B. WATER-BASED ACTIVITIES

Aquatics

Swimming Pool (Hotel, Backyard)	Grade 1+
Open Water (Lake, Ocean or River)	Grade 3+
Remote Context Open Water	Grade 7+

Many school groups find themselves with opportunities to take advantage of one or more aquatic environments that differ from traditional public swimming. Some examples may include:

- swimming in a member's backyard or apartment pool;
- swimming in a hotel pool while on a band trip, ski trip, sports team trip, etc.;
- swimming at an unguarded beach close to the municipality;
- swimming in the lake or river at the end of the day while on a canoe trip; or
- the above or any other aquatic context that relies upon lifesavers and other supervisory systems versus certified, qualified Lifeguards (NLS) to support the group.

While few would argue that it would be ideal, whenever children will be in the water without PFDs on, to have them supervised by a fully certified and qualified Lifeguard (National Lifeguard Service (NLS), age 16 or older, Standard First Aid or above, including CPR). However, it is simply not achievable or feasible to have Lifeguards present in all swimming contexts, particularly for incidental swimming activities. Recognizing the potential loss of some level of aquatic-specific supervision, incident prevention, and aquatic rescue and emergency response capacity whenever a qualified Lifeguard is not present at a swimming activity, the context here regards these activities as higher care. The following guidelines are provided to help structure any such off-site experience to promote informed consent and safe and successful outcomes.

An activity that involves swimming in a river, lake or ocean at a site that is not designated swimming area, must be treated as a higher care activity..

These guidelines apply to all aquatic contexts except those covered in Section 5 (i.e., swimming activities at designated public venues (e.g., municipal or 'Y' pools, waterparks) with certified Lifeguards supervising the activity). It builds on rather than repeating the content from Section 5.

General Considerations for all Higher Care Aquatics Activities

Prior to reviewing elements of this subsection for the purpose of planning an activity or outing, be able to confirm the following:

- ❑ *I have at least a basic familiarity with the content in Sections 1 (Introduction) and 2 (Risk Management Primer) of the Level 1 Manual.*
- ❑ *I have a solid understanding of all the material in Section 3 (General Considerations for Off-site Activities), and any subsections in Sections 4 (Special Considerations) and 5 (Local Outdoor Activities) pertinent to the activity I am planning (especially the section on Aquatics).*
- ❑ *I have a solid understanding of the relevant material in Section 6 (General Considerations for Higher Care Activities).*

With this grounding, now review the following additional guidelines:

Known Potential Risks

- Injuries related to stepping on sharp objects with bare feet;
- Injuries if swimming in moving water environments due to foot entrapment in bottom hazards such as rocks or submerged branches:
- Environmental hazards such as murky water, wind, waves, currents, etc. depending on the specific site used;
- Complications of injury or illness due to remoteness and time to emergency services; and
- Other risks normally associated with the activity and environment.

Note: Some of these risks will not or may not be present in indoor sites (e.g., hypothermia).

Teacher/Leader Readiness

- The teacher/leader must be competent to organize the swimming activity; to demonstrate, instruct and supervise it; and to effect rescue and emergency procedures as necessary, or to otherwise provide for any or all of these functions and capacities (e.g., using a service provider, Lifeguard or Lifesaver).
- A designated NLS Lifeguard or Lifesaver (e.g., Bronze Medallion, 16 years of age, and CPR A). CPR B or C is recommended if students are under age 8. The Lifesaver should be a minimum of 16 year of age and at least two years older than the students being supervised.
- Lifeguards or Lifesavers require significant knowledge specific to the activity and the aquatic context. At least one Lifeguard or Lifesaver must have an understanding of site assessment, supervision, safety and emergency procedure considerations relevant to the environment of choice (e.g., pool, water park, or waterfront) and should have a minimum of 10 hours experience supervising in that environment.
- The Lifeguard or Lifesaver must be knowledgeable and skilled in relevant incident prevention (e.g., site assessment, supervision, safety rules) and incident response (e.g., water rescue skills, emergency procedures).

- Any teacher/leader who may be required to enter deep water as part of the activity should be able to achieve the swim to survive standard (while wearing a PFD if necessary) (i.e., roll into deep water, tread water for one minute, and swim 50 m using any swimming method without wearing goggles);
- Parents/guardians must:
  - be notified of the supervisory arrangements (e.g., the number and level of certification of the Lifeguards or Lifesaver(s) present. Take care not to use the term 'Lifeguard' unless the individual(s) are currently NLS certified and qualified Lifeguards; specifically clarify when there is not a Lifeguard present so parents/guardians are aware;
  - identify their child/ward's aquatic skill level,
  - acknowledge awareness of the potential hazards associated with the swimming/wading activity, and
  - consent to their child/ward's participation.

Equipment/Location: *all of Section 5 plus:*

- Persons assuming Lifeguard or Lifesaver responsibilities should be clearly visible and identifiable.
- Students must not dive head first into the water, unless the water at that point has a minimum depth of at least 2.5 m (8'2"). If a pool, it is the venue manager's responsibility to ensure diving tank depth is in compliance with standards if divers are entering from an established diving board or platform. It is the Lifeguard or Lifesaver's responsibility to assess the safety of any other site to be used for jumping or diving into a natural body of water (e.g., off a dock, rock shelf or floating raft, off a riverbank).

Instruction: *all of Section 5 plus:*

- Where a particular off-site experience involves a water-based activity (e.g., swimming, canoeing), parents/guardians should be asked to verify the student's level of swimming training/skill.
- Before being permitted to swim in water above their chest height without a PFD the students must be given a **survival swim** (i.e., swim to survive) or **endurance test**. The selected test will generally be conducted by the Lifeguard or Lifesaver or may be conducted by another leader as long as it is undertaken in a safe location where rescue would be easy.
- All rules and regulations of the swimming area, diving area, swing ropes, pool slides, waterslides, hot tubs, change rooms and/or other related facilities in the aquatic must be presented to the students and followed. Most often this rule review will be provided by the Lifeguard or Lifesaver.
- No swimming after dark
- No distance swims in open water except where this is part of a specific planned swimming or triathlon program and informed parental/guardian consent has been secured. Appropriate rescue craft must be provided.

Supervision

- A certified Lifeguard or Lifesaver to supervise the aquatic environment and group. In determining the number of Lifeguards and/or Lifesavers needed, consider the size and configuration of the environment (e.g., number of pools, sight lines); group size, student grade/age, and swimming ability. Those serving as Lifeguards or Lifesavers must have:
  - CPR (any level, except if those to be supervised are under age 8, where Level B is recommended as a minimum). Standard level first aid training is also recommended;
  - Be trained in the facility operating and emergency procedures, or be able to develop appropriate safety and emergency plans for a site to be used for an incidental swimming activity.
- At least one teacher/leader must remain free to handle needs and discipline of individual students.
- The Lifeguard or Lifesaver(s) and supervisors should be free of all other duties when supervising the aquatic activity.
- Supervisors not trained in aquatic rescue should not personally enter deep water to render assistance to an age 8 or older student in difficulty. Their job in these cases, and which they need to be clear about through a briefing by the Lifeguard or Lifesaver and/or a teacher/leader, is to serve as extra sets of eyes and to summon the Lifeguard or Lifesaver to render assistance to a student in distress. In all cases, a reaching assist (e.g., hooked pole, flutter board, canoe paddle) should be extended to a swimmer in difficulty; body contact should be avoided except with very small children who may not respond to a reaching assist.
- Employ a buddy system.

Open Water Swimming

- Swimming, wading or other aquatic activities should not be allowed as an impromptu activity for which there is no safety or emergency plan and for which the parents/guardians and principal or designate have not approved. Plan ahead or don't do it!
- Avoid crowded beaches where it is more difficult to see students;
- Know the environment or seek competent local advice (e.g., drop-offs, currents, bottom surface, water clarity, effect of wind);
- Establish boundaries for the activity (demarcated with buoys, buoy lines or landmarks) and ensure students are aware of these;
- Ensure teacher/ leader competencies, Lifeguard or Lifesaver and supervisory ratios and considerations can be met based on the nature of the environment, as described above;
- Learning to swim in moving water while wearing a PFD is an important skill relevant to developing confidence and competence in river-based paddlesports. However, swimming in moving rivers or streams should only be undertaken if the lifesaver or lifeguard assesses the conditions and group and deems them sufficiently safe to proceed. Such assessment includes:
  - the teacher/leaders and students are all reasonably competent swimmers (i.e., based on swim level attained or successful survival swim or endurance test);

  - they are wearing PFDs;
  - there are no significant downstream hazards (e.g., rapids, sweepers, log jams) evident;
  - the students have been instructed re: appropriate swimming technique for the environment (e.g., if in moving water, keeping feet up near surface and downstream to avoid foot entrapment, swimming up onto strainers);
  - there is a slow section downstream where students can easily make their way to shore; and
  - water rescue back-ups are in place (e.g., throwbag, rescue boat).
- If the swimming activity is to occur in the ocean, be aware of slippery or sharp shoreline rocks, wave action, potential big waves (never turn back on the ocean), rip currents, sea life (e.g., corals, sea urchins, etc.). Stay close to shore. See Ocean Hazards in the Adventure Leadership resource.
- Where cool weather and/or water may contribute to hypothermia, establish a system for monitoring this (e.g., student awareness of potential, buddies watching each other for shivering, blue lips, loss of coordination).

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General Considerations for Paddlesports

BC offers some of the finest paddling opportunities in the world. Exploring the province, and/or other parts of Canada by small craft (canoe, voyageur canoe, kayak, raft, etc.) is a tremendous way to learn about and come to appreciate, understand and care about our natural and cultural heritage. While there are unique inherent risks associated with water travel, these risks are largely manageable by adhering to the general and specific guidelines shared herein.

Prior to reviewing elements of this subsection for the purpose of planning an activity or outing, be able to confirm the following:

- ❏ *I have at least a basic familiarity with the content in Sections 1 (Introduction) and 2 (Risk Management Primer) of the Level 1 Manual.*
- ❏ *I have a solid understanding of all the material in Section 3 (General Considerations for Off-site Activities), and any subsections in Sections 4 (Special Considerations) and 4 (Local Outdoor Activities) pertinent to the activity I am planning.*
- ❏ *I have a solid understanding of the relevant material in Section 6 (General Considerations for Higher Care Activities).*

With this grounding, now review the following:

Following are general considerations for all paddlesport related activities.

Known Potential Risks

- Injuries related to vehicle crashes en route to and from activity area;
- Becoming lost or separated from the group or the group becoming split up;
- Injuries related to slips, trips, and falls in the program area or en-route to/from it;
- Injuries related to collisions with movable (e.g., other boats or paddles) or immovable (e.g., rock, bridge abutment) objects;
- Injuries related to capsize of craft or falling out of craft (e.g., due to hazards such as high or low water levels, strong currents, cross currents, weirs, shoals, dead heads, rocky shorelines or other factors);
- Injuries related to the physical demands of the activity and/or lack of activity skill;
- Weather changes creating adverse conditions (e.g., cold, wind, precipitation);
- Hypothermia due to remaining in cool/cold water too long or due to insufficient clothing;
- Loss of manual dexterity in hands during cold and wet weather;
- Hyperthermia (e.g., overheating) due to insufficient hydration, overdressing and/or overexertion;
- Injuries related to equipment (poor fit, improper adjustment, malfunction, or becoming tangled in apparatus; e.g., foot snag in bailer cord);
- Injuries related to lifting, carrying, walking with, or putting down the craft and/or packs;
- Other injuries (e.g., blisters, sprains, strains; acute or overuse injuries/conditions);
- Motion sickness when on large wavy bodies of water (lakes, ocean);

- Drowning or near drowning;
- Illness related to poor personal hygiene, or failure to purify drinking water;
- Allergic reactions to natural substances in the outdoor environment (e.g., bee stings or jelly fish stings in ocean) or food items;
- Injuries related to encounters with animals and plants in the environment;
- Psychological injury due to anxiety or embarrassment (e.g., re: lack of skill, body image);
- Complications of an injury or illness related to remoteness and time to emergency services; and
- Other risks normally associated with participation in the activity and environment.

