



Fort Langley Canoe Club Dragon Boat Steering Manual

Revised February 2025

Table of Contents

Table of Contents	2
Forward	2
FLCC Steering Accreditation	3
Steersperson Responsibilities	7
Preparation Prior to Departing Dock	8
Boat Commands	10
Steering a Boat in Practice	12
DB10 Boat Usage	15
Docking – Fort Langley	18
Mooring the Boats	18
Navigation in Freshet	22
Emergency Situations: Man-Overboard, Capsizing and Swamping	23
Emergency Pull-out Maps and Locations	26
Boating Right-of-Way	27
Known Water Hazards in the Bedford Channel	28

Forward

This steering manual provides essential information for anyone taking on the responsibility of steering a dragon boat (DB). Reading the manual carefully ensures an understanding of boating rules and the Fort Langley Canoe Club (FLCC) safety guidelines and policies.

As a steersperson, the safety of your crew is your first priority. Consequently, it is imperative that you understand how to manoeuvre your boat in the changing conditions of the river.

In the DB community, FLCC is fairly unique in that we paddle on the lower reaches of the Fraser River where the current varies hour by hour and day by day. Fort Langley is approximately 64 km from the mouth of the river but the river only drops about 2-1/2 metres in that distance so the ocean tides affect our water level and current. For much of the year the current is relatively slow but the water level and speed can vary by up to 2 metres and several kilometres per hour during the course of a day, particularly during freshet.

FLCC Steering Accreditation

The FLCC applies a graduated approach to the training and assessment of steerspersons. The purpose of this approach is to ensure that the safety of all club members is uppermost in the steersperson's mind and that the operation of a dragon boat complies with all club policies and rules. This process also ensures that the steersperson gains experience and feels confident in the management of a crew and in the manoeuvring of a boat in a variety of conditions.

An FLCC steersperson should have a calm, non-reactive personality and be able to maintain their composure in stressful situations, including in those dealing with team or personal issues.

Steersperson Training Process:

It is the responsibility of each team to ensure their steersperson is FLCC trained and assessed.

Potential Steersperson

A potential steersperson is any member of the FLCC who decides they would like to try to become a steersperson. The first step in this process is for the potential steersperson to try steering with their own team under the guidance and supervision of the team's current steersperson, provided that person is a recognized DB trainer (the trainer). If the potential steersperson is not currently a member of a team, they must take the initiative to make contact with a team and steersperson who would be willing to give them a steering trial.

After a steering trial and discussion with the team captain and coach, should the potential steersperson wish to become a regular FLCC steersperson she/he would proceed to follow the steps outlined below:

Contact the DB Steering Coordinator (DBSC) through the club website and specify:

- The potential steersperson's (the trainee) name and contact information including steering experience, if any, to date,
- The team name, practice schedule, and the name of the existing steersperson, if any,
- The team captain's name and contact information,
- When the training process is to begin,
- Read the Dragon Boat Steering Manual on the club website (under Dragon Boat Steering) to become familiar with the many important aspects of being an FLCC steersperson, including the graduated process the club uses in the training and assessing steerspersons,
- Complete the DB Steersperson Quiz (On-line under DB Steering) to demonstrate an understanding of the information in the Steering Manual,

- Bring any questions you have to your trainer.

Once the DBSC has this information, she/he will send a message to all trainers, asking for trainers for the specific day and time requested.

Once a trainer has agreed to take on this training, the DBSC will advise the trainee and team captain of the name(s) of the trainer(s) and the dates that a trainer will be at practice. An email will be sent to the trainer(s) to confirm the training day and times. In addition, contact for the trainee and trainer(s) will be shared to ensure that contact can be made to confirm training, especially if training may be affected due to work or illness.

- Once the trainee has been advised that training will take place she/he should print out a Steersperson On-Water Skills Checklist. **THIS IS TO BE CARRIED TO ALL TRAINING SESSIONS**. This form lists what trainees need to learn and demonstrate to show their knowledge and ability. The trainer(s) will use this form to keep track of what has been covered during a training session and what still needs to be done. The completed form(s) are to be given by the trainee to the FLCC assessor at the time of an On-Water Assessment.

For the purpose of training, the trainee must be trained by a FLCC DB trainer. At all times during training the trainer will be responsible for the crew and equipment. At the start of training a new steersperson, the trainer must position themselves at the back of the boat near the trainee so they are available to take over from the trainee if required. Once the trainer determines that the trainee has sufficient skill to handle the boat on their own, the trainer may position themselves elsewhere in the boat.

It is expected that every trainee will work with a trainer (s) for a minimum of 10 hours of “on-tiller time.” Once the minimum number of hours are completed, if the trainee has received a recommendation from a trainer and feels ready to take the On-Water Assessment required to move to the next steering level, the trainee should contact the DBSC. **ONLY THE TRAINEE MAY MAKE THIS REQUEST.** This requirement is intended to ensure that the trainee feels comfortable and ready for an assessment of her/his skills by a DB steersperson assessor. The Steersperson On-Water Assessment document is on-line so the trainee can see what to expect during the assessment.

There are three (3) levels of steerpersons:

Level 1 Trainee Steersperson

A Level 1 trainee must know and learn to do the following:

- Canada Safe Boating Guide (Online at <http://www.tc.gc.ca/media/documents/marinesafety/TP-511e.pdf> and free at an ICBC Driver's License Office),
- Rules of the water,
- Safety gear required,
- Safety on the dock - safe loading and unloading procedures,
- Verbal communication and command of the crew,
- Leaving and returning to the dock safely,
- Basic steering techniques,
- Balance - of themselves and the boat,
- Knowledge of hazards in the channel and river,
- Steering in current,
- Assess weather conditions,
- Mooring procedures,
- Freshet rules,
- Incident handling - man-overboard, swamped boat, capsized boat, incident reporting,
- Attend the annual FLCC safety meeting,
- Housekeeping and security of the boat and dock.

