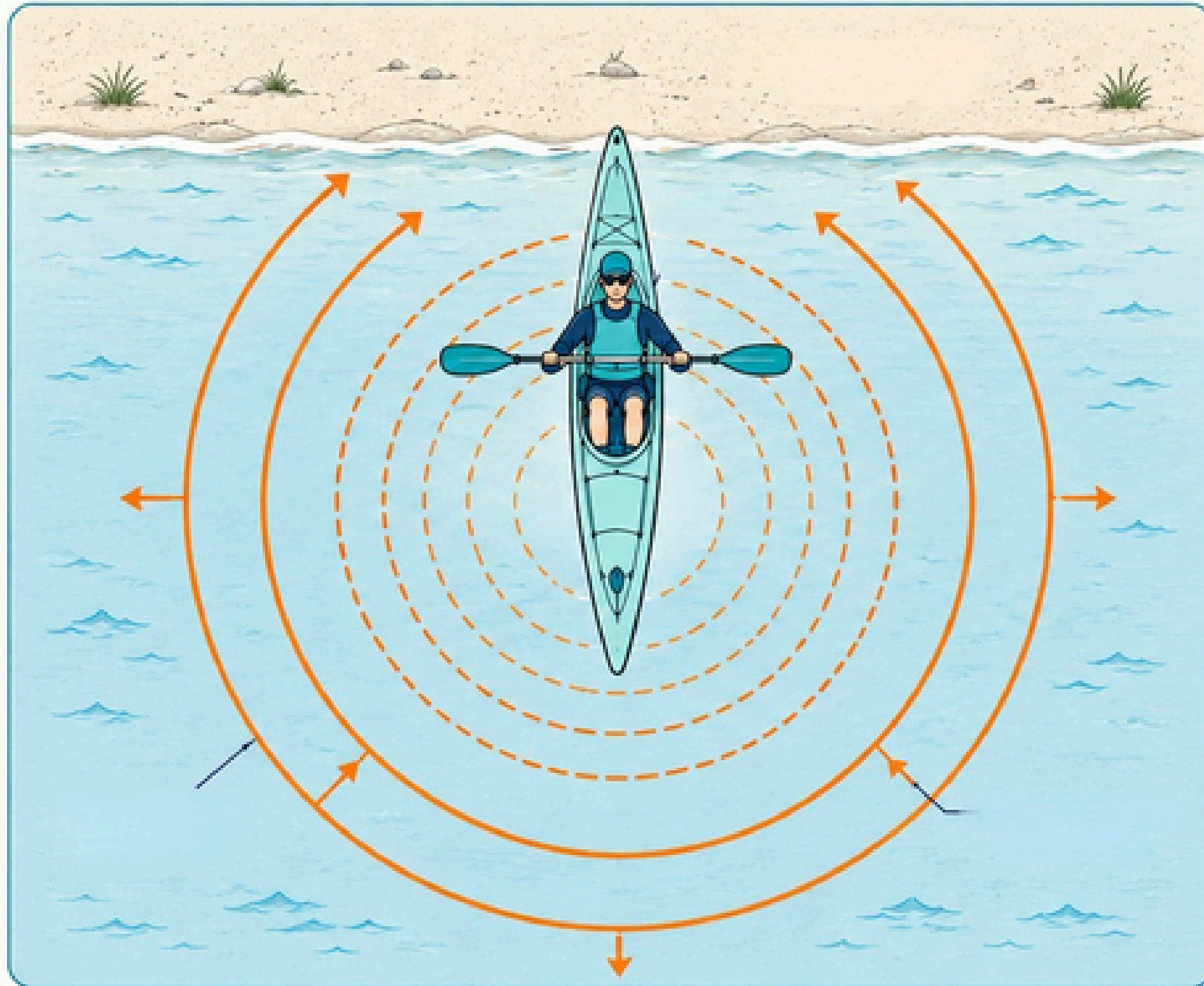
High and off-centered weight raises your center of gravity, and the risk of capsizing increases dramatically.

Rule of thumb: never exceed your boat's capacity (details provided by the manufacturer).



2

Launching - Turn on Your Radar



1 Far Scan

Look into the distance for incoming vessels or large environmental hazards



2 Nearby Scan

Look carefully at your immediate launch point for any points of possible collision



3 Low Profile Departure



For SUPs, start in a kneeling position until you reach deep water

Third Section:

Paddling

② General Paddling Principles

Keep these concepts in mind for a more successful paddling trip:

- Posture – keep your body upright and relaxed
- Strong shoulder position – keep your elbows oriented in front of the plane of your body and below your nose
- Balance – good posture keeps your head over your seat, leading to better balance
- Traction – fully immerse your paddle for the most effectiveness and to minimize splashing
- Vision – look where you want to go



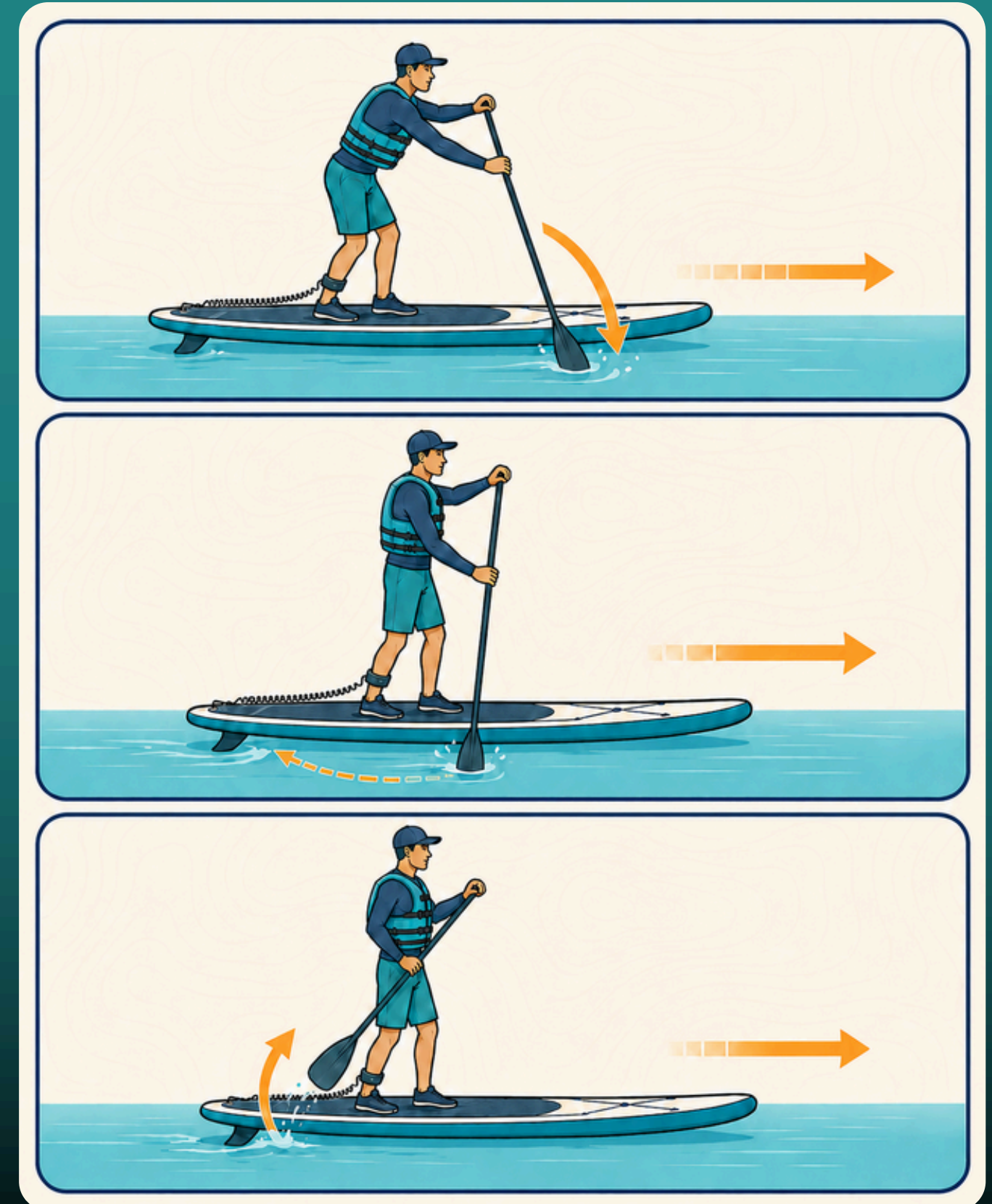
② Paddling Stroke Principles

Boats and boards are moved when your paddle interacts with the water. All paddle strokes are broken down into three phases:

