

The Paddling Environment Matrix

Risk Factor	Class 1	Class 2	Class 3
Distance to Additional Resources	No more than 3 hr.	Multiple days, but no more than 5 hours.	Multiple days, but no more than 12 hours.
Access to Shore	Group can exit to shore easily within 15 minutes.	Group can exit to shore easily within 15 minutes.	Group can exit within 15 minutes. Landing may be difficult.
Ocean Current	Currents less than 2 knots or 4 km/hr.	Currents less than 3 knots or 6 km/hr.	>3 knots, can be complicated by tides
Lake/River Current	Flat water or IRCS class 1 rapids.	IRCS class 2 rapid	IRCS class 3 rapid
Wave Exposure	Waves are less than ½ a meter.	Waves are less than 1 meter.	Rough water: waves, choppy sea, surf.
Wind Exposure and Speed	Shoreline sheltered from wind. Winds less than 11 knots, 20 km/h (gentle breeze).	Shoreline exposed to wind with easy retreat to sheltered area. Winds less than 16 knots, 29 km hr (Moderate breeze)	Shoreline exposed to wind: very few places to find shelter. Winds less than 22 knots, 40 km/h (fresh breeze).
Navigation	Destination is visible and/or shore hand-line can be followed.	Map is required. Lack features along shore can make navigation difficult.	Compass is required or challenging with confusing shore.
Other Boat Traffic	No boats traveling faster than 5 knots or 10 km/hr in the area.	No boats traveling faster than 5 knots or 10 km/hr in the area.	Considerable presence of pleasure boats and/ or commercial vessels
Water Temperature	Above 18°C	Between 12°C and 18°C	Between 8°C and 12°C

The Hiking Terrain Matrix

Risk Factor	Class 1	Class 2	Class 3
Time to additional resources at road or lodge	No more than 3 hrs.	Multiple days, but no more than 8 hrs.	No Limit.
Fall Exposure	Easily managed or avoidable.	Fall hazard exists but manageable with moderate consequence.	Short sections with unavoidable & serious consequence, but can be managed without a rope.
Technical Difficulty	Smooth & Easy. Sections of unstable footing are short & isolated.	Talus and loose footing, some rough sections, trails may be poorly maintained.	Use of hands may be required. May be sustained sections of unstable footing.
Fresh Water	Mid-calf deep for slow moving and ankle deep for fast moving with no downstream hazards.	Hip deep for slow moving and knee for fast moving with no downstream hazards.	Waist deep for slow moving and crotch deep for fast moving.
Tidal Water	Gently sloping and non-slippery intertidal zone. No rogue waves.	Surge channels and tidal entrapment easily avoided. Moderate wave hazard may exist. Moderately sloping. Some slipping hazard.	Surge channels, tidal entrapment and wave hazards may be present. Steeply sloping, rocky, and slippery intertidal zone.
Weather Exposure	Generally sheltered, or easy retreat to sheltered area.	May be exposed but can retreat to sheltered area within 45 minutes.	Exposed areas with difficult or no retreat.
Navigation	On trails, or untracked with natural boundaries and/or handrails, may require simple map.	Simple route choices. May require a map, compass and/or GPS.	Complicated navigation, difficult route finding with minimal landmarks, requires map and compass and/or GPS.