Level 2 - FLCC Steersperson

To move from a Level 1 Trainee Steersperson to a Level 2 Steersperson the candidate must:

- Have successfully completed the online steering quiz,
- Make a request for an On-Water Steersperson Assessment by contacting the DBSC. Such an assessment must be conducted by a DB steersperson assessor.
- Have successfully completed an On-Water Steersperson Assessment conducted by a DB steersperson assessor,
- Know and understand all steering and safety responsibilities from Level 1,
- Improve confidence in commanding the boat,
- Gain freshet experience and learn to use the current to manoeuvre the boat,
- Attend a freshet clinic when offered or practice and affirm freshet skills,
- Attend the annual safety meeting.

Level 3 - FLCC Accredited Steersperson

To move from a Level 2 Steersperson to a Level 3 Steersperson the candidate must:

- Have strong communication skills,
- Make a request for an On-Water Steersperson Assessment by contacting the DBSC. Such an assessment must be conducted by a DB steersperson assessor, Before making such a request, the candidate must have completed one regular dragon boat season as a Level 2 steersperson and shown competence in the position. One regular dragon boat season is defined as steering a minimum of once per week for a recognized FLCC DB team or for drop-in steering during the DB season, April to September or for an equivalent period of time,
- Demonstrate confidence in commanding the boat.

The DBSC has the sole discretion to determine whether or not the candidate meets the requirements for designation as a Level 3 Steersperson.

Upon the recommendation of the DBSC a Level 3 Steersperson can:

- Steer for an inexperienced group of adults and youth,
- Train new steerspersons.

A Level 3 DB Trainer must have the following characteristics:

- Strong communication skills and a supportive personality,
- Ability to listen patiently and have a calm demeanour,
- Possess a firm but fair approach when training others,
- Comply with all club rules and policies,
- Have a personal commitment to safety,
- Be respectful of all others in the club: coaches, teams, fellow steerspersons.

The Level 3 Steersperson will:

- Improve proficiency of skills specified in Level 1 & 2,
- Continue freshet experience,
- Attend a freshet clinic when offered or practice and affirm freshet skills,
- Attend the annual safety meeting.

Steering Re-Assessments:

It is the policy of the club that all Level 2 and 3 steerspersons be re-assessed by a DB assessor within five (5) years of their original assessment and once within every five (5) year period thereafter. Failure to participate in such a re-assessment will result in the loss of the Level 2 or 3 steering designation until such time as a re-assessment is completed.

Re-assessments will be scheduled by the DBSC in consultation with the steersperson requiring the re-assessment.

The DBSC, may ask a DB assessor to conduct additional performance assessments of a steersperson in a “non-evaluation year” if there are concerns related to the steersperson’s performance.

FLCC DB Assessors

FLCC DB assessors will be designated annually by the Dragon Boat Representative (DBR). The DBSC may make recommendations to the DBR regarding assessors.

FLCC DB assessors must have the following characteristics:

- Proven communication skills and a supportive personality,
- Proven ability to listen patiently and have a calm demeanour,
- Possess a firm but fair approach when assessing others,
- Comply with all club rules and policies,
- Have a personal commitment to safety,
- Be respectful of all others in the club: coaches, teams, fellow steerspersons,
- Full understanding of safe boating practices,
- Already a Level 3 Steersperson with three (3) years’ experience and a clean safety record,
- Participation in club activities, clinics and special events,
- A demonstrated willingness to assist the club generally,
- Experience in training new steerspersons.

Steersperson Responsibilities

SAFETY FIRST!

A STEERSPERSON MUST NOT BE UNDER THE INFLUENCE OF DRUGS OR ALCOHOL!

All responsibilities are the steersperson’s, however, there must be a second in command in order to take control if the steersperson is unable to continue for any reason. This person can be the coach, drummer or captain and must be identified before leaving the dock. This person must be able to take command of the boat and manoeuvre the boat without the steersperson.

It is highly recommended that each team have a trained backup steersperson on board at all times.

The steersperson’s primary responsibilities are:

- The safety of the crew,
- The safe operation of the boat,
- The safety of others on or in the water,
- To adhere to the scheduled practice time.

Additional steersperson responsibilities are as follows:

Pre-Practice:

Assessing the weather and river conditions in consideration of the experience of the paddlers to avoid putting them at any unnecessary risk, The steersperson has the responsibility to ensure that all water exercises can be conducted safely and has the **sole authority** to decide whether or not the practice will take place.

WHEN IN DOUBT - DON'T GO OUT!

Minimum Number of Paddlers:

FLCC requires a minimum number of experienced paddlers in each boat before being allowed on the river. Weather and water conditions must be considered when using these rules. Fast and high water also require you to consider the weight of the normal crew complement. Overloading for the conditions may result in the boat taking on water and swamping. It is the responsibility of the steersperson to ensure that the crew always complies with the minimum and maximum loads on the boat.

NOTE: A coach with a paddle can be included in the count of paddlers. In such an instance the front seat must be open.

Boat	Minimum Non-Freshet mostly experienced paddlers	Minimum Freshet mostly experienced paddlers
Millennium or 6/16	12	16
BuK	10	14
DB 10	6	8

NOTE: At times of extremely slack water, two less paddlers is the minimum number.

Preparation Prior to Departing Dock

Prior to taking the team to the dock:

- Ensure there are the required number of paddlers to meet club rules,

- Ensure the boat you are taking has been appropriately prepared - the boat has two balers and a throw bag on board, the boat is in good condition,
- Check the bridge footings, dock and river for any observable hazards,
- Check to ensure all PFDs are Canadian Coast Guard, Ministry of Transport or Fisheries and Oceans Canada approved and properly fastened **BEFORE** going down the ramp to your boat, (Vaikobi PFDs are not acceptable.)
- Before proceeding to your boat organize the paddlers back to front in the parking lot and proceed to the dock in an orderly manner,
- Send the lines people down first, followed by the rest of the group. Do not proceed to your dock finger if it is already occupied by another team boarding or unloading.

On the dock:

- Have the paddlers line up by their row/seats providing enough space for the lines people to see one another and for you to move freely alongside the boat.