Catch – the starting position where the paddle enters the water

Power – the path along which the paddle travels to generate power

Release – how the paddle ends the stroke and exits the water



2

Types of Paddling Strokes



Forward

- Blade enters in front of the body, and begins to pull water towards the paddler
- Blade travels towards the rear in a straight line parallel to the boat
- Blade exits the water near the body



Reverse or Stop

- Blade enters near the body, and begins to push water forward
- Blade travels forward in a straight line parallel to the boat
- Blade exits the water in front of the body



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P



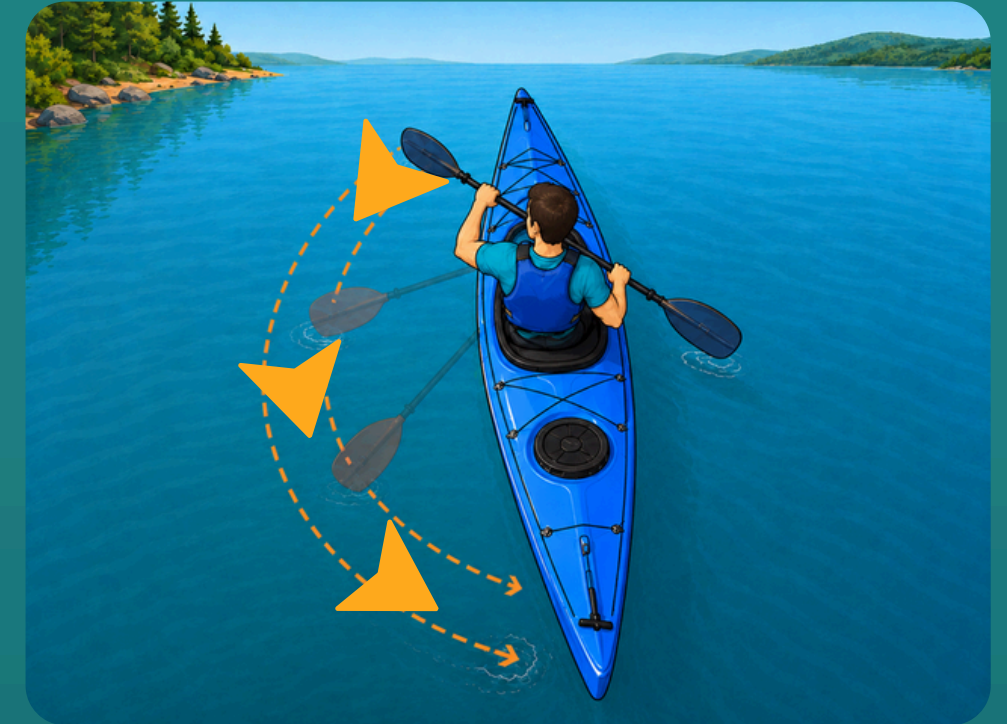
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② *Types of Paddling Strokes*



Forward Sweep

- Blade enters in front of the paddler with powerface oriented to push water away from the boat.
- Blade sweeps out and away from the boat, turning the bow away from the paddle.
- At the end of the stroke, the blade slices out of the water



Reverse Sweep

- Blade enters behind the paddler with back face oriented to push water away from the boat
- Blade sweeps out and away from the boat, moving the stern away from the paddle
- At the end of the stroke, the blade slices out of the water



② *Types of Paddling Strokes*

Stern Pushaway

- Blade enters behind the paddler with back face oriented to push water away from the boat, similar to the starting point for a reverse sweep.
- Blade sweeps out and away from the boat, pushing the stern away from the paddle.
- The stroke ends at the starting point for a stern draw. At the end of the stroke, and the blade slices out of the water.

Stern Draw

- Blade enters behind the paddler, and extended out from the boat, similar to the midpoint of a forward sweep. with the blade oriented as done for a reverse sweep
- Bottom elbow stays low and tucks in, pulling the stern toward the paddle
- Paddle exits near the boat by slicing upwards out of the water



2

Types of Paddling Strokes



Draw

- Blade enters to move water directly toward the center of the boat. Paddler turns their torso to face the blade
- Blade travels directly toward the center of the boat
- Before reaching the boat, the blade is lifted out of the water.



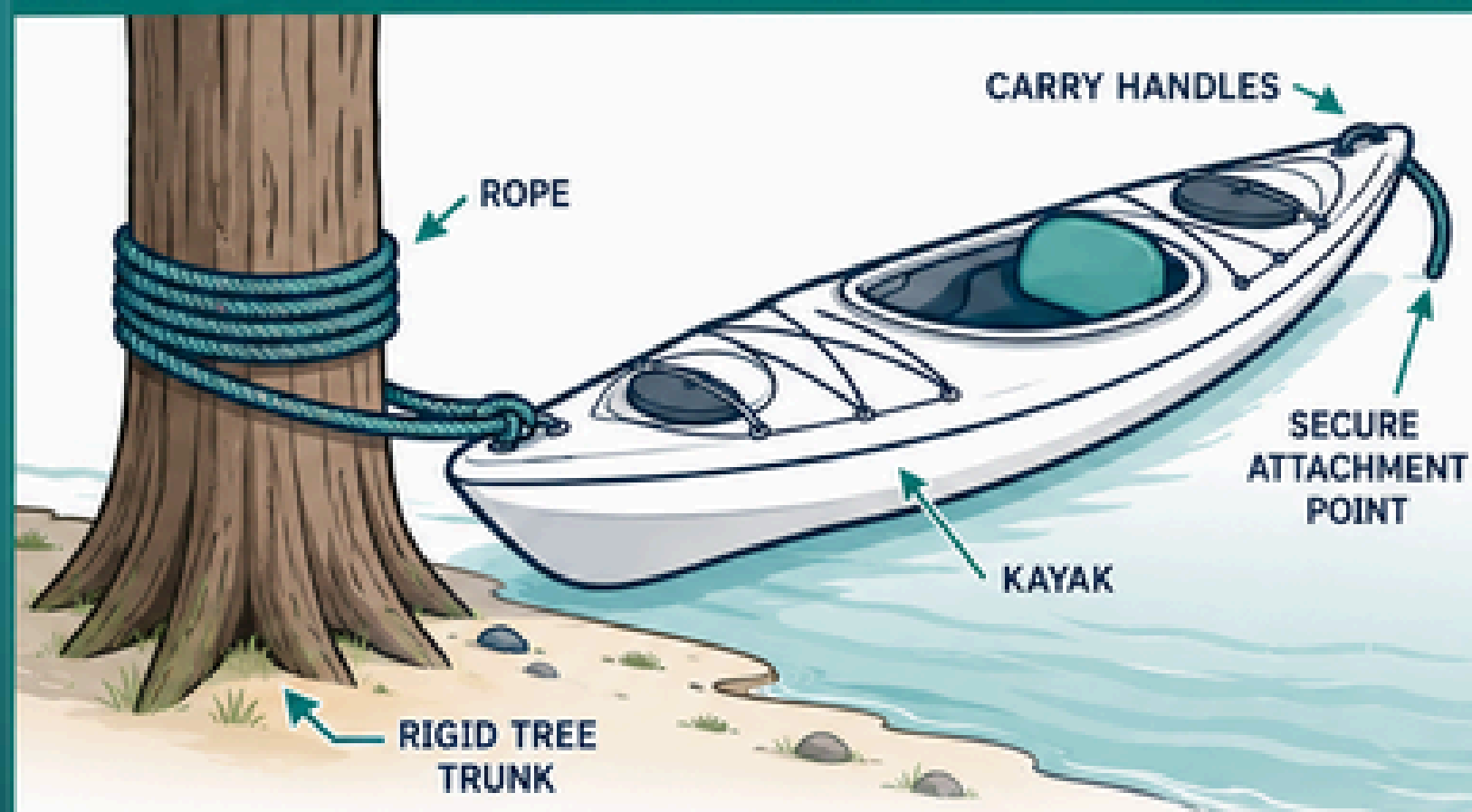
Brace

- Blade is placed face down, flat against the water
- Power is applied to the blade to keep the boat from tipping
- Power is applied only briefly and then the paddle moved to another stroke
- The blade can slide across the surface or be lifted directly off the water