Teacher/Leader Readiness

- The teacher/leader must be competent to organize the boating activity; to demonstrate, instruct and supervise it; and to effect rescue and emergency procedures as necessary. The more remote and/or longer the boating activity is to be, the more knowledge, skill, fitness and experience the leader must have.
- If craft are to be transported by trailer to and from the water, the individual driving the tow vehicle must have sufficient experience and skill to manage these tasks safely.
- The teacher/leader and assistant leaders must be capable swimmers, able to manage themselves confidently in the water in the selected environment while wearing a PFD. At a minimum they should be able to successfully complete a survival swim test (roll into the water, tread 1 min., swim 50 m. any style while wearing a PFD and no goggles).
- Theteacher/ leader must be comfortable and capable on and near the type of water intended to paddle; whether pond, lake, river or ocean. Those competencies include but are not limited to: reading local winds and weather and making accurate short term forecasts; reading the water and navigating accurately in the area; executing rescues of self, and others; and using the communications system to engage in necessary communications.
- Those intending to teach/lead on the ocean must understand: waves, tides, river outflows, currents and sandbanks, beach hazards, and how these affect water travel; reading of tide/current tables and nautical charts; reading of warning signs and flags, and dealing with ships and wakes; relevant flora and fauna and how to minimize negative interactions with such.
- The teacher/leader or a designated other must be able to provide first aid and CPR.
- The leader should be familiar with Transport Canada regulations for the vessel(s) in use with regard to operator certification. Such certifications depend upon whether the craft in use is designated a commercial or pleasure craft. Refer to www.boatingsafety.gc.ca
- If the group is divided into two groups, then at least one supervisor in each group must have all of the above competencies, as relevant.
- All assistant leaders must be competent boaters, capable of supporting the group and effecting/helping effect appropriate rescues in the type of water anticipated.
- Water temperature is a critical factor in risk level calculation. It is important that all leaders and students are sufficiently prepared and skilled to get out of the water quickly (e.g. within 10 minutes). Cold water is debilitating. Most individuals have difficulty

rescuing themselves out of frigid waters, let alone another person(s), and children are incapacitated far more quickly. Lakes and rivers in BC can be very cold, even in summer.

Equipment/Location

The following equipment suggestions meet or exceed the Transport Canada, Office of Boating Safety minimum standards and recommendations. Standards and regulations change periodically and it is **the responsibility of vessel operators to comply with current standards**. It would be prudent to consult the office or website for current information before planning any boating activities. Go to www.boatingsafety.gc.ca

- Craft should be checked for leaks, broken seats, etc. and paddles/oars for cracks and splinters.
- If transporting boats to and from usage site, ensure that they are properly secured on a trailer (with safety chain in place and functioning lights) or well-lashed on a secure rooftop carrier.
- Do not exceed the weight load or capacity for the craft used.
- Correct fitting, Transport Canada/Canadian Coast Guard/Fisheries and Oceans Canada (or any combination of the above) approved PFDs/life jackets,must be worn properly and done up at all times by all group members while on/in the water. Select bright (orange, yellow or red) PFDs for visibility. Lifejackets have the added advantage of turning the wearer onto his or her back, even if unconscious, while PFDs will not do this.
- Students under 36.3 kg (80 lbs) should wear PFDs that include a large collar for head support, buckled waist belt or elastic gathering, a buckled crotch strap that prevents the PFD from slipping over the student's head, and reflective tape.
- PFDs should be pre-use checked to ensure they are in appropriate condition (e.g., buoyant, straps/buckles/zippers work, straps well-attached). Clean dirty PFDs with mild soap and water (do not dry clean), dry in open air vs. with a direct heat source, and use appropriately (e.g., not to kneel on or as a boat fender).
- Be aware that inflatable PFDs are not approved for anyone under 16 years of age or under 36.3 kg (80 lbs.), on a personal watercraft or for whitewater paddling activities.
- A sound-signaling device is required equipment onboard each craft. Attaching a pea-less whistle to each participant's PFD is an ideal way to achieve this requirement. Alternatively, each craft would need to be outfitted with a compressed gas horn or electric horn.
- Teachers/leaders should each have a knife attached to their PFD in the event someone gets tangled in ropes or cords, sweepers, etc.
- There must be a bailing device in each craft (e.g., bailer in canoe, mulitple paddler craft, sponge in kayak, bilge pump in sea kayak or any of the above craft). Bailers must hold at least 750 ml (0.2 gallon) and be made of plastic or metal. A 4-litre jug, well washed out and with lid on with the bottom cut off works well. Cut at an angle up toward the handle so it works as a scoop.
- There must be a 15 m (minimum) length of buoyant rope (single piece vs. several shorter pieces tied together) in good condition attached to and accessible in the craft or (preferably bagged, but at least coiled and held together with an elastic/bungee, so it doesn't pose a foot entrapment hazard).

- If on the ocean and/or if paddling anywhere at dawn or dusk, a watertight flashlight or navigation lights are strongly recommended and required in a craft over 6 m long.

- An extra paddle per three tandem canoes or six solo kayaks, one spare per multiple paddler craft or raft.
- Ensure the first aid kit is waterproofed.
- Open crossings of large bodies of water are discouraged; groups should generally be kept within 80 meters of a shoreline.
- If in a boat over 6 metersor any craft that has potential to be more than one nautical mile from shore, carry a watertight flashlight/headlamp and Transport Canada approved flares (Type A (parachute), B (red star shells) or C (hand flares).
- Small craft used for racing and training for racing do not need to have all of the safety equipment listed above if they have a fully equipped safety boat. Consult Transport Canada guidelines.
- A wetsuit, drysuit or appropriate clothing layers, including a dry change(s) (packed in waterproof bag/container) and good rain gear (tops and bottoms) should be worn or carried by all leaders and students traveling in small craft. Wetsuits or drysuits should be considered when the combined air and water temperatures are less than 15^{o} Celsius, if on a river rated at Grade 2 or above or on extended open water trips. Children have a larger surface area/volume ratio and smaller overall mass than adults and, therefore, are more susceptible to hypothermia.
- Appropriate lightweight and securely fastened footwear (e.g., runners, neoprene booties) should be worn to protect the feet from rocky river bottoms or on ocean trips where there are barnacles. Rubber boots are fine for flatwater paddling in all but kayaks.
- Glasses should be strapped/tied on.
- All teachers/leaders should have rescue throwbags or coiled ropes, fastened to the boat and be well versed in their use.
- Have adequate floatation or watertight bulkheads to prevent craft from filling and sinking.
- When selecting an appropriate teaching site/route for a boating activity, consider:
  - the temperature of air (including wind chills) and water,
  - length of time a participant(s) may spend in the water if a boat is upset,
  - rate at which the water is moving (if a river, stream, or ocean current),
  - ease of access to/egress from site or watercourse,
  - the time of flood/slack/and ebb tides and their level of change (if on the ocean) by consulting tide and current tables, and
  - the skill/experience level of the students.
- Non-established waterfronts should be well-researched before swimming or practicing boat rescues. Look for submerged branches, large rocks or other objects, swiftly moving water on bends in rivers, shallow water, etc.
- When selecting a river travel route, consider gradient and grade of the water (consult maps, guidebooks, local area officials, paddling associations and clubs, etc.).
- When selecting a river travel route subject to change in classification based on flow rate, consult the Environment Canada Water Office. See www.wateroffice.ec.gc.ca

- Consider potential implications if a watercourse is subject to sudden and/or significant fluctuations in volume (e.g., impact of dams, storms, diurnal, seasonal or tidal variations).
- On multi-day trips, consider impact of loaded boats (e.g., slower, less maneuverable) when selecting paddling routes.
- If overnighting, gear carried should be secured in the craft, with weight low and distributed side to side and bow to stern (as appropriate – e.g., generally leaving bow slightly higher for better tracking).
- Consider the frequency/length and terrain (e.g., steep, potentially muddy) of any portages expected (impacting packing methods for hauling gear and timelines).
- Postpone paddling if there are indications of dangerous weather (e.g., lightning, storm activity, high wave conditions, or a strong off-shore or very gusty wind - particularly on shallow lakes, wide rivers or the sea).
- A rescue craft should be on shore or in the water at a waterfront site while students are out on the water, or there must be sufficient craft and leaders on the water to provide rescue.
- All paddling in diminished conditions should be done near shore unless doing so would increase risk (e.g., strong on-shore winds with a rocky shoreline).
- At the end of each trip, and upon changing watercourses, wash any mud, algae or plant fragments from boats, paddles and feet to avoid transmitting any plant or animal pest species to previously uninfected places.

Instruction

- Students should be comfortable in the water. Because they are wearing PFDs/life jackets, it is not essential that they can all swim, but it may be physically and/or psychologically beneficial (e.g., reducing fear of falling in) to introduce them to/review survival swimming as relevant to their anticipated paddling situation (e.g., reorienting themselves after rolling in, treading 1 min. and swimming 50 meters, all while wearing a PFD and no goggles).
- Non or weak swimmers should be buddied with competent swimmers;
- Students should be taught the boating 'rules of the road', especially if boating near powerboats;
- Students must be taught general procedures if their craft upsets. For example,
  - call for help,
  - attempt to hang onto paddle and craft (unless doing so places them in danger; e.g., being blown away from shore by off-shore wind, dangerous rapids downstream),

  and if in a current:
  - stay upstream of boat,
  - keep feet up at the surface (to avoid entrapment) and downstream of body (to fend off rocks or other obstructions),
  - watch for a rescue craft or throw rope coming or an eddy or slack water that they can use to work their way to shore, and
  - know to swim at and climb up on a strainer (log jam) that cannot be avoided.

- If lake, ocean or flatwater river paddling, students may be taught skills such as re-entries in deep water, kayak rolls, changing places, etc. as appropriate.
- Students must be taught general procedures if another craft upsets (e.g., signaling rest of group, rescuing people first, then craft and/or other gear).
- Tandem paddling students should be taught to communicate with each other.
- Students should be taught universal whistle signals and paddle signals (i.e., directional, emergency and group up), and the importance of passing back paddle signals.
- Warn students not to drink untreated water from any lakes, rivers or streams.
- If in tandem or solo craft, groups should consist of a minimum of three craft and students should be instructed regarding safe group size.
- If tripping, group gear should be distributed among the boats so the loss of one boat does not seriously compromise the ability of the group to continue (e.g., it's really hard to cook for the group without a pot).
- School groups should not boat after dark and students should understand why this is generally an unsafe practice.
- To the extent that it affects the ability of the students to safely negotiate the waters they are boating, they should be taught how to read the water and how to identify hazards they are likely to encounter.
- If in doubt, get out and scout! While stopping a group and going to shore takes time, modeling of conservative travel is more important.
- Students should be instructed as to how to behave while near marine or terrestrial animals (e.g., look from a non-threatening distance; do not touch or feed).

Supervision

- On-site supervision of teaching area and in-the-area supervision on trips.
- Ratio as per calculation, with consideration of exposure to the inherent risks water presents. Consider the number and size of boats, potential to get spread out and hazards anticipated. Generally, for inland and/or protected waters, a ratio of one capable adult boater to 8 - 10 students is considered minimum; one to 6 - 8 if students are in solo canoes or kayaks. One or more additional leaders will be needed if the group is paddling on a large body of open water or on a river. See Sea Kayaking section for ratios related to this activity and/or other similar open water travel.
- The responsibilities paddlers in the group (or each group if breaking up into smaller flotillas) have for one another must be outlined as well as the proximity that should generally be maintained between craft (e.g., all boats stay between their group's lead and sweep boats and check on the boat behind them frequently so they don't get too far ahead).
- Consider group management in this context; create appropriately spaced regroupings/raft-ups/eddy-outs if the group is prone to getting too spread out (e.g., due to widely varying fitness levels, paddling skills and/or objectives) and/or to provide time for clothing adjustments, and water/snack intakes.

Review Camping if the boating activity is to involve overnighting.

On-site Instruction	Grade 1+
Day Tripping (< 3 hours)	Grade 3+
Day Tripping (> 3 hours)	Grade 4+
Overnight	Grade 5+
Extended Tripping	Grade 7+

Note: The above minimum age recommendations assume the student is actively paddling with another similarly aged student (e.g., required to manage his or her end of the canoe). If there are one or more older, stronger paddlers in each craft to support and cover for them if they cease paddling, then students younger than those noted can be taken safely on most types of outings (e.g., a float down a mellow Grade 1 river in a canoe can be enjoyed by students of all ages with adult support in the boat).