Load your boat:

- Once the boat is loaded have all dockside paddlers hold the dock and have the coach take her/his place in the boat, then have the lines people take their seats,
- Take your place, ensuring the steers area is clear of any items,
- If no other team is waiting to use your finger, call for quiet and go through the pre-practice safety review. If another team is waiting, leave the dock area and go through this process once you are well away and clear of the dock.

Safety Review:

- Ensure two balers are positioned in the middle of the boat,
- Check to be sure the throw bag is located beside someone who knows how and feels confident in using it,
- Ensure you have a cell phone in a dry bag on board,
- Be sure everyone knows where the Emergency Pull Out map is located,
- Identify who will be in command should the steersperson become unable to control the boat,
- Identify your back up steersperson,
- Identify forward and aft pointers,
- Identify, from back row who will retrieve the tiller should the steersperson fall overboard,
- Check to identify anxious, non-swimmer and novice paddlers,
- Ask paddlers to number off by row so everyone knows how many people are in the boat, add the coach and the steersperson to this number.

Leaving the dock:

- Do not leave the dock until you know it is safe to do so and that you will be clear of other boats leaving or approaching the dock,
- Once you are clear of the debris deflector, turn the boat over to the coach for practice,
- During freshet do not turn the boat over to the coach until you have passed the red channel buoy.

Returning to the dock:

- Once practice is over and the coach has returned the boat to you, approach the dock facing upstream and on the South shoreline.
- Approach the dock slowly and ensure the team is quiet to respond to your commands.
- Once you are fully stopped dockside, ask paddlers to hold the dock. Call on the lines people to get out and take the forward and aft short lines.
- Ask the team to put the bumpers out and to sponge out the boat to remove dirt and gravel.
- Direct paddlers to unload on your command one row at a time, be conscious of boat balance, side to side and front to back during this process.
- Instruct paddlers to leave the dock area immediately.
- If no team is using the boat after you, return the throw bag and tiller to their storage areas.
- Move the boat to its appropriate mooring position and ensure it is locked and the lines are properly tied.
- Check to see that the dock storage area and tiller box are properly locked.
- Once you have completed these checks you may leave the dock and rejoin your team.

Boat Commands

Make sure that you know the FLCC commands and that your crews know those same commands. This will ensure that you can steer with any crew and they will be able to respond to you without hesitation. Communications need to be clear and the crew needs to be quiet. These communications are **NOT** requests but **COMMANDS**. Practise all calls and teach your crew what you expect when you use them. **USE YOUR DRILL SERGEANT VOICE!** The use of a strong commanding voice lets members of the crew know you are in charge and helps to ease any anxiety they may have about being on the water.

Bumpers/Fenders in/out – bring bumpers/fenders in or out of the boat for docking or coming alongside another boat,

Paddles up – Paddles raised, ready to move into the first stroke together,

Take it away – Start paddling, following the stroke's lead,

Let it run – Stop paddling, paddles placed across the lap, let the boat glide forward on its own momentum,

Hold the boat – Paddlers plunge blade vertically into the water, perpendicular to the gunnel and brace with their body to stop the boat moving forward or back,

Hold hard – Paddlers drive their paddle down into the water doing a backstroke and then hold firm vertically in the water.

Brace the boat – Paddles out flat and just below the water's surface to stabilize the boat. (used when crew members are moving in the boat or if a very big wave/swell is about to hit),

Prepare to back paddle or Paddle Back – Paddles held out of the water prepared to back paddle,

Back it down or Back paddle – Slowly paddle in reverse to back the boat up. Paddlers in time, based on steersperson's command,

Walk it back/up – Have the dockside paddlers move the boat back or up the dock using their hands,

Draw left or Draw right – Paddlers reach out sideways to pull water towards and down under the side of the boat on the steersperson's command. If stopped, the opposite side should lean out for stability,

Pry left or Pry right – The opposite of draw. Paddle is inserted beside the boat and water is pushed away from the boat at 90 degrees on the steersperson's command. May use gunnel as a fulcrum point,

Check (for drift) – to prevent the boat from drifting sideways (used mostly at the start line before a race). Paddles are in the water with the blades running parallel to the boat and the shaft is held against the gunnel.

Other terminology:

- **Port** – Left side of the boat
- **Starboard** – Right side of the boat
- **Bow** – Front of the boat
- **Aft or Stern** – Back of the boat
- **Lines** - the ropes attached to the boats
- **Spring lines** – long lines attached to bow and stern
- **Bow and Stern lines** - shorter lines attached to the bow and stern

Steering a Boat in Practice

Stance – Body positioning:

For optimal stability, feet should be at least shoulder width apart to give stability both fore (front) and aft (back) and side to side, keeping your right foot forward and the left foot back. Knees should be slightly bent and flexible, back straight, hips and shoulders square (except when turning the boat). To steer well you must learn to establish a stable stance so you can withstand front and back as well as side forces. This helps you utilize the whole steering platform to maximize the range of motion you have with the steering tiller.

Hands and Arms:

Hold the tiller “T” with the right hand as a paddle, left hand on the shaft near your left hip. The blade should be vertical and at least halfway below the waterline. Right hand should be near chest height but this will depend on the steersperson's height and other factors. The tiller bracket should be positioned one-third of the way up the tiller shaft. This will maintain proper leverage on the tiller and allow you to steer without undue force or exertion.

Stand Up:

Many first time steer persons tend to crouch down because they are worried about losing balance or falling out. To see where you are going and what your paddlers are doing and to have complete control of your boat, it is best to remain standing with an erect posture; **do not sit down to steer** – you will not have the visibility to see ahead or around you.

Balancing the Boat:

With the paddlers sitting up, looking forward with their hips against the gunnels, check for balance. Place your forward foot slightly left or right as required to balance the weight of the boat. Cooperate with the drummer/coach to balance the boat. If paddlers need to switch sides to balance the boat see: **Switching Positions of Crew in the Boat** below.

Determining practice locale:

In consultation with the coach, the steersperson will ascertain the best area to practice.

Under Way:

Stay close to the shore. Consider the wind and water conditions, e.g. go out against the wind so that if the wind increases, you can return with the wind to help push you back.