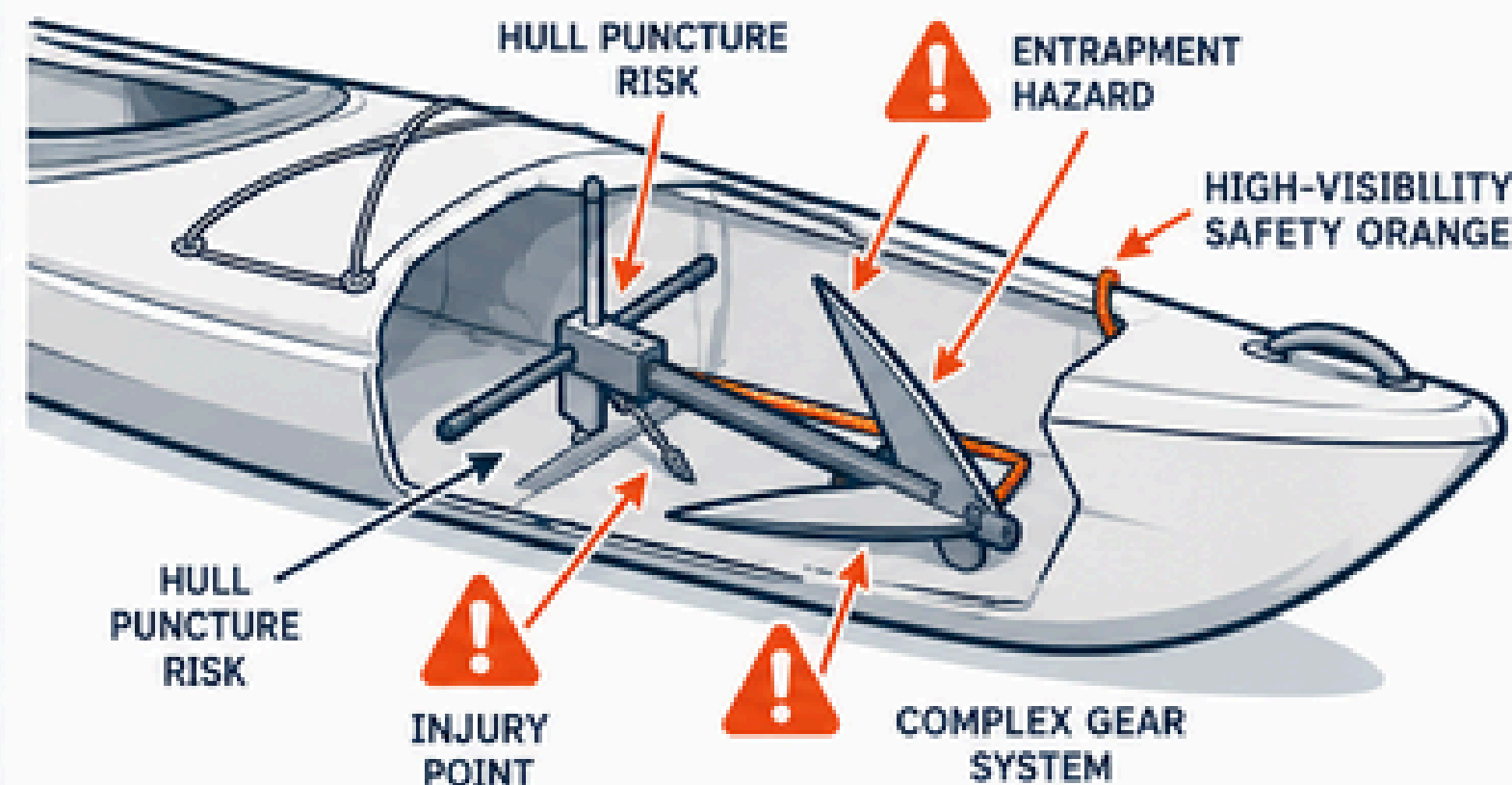
2 Anchoring a Paddlescraft

✓ Shore Securing (Recommended)



- ✓ Requires minimal gear (rope/rack).
- ✓ Safe, dry execution.
- ✓ Prevents drift away.
- ✓ Ideal for all paddlers.

⚠ Anchoring (High Risk)

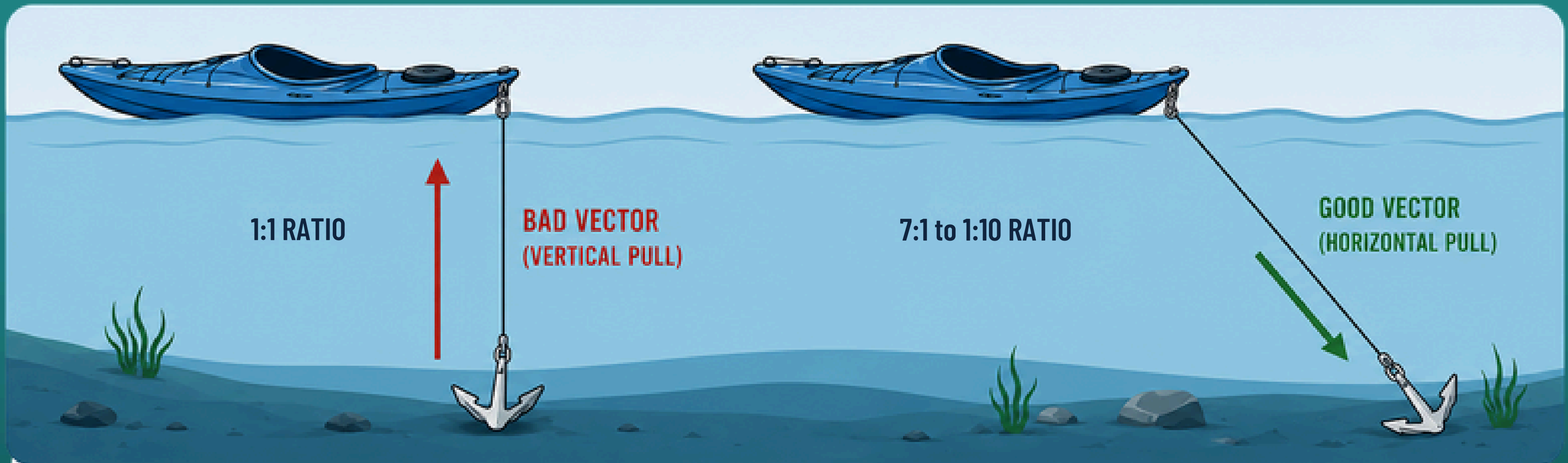


- ⚠ Requires specialized gear/training.
- ⚠ Difficult/impossible access to bow/stern.
- ⚠ Storage hazards.
- ⚠ Standard powerboat anchors present severe hull puncture, injury, and entrapment risks inside a paddlescraft hull.



Core Takeaway: In general, most paddlers will never anchor. Shore securing is universally safer.

② Anchoring a Paddlescraft



THE RATIO

The anchor line needs to be at least 3 times longer than the water depth.



ATTACHMENT

The line needs to attach to the bow or the stern of the boat, never the middle.



ESCAPE

Always use a quick-release mechanism so letting go / getting free of the line is easy.



SMART START TAKEAWAY: Use the right ratio, attach to the ends, and always plan your escape.

Fourth Section:

Returning to Shore

② *Returning to Shore*

The goal of a safe landing is keeping your paddlecraft upright and avoiding rocking or loss of control as your boat comes to a stop against the shore, dock, or boat ramp.

1. **Confirm your path:** pay close attention to other boats and waterway users. Avoid collisions at all costs!
2. **Control your momentum:** give yourself plenty of room to navigate your launch site and slow down carefully. SUP paddlers should drop to a kneeling posture while landing.
3. **Minimal disruption:** once you've gathered yourself and your gear, clear the landing area for the next person or waterway user