Prior to reviewing elements of this subsection for the purpose of planning an activity or outing, be able to confirm the following:

- ❏ *I have at least a basic familiarity with the content in Sections 1 (Introduction) and 2 (Risk Management Primer) of the Level 1 Manual.*
- ❏ *I have a solid understanding of all the material in Section 3 (General Considerations for Off-site Activities), and any subsections in Sections 4 (Special Considerations) and 5 (Local Outdoor Activities) pertinent to the activity I am planning.*
- ❏ *I have a solid understanding of the relevant material in Section 6 (General Considerations for Higher Care Activities).*
- ❏ *I have a solid understanding of all the material in the subsection General Considerations for Paddlesports in Section 7 (Adventure Pursuit Activities).*

With this grounding, now review the following:

Known Potential Risks (refer to General Considerations for Paddlesports)

Canoeing On-site Instruction

Teacher/Leader Readiness

- The teacher/leader must be competent to organize the canoeing activity; to demonstrate, instruct and supervise it; and to effect rescue and emergency procedures as necessary.
- Training may be secured through Recreational Canoeing Association of BC, Paddle Canada, Canoe/Kayak BC or other appropriate sources.

Equipment/Location

- A pool or waterfront environment may be used (e.g., pond, lake, river).
- Up to three students can be assigned to each canoe.
- Appropriate, properly sized and fitted helmets should be used when paddling on rocky streams or rivers of Grade 2 or above.

Instruction

Water Safety and Rescue Skills

- Self-rescues into dry and/or swamped canoes should be discussed and, weather and water conditions permitting, actually practiced.
- T-rescue and/or towing rescue procedures may be taught and practiced as appropriate (weather and water conditions permitting).
- If river paddling, students must be taught emergency procedures relevant to a tip (their own or another boat).
- When paddling rivers with rocky bottoms, students should be taught how to avoid foot entrapments (i.e., float with feet up off the bottom until it's shallow enough to stand safely).
- If river paddling, students should be told how to catch and hold onto a throwbag or throw rope when being rescued.

Canoeing Skills

- Students should be instructed and secure fundamental mastery in basic canoeing skills where such instruction will support safe participation in the canoeing activity and environment selected. Relevant skills taught may include:
  - lifts and carries,
  - launching from dock or beach as appropriate,
  - entry/exit from canoe,
  - body position and balance,
  - basic strokes and recovery braces,
  - basic maneuvers,
  - paddling on either side and at either end of the canoe,
  - switching paddling sides and synchronizing strokes, and communications in the boat.
- If it can be done safely, an "exploratory paddle" at the waterfront site is allowable before formal stroke and maneuver instruction.
- If canoeing on a river/stream of Grade 2 or above, students should first learn relevant basic river maneuvers (e.g., ferries, eddy turns, sideslips).
- The stern paddler should have a good grasp of basic steering, including use of the 'j' and stern sweep strokes. Students should be taught how to handle anticipatable wind and wave conditions, and currents and obstructions if on a river.
- The bow paddler should be taught how to scan the path ahead for obstacles, to communicate the presence of such to his or her partner, and how to initiate evasive action.

Canoe Tripping (Daytrip/Overnight/Extended)

All of Canoeing On-site Instruction Considerations, plus the following:

Equipment/Location

- Use appropriate waterproof canoe tripping bags/packs/jugs for clothing, sleeping gear, or double-wrap in plastic bags and then place in abrasion-resistant backpacks or duffels.
- If canoeing on Grade 2 or above rivers or streams, the canoes should be equipped with appropriate floatation (e.g., waterproof gear bags, air bag, foam, inner tube) installed to displace water and facilitate rescues.
- Ensure that the reach to be paddled is free of major hazards such as dams or weirs or that the students are aware of these hazards, understand which side to get out at and have the skills to do so reliably with a good margin of safety.
- Teachers/leaders should generally not plan a school trip on a river above Grade 2 and only well-trained and prepared groups should be taken in rivers above Grade 1 (i.e., moving flatwater with no rapids). Consult the International River Classification System for more information on the interpretation of information related to the Grade of river reaches (sections or runs) and Class of specific rapids. Secure district approval and informed parental/guardian consent for any trips exceeding these river grade guidelines.

Instruction

- Ensure students have sufficient river reading and boat negotiation skills to avoid anticipatable hazards (e.g., rocks, holes, sweepers, logjams).
- Generally avoid open water crossings (lake or ocean), particularly if wind, surface chop, deadheads, and/or currents are unfavorable. Skirting the shore is usually preferable (within 80 meters). Tell students what they are to do if their or another canoe(s) gets blown off-course and have a plan for retrieving them.
- Students should learn how to pack their canoe for appropriate weight distribution (e.g., keeping weight low, maintaining at least 15 cm of freeboard, and bow slightly higher than stern). All gear should be tied/clipped in.
- Conduct a lengthy portage much like a day hike, with a lead and sweep, buddy system, and drop points or regroupings at trail intersections if people may get lost. Use existing trails as much as possible.

Supervision

- In-the-area supervision.
- Ratio as per calculation, with additional competent leaders needed for larger groups negotiating more hazardous water (e.g., large open body of water; moving water).
- Where the physical fitness and/or technical canoeing skills of students vary, each boat should be heterogeneous (i.e., less capable paddlers partnered with more capable).
- In situations where rescuers will need to be highly effective and efficient, the teachers/leaders should avoid paddling with particularly weak paddlers in the group.

See Base/Remote Camping, and Hiking and Backpacking for other considerations.

Multiple Paddler Craft

Grade 3+

There are a number of craft that are used in BC that require a number of paddlers. As these craft are often tied to cultural traditions in Canada, they offer wonderful education as well as recreation opportunities. The craft that will be considered in this section include voyageur/Montreal and all varieties of big canoes (canoes that are paddled by more than four paddlers). This includes traditional and modern re-creations of First Nations craft.. On-site instruction or daytrips are assumed.

Rafting is covered in a separate section.

Prior to reviewing elements of this subsection for the purpose of planning an activity or outing, be able to confirm the following:

- ❑ *I have at least a basic familiarity with the content in Sections 1 (Introduction) and 2 (Risk Management Primer) of the Level 1 Manual.*
- ❑ *I have a solid understanding of all the material in Section 3 (General Considerations for Off-site Activities), and any subsections in Sections 4 (Special Considerations) and 5 (Local Outdoor Activities) pertinent to the activity I am planning.*
- ❑ *I have a solid understanding of the relevant material in Section 6 (General Considerations for Higher Care Activities).*
- ❑ *I have a solid understanding of all the material in the subsection General Considerations for Paddlesports in Section 7 (Adventure Pursuits Activities).*

With this grounding, now review the following:

Known Potential Risks

Refer to General Considerations for Paddlesports.

Teacher/Leader Readiness

- There are few specific training and/or certification courses in BC for multiple paddler craft, but the competent small craft instructor can adjust to these craft with some practice and thought re: the differences of manouevering larger, less-responsive craft.
- Experience handling the craft is needed. The craft are often heavy and difficult to turn, so the bows-person must have good water reading and anticipation skills, and both bows-person and sterns-person must be capable paddlers.
- Moving water and canoe tripping experience are needed if tripping, in waters comparable to those to be paddled with the group.
- Assistant leaders steering or bowing in other boats should be capable paddlers with competence in relevant rescue skills.

Equipment/Location

- The craft are often very heavy (often 120 kilos or more) and they should not be moved without sufficient numbers of people. If a boat must be carried, one person needs to lead

the process and to clearly communicate what the group is to do, how and when. For groups of young students, sufficient numbers of adults should be recruited to assist with these tasks.

- Access and egress sites should be selected which minimize the amount that the craft(s) need to be carried. It is ideal if the trailer carrying the boat can be backed directly into the water or at least up to the water's edge.
- There should be a minimum of two craft on a trip, unless a single craft is equipped with a self-inflating rescue raft or other rescue craft accompany the craft.
- A pond, lake, slow moving river or inlet may be used for this activity.

Instruction

- Students should be taught how to work together to lift, carry, launch, enter/exit safely and balance the group's weight in the boat.
- Basic strokes and maneuvers relevant to powering and steering the craft should be taught.
- Students must know what to do in the event of the upset of a craft; their own or someone else's.
- A teacher/leader or strong paddler with good sense of the water being paddled should be in the stern to steer and direct students.
- A mature paddler who has the skills to scan the water in front for adequate depth and absence of obstruction, and the ability to communicate direction changes needed and to initiate these, should be in the bow.

Supervision

- On-site supervision.
- One leader per craft; additional leaders as per calculation; more if students are young.
- If a craft tips, do a head count as soon as practical to ensure all group members are accounted for.

On-site Instruction	Grade 3+
Day Tripping (< 3 hours)	Grade 5+
Day Tripping (> 3 hours)	Grade 6+
Overnight Tripping	Grade 7+
Extended Tripping	Grade 9+

Prior to reviewing elements of this subsection for the purpose of planning an activity or outing, be able to confirm the following:

- ❑ *I have at least a basic familiarity with the content in Sections 1 (Introduction) and 2 (Risk Management Primer) of the Level 1 Manual.*
- ❑ *I have a solid understanding of all the material in Section 3 (General Considerations for Off-site Activities), and any subsections in Sections 4 (Special Considerations) and 5 (Local Outdoor Activities) pertinent to the activity I am planning.*
- ❑ *I have a solid understanding of the relevant material in Section 6 (General Considerations for Higher Care Activities).*
- ❑ *I have a solid understanding of all the material in the subsection General Considerations for Paddlesports in Section 7 (Adventure Pursuits Activities).*

With this grounding, now review the following:

Known Potential Risks

Refer to General Considerations for Paddlesports.

Kayaking On-site Instruction

Teacher/Leader Readiness

- The teacher/leader must be competent to organize the kayaking activity; to demonstrate, instruct and supervise it; and to effect rescues and emergency procedures as necessary.
- Teachers/leaders may secure training and/or certification from Paddle Canada, Canoe/Kayak Canada, BC Recreational Canoeing Association or another appropriate source(s).
- All assistant leaders must have adequate competency to support the students and to execute rescue in the anticipated water.

Equipment/Location

- Slalom or river kayaks are assumed for this activity. If touring (sea) kayaks are to be used for a tripping activity, please refer to the Sea Kayaking section.
- Participants should wear wetsuits or clothing appropriate for open water kayaking, expecting to tip at some point in the session.
- Hard-shell helmets (properly sized and fitted) should be used when paddling on rocky streams or rivers at or above Grade 2.

- Footwear must be light-weight and securely fastened to protect feet from rocky bottom. Running shoes or water shoes with strong soles are good. Rubber boots or other bulky footwear should be avoided in closed boats.
- Water conditions should be appropriate for the type of kayak being used and the skill level of the students.
- Kayaking should be introduced in a pool or on calm, still water before progressing to moving water applications.
- If paddling at a waterfront for instructional purposes, kayakers should be given boundaries (e.g., a buoyed-off area) in which to stay.
- A good river teaching site should have adequately sized eddies on each side to accommodate all of the paddlers at once and a safe area below for conducting rescues.

Instruction

Water Safety and Rescue Skills

- Students must be comfortable and confident in the water; a survival swimming practice and/or assessment is recommended as per the General Considerations for Paddlesports.
- If students will be using sprayskirts, instruct them first in wet exits without their skirts, and then with them. Ensure that when putting the skirt on the boat, they keep the pull toggle accessible.
- Students should be taught appropriate self-rescue (e.g., kayak roll) and assisted rescue skills (e.g., pulling up off another boat's bow) for the type of craft and water to be paddled. Novices shouldn't be expected to master these techniques and be able to apply them in tripping situations; secondary back-up rescue systems must be in place.
- Where paddlers are in tandem kayaks, they should learn and practise wet escapes as a pair to avoid collisions with each other.