Forward Paddling – Going Straight:

To go straight, start with the tiller straight back with the T-handle straight up and down. When the boat starts to turn off course just a foot or so, make a minor correction by tilting the tiller (twisting the handle) as needed to slant it and if needed, push away from you or pull back towards you a few inches to make the boat turn back to straight. Once you start to turn, the boat will tend to continue to turn in that direction. Stop the turning manoeuvre early enough to allow the boat to drift back to the desired course before going too far in the opposite direction.

A common beginner's mistake is to over steer, moving in a snake-like manner down the course. While practising, learn how the tiller and boat react differently at different speeds. (Slow – little reaction; fast – a quick reaction requiring a lighter touch). Practice adjusting the depth and angle of the tiller to determine its effect on steering and compare pushing or pulling the tiller versus rotating the tiller to a slanted position to steer. Another common beginner's mistake is to watch the tiller too much. Try to make yourself look ahead (down the course) while feeling the position of the tiller. Practice steering close to another dragon boat, choosing a landmark on shore for the course. Until you are more experienced, try to leave a minimum of 3 metres between boats. Put safety first – do not hesitate to command **“Let it run”** or **“Hold the boat”** in order to avoid a collision. Ignore calls on other boats. Your focus is and should remain on your boat's course and for other boat traffic or weather conditions that require changing course.

Making a Turn:

To make a small adjustment to turn while moving, slant the handle as needed, the top towards you to turn right and away from you to turn left. To make a bigger turn, pull the handle towards you to turn the boat to the left or push the handle away from you to turn right. (Practice this so you don't have to think about it – like driving a car). Try to feel the tiller's position while looking down the course so that you avoid turning the boat too far. To turn faster while the boat is moving, have the front 3-4 benches on one side do a 45 degree draw stroke.

To turn while the boat is stopped, stroke or scull the tiller several quick strokes towards you or away from you to rotate the boat or have the paddlers help by having the first 3-4 front benches on the side you want to turn towards do a 90 degree draw stroke and the back 3-4 benches on the opposite side do a 90 degree draw stroke. Help the timing by calling out the stroke numbers. Quicker yet is to use both methods in combination.

Handling Waves and Wind:

The best course of action is to maintain vigilance to avoid other boats and their wakes. When unavoidable, small waves are best handled at no less than a 45 degree angle from either bow or stern. Larger waves or wake should be aligned closer to 90 degrees to the bow or stern. Going straight on at the waves will help to prevent the boat from being pushed sideways as the wave crests and the boat drops into the trough between the waves. Being pushed sideways so that oncoming waves crest over the freeboard is a scary situation.

Speed helps maintain boat stability, so call for paddlers to **“Paddle through it!”** so paddlers know that the wake or waves are coming.

One of the problems with getting hit from the side by a wave is the shifting of the paddlers in the boat from one side to another. This is especially an issue with a boat that does not have a centerboard which can be used by the paddlers to brace their inside legs. Without a centerboard the paddlers can brace against each other. If water does come aboard, have midship paddlers bail, while bow and stern paddlers continue to paddle.

In windy conditions, whenever possible, head either directly into or away from the wind. A steersperson should determine where there is shelter from the wind, usually along one shore and use it if possible. If the wind increases considerably while you are out, making it impossible to return to the regular dock, turn the boat to go with the wind and head for the closest dock or even the shore if necessary.

Back Paddling:

Change your stance. Turn your left foot out at an angle instead of straight ahead so you can turn partially backwards so you can more easily see where you are going. Be especially cautious to avoid the tiller dipping too deep, as it may cause you to lose control of the boat and possibly even break the tiller arm or bracket. **GO SLOW!** Keep the tiller out of the water as much as possible, but, if turning is needed, use shallow, short strokes. If the tiller binds due to water pressure on the blade, have paddlers paddle forward hard to release the pressure. You have no control when this happens, so act quickly. If you have to paddle backwards a longer distance, look backwards, but regularly check the bow to avoid collision or grounding and warn the crew if the boat will come close to an obstacle on either side. Do not hesitate to call for **“Hold the boat”**.

Switching Positions of Crew in the Boat:

Command the paddlers to **“Brace the boat”**, before switching sides. Ensure paddlers remain in their positions until they are instructed to move so everyone is not moving at the same time. When they are not in the process of moving, they are bracing. Instruct paddlers to move slowly and stay low. For pairs sharing a seat, one paddler must stand, so instruct them to hold the shoulders of the paddler(s) in front of them. While they are standing their seat partner will move across. Instruct both paddlers to move to the middle first then at the same time both move to their new side to keep the boat balanced. For paddlers without bench mates, they can change simultaneously, first moving together to the centre before the others move, then to the other side. The steersperson can help by doing a 1-2-3 count. Remind the paddlers to brace again after switching their bench until all position changes are finished. Tell the paddlers when all seats have switched to release the brace and then they can adjust seat pads and water bottles.

Steering in low water:

Be aware the bank on the island side of the channel is extremely shallow in low tide and comes a fair distance into the channel. If paddlers hit bottom they can get hurt! Make sure your paddlers are aware of the possibility of low water issues when in those areas and have them call out if they touch the bottom with their paddles. You can then make the necessary course adjustments to get your boat out of the shallows.

DB10 Boat Usage

This policy outlines the usage guidelines for the Swift and Champion DB10 boats at Fort Langley Canoe Club.

Swift DB10 Usage

- **Eligibility:** The Swift DB10 is available for **Level 2** and **Level 3 steers**.
- **Orientation:** All steers and crew members must complete an orientation and check-out process in the boat before using the Swift DB10. This is mandatory.

Champion DB10 Race Boats

- **Eligibility:** The Champion DB10 race boats are restricted to **Level 3 steers** only.
- **Orientation:** All steers and crew members must complete an orientation and check-out process in the boat before using the Champion DB10. This is mandatory.
- **Maximum Load:** 1150kg (2535 lbs)

Orientation Requirements

- All steers must complete a **short orientation session** before using the Swift & Champion DB10.
- To schedule an orientation, please contact the **Steers Coordinator** at steering@fortlangleycanoeclub.ca.