② *Securing Boats for Future Use*

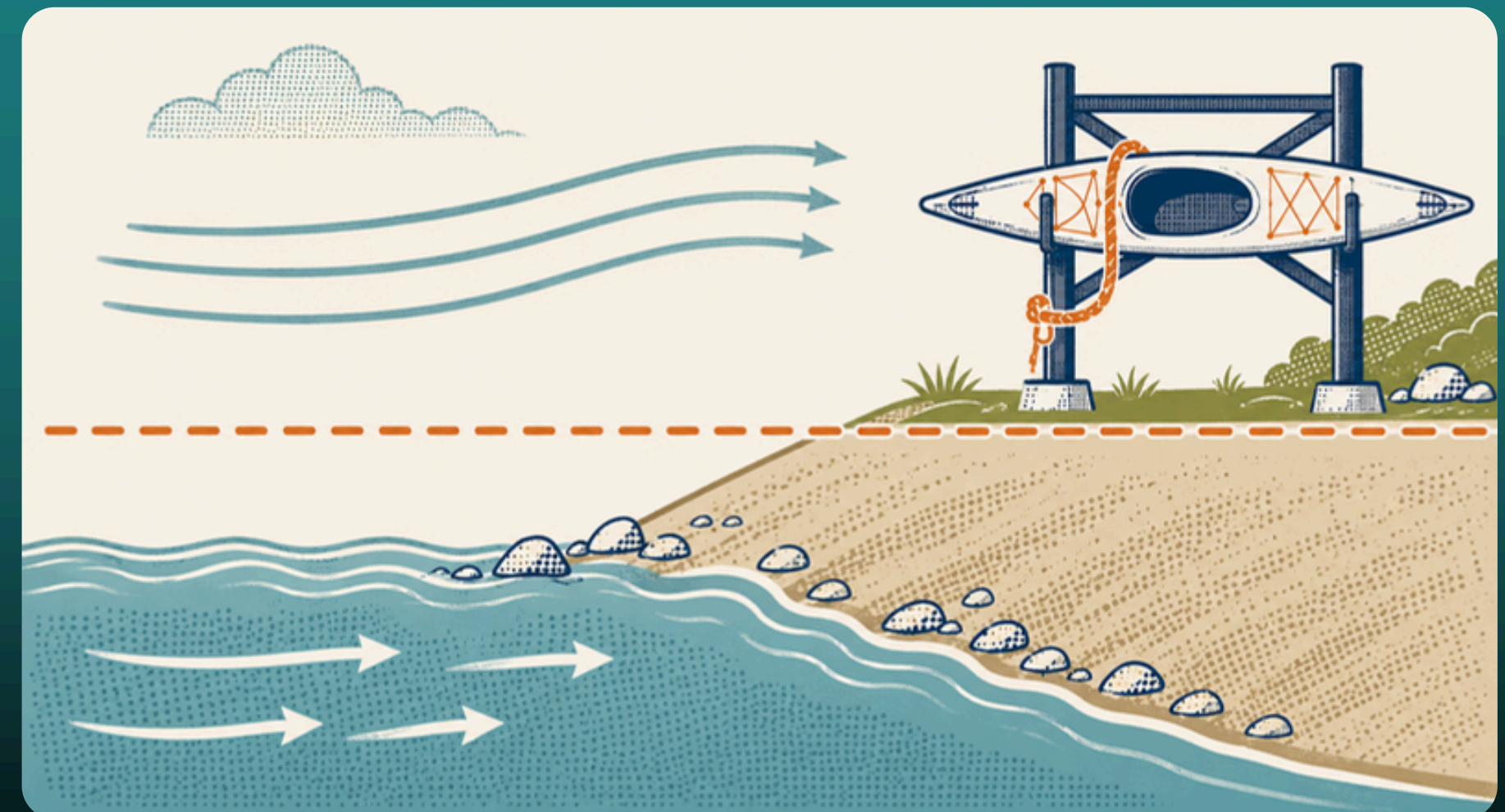


Before you conclude your trip, make sure your craft is secured and identified so changing wind, water levels, and currents do not carry it away or create a safety concern.

Anticipate changes: Tides rise, currents shift, and winds accelerate while you are away. Secure vessels well above the active waterline.

Make Sure it's Secure: Tie or chain your boat or board to a solid object, use vehicle racks, or store indoors.

Identification: Prominently label the vessel with the owner's name and contact information. If blown away, this facilitates return and prevents unneeded search-and-rescue operations.



Fifth Section:
Recognizing, Avoiding, and
Responding to Hazards

② *Types of Hazards*



1. Environmental

Examples:
water, weather, wind,
and waves

2. Human Made

Examples:
boat traffic, ramps,
docks, swimmers,
slippery banks, vehicle
traffic

3. Personal & Social

Examples:
fatigue,
overconfidence,
poor judgment,
lack of skill, group
separation



② Environmental: Water, Weather, Wind, and Waves



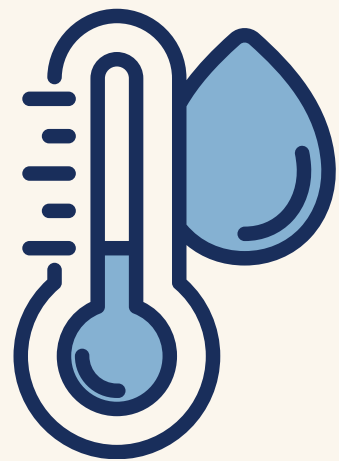
Water, weather, wind, and waves can change quickly and have a big impact on a paddler's safety, comfort, and control. Before launching, paddlers should take time to understand the conditions they may encounter and choose a route that matches their skills, equipment, and group. Staying aware while on the water helps paddlers recognize changing conditions early and make smart decisions about when to continue, adjust, or turn back.



② Environmental: Water Conditions



Water conditions such as current, waves, tides, water depth, obstacles, and cold temperatures can affect how easily paddlers control their craft and stay balanced. Understanding the water before launching and continuing to watch for changes helps paddlers choose safer routes, avoid hazards, and know when to adjust plans or get off the water.

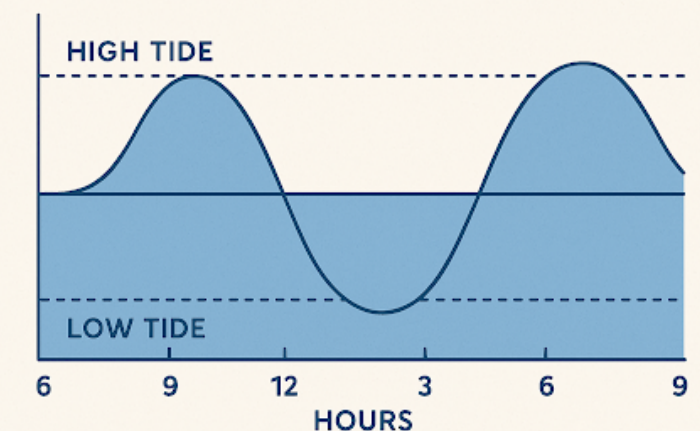


Always check the water temperature, not just the air temperature. Water drains heat from the body 25x faster than air.



Stay aware of waves from wind, currents, and passing boats, and adjust your speed, angle, and route to keep your craft balanced and under control.