Kayaking Skills

- Beyond the above, students should be taught and demonstrate basic skills that are appropriate to safe participation in the activity and environment. These skills may include:
  - proper adjustment of foot braces for good fit in boat,
  - lifting, carrying and launching kayak,
  - emptying the kayak (beach or dock as relevant),
  - getting in and out,
  - body position and balance,
  - T-Rescue and/or towing rescue (if paddling slalom kayaks),
  - basic strokes and braces, and
  - basic maneuvers.
- If river kayaking, students should be taught basic river maneuvers that are appropriate to safe participation in the kayaking activity and environment (e.g., ferries, eddy turns, sideslips).
- Students should be instructed on how to handle anticipatable wind and wave conditions if preparing to take a trip on a lake, the ocean, or on a large river.

Supervision

- On-site supervision.
- Ratio as per calculation and also recognizing the risk of novice kayakers panicking when they tip over and fail to properly extricate themselves from their boat. The leaders must know they (or paddler's partners or assistants) can assist every student quickly in the event several have this problem at once.

River Kayaking Day Tripping: *all of On-site Instruction, plus:*

Equipment/Location

- Introductory kayaking generally involves flatwater kayaking; paddling on a lake or a stream or river where no significant rapids exist and eddies are very slight (i.e., not above a Grade 1 river). Only well-trained and supported groups should venture on Grade 2 water or above. Grade 3 water is the maximum grade for school groups and that should only be undertaken with district approval and informed parental/guardian consent.. See guidebooks or paddling route maps for ratings or discuss with area officials, paddling associations or clubs familiar with the route. Consult the International River Classification System for more information on the interpretation of information related to the Grade of river reaches (sections or runs) and Class of specific rapids.
- Appropriate waterproof drybags/packs/jugs used or all spare clothing, or double-wrapped in separately tied plastic bags and then placed in abrasion-resistant duffel bags or backpacks.
- If paddling a narrow river where good boat negotiation skills are needed, ensure that the reach to be paddled is not running unusually high and that it is free of major hazards that cannot be readily seen and avoided (e.g., weirs, windy with extensive sweepers or logjams).

Instruction

- Participants are aware of potential hazards on the run and how to avoid these.
- All students must know and have practiced emergency procedures for one or more overturned boats, their own and/or others, preferably practiced in moving water if that is what they will be paddling.

Supervision

- In-the-area supervision in general.
- Constant-visual at the site of significant hazards. For example, have a rescue boat waiting in an eddy and perhaps one or two people on shore with throwbags at rapids likely to produce swims.
- Have a lead and sweep consisting of competent paddlers capable of carrying out a rescue if needed.
- Ratio as per calculation, with additional trained leaders needed for larger groups and/or those negotiating more challenging water (e.g., large open body of water; Grade 2 or above river or Class 2 or above rapids).

On-site Instruction/Day Tripping Grade 7+
Overnight/Extended Tripping Grade 9+

Prior to reviewing elements of this subsection for the purpose of planning an activity or outing, be able to confirm the following:

- ❑ *I have at least a basic familiarity with the content in Sections 1 (Introduction) and 2 (Risk Management Primer) of the Level 1 Manual.*
- ❑ *I have a solid understanding of all the material in Section 3 (General Considerations for Off-site Activities), and any subsections in Sections 4 (Special Considerations) and 5 (Local Outdoor Activities) pertinent to the activity I am planning.*
- ❑ *I have a solid understanding of the relevant material in Section 6 (General Considerations for Higher Care Activities).*
- ❑ *I have a solid understanding of all the material in the subsection General Considerations for Paddlesports in Section 7 (Adventure Pursuits Activities).*

With this grounding, now review the following:

Known Potential Risks (refer to General Considerations for Paddlesports)

Sea Kayaking On-site Instruction/Day Tripping

Teacher/Leader Readiness

- The teacher/leader must be competent to organize the sea kayaking activity; to demonstrate, instruct and supervise it; and to effect rescue and emergency procedures as necessary.
- The teacher/leader must be comfortable and capable on and near the sea, including, but not limited to competence in:
  - understanding waves, tides, river outflows, rip currents and sandbanks, beach hazards, and how these affect ocean travel,
  - sea traffic hazards (e.g., shipping lanes, ferries, float planes),
  - reading tide/current tables and nautical charts,
  - reading local winds, coastal weather and making accurate short term forecasts,
  - navigating on and along coastal areas, including points, reefs (dealing with reduced visibility), etc.,
  - taking off and landing in manageable surf,
  - reading warning signs and flags, and dealing with ships and wakes,
  - understanding relevant ocean flora and fauna and how to minimize negative interactions with such,
  - executing rescues of self (e.g., kayak roll, paddle float rescue) and others (e.g., towing rescue, T-rescue, stirrup re-entry), and
  - using the external communications system to secure weather information, make distress calls and/or engage in other important communications

- Teachers/leaders should secure training and/or certification from the Sea Kayak Guides Alliance of BC, Association of Canadian Sea Kayaking Guides, Paddle Canada and/or other appropriate sources.
- All assistant leaders must have adequate competence to support the students on the trip and to execute rescue in the anticipated water.

Equipment/Location

- Sea (touring) kayaks are assumed for this activity. If river (slalom) kayaks are to be used, please refer to the River Kayaking section.
- Sea kayaks come in singles (one seat) and doubles (two seats). A school group may be best operated with everyone in doubles boats. A mixed fleet, with some in each craft, is challenging because doubles boats can go faster (two paddlers vs. one), so can get more space opening up between the boats. That said, if there is an odd number, someone will end up in a single.
- Each craft should be outfitted with a sprayskirt, spare paddle, a paddle float, a buoyant heaving line of 15 meters, bailer or water pump, and a PFD and whistle (per paddler).
- Wetsuits/drysuits should be considered except on very short trips in very sheltered areas.
- Sea kayaking can be introduced in a pool, lake or ocean environment, but not in fast moving water. If on the ocean, a protected bay, inlet or other safe area (Class 1) should be used. Be particularly cautious in open areas with off-shore winds and/or subject to the effects of incoming or outgoing tides. Secure district approval and informed parental/guardian consent for all paddling in Class 2 ocean environments. In all cases, high energy coastline/minimal refuge travel (Class 3) should be avoided with school groups.
- If paddling at a waterfront, kayakers should be given boundaries (e.g., a buoyed-off area) in which to stay.
- Retreat to the first safe site along the shore if a major storm blows in, particularly if it is accompanied by lightning.

Instruction

Water Safety and Rescue Skills

- Practise rescue of self and others in a safe environment (e.g., pool, pond, calm waterfront) prior to an outing.
- Students should be instructed in wet exits from a kayak.
- If students will be using sprayskirts, instruct them first in wet exists without their skirts, and then with. Ensure that when putting the skirt on the boat, they keep the pull toggle accessible.
- Students must be informed about the potential hazards likely to be encountered on the route and safety procedures to minimize the risks.
- Students should be taught appropriate self-rescue (e.g., kayak roll, paddle float use) and assisted rescue skills (e.g., towing rescue, T-rescue, stirrup re-entry) for the type of craft and water to be paddled. However, novices shouldn't be expected to master these

techniques and be able to apply them in tripping situations; secondary rescue systems must be in place.

- Where paddlers are in tandem kayaks, they should learn and practise wet exits as a pair to avoid collisions with each other.

Sea Kayaking Skills

- As a pre-requisite for open water kayaking, students should be taught and demonstrate basic skills that are appropriate to safe participation in the sea kayaking activity. These skills may include:
  - proper adjustment of foot braces for good fit in boat,
  - lifting, carrying and launching kayak,
  - emptying the kayak (beach and dock),
  - getting in and out,
  - body position and balance,
  - basic braces, strokes, steering, maneuvers, and
  - taking off and landing in waves or surf.
- Students should be taught about hazards associated with ocean flora and fauna and how to minimize the impact of these.
- Students should be instructed on how to handle anticipatable wind, wave and current conditions if paddling anything not completely protected.

Supervision

- On-site supervision.
- Recognize risk of novice kayakers panicking when they tip over and failing to properly extricate themselves from their boat. The instructors must know they can assist every student very quickly in the event several have this problem at once.
- Generally, consider a ratio of one capable adult paddler to 4–5 students if in solo boats,1: 6–8 if in double kayaks, except in the most protected of bays.
- Have a plan and practice strategies for keeping the group together in deteriorating conditions (e.g., buddy system, counting off).

Sea Kayaking Overnight/Extended Tripping
All of On-site Instruction/Day Tripping plus:

Equipment/Location

- A protected bay, inlet or other safe area (Class 1) should be used. Be particularly cautious in open areas with off-shore winds and/or subject to the effects of incoming or outgoing tides. Secure district approval and informed parental/guardian consent for all paddling in Class 2 ocean environments. In all cases, high energy coastline/minimal refuge travel (Class 3) should be avoided with school groups.
- Avoid routes that place the group on open, exposed areas of the sea for extended periods of time where rising winds can increase wave action substantially in a short period of

time. Group management and support becomes very difficult in large waves, especially with loaded boats. Keep crossings manageable (i.e., well within the capacity of the weakest paddler in the group in the worst conditions anticipatable).

- Where an open water crossing is unavoidable, consider providing or securing an escort support boat (e.g., powerboat, zodiac).
- Avoid surf landings whenever possible with groups of novice students, especially with loaded boats. Plan the trip so each day's paddle begins and ends in protected water.
- If paddling in areas with icebergs, ensure all paddlers give them a wide berth. Icebergs can roll and crush a paddler or calve off heavy pieces of ice.
- Store clothing and gear in waterproof compartments in the boats and seal these properly.
- Avoid paddling in shipping lanes and other major boat routes. If unavoidable, keep the boats close together and consider carrying a radar reflector to increase visibility to large boats (a boat's radar equipment won't pick up a signal from a plastic or fibreglass kayak, but it will from a metal reflector rod if one is affixed to the kayak).
- Recognizing the potential for motion sickness when paddling on large open bodies of water like large lakes or the sea, motion sickness medication should be carried. Parents should provide consent for their child to be administered this type of medication if it is indicated.
- A satellite phone, PLB - GPS, marine VHF radio, cell phone, or other appropriate means of securing current weather forecasts and/or timely assistance in an emergency is required.

Instruction

- Students should be taught how to conduct routine checks on their boats.
- All students must know and have practiced emergency procedures for one or more loaded overturned boats, their own and/or others.

Supervision

- In-the-area supervision.
- Have a lead and sweep consisting of competent paddlers capable of carrying out a rescue if needed.
- Ratio as per above. Generally, as two leaders will be assumed with school groups, recommended ratios for Class 1 or 2 water are about 2:8-10 (doubles), 2:5-7 (singles) and 2:6-8 (mixed).

See Base/Remote Camping, and Day Hiking and Backpacking for other considerations.

Rafting

Day Tripping Grade 5+
Whitewater Rafting Grade 7+

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- ❑ *I have a solid understanding of all the material in Section 3 (General Considerations for Off-site Activities), and any subsections in Sections 4 (Special Considerations) and 5 (Local Outdoor Activities) pertinent to the activity I am planning.*
- ❑ *I have a solid understanding of the relevant material in Section 6 (General Considerations for Higher Care Activities).*
- ❑ *I have a solid understanding of all the material in the subsection General Considerations for Paddlesports in Section 7 (Adventure Pursuits Activities).*

With this grounding, now review the following:

Known Potential Risks

Refer to General Considerations for Paddlesports.

Teacher/Leader Readiness

- The teacher/leader must be competent to organize the rafting activity; to demonstrate, instruct and supervise it; and to effect rescue and emergency procedures as necessary.
- There are several companies that offer rafting training and/or certification courses in BC, most of which are identified on the BC River Outfitters Association website. An individual with canoeing training, particularly that involving big canoes (more than four paddlers) from Paddle Canada, the BC Recreational Canoeing Associationmay be able to apply much of their knowledge and skills to introductory rafting. Moving water and relevant rafting experience are required if taking students on Grade 2 rivers.
- In BC, commercial rafting guides must be certified by the Registrar of Commercial River Rafting. School groups are only 'commercial groups' if paying a service provider to provide the guiding and the provider is the commercial entity in that case. If participating on a fully outfitted, professionally guided trip with a commercial company, school groups may participate on Grade 3 water. District approval and informed parental/guardian consent must be secured.
- Assistant leaders steering boats must be capable paddlers with relevant experience and good rescue skills.