Safety and Operating Guidelines

- **Racing and Training:** According to the boat label, the DB10 boats are licensed **for racing and training use only on placid inland waters and sheltered harbours**.
- **Restricted to the Channel:** All DB10 boats are restricted to the **channel** for safety reasons, with the exception of experienced race crews accompanied by a safety boat.

- **Safety Boat Requirement** - Experienced race crews are permitted to paddle outside the channel boundaries provided they are accompanied by a Safety Boat. The Safety Boat must have a minimum of two people on board. The DB10 must remain close to shore at all times.
- **Minimum Crew Requirements:**
 - ○ DB10 Swift & Champion: 6 paddlers minimum
 - ○ Freshet: 8 paddlers minimum

Boat Booking

- **Booking Process:** The DB10 boats are booked according to the same guidelines as the 20 or 24 person boats. Please consult the DB Schedule on the website for availability and contact the DB Rep for booking. Fees for the DB10s are listed on the website.
- **Rental Fees:** A team substituting a DB10 for a 20 or 24 person boat due to insufficient paddlers will **NOT** be refunded for the substitution.

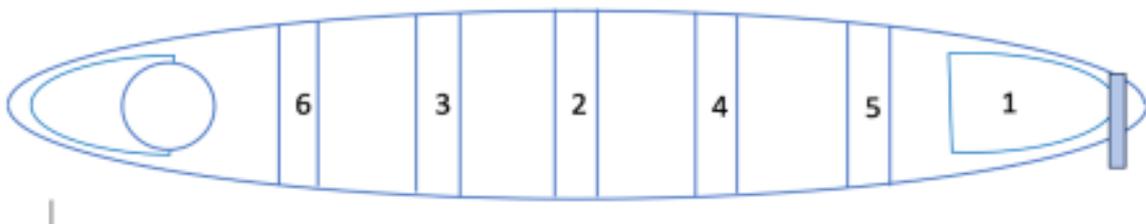
Steering Principles for FLCC's Swift and Champion DB10s

The general principles for steering a 20 or 24 seat dragon boat apply to steering a DB10, but there are additional considerations specific to the DB10, such as weight distribution, stability, and responsiveness. This guide focuses on steering FLCC's Swift and Champion DB10s.

Loading the DB10

The DB10 is highly sensitive to weight distribution, so loading the boat correctly is essential for stability. Follow the recommended order and guidelines for loading to ensure safe and balanced positioning:

Front Seat (Lines People): Paddlers in the front seat should be responsible for handling the lines.



Recommended Loading Order:

1. **Steersperson Loads:** Start by positioning the steersperson at the tiller and shift your weight to help counterbalance the loading paddlers.
2. **Seat #3:**
3. **Seat #2:**

4. **Seat #4:**
5. **Seat #5:**
6. **Seat #1 (Lines People):**

Key Loading Tips:

- **Step Carefully:** Paddlers should step into the middle of the boat to maintain balance while loading.
- **Position Heavier Paddlers in the Middle:** This helps keep the boat balanced.
 - **Limit One Paddler at a Time:** Avoid overloading or uneven weight distribution by loading one paddler at a time.
- **Brace for Stability:** Paddlers can help stabilize the boat by bracing the boat while loading and unloading.
- **Avoid Odd Numbers:** If there's an odd number of paddlers, the boat may become unbalanced. In this case, the coach may be able to assist from a seat.
- **Unloading sequence:** Reverse of loading.

3

Stability Considerations

The DB10 is agile but very sensitive to weight shifts and tiller movements. To maintain stability:

- **Minimize Unnecessary Movement:** Paddlers should avoid leaning in or out, as unnecessary shifts can destabilize the boat.
- **Steers Must Adjust Weight:** Steers people need to shift their weight as needed to maintain balance.
- **Avoid Sudden Turns:** Turning too quickly or with excessive force can destabilize the boat and cause a capsize.
- **Maintain Balanced Weight Distribution:** Steers must ensure that the paddlers' weight is distributed evenly throughout the boat.
- **Maximum Load** for the DB10s is approximately 1150kg or (2535 lbs). DB10's have less clearance from gunnel to water than standard boats. For that reason, less than 10 paddlers may be required due to weight restrictions and water conditions.

Responsiveness

One of the defining characteristics of the DB10 is its responsiveness. The boat can turn quickly, but this responsiveness can be both an advantage and a challenge for a steers.

- **Sharp Turns:** You may hear steers say that the DB10 can turn "on a dime," which is

true. However, while this tight turning ability is useful, it can also be a disadvantage if not controlled properly.

- **Control Challenges:** The boat's quick responsiveness can make it harder to counter sudden movements, particularly when the boat feels unexpectedly heavy during turns. It's essential to maintain control and make gradual, controlled adjustments.

These streamlined usage & steering principles are designed to ensure the safe, efficient, and fair use of the DB10 boats by qualified individuals at Fort Langley Canoe Club. Please adhere to these guidelines for the safety and success of all participants.

Docking – Fort Langley

TAKE YOUR TIME. DO NOT RUSH. When you leave the docks you must recheck for debris under the bridge and the strength and direction of the current as this knowledge is needed for approaching the docks safely. Check if the current or wind will be pushing you into or away from the dock. It is recommended to approach the docks coming under the south side of the bridge.

If there are boats coming in or leaving the docks, hold the boat and wait for a spot on the dock. Take a good line into the dock using your paddlers to slow the boat. Be sure others know your intentions. Approach the docks very slowly in a controlled manner. Use the current to help you bring the boat into the dock - this is especially important in freshet. The angle of the boat and speed of the river can be used to assist in the approach to the dock. A good demonstration of this manoeuvre can be seen on the FLCC website under the Safety Heading - Big Boat Steers Clinic.