TIDE CHART

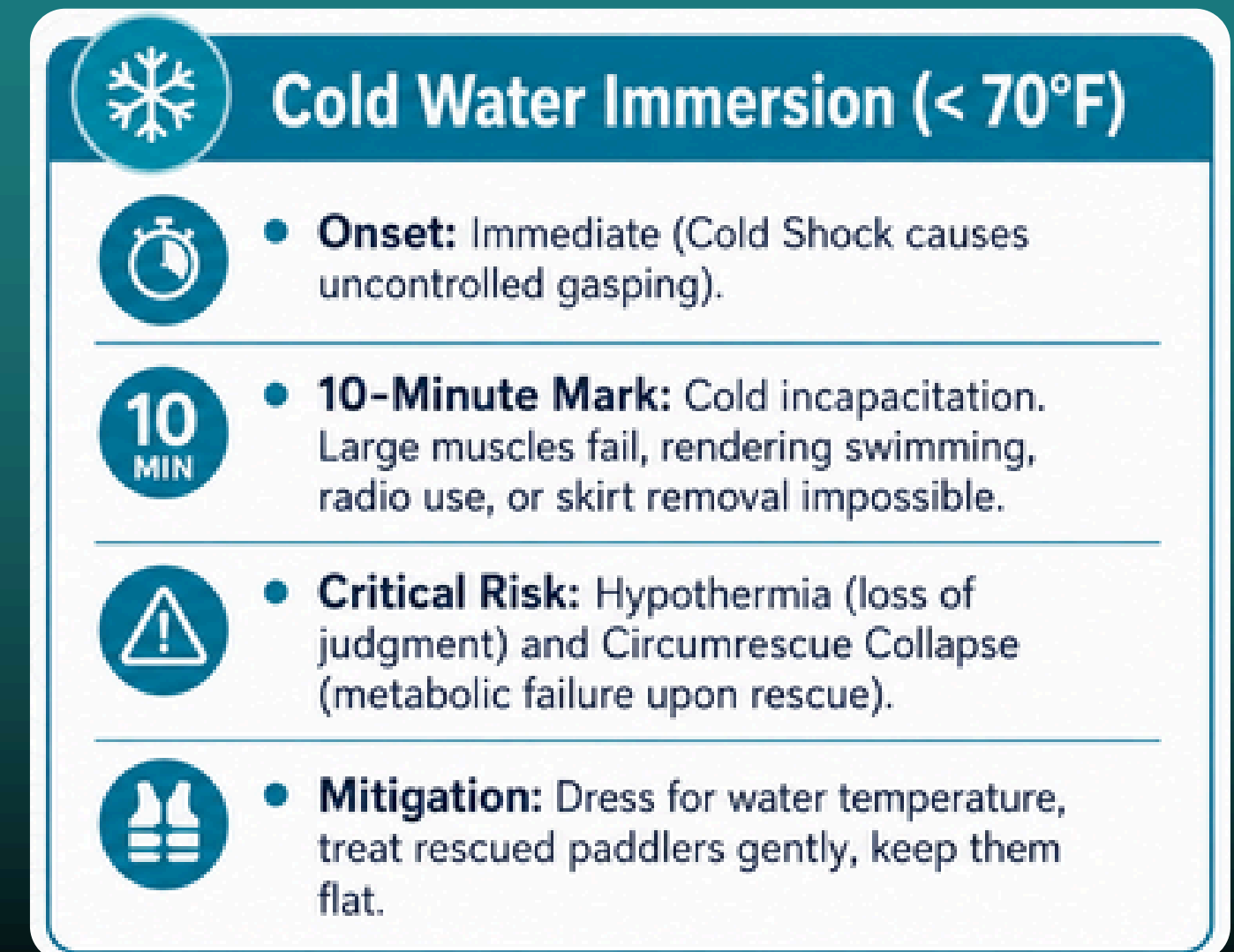
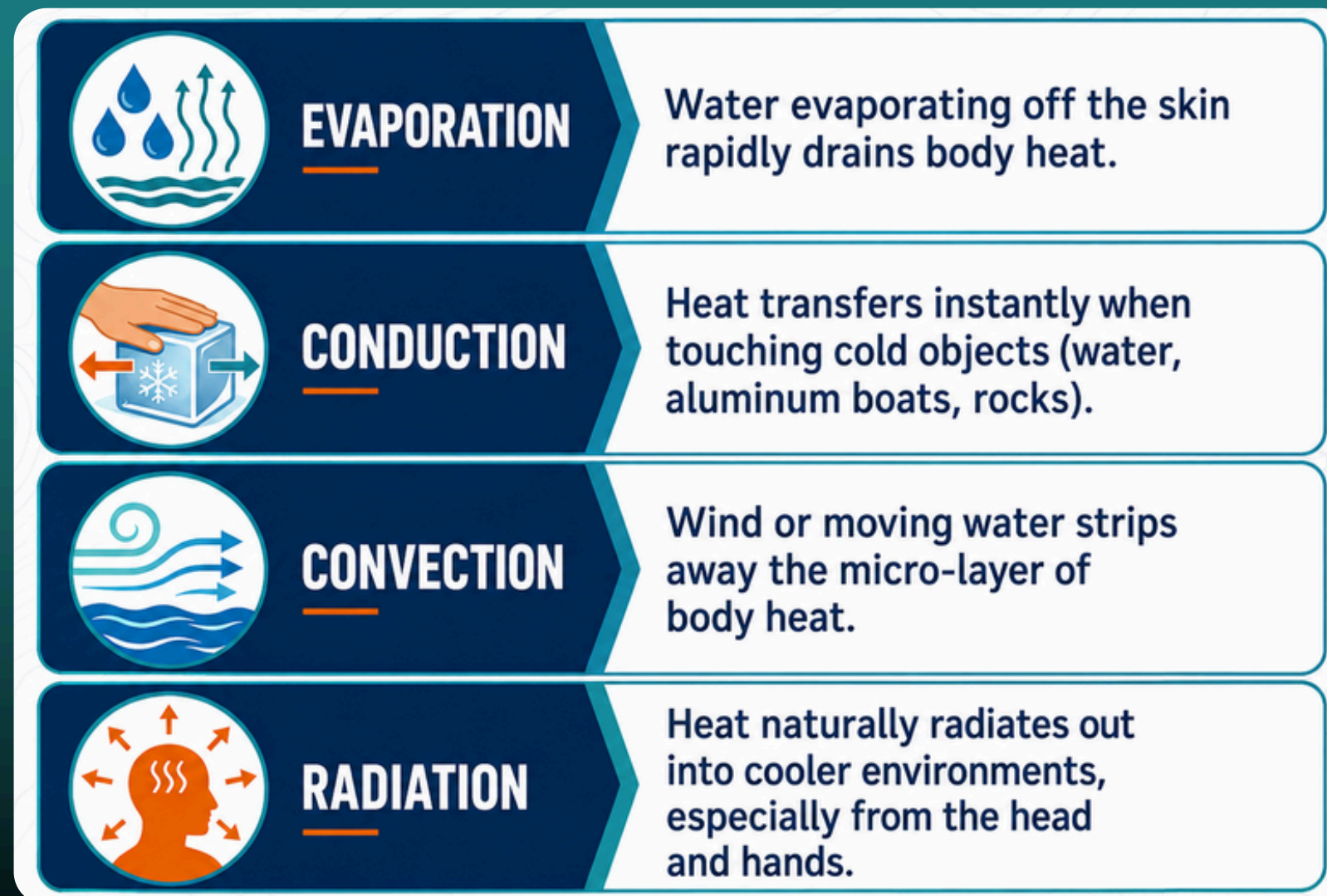


Because tide patterns vary greatly by geographic location, having location-specific tide data ensures safety and efficiency in a variety of coastal activities.

② Environmental: Water Conditions



Maintaining a safe core body temperature is essential for paddlers because both cold and heat can quickly affect strength, coordination, judgment, and the ability to respond to emergencies. Dressing for the water and weather, staying hydrated, and recognizing early warning signs can help paddlers prevent cold water immersion injuries, hyperthermia, dehydration, and other temperature-related risks.



② Environmental: Weather Conditions



Weather conditions can quickly change a paddler's experience by increasing wind, waves, current, temperature stress, and visibility challenges. Checking the forecast before launching and watching conditions while on the water helps paddlers make safer decisions about when to go, where to paddle, and when to turn back.



Learn how to identify dangerous weather conditions including strong winds, thunderstorms, lightning, hurricanes, fog, and changing temperatures.



Wind can blow a paddler off course, making it difficult to navigate and reach your destination. Strong winds can capsize paddlers, create waves that can swamp a boat, and separate groups.

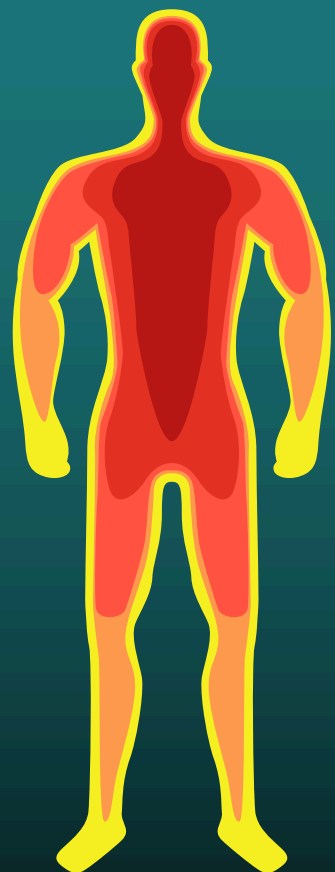


Lightning can strike from miles away, and paddlers on open water are especially exposed, so stay off the water for 30 minutes after seeing lightning or hearing thunder until the storm has safely passed..

② Environmental: Weather Conditions



Maintaining a safe core body temperature is essential for paddlers because both cold and heat can quickly affect strength, coordination, judgment, and the ability to respond to emergencies. Staying cool and hydrated helps paddlers maintain energy, focus, coordination, and good decision-making, especially when sun, wind, and physical effort increase the risk of overheating or dehydration.



Heat Injuries



- **Early Signs:** Thirst, heavy sweating, headache, dizziness, and muscle cramps.



- **Heat Exhaustion:** Cool, pale, clammy skin, weakness, nausea, and rapid fatigue.



- **Heat Stroke:** Confusion, hot skin, loss of coordination, or altered consciousness. This is a medical emergency.



- **Prevention:** Drink water often, wear sun-protective clothing, rest in shade, and cool down early.



Hyperthermia & Dehydration



- **Onset:** Gradual, accelerated by sun glare and wind exposure.



- **Symptoms:** Rapid fatigue, high body temperature, mental fog.



- **Critical Risk:** Faster onset than on land due to the physical demands of paddling and water glare.