Equipment/Location

- Ensure rafts are adequately inflated and free of leaks.
- Properly sized and fitted single or multiple-impact helmets should be worn when conditions warrant; i.e. rocky bottom, river rated at Grade 2 or above.

- Encourage the wearing of appropriate footwear; light weight and securely fastened to protect feet from rocky bottom. Running shoes (well-tied) or water shoes with strong soles are good.
- Ensure that the reach/section to be paddled is free of major hazards such as weirs.
- Generally, a school trip should not be planned through white water above Grade 3 and only very well-trained and prepared groups should be taken in rivers above Grade 2 (i.e., lakes or moving flatwater with no rapids). Consult the International River Classification System for more information on the interpretation of information related to the Grade of river reaches (sections or runs) and Class of specific rapids. See above.
- The BC River Outfitters Association website provides special provisions commercial guiding companies consult for specific river reaches (sections of rivers from put-in to take-out)

Instruction

- Students should be taught how to work together to lift, carry, launch (dock or beach, as appropriate), enter/exit safely, sit and balance the group's weight in the raft.
- Students should be instructed in river reading and must have sufficient boat negotiation skills to avoid anticipatable hazards (e.g., rocks, sweepers).
- Students should be taught basic strokes, maneuvers and braces and the communication system to be used so they will know what to do when.
- All students must be familiarized with emergency procedures for one or more overturned rafts, their own and/or others.

Supervision

- On-site supervision.
- One leader per boat. Additional leaders as needed as per calculation and more if younger group and/or weak swimmers present.
- A leader or strong paddler with good sense of the water being paddled must be in the stern of each craft.
- Where the physical fitness and/or technical rafting skills of students vary, each boat should be heterogeneous with respect to physical strength, endurance and skill (i.e., each raft with some stronger and some weaker paddlers).
- Do a head count after a flip as soon as practical to ensure all group membersare accounted for.

On-site Instruction / Day Tripping Grade 8+

This section will generally relate to the use of rowing shells (where each rower uses one oar) or sculling craft (where each participant uses two oars). There are other differentiations in the related competitive sports, but oar number/person would be a main distinction. This section will also apply to the use of more traditional flat-bottomed rowboats in many aspects; use reasoned decision making processes and judgement for modifications.

Prior to reviewing elements of this subsection for the purpose of planning an activity or outing, be able to confirm the following:

- ❑ *I have at least a basic familiarity with the content in Sections 1 (Introduction) and 2 (Risk Management Primer) of this document.*
- ❑ *I have a solid understanding of all the material in Section 3 (General Considerations for Off-site Activities), and any subsections in Sections 4 (Special Considerations) and 5 (Local Outdoor Activities) pertinent to the activity or outing I am planning.*
- ❑ *I have a solid understanding of all the material in the subsection General Considerations for Paddlesports and relevant elements of the General Considerations for Powerboats and Sailboats in Section 7 (Adventure Pursuits Activities).*

With this grounding, now review the following:

Known Potential Risks

Refer to General Considerations for Paddlesports.

Activity Instruction

Teacher/Leader Readiness

- The teacher/leader must be competent to organize the rowing activity; to demonstrate, instruct and supervise it; and to effect rescue and emergency procedures as necessary. The more remote and/or longer the rowing activity is to be, the more knowledge, skill, fitness and experience the teacher/leader must have.
- Training may be secured through the Rowing Canada, or other appropriate sources.

Equipment/Location

- A rowing tank or waterfront environment may be used (e.g., pond, lake, slow moving river). Avoid open water sites with strong offshore winds.
- Transport Canada has exempted rowing shells from carrying of safety equipment other small craft are required to carry (such as PFDs, bailers, noisemakers and heaving lines), if they are competing or training during a sanctioned regatta or if they are attended by a safety craft (e.g., powerboat, zodiac) carrying a PFD or lifejacket of appropriate size for

each member of the crew of the largest vessel being attended (in addition to its own required safety equipment) or (refer to www.boatingsafety.gc.ca)..

- The teacher/leader must be aware of and ensure Transport Canada regulations are followed with respect to gear that must be aboard the safety boat (e.g., including PFDs, re-boarding device such as a stepladder or handhold and, where motors are equipped with a skill switch, the kill switch is attached to the operator)..
- Every rowing/sculling craft must have:

  - a white ball of not less than 4 cm diameter made of rubber or similar material to protect others in the event of a collision; and
  - heel restraints to allow "hands-free" release of feet; or
  - quick-release mechanisms that are in working order in boats with fitted shoes.
- All non-swimmers or weak swimmers are required to wear a PFD when on the water. As well, beginner and novice students participating in the rowing activity in cold water where rescue could take some minutes, should be required to wear a PFD. Crew members 16 years of age and older may wear inflatable PFDs, but those younger must use inherently buoyant PFDs.
- All craft, oars and other equipment should be checked before use to ensure it is in good condition.
- Rowing shells and sculling craft can be heavy and care must be taken to ensure there are an adequate number of people, appropriately distributed along each side, to carry each craft to and from the water and that the procedures and communications terminology are understood prior to lifting.
- Adverse weather protocols must be established and followed. Environment Canada tracks severe storms and issues alerts, warnings and watches which are of concern to small craft users in “real time” on their website www.weatheroffice.ec.gc.ca.

Instruction

Water Safety and Rescue Skills

- Self-rescues into dry and/or swamped shells or swimming with the boat to shore should be discussed and, weather and water conditions permitting, actually practiced.• Rescue procedures may be taught and practiced as appropriate (weather and water conditions permitting).
- Shells and sculls should proceed single file in narrow stretches of a watercourse.
- Rowers are responsible for following the traffic pattern at all times, but be aware of and avoid other traffic who may/may not be following the traffic pattern.
- A logbook for launching and returning is an appropriate way to keep track of who is on the water and in what boat.
- In coxed boats the coxswain is in command of the boat at all times and should be given complete attention and respect.
- The coxswain guides the rowing craft by steering and commanding the crew.
- Crew members should not talk while the boat is moving: it makes it hard to hear.
- A rower who sees a hazard that the coxswain does not should notify the coxswain.

- All rowers should exit the watercraft and take cover in the event of thunder or lightening.
- Be aware of fishermen or others using the watercourse.
- Be aware of and know how to respond to wakes from powerboats.

Rowing Skills

- Students need to know the roles and responsibilities of rowers, scullers, coxswains, coaches and any others involved in the activity.
- Students should be instructed and secure fundamental mastery in basic rowing skills where such instruction will support safe participation in the rowing/sculling activity and environment selected. Relevant skills taught may include:
  - lifts and carries,
  - launching from dock or beach as appropriate,
  - communications in the boat
  - entry/exit from shells,
  - body position and balance,
  - basic strokes and recovery,
  - basic maneuvers,
  - paddling on either side and at either end of the shells,
  - synchronizing strokes, and.

Supervision

- On-site supervision for students just learning the activity.
- In-the-area supervision, assuming established boundaries with experienced students.
- Ratio as per calculation.

On-site Instruction / Day Tripping Grade 8+

This section will generally relate to the use of flatwater racing canoes (where each paddler uses a single bladed paddle) or flatwater racing kayaks (where each paddler uses a two bladed paddle). There are other differentiations in the related competitive sports, but blade number would be a main distinction. The craft used are narrow and very tippy compared to other canoe/kayak craft until some experience and mastery is achieved.

Prior to reviewing elements of this subsection for the purpose of planning an activity or outing, be able to confirm the following:

- ❏ *I have at least a basic familiarity with the content in Sections 1 (Introduction) and 2 (Risk Management Primer) of this document.*
- ❏ *I have a solid understanding of all the material in Section 3 (General Considerations for Off-site Activities), and any subsections in Sections 4 (Special Considerations) and 5 (Local Outdoor Activities) pertinent to the activity or outing I am planning.*
- ❏ *I have a solid understanding of all the material in the subsection General Considerations for Paddlesports and relevant elements of Canoeing, River Kayaking, Sea Kayaking and the General Considerations for Powerboats and Sailboats in Section 7 (Adventure Pursuits Activities).*

With this grounding, now review the following:

Known Potential Risks

Refer to General Considerations for Paddlesports.

Activity Instruction

Teacher/Leader Readiness

- The teacher/leader must be competent to organize the rowing activity; to demonstrate, instruct and supervise it; and to effect rescue and emergency procedures as necessary. The more remote and/or longer the flatwater paddling activity is to be, the more knowledge, skill, fitness and experience the teacher/leader must have.
- The teacher/leader or coach may be directing this activity from a dock or support/safety boat (e.g., powerboat, zodiac).
- Training may be secured through the Canoe/Kayak Canada, or other appropriate sources.

Equipment/Location

- A pool or waterfront environment may be used (e.g., pond, lake, slow moving river). Avoid open water sites with strong offshore winds.

- Paddlers shall not be tied, strapped or otherwise artificially secured to the boat or its floor.
- All students must wear a Government of Canada approved PFD for this activity.
- Transport Canada has exempted flatwater racing craft from carrying of safety equipment other small craft are required to carry (bailers, noisemakers and heaving lines), if they are training or competing or if they are attended by a safety craft (e.g., powerboat, zodiac) (in addition to its own required safety equipment) or (refer to www.boatingsafety.gc.ca)..
- The teacher/leader must be aware of and ensure Transport Canada regulations are followed with respect to gear that must be aboard the safety boat (e.g., including PFDs, re-boarding device such as a stepladder or handhold and, where motors are equipped with a skill switch, the kill switch is attached to the operator).
- All craft, paddles and other equipment should be checked before use to ensure it is in good condition.
- The craft used may include C1, C2 and C4 (denoting canoe and the number of paddlers) and K1, K2 and K4 (denoting kayak and the number of paddlers). The 4-person craft can be heavy and care must be taken to ensure there are an adequate number of people, appropriately distributed along each side, to lift and carry each craft to and from the water and that the procedures and communications terminology are understood prior to lifting.
- Adverse weather protocols must be established and followed. Environment Canada tracks severe storms and issues alerts, warnings and watches which are of concern to small craft users in “real time” on their website www.weatheroffice.ec.gc.ca.

Instruction

Water Safety and Rescue Skills

- Because of the inherent nature of the craft (narrow, tippy), students participating in this activity should be comfortable and reasonably competent in the water. Survival swim skills as defined earlier and wearing a PFD are adequate for safety, but students who are more comfortable on and in the water will likely progress more quickly.
- Self-rescues including swimming with the boat to shore should be discussed and, weather and water conditions permitting, actually practiced.
- Rescue procedures should be taught and practiced as appropriate (weather and water conditions permitting).
- Paddlers should proceed single file in narrow stretches of a watercourse.
- Paddlers are responsible for following the traffic pattern at all times, but be aware of and avoid other traffic that may/may not be following the traffic pattern.
- A logbook for launching and returning is an appropriate way to keep track of who is on the water and in what boat.
- All paddlers should know to stay near shore during rough water and/or cold weather conditions and get off the water and take cover in the event of thunder or lightening.
- Be aware of other craft, people fishing or others using the watercourse.
- Be aware of and know how to respond to wakes from powerboats.

Paddling Skills

- Students need to know the roles and responsibilities of paddlers, teachers/leaders/coaches, safety boat driver, and any others involved in the activity.
- Students should be instructed and secure fundamental mastery in basic paddling skills where such instruction will support safe participation in the canoeing/kayaking activity and environment selected. Relevant skills taught may include:
  - lifts and carries,
  - launching from dock or beach as appropriate,
  - communications in the boat
  - entry/exit from craft,
  - body position and balance,
  - basic braces and strokes,
  - basic maneuvers,
  - paddling on either side and at any paddler position of the canoe,
  - paddling at any paddler position of the kayak, and
  - synchronizing strokes if paddling with one or more other paddlers in the craft.

Supervision

- On-site supervision for students just learning the activity.
- In-the-area supervision, assuming established boundaries with experienced students.
- Ratio as per calculation.

If conducting a regatta, consult Canoe/Kayak Canada for additional safety guidelines.

General Considerations for Powerboats and Sail Boats

Motorized and sail craft are used for student experiences, sometimes for purposes of learning the activity, but also often as a means of transportation for other purposes (e.g., using powerboats or zodiacs as safety or support craft for rowing/sculling or sprint canoe/kayak activities, to get to snorkeling or scuba sites, or to a whale watching site). This section also recognizes that most medium to large sailboats are also motorized craft, relying on use of the motor when winds are insufficient or when needing to manoeuver around a lot of other boat traffic.