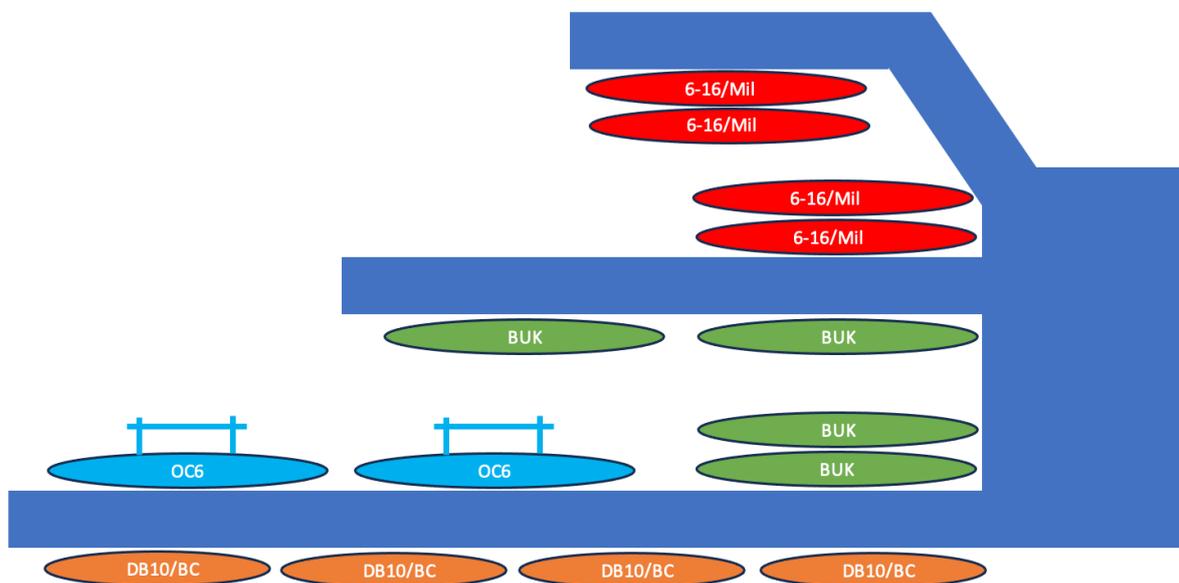
A good steersperson should arrive at the dock at a slow enough speed that the boat stops in the appropriate position without needing a hard hold.

Mooring the Boats

Ensure the bumpers/fenders are properly positioned, hanging down with the top of the fender at the gunnel, on the side of the boat that comes into contact with another boat. All boats are to be moored behind a finger for protection from wake. If needed, use the long lines (Spring Lines) attached to bow and stern to line the boat into mooring position - this is, at least, a two person job. Cleat the bow and stern lines loosely. Cleat the bow spring line to the dock cleat at the stern end of the boat and the stern spring line to the dock cleat at the bow end of the boat. These lines need to be taut to keep the boat in place. Ensure there is sufficient space between the bow of the boat and the dock, and that the tiller arm

will not hit the dock in waves. The black cable is fed through the cleat and locked to itself.
NOTE: the boat closest to the dock should be tied to the furthest cleats from the mooring position. This allows the boat which is rafted up to it to give the team sufficient line length to properly secure the boat.

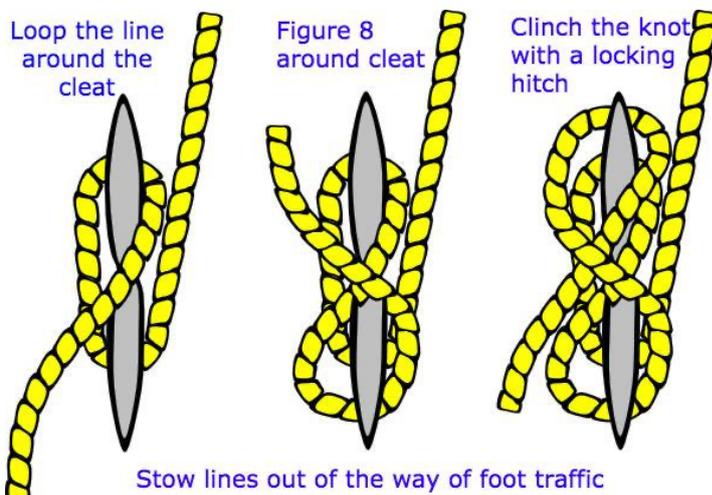
Mooring locations: These positions may change seasonally.



Ensure that boats are moored in their assigned dock location. All boats must be protected from wake/wave action by fingers.

Do not assume the boat is to be moored where it was before your practice.

Tying lines to the cleats



Fewer boats will be moored at the canoe dock during the off season. Cleats are used to provide quick release of lines so do not over-wrap the lines, particularly in winter when lines ice-up.