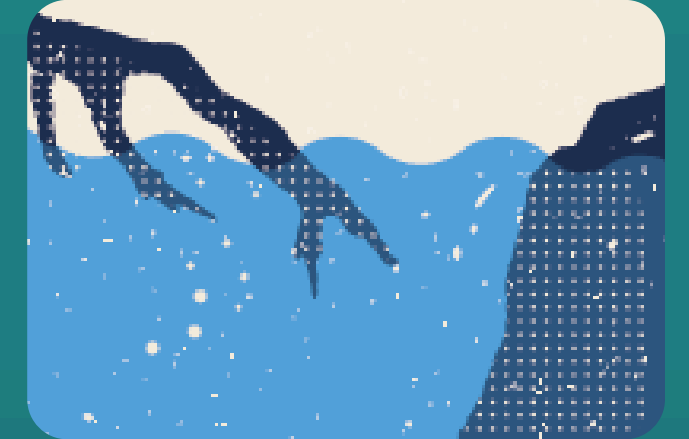


- **Mitigation:** Hydrate continuously, wear wide-brim hats, avoid overdressing.

② Environmental: Water-Based Hazards



Strainers are environmental risks that paddlers must recognize and avoid. Strainers are any object or obstruction that allows water to pass through but stops and holds objects such as boats and people.



Rapids are areas of river with turbulent or irregular water flow created by a shallow river bed, obstacles, or constriction. River rapids are also called "whitewater" because of the splashing and aeration of the fast moving water.



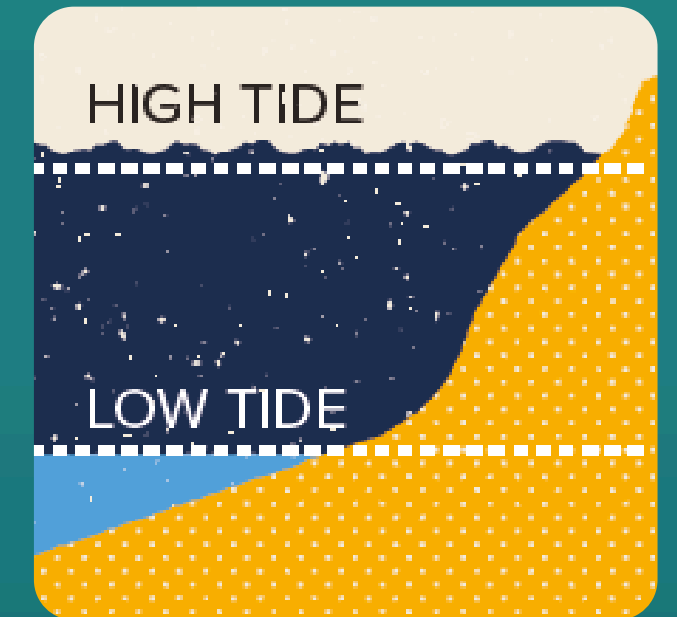
Rocks present obstacles that make navigation challenging and at times dangerous. Rocks create rapids and present both impact and entrapment hazards. Impacts can occur while paddling and also while walking around: rock surfaces can be slippery, uneven, and unstable causing you to lose your footing and fall.



② Environmental: Water-Based Hazards



Tides create currents that can change direction and strength depending on whether the tide is rising or falling. Paddling against a strong outgoing tide can be exhausting, but an incoming tide can help.

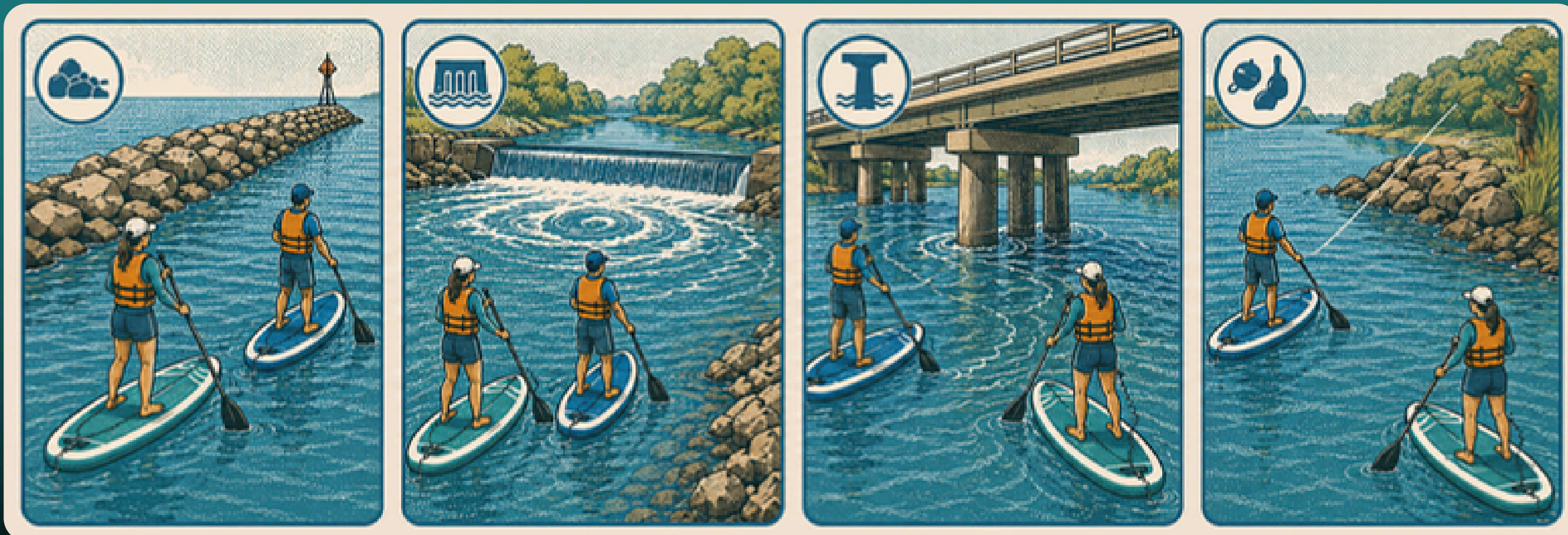


A hydraulic, also known as a hole, is a river feature that occurs when water flows over an obstruction, like a rock or ledge, into deeper water downstream. Hydraulics can be very dangerous and hard to escape. The force of a hydraulic can turn boats upside down, and if the reversal currents are strong enough, people and crafts can become trapped in the recirculated flow. Hydraulics can also be found at the base of dams and waterfalls, and behind or on top of submerged rocks.



② Human-Made Hazards

Human-made hazards can create serious risks for paddlers because they may block, trap, scrape, or pin boats and people in moving water. Structures and debris such as jetties, low-head dams, bridges, ropes, lines, sharp metal, broken glass, and other unidentified objects in the water should be identified early and given plenty of space. When in doubt, slow down, scout from shore, choose a safer route, or get off the water before reaching the hazard.



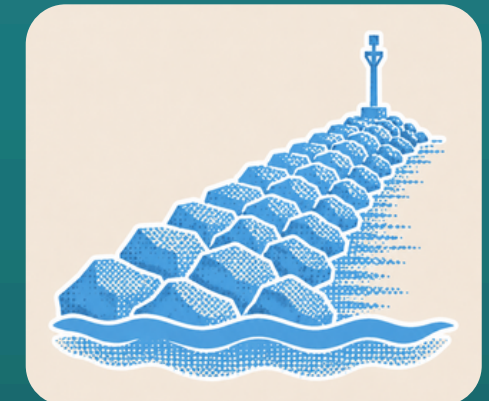
② *Human-Made Hazards*



The bases of bridges can create obstacles similar to rocks and strainers. They present impact and entrapment hazards as well as a location that logs, branches, and other debris accumulate.



Jetties are often found near the shoreline of a body of water. Waves and strong currents near jetties can pull people out to sea or directly into the jetty itself. Jetties often are lined with sharp rocks, encrusted barnacles, and shells.



Paddlers should exercise caution to avoid entanglement when using anchor lines, throw bags, tow lines, and fishing lines. Paddlers may also encounter lines from other boats and fishermen; always stay alert to avoid getting snagged.



Avoid debris in the water by slowing down, giving it plenty of space, and steering clear of anything that could scrape, puncture, snag, or entangle your boat, paddle, leash, or body.

② *Personal & Social Hazards*



In addition to environmental and human-made hazards, fatigue, lack of personal care and self-awareness can lead to impaired judgment, poor decision making, and disregard for other group members.