Prior to reviewing elements of this subsection for the purpose of planning an activity or outing, be able to confirm the following:

- ❑ *I have at least a basic familiarity with the content in Sections 1 (Introduction) and 2 (Risk Management Primer) of the Level 1 Manual.*
- ❑ *I have a solid understanding of all the material in Section 3 (General Considerations for Off-site Activities), and any subsections in Sections 4 (Special Considerations) and 5 (Local Outdoor Activities) pertinent to the activity I am planning.*
- ❑ *I have a solid understanding of the relevant material in Section 6 (General Considerations for Higher Care Activities).*

With this grounding, now review the following:

Known Potential Risks

- Injuries related to vehicle crashes en route to and from activity area;
- Becoming lost or separated from the group or the group becoming split up;
- Injuries related to slips, trips, and falls in the program area or en-route to/from it (e.g., slipping and falling in the boat);
- Injuries related to collisions with movable (e.g., other boats) or immovable (e.g., rock) objects;
- Injuries related to capsize of craft or falling out of craft;
- Injuries if capsizing in moving water environments due to foot entrapment in bottom hazards such as rocks and submerged branches:
- Injuries related to the physical demands of the activity and/or lack of activity skill;
- Weather changes creating adverse conditions;
- Hypothermia due to remaining in cool/cold water too long or due to insufficient clothing;
- Loss of manual dexterity in hands during cold and wet weather;
- Hyperthermia (e.g., overheating) due to insufficient hydration, overdressing and/or overexertion;
- Injuries related to equipment (poor fit, improper adjustment, malfunction, or becoming tangled in apparatus; e.g., foot snag in lines);
- Injuries related to lifting, carrying, walking with, or putting down the craft and/or packs;
- Other injuries (e.g., blisters, sprains, strains; acute or overuse injuries/conditions);
- Motion sickness when on large wavy bodies of water (lakes, ocean);

- Drowning or near drowning;
- Illness related to poor personal hygiene, or failure to purify drinking water;
- Allergic reactions to natural substances in the outdoor environment (e.g., bee stings or jelly fish stings in ocean) or food items;
- Psychological injury due to anxiety or embarrassment (e.g., re: lack of skill, body image);
- Complications of an injury or illness related to remoteness and time to emergency services; and
- Other risks normally associated with participation in the activity and environment.

Teacher/Leader Readiness

- The teacher/leader must be competent to organize the boating activity; to demonstrate, instruct and supervise it, and to effect rescue and emergency procedures as necessary. The more remote and/or longer the boating activity is to be, the more knowledge, skill, fitness and experience the leader must have.
- Watercraft are governed by laws and regulations under jurisdiction of Transport Canada, Office of Boating Safety. It is imperative for a teacher/leader to know and observe the Small Vessel Regulations, Collision Regulations, and the Competency of Operators of Pleasure Craft Regulations, all of which are part of the Canada Shipping Act. Refer to www.boatingsafety.gc.ca.

- All pleasure craft fitted with a motor (including personal watercraft - jet skis) require the operator to hold a Pleasure Craft Operator Card (minimum age of 16). Training for this may be found through a variety of organizations approved by Transport Canada's Office of Boating Safety. Contingent upon the vessel's application and size, commercial operators may require a variety of certifications.
- All VHS radio operators are required to have a restricted operator's certificate (ROC) with maritime qualifications (ROCMC).
- If the craft are to be transported by trailer to and from the water, the individual driving the tow vehicle must have sufficient experience and skill to manage these tasks safely.
- The teacher/leader and assistant leaders must be capable swimmers, able to manage themselves confidently in the water in the selected environment while wearing PFDs.
- The teacher/leader or designated other must be able to provide first aid and CPR.
- All assistant instructors/leaders must be competent boaters, capable of supporting the group and effecting/helping effect appropriate rescues in the type of water anticipated.
- The teacher/ leader must be comfortable and capable on and near the waters intended to boat on, whether lake, pond, river or ocean. Those competencies to include but not limited to:

  – navigating accurately in the area,
  – operating the boat at slow speed and with care when in the vicinity of docks and swimming areas,

  - approaching docks, wharves, non-motorized craft, swimmers, etc. in the safest possible manner and appropriately for the circumstances (e.g., motor to be shut off before final approach to a swimmer one is assisting and extending a reaching assist),
  - taking care to avoid creating a large wake that may interfere with or cause hazard to non-motorized craft sharing the waterway or along the sides of the waterway,
  - reading local winds and weather and making accurate short term forecasts,
  - executing rescues of self, and others,
  - understanding waves, tides, river outflows, currents and sandbanks, beach hazards, and how these affect water travel,
  - reading tide/current tables and nautical charts,
  - reading warning signs and flags, and dealing with ships and wakes,
  - understanding relevant flora and fauna and how to minimize negative interactions with such,
  - executing rescues of self and others,
  - experience in using all communications and navigational systems on board the craft.
- If the group is divided into two groups, then at least one supervisor in each group must have all of the above competencies.

Equipment/Location

- The Transport Canada, Office of Boating Safety establishes standards and regulations. These change periodically and it is the responsibility of vessel operators to comply with current standards.
- Commercial vessels used for carrying passengers must obtain Transport Canada permits to operate. Confirmation of current permits is advisable.
- Correct fitting Transport Canada approved PFD's/lifejackets or Floater Suits must be worn properly and done up at all times by all participants while on/in the water.
- There must be a noisemaker (e.g., pea-less whistle - recommend having one attached to each PFD, or an air horn or electric horn on board each craft).
- There must be a bailing device or a manual water pump in each craft.
- A paddle or an anchor with a minimum of 15m of cable, rope or chain.
- There must be a minimum 15m, length of buoyant rope attached to the craft.
- There must be a suitable re-boarding device (e.g., stepladder or handholds) if freeboard is more than .5 meters.
- A watertight flashlight or navigation lights are required in case of reduced visibility like fog.
- Increased boat size and power increases the need for safety gear, including lifebuoy, ladder, lifting harness, fire extinguisher, axe, multiple sound signaling devices, buckets, flares etc. Consult the Office of Boating Safety about specific requirements for the vessel(s) to be used.
- Emergency communication equipment – cellular phone, PLB-GPS, satellite phone, or VHF/HF radio – should be waterproofed and easily accessible. It is the operatorr's responsibility to ensure that this equipment is appropriate and fully operational along the intended route.

- Consider potential implications if a watercourse is subject to sudden and/or significant fluctuations in volume (e.g., impact of dams, storms, diurnal, seasonal or tidal variations).
-

Craft should be checked to ensure hull integrity (no cracks) and good mechanical condition, etc.

- Do not exceed the weight load or capacity for the craft used.
- Accessory gear should be secured to avoid entanglement.
- Ensure the first aid kit is waterproofed.
- Carry sufficient tools for basic repairs.
- Plan fuel with 1/3 to go, 1/3 to return and 1/3 reserve in mind. Know and apply safe refueling procedures.
- Postpone water-travel if there are indications of inclement weather (e.g., lightning, storm activity, high wave conditions, or strong winds.
- File a sail plan.
- At the end of each trip, and upon changing watercourses, wash any mud, algae or plant fragments from boats, gear and feet to avoid transmitting any plant or animal pest species to previously uninfected places.
- It is not uncommon for boaters along BC's southern coast to pass unintentionally into US waters. Operators must be knowledgeable of and comply with US regulations when in US waters. Only in emergency circumstances should a Canadian registered boat with non-US citizens aboard attempt to go ashore on US soil unless it is a planned event, with all proper permission and proper identification of passengers on board.
- For school activities involving personal watercraft (jet skis), each driver be 16 or older, have a pleasure craft operator card, and must wear a PFD with a pea-less whistle attached and carry a buoyant line of 15 meters minimum length on board. Other Transport Canada regulations applied as relevant.
- Where personal watercraft are used, they must be operated safely (e.g., in a careful and diligent manner with due consideration for others, including consideration of noise impact). These craft are subject to the same boating safety rules and requirements as a powerboat. No jumping waves or the wake of another watercraft too close or in a way that causes too much engine noise. Maintain slow speed when in boat traffic or within 30 meters of an anchored or moored vessel, shoreline, dock, pier, swim float, marked swim area, swimmers, surfers, non-motorized watercraft or anglers. Do not take air while crossing the wake of another vessel that is less than 30 meters away or follow another vessel too closely. These craft to not have lights so cannot be operated at night or in periods of reduced visibility.
- All powerboats, including motorized sailboats, and personal watercraft may also be subject to local laws, regulations and ordinances related to the age of the operator, hours of operations, special no-wake zone provisions, assigned operating areas and restrictions and speed and distance limits.

Instruction

- Students should be comfortable in boats. Because they are wearing PFDs or lifejackets, it is not essential that they be able to swim well.
- Students should be instructed in what to do in emergencies (e.g., fire, person overboard).
- Students should be made aware of possible hazards on the boat, location of vessels toilet if available, and how to gain the attention of the driver if needed while underway.
- Students on powerboats should be instructed to remain seated while the vessel is under power, especially if it is an open vessel and/or the water is choppy. There are obvious exceptions on large vessels; these guidelines apply to pleasure craft.
- Students should be instructed as to how to behave while near marine animals (e.g., maintaining a non-threatening distance, look but do not touch).

On-site Instruction	Grade 5+
Day Tripping (< 3 hours)	Grade 6+
Day Tripping (> 3 hours)	Grade 7+
Overnight Tripping	Grade 7+
Extended Tripping	Grade 9+

Sailing is a popular activity on BC's lakes and along the coast. In the school program context it typically, but not necessarily, involves introductory instruction and day trips on small sail craft.

Prior to reviewing elements of this subsection for the purpose of planning an activity or outing, be able to confirm the following:

- ❏ *I have at least a basic familiarity with the content in Sections 1 (Introduction) and 2 (Risk Management Primer) of the Level 1 Manual.*
- ❏ *I have a solid understanding of all the material in Section 3 (General Considerations for Off-site Activities), and any subsections in Sections 4 (Special Considerations) and 5 (Local Outdoor Activities) pertinent to the activity I am planning.*
- ❏ *I have a solid understanding of the relevant material in Section 6 (General Considerations for Higher Care Activities).*
- ❏ *I have a solid understanding of all the material in subsection General Considerations for Powerboats and Sailboats in Section 7 (Adventure Pursuits Activities).*

With this grounding, now review the following:

Known Potential Risks

Refer to General Considerations for Powerboats and Sailboats.

On-site Instruction/Day Trips

Teacher/Leader Readiness

- The teacher/leader must be competent to organize the sailing activity; to demonstrate, instruct and supervise it; and to effect rescue and emergency procedures as necessary. The more remote and/or longer the sailing trip is to be, the more knowledge, skill, fitness and experience the lead teacher/leader must have.
- At least one teacher/leader should have training from the BC Sailing Association,, Canadian Power and Sail Squadron, the Canadian Yachting Association (CYA), and/or other appropriate sources.
- Assistant leaders should be competent sailors experienced with sailing the type of craft to be used and on the type of water anticipated.
- All leaders must be capable swimmers (e.g., survival swim test: roll in, orient self, tread 1 min. and swim 50 meters – all while wearing a PFD and no goggles).

Equipment/Location

- Sailing vessels and other group and personal equipment should have been selected for its appropriateness for the students, maintained and repaired as appropriate and inspected for defects prior to use.
- The mainsail must be capable of being lowered while the boat is capsized.
- The centerboard and rudder blade must be securely attached to the boat
- All boats must carry an attached bailing bucket or a bilge pump.
- Inspect rigging prior to sailing.
- All group members must wear a correctly fitting Government of Canada approved PFD/life jacket, with pea-less whistle attached, done up at all times while sailing on craft of a size where Coast Guard regulations require such. Non-swimmers or weak swimmers (as determined by swimming level or endurance test – see Aquatics) should wear them at all times on deck of any sail-craft.
- Loose fitting clothing should not be worn around ropes and rigging (e.g., tuck in baggy t-shirts) and long hair should be tied back.
- Students should wear appropriate shoes with a non-slip sole (e.g., running shoes).
- Rings, watches and other jewelry that could snag in ropes or other sailing apparatus should be removed or taped down.
- Restrict sailing to designated sailing areas. Select confined waters for introductory instruction.
- Leaders must take weather and water conditions into consideration, being particularly conservative regarding sailing with strong winds, offshore winds and wave conditions on shallow lakes or seas.
- Where possible, avoid crossing shipping lanes and busy harbour channels.
- Powered rescue boats should be fast enough to allow prompt response and have sufficient power to tow the sailing boats even in adverse weather/water conditions.
- Powered rescue boats must be in good working order and must carry personal protection and boat safety equipment as required by Transport Canada dependent upon the size of the craft.