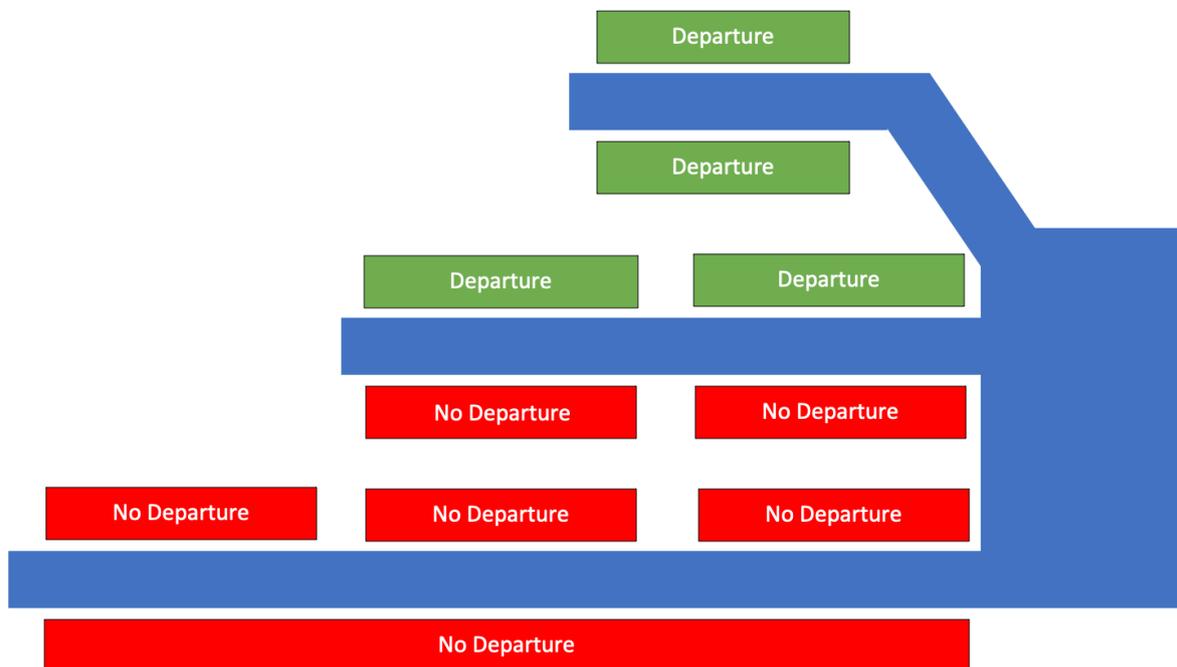
Steering in Freshet – FLCC Rules

The FLCC website and/or newsletter will announce when freshet rules apply. Be aware conditions change quickly at this time of year due to fast moving water and the debris carried along with it can come up on you quickly. If in doubt if freshet has not been called but the water is running high and fast, follow the freshet rules. No corporate outings may be taken out during freshet.

Leaving the Dock - During Freshet:

During freshet all boats are to leave from the north side of all docks (A, C, E). The one exception is that you may leave from the south side of the North Finger (B). If your boat is on the south side of the Middle or on either side of the South Finger it must be lined around to the north side of the middle finger or either side of the North Finger before loading.

This will require cooperation from all teams: teams need to depart the docks in a timely manner so as to allow boats to be lined around.



When leaving the dock ensure the current does not push the boat too close to the bridge. If at the east end of the Middle Finger walk the boat back along the dock in a controlled manner. There is no need to back paddle or you may be moving too quickly backwards towards the bridge. Keep as much distance as possible from the bridge. In strong current one method to leave the dock from the north side of the finger is to walk the boat down to the west end of the dock, then hold the stern close to the dock and not let it move closer to the bridge by looping the short stern line around a dock cleat and request seats 2 and 3 to **“Push off from the dock.”** The bow is turned out by the current as the stern is held tight to the dock. As soon as the bow is heading away from the dock and will clear the debris

deflector, the stern line is slipped off of the cleat and the command is given **“Paddles up; Take it away”**. The boat has then safely left the dock with very little effort from the crew. See diagrams.



Holding stern close to dock. Seats 2 and 3 push off



Note stern line looped around dock cleat



Stern line is released when the bow clears the dock/debris deflector.

Once clear, **“Paddles up – Take it away”**

During Freshet always leave and return to the dock heading upriver.
Club policy does not permit you to turn the boat between the bridge and the red buoy until you have completely passed the buoy as you could be pushed sideways into the bridge!

Navigation in Freshet

During freshet, although the water level is much higher, it does not vary much due to the tides but the current may be up to 7 km/hr. If we paddle our boats at a little over 10 km/hr we see that the current can have a major effect on our boat speed, reducing our upstream speed to maybe 3 km/hr but rushing us downstream at 17 km/hr. However, the current is not constant across the entire channel; we can find slower currents next to shore, on the inside shore where the channel curves and in the lee of rock piles, boat houses, etc. The current may speed up on the outside shore where the channel curves and where the current is forced to bend around islands, etc..

The river never stops coming at you so you must be mindful at all times and not lose focus of what you are doing as it can result in a rapid loss of position and an ill advised ferry angle into stationary objects which is extremely dangerous to crew and equipment. The current will be constantly pushing boats downriver and creating turbulence around docks and other stationary objects - a steersperson must learn to use this to their advantage. Additionally, each boat will perform differently in the water as the loads within the boat change. A steersperson needs to understand the performance characteristics of their boat. Improper steering techniques may result in rotational capsizing or sudden surges or losses in position in the river.

Once you leave the dock you will be heading upstream against the current. Steer towards the middle of the channel to get around the dock debris deflector while being aware of the effects of the current. You will feel more pressure on the tiller when crossing the current as the water will be pushing on the bow to make the boat turn downstream. Always look ahead for deadheads and debris which can be stuck in the channel or heading your way from upstream.

When steering in a current it is very important to anticipate what your course will be so you can manoeuvre safely away from other watercraft. You need to understand how the current can affect your turning radius. Do not get caught trying to turn without room to do so. If you wish to turn to head downstream, when leaving the dock area, you must go past the red buoy before turning the boat in order to leave room up-river of the bridge. To pass under the bridge, heading downstream, pick a bridge arch to go through, and line up well upstream for a straight run through the centre of the arch, keeping an eye out for other boat traffic and any debris which may be caught under the bridge. During the summer people often jump from the bridge to the river - be alert and watch for jumpers. Watch for eddies (disturbed swirling water) which can indicate submerged or partially submerged obstacles.

The bridge constitutes a major hazard by restricting overhead clearance, generating extreme turbulence in the vicinity of the bridge footings or trapping debris and reducing the opening available between footings. Look at the bridge footings to get an indication of

water speed and to note any debris that may be caught up under the bridge. Always pass under the bridge centred between the bridge footings with your boat straight to ensure the boat does not ferry into a piling. It is recommended that steerspersons not take the boat through the most northern full arch. To return to the dock from upriver, pass under the bridge on the north side of the river, then turn downriver of the bridge heading upstream passing under the bridge on the south side to arrive back at the dock facing upstream. Once unloaded, if required, line the boat to a mooring position and secure it.

Emergency Situations: Man-Overboard, Capsizing and Swamping

A crew must be prepared for emergency situations.

- Ensure the safety equipment is on board and the crew know what to do with it,
- Each paddler should know their seatmate - “buddy”,
- Identify non-swimmers and anxious swimmers. Before leaving the dock ensure all paddlers know the non-swimmers or anxious swimmers to give them special attention in case of emergency. Other paddlers are **NOT** to try to physically help a nervous paddler in the water as they may be pulled under themselves. The paddler in the water will have a PFD to keep them afloat - talk reassuringly to them to keep them calm,
- Know the pullout spots in the areas you are paddling,
- In case of emergency, immediately assess crew for injury or hypothermia and call 911 if needed. This can be done before returning to the shore, dock or emergency pull out spot so the ambulance can meet the crew upon arrival. Reassess crew conditions frequently.