Practice self-care by dressing for the conditions, bringing all the food and water you may need, and taking breaks when you are tired. Avoid paddling while under the influence of drugs or alcohol.

Paddlers can support group care by paying attention to both their own condition and the needs of others in the group. A safer group is one in which everyone checks in, communicates honestly, stays together, and makes decisions based on the abilities and well-being of the whole group.



② Personal & Social Hazards



Personal choices and group dynamics matter because unseen factors such as pride, fear, embarrassment, exhaustion, attitude, and substance use can quickly affect judgment, communication, and the overall safety of a paddling trip.

- **Fatigue and low energy** can reduce strength, coordination, focus, and reaction time, making it harder for a paddler to keep up with the group or respond to changing conditions.
- **Dehydration or lack of food** can lead to dizziness, weakness, poor judgment, and reduced endurance, especially during long trips, hot weather, or physically demanding conditions.
- **Overconfidence, pride, or embarrassment** can cause paddlers to hide concerns, ignore changing conditions, or continue beyond their ability instead of speaking up or asking for help.



② *Personal & Social Hazards*



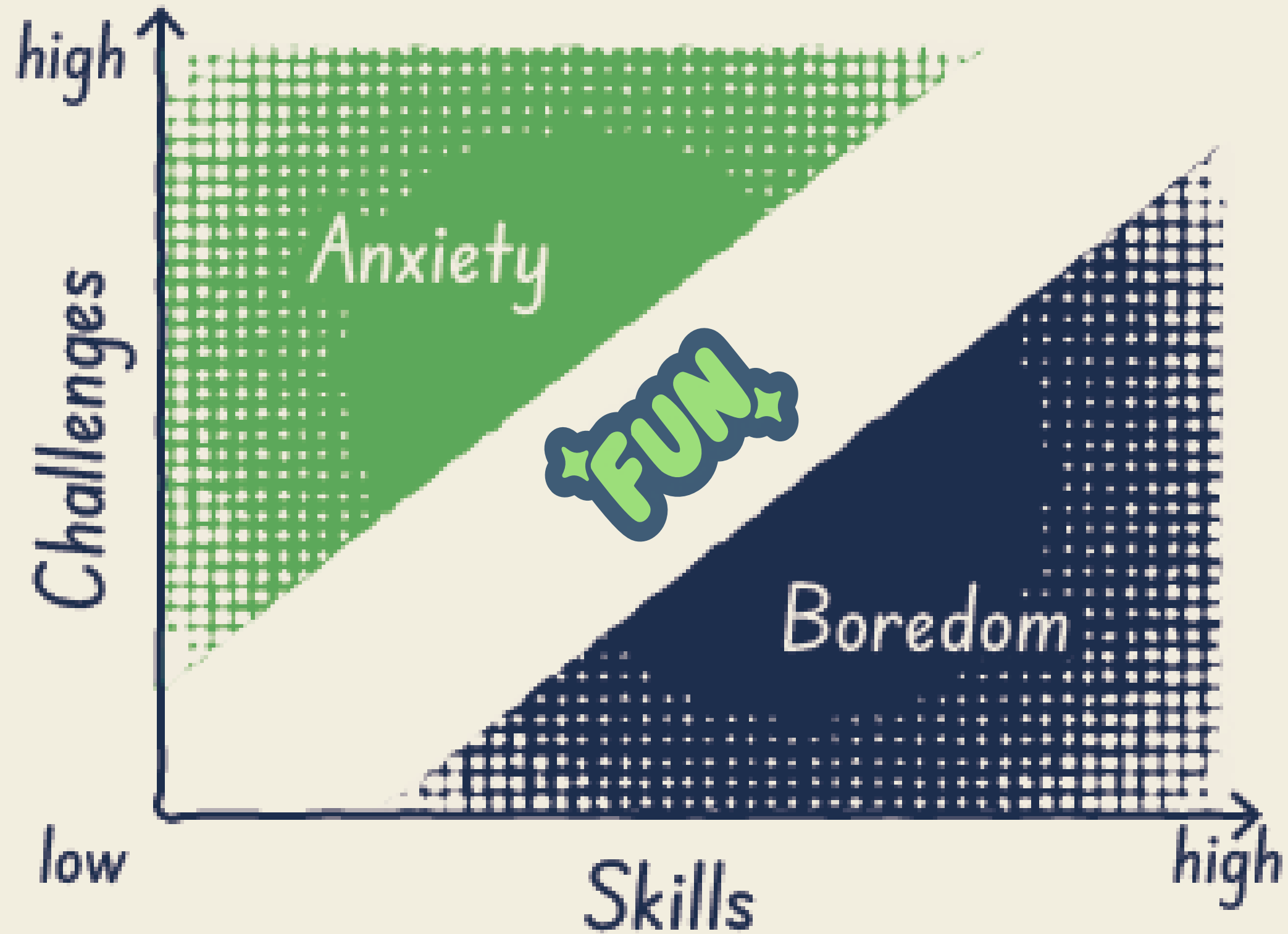
Personal choices and group dynamics matter because unseen factors such as pride, fear, embarrassment, exhaustion, attitude, and substance use can quickly affect judgment, communication, and the overall safety of a paddling trip.

- **Fear, frustration, or poor attitude** can affect communication and decision-making, creating tension within the group and making it harder to respond calmly to problems.
- **Mind-altering substances** can impair balance, judgment, coordination, reaction time, and awareness, increasing risk for both the individual paddler and the group.
- **Group separation or poor communication** can leave paddlers without help if someone capsizes, gets tired, or encounters a hazard, and can lead to confusion about the route, pace, rest stops, or when to turn back.



2

Personal & Social Hazards



Sixth Section:

Rescue Principles and Priorities

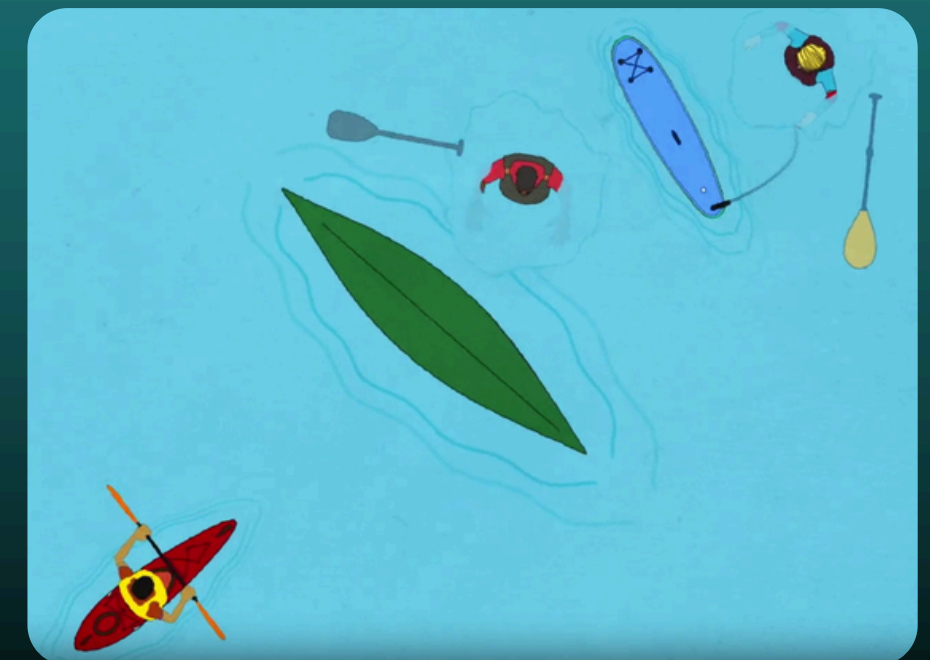
② *Rescue Principles and Priorities*



Paddling rescues are important because they can be life-saving when a kayak, canoe, SUP, or raft capsizes (flips). Capsizes can happen when paddlers are in conditions they can't normally handle, such as when trying something new or when wind and waves increase. Regularly practicing self-rescue techniques in protected waters and close to shore can help paddlers feel confident and be able to perform the skills under stress in an emergency.

Several contributing factors will impact your rescue options and your ultimate decision about what to do after a capsize:

1. Distance to shore
2. Weather and water conditions
3. Your ability to swim and/or perform a self-rescue
4. The ability of other paddlers in your group to assist in a rescue
5. The boat you are using and the rescue equipment available



2

Rescue Principles and Priorities



IF YOU FALL INTO THE WATER

1 - SELF RESCUE OR HAVE A BUDDY PERFORM AN ASSISTED RESCUE

2 - HAVE A BUDDY HELP GET YOU AND YOUR GEAR TO SHORE

3 - SWIM YOURSELF AND YOUR GEAR TO SHORE

4 - CALL FOR PROFESSIONAL EMERGENCY RESPONSE

② Rescue Principles and Priorities



Option 1: Stay in the water and have a buddy perform an assisted rescue. When performing a Boat-To-Boat Rescue, also known as a “T-Rescue,” the most common way to re-enter your boat while on the water is with the help of your paddling buddy, who is comfortable and stable in their craft.