Instruction

- Students should be comfortable in the water. Because they are wearing PFDs, it is not essential that they be able to swim well, but if comfort/competence in the water is in question, a survival swim test should be given in a pool or in open water (e.g., roll in, orient self, tread 1 min. and swim 50 meters – all while wearing a PFD and no goggles).
- Students should be instructed in person overboard procedure, and what to do if a boat upsets (theirs and others').
- Instruction in sailing should include content and skills relevant to safe participation in the sailing activity and selected environment. This may include:
  - familiarizing the students with the equipment to be used including terminology, use and care (e.g., not stepping on lines),
  - lifting, carrying, launching and landing sailboats (as appropriate),
  - pre-departure check,

- flag and whistle signals,
- the way a sail is affected by the wind,
- how to rig the sails (as appropriate),
- how to use the wind to sail, including moving forward, tacking, gybing, controlling speed, turning and coming about, and
- emergency procedures (e.g., hanging onto and righting an overturned craft).

Supervision

- On-site supervision.
- Where students are learning to sail their own small sailboats, the instructor to student ratio should generally not exceed six boats per rescue boat, unless in a very sheltered, confined bay or lake.
- If sailing small craft likely to upset, a motorized safety boat should be present (if allowed on the water body being used) or other secondary rescue system in place.

Grade 7+

Windsurfing involves using a small sail rigged to a 'surf' type of board and using the wind to propel the board and rider as one would on a small sailboat. Stand-up paddling involves standing on a long paddleboard and using a long shafted canoe paddle to propel the board and rider.

Prior to reviewing elements of this subsection for the purpose of planning an activity or outing, be able to confirm the following:

- ❏ *I have at least a basic familiarity with the content in Sections 1 (Introduction) and 2 (Risk Management Primer) of the Level 1 Manual.*
- ❏ *I have a solid understanding of all the material in Section 3 (General Considerations for Off-site Activities), and any subsections in Sections 4 (Special Considerations) and 5 (Local Outdoor Activities) pertinent to the activity I am planning.*
- ❏ *I have a solid understanding of the relevant material in Section 6 (General Considerations for Higher Care Activities).*
- ❏ *I have a solid understanding of all the relevant material in subsection General Considerations for Paddlesports, Powerboats and Sailboats and Sailing in Section 7 (Adventure Pursuits Activities).*

With this grounding, now review the following:

Known Potential Risks

Refer to General Considerations for Paddlesports and Powerboats and Sailboats and Sailing

Additional Known Potential Risks

- Injuries related to slips, trips and falls on the board;
- Injuries related to collisions with movable (e.g., other people/boards or one's own board) or immovable (e.g., rock) objects;
- Injuries related to board capsize or falling off of board;
- Injuries related to equipment malfunction (e.g., windsurf rigging jammed) or becoming tangled in apparatus (e.g., snagging in rigging); and
- Psychological injury related to anxiety of open water.

On-site Instruction/Day Trips

Teacher/Leader Readiness

- The teacher/leader must be competent to organize the windsurfing or stand-up paddling activity; to demonstrate, instruct and supervise it; and to effect rescue and emergency

procedures as necessary. The more remote and/or longer the windsurfing activity is to be, the more knowledge, skill, fitness and experience the leader must have.

- To teach/lead windsurfing, training and/or certification is available from from Windsurfing Canada, the Canadian Power and Sail Squadron, the Canadian Yachting Association (CYA),) and/or other appropriate sources.
- To teach/lead stand-up paddling (SUP), training and/or certification may be available from Paddle Canada or other appropriate sources. Training and experience in canoeing will have high transferability.
- Assistant leaders should be competent sailors experienced with sailing the type of craft to be used and on the type of water anticipated.

Equipment/Location

- Windsurfing board and sail/rigging apparatus or SUP board and paddle must be in good working condition and board with sufficient built-in buoyancy to support the rider.
- The windsurfing board should be capable of being de-rigged while it is afloat.
- For windsurfing, ensure deck plate is secure and is properly attached. Ensure the downhaul and outhaul are properly tightened, cleated off and rope ends stowed away. Ensure fin is fastened securely.
- For SUP, ensure the fins are fastened securely if not integral to the board.
- An approved PFD for each student, with pea-less whistle attached, is required.
- Wetsuits should be considered for all school-based windsurfing, recognizing the season and potential for repeated dippings in cool to cold water.
- Define boundaries for the activity. These activities should be introduced in confined waters. Avoid areas with substantial motorboat or larger craft powering in area.
- If on open water, a tether from board to boarder/paddler is suggested.
- Check the area for sufficient water depth and potential hazards (e.g., broken glass, overhead wires or obstacles, rocks, shoals, strong currents).
- Check the weather and postpone the activity if strong offshore winds, choppy waves or storms are present. Consider how these are likely to influence safe performance of the skills taught and student comfort.

Instruction

- Parents/guardians should be asked to verify the level of swimming training/skill the student has.
- Because there is high potential for students to fall in the water, sometimes in unusual positions, those involved in this activity should be comfortable and competent in the water while wearing a PFD.
- If the swimming ability of a student is unknown, before being permitted to participate in water above their chest height without a PFD the student should be given a **survival swim test** (roll in, tread 1 min., swim 50 m. any style without PFD or goggles) or **endurance swim test** (50 m. swim any style).

- Students must be familiar with emergency procedures and self-rescue skills related to the equipment and area (e.g., remounting the board, hand paddling to safety).
- Students should be instructed regarding how to assist another boarder/paddler in difficulty.
- Students should be familiar with hypothermia prevention, recognition and treatment.
- Students who will windsurf should be instructed in basic windsurfing skills where such instruction will support safe participation in the windsurfing activity and environment selected. Skills taught may include, as relevant:
  - familiarization with the equipment to be used (e.g., terminology, use and care);
  - lifting, carrying, launching and landing boardsails (if appropriate);
  - flag and whistle signals, as appropriate;
  - the way a sail is affected by the wind;
  - how to rig the sail;
  - how to use the wind, including moving forward, gybing, tacking, controlling speed, turning and coming about, and
  - how to right the board and re-board in the event of a capsize on open water.
- Students who will SUPshould be instructed in basic stand-up paddling skills where such instruction will support safe participation in the SUP activity and environment selected. Skills taught may include, as relevant:
  - familiarization with the equipment to be used (e.g., terminology, use and care);
  - lifting, carrying, launching and landing paddleboards (if appropriate);
  - flag and whistle signals, as appropriate;
  - the way a paddler is affected by the wind;
  - braces, strokes and manoeuvers; and
  - how to right the board and re-board in the event of a capsize on open water.

Supervision

- On-site supervision.
- Supervise non-swimming or weak swimming students more closely.
- Generally, unless in a very sheltered, confined bay or lake, there should not be more than six boards/leader.
- Watch group members for signs of hypothermia; it can come on quickly due to repeatedly getting wet and then exposed to the breeze/wind.
- A motorboat or other suitable rescue craft must be present to aid in supervision/rescue of students distant from shore, or other appropriate secondary rescue system put in place.

Snorkeling

Grade 4+

Prior to reviewing elements of this subsection for the purpose of planning an activity or outing, be able to confirm the following:

- ❑ *I have at least a basic familiarity with the content in Sections 1 (Introduction) and 2 (Background Information) of this document.*
- ❑ *I have a solid understanding of all the material in Section 3 (General Considerations for Off-site Activities), and any subsections in Sections 4 (Special Considerations) and 5 (Outdoor Pursuits) pertinent to the activity or outing I am planning, especially Aquatics.*
- ❑ *I have a solid understanding of all the material in Section 7 (Adventure Pursuits Activities) regarding Aquatics.*
- ❑ *If using powerboats or sailboats to access activity sites, I have a solid understanding of all the material in the subsection General Considerations for Power Boats and Sailboats in Section 7 (Adventure Pursuits Activities).*

With this grounding, now review the following:

Known Potential Risks (refer to Aquatics and Open Water Aquatics)

Additional Known Potential Risks

- Injuries related to slips, trips and falls (e.g., while wearing swim fins);
- Injuries related to collisions with movable (e.g., other swimmers, passing boats) or immovable (e.g., pool wall if in pool, underwater rock if in open water) objects;
- Injuries caused by inhaling water through an uncleared snorkel;
- Blackouts or other injuries caused by excessive breath holding or hyperventilation.

Teacher/Leader Readiness

- The teacher/leader must be competent to organize the snorkeling activity; to demonstrate, instruct and supervise it, and to effect rescue and emergency procedures as necessary.
- If the students are to snorkel in water more than chest deep and are not wearing PFDs (which preclude underwater swimming), then a certified lifeguard or a lifesaver (e.g., Bronze Medallion) must be in attendance.
- A certified scuba instructor (see Scuba Diving in Section 7) may instruct, supervise and serve as lifesaver for this activity.
- First aid and CPR capacity must be immediately accessible on site (see First Aid in Section 6).
- If the students are only to be snorkeling in shallow water, or at the surface while wearing PFDs, then the guidelines for Open Water Swimming should be followed.

Equipment/Location

- Ensure students have a mask, snorkel and fins that fit.
- If all or part of the water used is more than chest deep, all non-swimmers or very weak swimmers must wear a PFD. This will restrict their snorkeling activity to surface swimming.
- In BC and Canada, most open water snorkeling is done while wearing wetsuits or dry suits. Ensure these fit appropriately for comfort, functionality and maneuverability.
- Where wetsuits are used, a weight belt will be needed to submerge. Ensure it has a quick release buckle.
- The teacher/leader must be familiar with the dive site from previous reconnaissance.
- If open water snorkeling (from boat or shore), the area must be secure from motorized vehicles (e.g., power boats, personal watercraft) or a diver's flag must be posted.
- If open water snorkeling from a boat, the boat must be equipped with appropriate safety and rescue equipment (e.g., float, reaching and throwing assists, first aid kit and blanket).
- Have emergency transport available.

Instruction

- Students should be introduced to basic skills related to safe participation in the activity and environment selected. This may include:
  - pre-dive check,
  - hand signals,
  - clearing the mask and snorkel,
  - swimming with fins,
  - entry and exit methods and surface diving,
  - equalizing ears (as appropriate to age group),
  - buoyancy control,
  - ditching the weight belt,
  - staying with buddy and with group and dangers of not doing so,
  - avoiding hyperventilation and/or excessive breath holding,
  - inflating life vest,
  - dangerous marine life, and
  - rescue techniques.

Supervision

- On-site supervision.• For open water snorkeling, one supervisor is to remain out of the water, outfitted with snorkeling equipment.
- Ratio in pool environment is generally about 1:12, considering size and shape of pool area and age/maturity of students.
- In open water context, there must be at least two adult supervisors present, one of whom is the leader responsible for the group. Consider size of snorkeling area, water clarity, presence of any currents/other hazards and maturity of students in establishing ratio; approximately 1:8 is common.
- Use a buddy system.

See Aquatics for other considerations.