- As the rescuer, align your boat with the flipped boat so that they form the letter “T.”
- Maneuver and twist the flipped boat to break any suction to empty water from the boat, which can then be flipped upright and slid back into the water.
- After the boat has been emptied and put back into the water, the rescuer should hold and stabilize the boat so the swimmer can safely re-enter their boat



② Rescue Principles and Priorities



Option 2: Have a buddy help get you and your gear to shore. If your paddling buddies aren't confident with an on-water rescue, getting your boat to shore, where you can empty it and get back in, might be easier.

- **Bumping:** this is when your buddy, the rescuer, pushes your boat to shore with their boat.
- **Towing a person and boat:** the swimmer in the water holds onto their boat with one hand and the rescuer's boat with the other hand as they are pulled to shore.
- **Towing a SUP and paddler with a leash:** If you're on a SUP, a rescuer can wrap their leash around your paddle and tow you to shore.

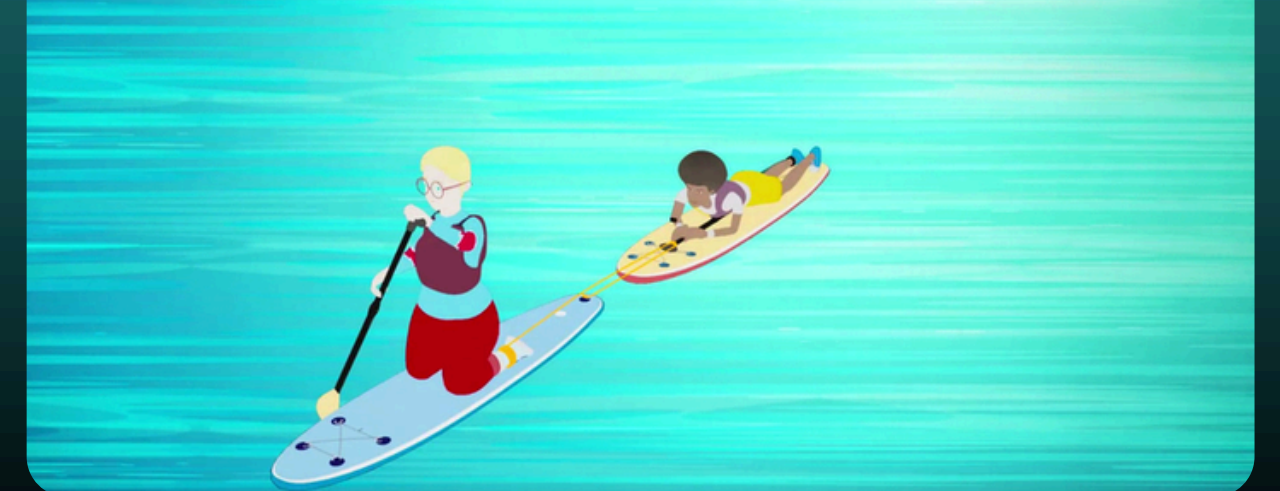
BUMPING



TOWING A PERSON AND BOAT



TOWING A SUP AND PADDLER WITH A LEASH

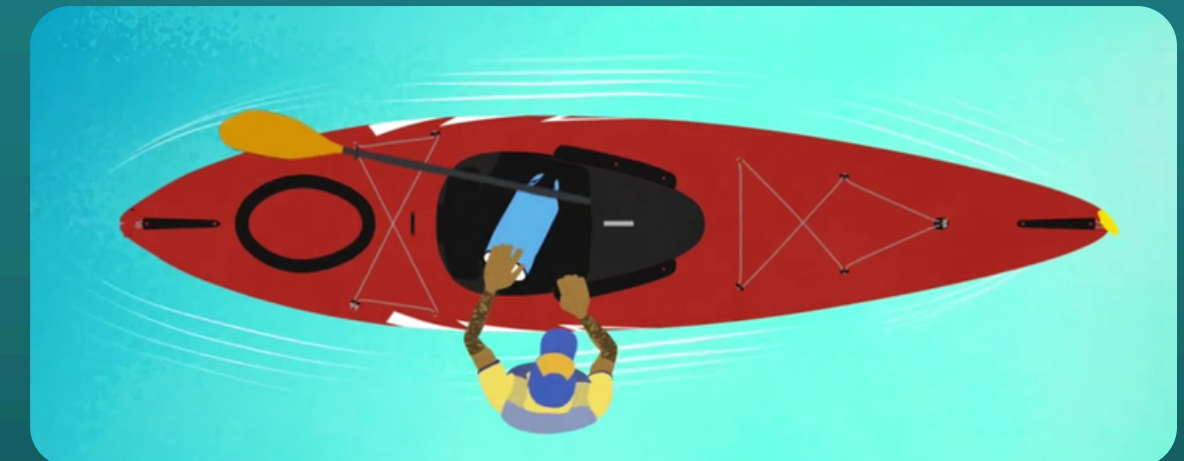


② Rescue Principles and Priorities



Option 3: Swim yourself and your gear to shore. You are your #1 priority! If you struggle to hold onto your gear while swimming to shore, let go of the gear and get yourself to safety first. Stay aware of your surroundings and swim away from hazards like rocks and strainers.

- If you can hold onto your gear, place your paddle and other gear in the boat or onto the board, hold the grab loop or painter line, and push or pull the boat as you swim to shore.
- If you are in moving water like a river, stay upstream of your boat or board. Keep your feet up at the surface of the water to reduce the risk of entrapment.
- If you are in surf waves like the ocean, don't get between your boat or board and the shore.



② Rescue Principles and Priorities



Option 4: Call for Emergency Response. Your pre-trip float plan should include the contact information for local first responders. If you cannot safely receive or perform a rescue, call for help.

Rescue Priorities

When paddling in a rescue situation, keep in mind these priorities as you assist the swimmer (victim) as efficiently and effectively as possible:

1. **Self-preservation:** your own safety should always be your first priority.
2. **Protect your group** so that no one else ends up in the water.
3. **Assess the situation** and identify any hazards that must be addressed while conducting a rescue.
4. **Develop a plan** to assist the person in distress.
5. **After taking care of the victim,** take care of their gear.
6. **After the rescue, take a moment to recover and debrief:** make sure everyone in your group is ready to go before getting back on the water.



Last Section:

Chapter Summary

② Chapter Summary

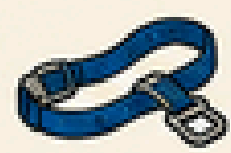


Chapter 2 introduced the core skills and decisions that helped paddlers prepare for a safer day on the water.

- How to load and secure boats safely.
- How to move people and gear with care.
- How to launch and land smoothly.
- Using strokes, boat control, rescue priorities, and basic rescue techniques effectively.
- Awareness of waterway hazards.
 - Environmental and human-made risks.
 - Personal and social hazards such as fatigue, poor communication, group separation, and impaired judgment.
- Rescue principles and priorities
- Self and assisted rescue options and techniques

Together, these topics showed that safety began before launch and continued through every stage of the paddling experience.

BEFORE THE WATER



Load and secure boats safely



Move people and gear with care



Plan transport and shuttle details



Check gear before launch

AT THE LAUNCH



Launch and land smoothly



Keep boats clear of traffic



Watch footing, ramps, and docks



Notice wind and current before launching

ON THE WATER



Use strokes and boat control effectively



Know rescue priorities and basic techniques



Watch for waterway hazards



Practice group care and communication



Manage personal and social hazards



Up Next: Chapter 3



This concludes the Smart Start for Safe Paddling Chapter 2: Smart Skills.

Be sure to check out Chapter 3: Smart Plan for even more great information!

1

2

3



4

Smart Gear

Smart Skills

Smart Plan

Smart Decisions



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The American Canoe Association's (ACA) vision is to engage millions of paddlers with safe and healthy opportunities for challenge, learning, service, and enjoyment. ACA's Smart Start for Safe Paddling is a holistic program which features comprehensive books, student activity workbooks, free online coursework, instructor's guide with presentation slides, and a wide collection of complementary resources.

Find all this and more:

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