Grade 9+

Prior to reviewing elements of this subsection for the purpose of planning an activity or outing, be able to confirm the following:

- ❑ *I have at least a basic familiarity with the content in Sections 1 (Introduction) and 2 (Background Information) of this document.*
- ❑ *I have a solid understanding of all the material in Section 3 (General Considerations for Off-site Activities), and any subsections in Sections 4 (Special Considerations) and 5 (Outdoor Pursuits) pertinent to the activity or outing I am planning.*
- ❑ *I have a solid understanding of all the material in Section 7 (Adventure Pursuits Activities) regarding Aquatics and Snorkeling.*
- ❑ *If using powerboats or sailboats to access activity sites, I have a solid understanding of all the material in the subsection General Considerations for Power Boats and Sailboats in Section 7 (Adventure Pursuits Activities).*

With this grounding, now review the following additional guidelines:

Known Potential Risks

- Injuries related to equipment (improper fit, improper adjustment, malfunction, failure to use the equipment properly, or becoming tangled in apparatus (e.g., buoy line);
- Hypothermia due to remaining in cool/cold water too long;
- Weather changes creating adverse conditions (e.g., murky water);
- Choking or problems related to breathing in water through a snorkel;
- Decompression illness/injury;
- Air embolism due to breath holding on ascent;
- Injuries due to interactions with animals or plants in the environment;
- Psychological injury due to anxiety (e.g., fear of not being able to breathe);
- Panic due to separation from others, water depth, disorientation;
- Complications of injury or illness due to remoteness and time to emergency services; and
- Other risks normally associated with participation in the activity and environment.

Teacher/Leader Readiness

- The instructor/leader must be competent to organize the scuba activity; to demonstrate, instruct and supervise it; and to effect rescue and emergency procedures as necessary.
- Training/certification must be secured from the Professional Association of Diving Instructors (PADI), National Association of Underwater Instructors (NAUI) or American Canadian Underwater Certification or equivalent.
- A person with CPR capacity must be present along with one with Workplace Hazardous Materials Information System (WHMIS) and an Oxygen Therapy Certificate. A properly certified instructor will have these certifications and be able to show their cards.

- Teacher/leader should check that the service provider instructor has an annual renewal sticker for the current year on his or her certification card. This ensures that the instructor has insurance.

Equipment/Location

- Certified instructor to check all diving gear prior to use and to set up/closely supervise set up and use of all gear for novices. The following is provided to accompanying teachers/leaders to give them some sense of what to look for, but not as a replacement for certification.
- Students need a mask, snorkel and fins that fit and are adjusted properly.
- Check that tanks have adequate air, including sufficient reserve.
- Have an approved, appropriately sized buoyancy compensation device (BCD with auto-inflate) for each student, with whistle attached, and a weight belt with a quick release buckle.
- In BC, scuba diving is generally introduced in a swimming pool.
- In BC and Canada, almost all scuba diving is done while wearing wetsuits or drysuits. Ensure they fit appropriately for safety and functionality.
- Carrying dive knives is optional, but recommended if a site has substantial vegetation or fishing occurring in the region (potential ensnarement risks).
- Each instructor (and ideally each diver) will have a dive watch/bottom timer, depth gauge, compass, tank pressure gauge regulator, and octopus regulator.
- If boat diving, the following is also required:
  - Highly visible float with mermaid line,
  - Descent/ascent line incorporating a safety stop facility,
  - Decompression tables or reliable means of calculating decompression requirements,
  - Datum marker (e.g., GPS) or suitably weighted line and float, and
  - Notebook and pen (optional).
- At an open water site, check the area for potential hazards. Put up the internationally recognized dive flag or otherwise ensure safety from passing vessels.
- The instructor must establish clear boundaries for the activity, especially depth, as follows:
  - 12 meter maximum depth for introductory or entry diving courses, and
  - 18 meters for full open water training
- Compensate appropriately for cold water dives (adjust depth in dive plan, wear thermal protection, increase margin for error, and limit depth and bottom time).
- Ensure that the site has
  - Safe entry and exit points with minimal water movement,
  - No obvious dangers such as boat traffic or fishers,
  - A current less than 0.5 knot,
  - Stable weather (e.g., no storms) and water conditions, and
  - A minimum visibility of 3 meters underwater.
- Establish time limits for the activity, considering student experience, weather, water temperature, and whether wet/dry suits are worn.
- Have a fully charged extra scuba unit on board (boat diving) or on shore (shore diving).

- Instructor must know the location of the nearest decompression chamber.
- Instructor must know the location of the nearest oxygen source.
- Instructor must have a reliable communications system (e.g., satellite phone, Marine VHF, cellular phone) and emergency contact numbers available.

See Aquatics for other considerations.

Instruction

- Students should undergo a medical screening by a physician prior to participating, particularly for open water dives.
- Students must be capable swimmers. They should be able to swim 200 meters (on their fronts, with reasonable strength and coordination, with their face frequently in the water and without swimming aids (e.g., no PFD or goggles/mask).
- The minimum age for any open water diving is 12 years.
- Students must be taught safety-related practices relevant to participation in the scuba activity, including, but not limited to:
  - buddy diving,
  - basic communications above and below the water,
  - buoyancy regulation and coming up slowly,
  - equalization, and
  - the importance of always breathing while underwater.
- Students should be taught scuba diving skills, as these relate to safe participation in the scuba activity in the selected environment. This may include:
  - selection and basic care of scuba gear,
  - how to put gear on and take it off,
  - pre-dive checks,
  - entry and exit methods,
  - clearing the mask and snorkel,
  - swimming with fins,
  - pacing (i.e., moving slowly in the water),
  - ditching the weight belt, and
  - buoyancy regulation.
- If students are to do open water diving, they must receive a full instructional program (dryland and pool or other controlled environment) and be successful in all assessments here before doing so.
- No diving into caves or shipwrecks which prevent direct access to the surface, or in conditions of significantly reduced visibility (e.g., less than three meters) or at night, unless students are specifically trained for these situations.
- Students are not to collect any natural objects or relics while diving unless an appropriate license has been obtained. If picking up anything like this to show others, it must be replaced where it was found.
- Students should be instructed re: any hazards in the area (e.g., strong currents, dangerous marine life).

Supervision

- On-site supervision.
- One supervisor must remain out of the water, maintaining constant watch of the dive site. The individual must have snorkeling equipment accessible.
- All divers in the group must scuba dive with a buddy.
- Check off participant's names as they enter and when they leave the water.
- Ratio of one certified scuba diving instructor to ten students in a pool maximum (1:12 if a trained assistant is present), and six students or less per instructor for open water diving (1:8 if a trained assistant present).
- Each diver to complete dive log after each dive.

Grade 7+

Prior to reviewing elements of this subsection for the purpose of planning an activity or outing, be able to confirm the following:

- ❑ *I have at least a basic familiarity with the content in Sections 1 (Introduction) and 2 (Risk Management Primer) of the Level 1 Manual.*
- ❑ *I have a solid understanding of all the material in Section 3 (General Considerations for Off-site Activities), and any subsections in Sections 4 (Special Considerations) and 5 (Local Outdoor Activities) pertinent to the activity I am planning.*
- ❑ *I have a solid understanding of the relevant material in Section 6 (General Considerations for Higher Care Activities).*
- ❑ *I have a solid understanding of all the material in the subsection General Considerations for all Aquatic Activities in Section 7 (Adventure Pursuits Activities).*
- ❑ *If using powerboats or sailboats to access activity sites, I have a solid understanding of all the material in the subsection General Considerations for Power Boats and Sailboats in Section 7 (Adventure Pursuits Activities).*

With this grounding, now review the following:

Known Potential Risks

Refer to General Considerations for Aquatic Activities.

Additional Known Potential Risks

- Injuries related to slips, trips and falls on the board or as a result of wearing fins;
- Injuries related to collisions – with movable (e.g., other boarders/boards or one's own board) or immovable (e.g., rock) objects;
- Injuries related to board capsize or falling off of board;
- Injuries related to equipment malfunction (e.g., board breaking) or becoming tangled in apparatus (e.g., tether); and
- Being swept under or out to sea due to strong undertow currents or rip currents or struck by large waves.

Teacher/Leader Readiness

- The teacher/leader must be competent to organize the surfing/skim boarding activity; to demonstrate, instruct and supervise it; and to effect rescue and emergency procedures as necessary.
- If the students are to surf in water more that chest deep and are not wearing PFDs, then a certified lifeguard or a lifesaver (Bronze Medallion) with CPR and experience in relevant water rescue must be present. If the students are only to be surfing in shallow water or while wearing PFDs, then the criteria for *Open Water Swimming* should be followed.

Equipment/Location

- Ensure students have equipment that is not damaged in a manner that renders it unsafe (e.g., fins, surfboards /bodyboards/skim boards).
- If the students will be venturing into water more than chest deep, all non-swimmers or very weak swimmers must wear a PFD.
- In Canada most surfing is done while wearing wetsuits or drysuits. Ensure these fit appropriately for comfort, functionality and maneuverability.
- The teacher/leader must be familiar with the surfing site from previous reconnaissance;

Instruction

- Parents/guardians should be asked to verify the level of swimming training/skill the student has.
- If the swimming ability of a student is unknown, before being permitted to participate in water above their chest height without a PFD the student should be given a **survival swim test** (roll in, tread 1 min., swim 50 m. any style without PFD or goggles).
- Students should be introduced to basic skills related to safe participation in the activity and environment selected. This may include:
  - equipment checks
  - swimming with fins
  - entry and exit methods
  - techniques of "catching a wave"
  - how to avoid collisions with other surfers/skimmers
  - staying with group and dangers of not doing so
  - respecting marine life (animals, plants, corals, barnacles)
  - rescue techniques.
  - "reading the water", including knowledge about tides, current and waves for the local region.

Supervision

- On-site supervision.
- One supervisor is to remain out of the water for shore supervision.
- In open water, there must be at least two adult supervisors present, one of whom is the teacher/leader responsible for the group. Consider the size of the surfing/skim boarding area, presence of any currents/other hazards and maturity of students in establishing ratio; approximately 1:4 is common for surfing and 1:10 for skim boarding.
- Use a buddy system.

See Aquatics for other considerations.

Grade 3+

Prior to reviewing elements of this subsection for the purpose of planning an activity or outing, be able to confirm the following:

- ❑ *I have at least a basic familiarity with the content in Sections 1 (Introduction) and 2 (Risk Management Primer) of the Level 1 Manual.*
- ❑ *I have a solid understanding of all the material in Section 3 (General Considerations for Off-site Activities), and any subsections in Sections 4 (Special Considerations) and 5 (Local Outdoor Activities) pertinent to the activity I am planning.*
- ❑ *I have a solid understanding of the relevant material in Section 6 (General Considerations for Higher Care Activities).*
- ❑ *If using powerboats or sailboats to access activity sites, I have a solid understanding of all the material in the subsection General Considerations for Boating in Section 7 (Adventure Pursuits Activities).*

With this grounding, now review the following:

Known Potential Risks

Refer to General Considerations for Powerboats and Sailboats.

Teacher/Leader Readiness

- The teacher/leader must be competent to organize the whale watching activity; to demonstrate, instruct and supervise it; and to effect rescue and emergency procedures as necessary.
- If accessing the whale watching site by powerboat, at least one teacher/leader must hold a Pleasure Craft Operator Card and/or appropriate certification for the craft.
- The certifications required to operate commercial vessels is dependeant on the size of the craft and can be found in the publication Small Commercial Vessel safety guide by Transport Canada, Office of Boating Safety.
- If using the services of a commercial whale watching operator, ensure that the operator has a certificate of operator proficiency from Transport Canada.
- All leaders must be capable swimmers, with PFD on.

Equipment/Location

- A vessel used for whale watching as well as other group and personal equipment should be selected for its appropriateness for the participants, maintained and repaired as appropriate and inspected for defects prior to use.
- Vessels are regulated by Transport Canada, Office of Boating Safety. On-board equipment requirements are determined by the length of the vessel, and whether that vessel is considered a pleasure or commercial craft. Clarify this before setting out in unlicensed craft.

- Commercial whale-watching vessels used for carrying passengers must obtain Transport Canada permits to operate, including a commercial safety inspection. Confirmation of current permits is advisable.
- Each boat must have sufficient built-in buoyancy to support boat and crew if swamped.
- Students should wear appropriate shoes with a non-slip sole (e.g., running shoes).
- Laws and regulations currently in effect in Canada under the *Federal Fisheries Act*, and in the USA under the *Federal Marine Mammal Protection Act* (if passing intentionally into US waters). These acts are in place to protect marine wildlife and should be followed at all times while engaging in marine animal viewing.Pacific Whale Watch Association , which includes both Canadian and American members (WWOAN), has developed a set of "Best Practices Guidelines" which can be accessed via their website to ensure the responsible management of vessels in the presence of marine wildlife. See www.pacificwhalewatch.org