Man-Overboard (MOB)

If someone has fallen out of the boat, pointers locate the MOB and continue to point at them until the steerspersons indicates they have them in sight. The person with the throw bag should ready the bag for use but not throw until directed to do so. The steersperson will manoeuvre alongside them amidships where there is more room and have the MOB upcurrent of the boat to prevent the boat from injuring the MOB by pushing them against an object in the water. If the MOB is behind the boat it is faster to back paddle than to go forward and turn back. If the MOB is off to the side of the boat, it is much faster to back the boat up first to get behind the MOB then turn as you move forward, than to move long distances with draw strokes. In a faster current, always paddle downstream of the swimmer and approach heading upstream so you have better control of approach. Once the MOB is alongside the boat some of the crew needs to endeavour to get the MOB into the boat while the rest of the crew balances the boat. If it is not possible to quickly get the MOB in the boat, get as much of the MOB out of the water as possible, then while several paddlers hold the MOB the rest of the crew will paddle to the closest open shore where the MOB can board.

Here are options for getting a MOB back into the boat:

- If the MOB is conscious and strong enough to partially lift themselves into the boat, first have the crew on the opposite side scoot sideways towards the middle causing the gunnel on the MOB's side to be closer to the water. On a count of 1-2-3, the paddlers on the opposite side move back to their original positions against the gunnel while the MOB pulls himself/herself up into an empty bench in the boat,
- If the MOB is conscious but unable to get in on their own, have crew members grab the MOB by the PFD and warn them of the following manoeuvre. First push down on the MOB, then using the momentum of the PFD being pushed up by the water, pull them into the boat,
- If the MOB is unconscious, have crew members turn the MOB's back to the boat, kneel down and grab the MOB by the PFD and then pull them up and over the side, falling backwards into the boat with the MOB,
- Spring or throw lines can be made into a loop to hang from a seat or centerboard for the MOB to step in to assist getting into the boat.

Capsizing

It is a widely held belief that a 6-16 or Millennium cannot be capsized but it has happened on rare occasions. A BuK or DB10 is more easily flipped so extra caution is necessary.

Avoidance is always the best approach.

- Be careful that the boat is not overloaded and is properly balanced and bailed,
- Handle waves correctly,
- Avoid excess speed when turning,
- Follow procedure appropriate for the conditions when changing positions in the boat.

Cold water can quickly become a problem so act promptly:

- The crew must stay with the boat and count off from the front to ensure no one is trapped under the boat, non-swimmers are safe, and there are no medical issues. Paddlers are to know their seat buddy, as well know who is in front and behind. Immediately after surfacing, they are to check to see if their partner is present and okay. Front pair checks on the drummer and back pair checks on the steersperson. Assign competent swimmers to assist and reassure the non and anxious swimmers or anyone that is injured. Remind everyone the boat will not sink. The best policy is to **STAY WITH THE BOAT!** Once it is determined everyone is safe, a course of action will be determined by the person in command. If individuals head to shore on their own the rest of the team will stay in the water as they continue to look for them,
- If paddlers surface and find themselves under the boat, they need to come out in a timely manner. A paddler can grasp the gunnel and push themselves, down and out,

- A capsized boat will be upside down. Paddlers in the water can try to push up on one side to flip it right-side up. If this is possible, then the boat will be full of water. Once the boat is upright, as long as the gunnels are above the water, start getting paddlers back in the boat. This will be easier with less freeboard while the boat is full of water so get less agile paddlers in the boat first. As soon as the first paddlers are in the boat they start bailing. Continue to get paddlers in the boat to get them out of the water - it will be warmer in the boat. Keep everyone busy to stay warm. Be sure the gunnels remain above the water as you get paddlers in the boat. If a few are not able to get in the boat treat them as a MOB and pull them out of the water as far as possible then have the rest of the crew paddle to shore where the boat can be emptied and all the paddlers get back in the boat to paddle back to the dock,
- In case the crew cannot flip the boat while in the water, non-swimmers may be pushed up onto the hull to get them out of the water, or give them paddles, which are buoyant to hold. The other paddlers in the water can swim the boat to the closest open shore, using the current to ferry the boat. Do not try to get to shore against the current. On shore the boat can be flipped then launched to paddle back to dock. If this is not possible tie the boat to ensure it is not washed downstream and phone for assistance. Keep everyone busy to stay warm,
- If the person in command determines it is best to leave the boat while in the water everyone must stay as a group. Determine a meeting place before leaving the boat, use the buddy system enroute but keep everyone close, and recount the crew at the site on land. If there is a current, be aware that the current will take everyone downriver so move with the current. Paddlers should roll onto their backs with their feet down river to see where they are heading and angle their bodies to ferry towards shore - do not fight the current. Pick a spot for landing that suits conditions.

Get familiar with the landing positions in different conditions during practices. Once on shore, re-check carefully for any injuries or medical problems. Use a cell phone to call 911 if there are any medical concerns - giving them the situation and the landing position, or phone for assistance. If there are no medical concerns, phone family and friends to arrange transportation for the crew. When everyone is safe, contact the FLCC executive to explain the situation regarding crew, boat and equipment.

Swamping

Normally the biggest issue with a 6-16 or Millennium is swamping, but any boat may be swamped in high waves or if mishandled. When a boat swamps, the paddlers will likely still be seated and the boat may have any level of water inside. If the water is below the gunnels, have mid-boat paddlers bail as quickly as possible while the others continue to paddle. Remember, if swamping was caused by rough water, more water may come in the boat with the next wave, so you want to get as much freeboard as quickly as possible. If the gunnels are below the water you must get some paddlers out of the boat to raise the gunnels before you can bail. Those paddlers can get back in as soon as there is more freeboard. **Do not leave paddlers in the cold water any longer than necessary.** Determine the closest landing spot or head back to the dock. Keep everyone busy either bailing or paddling to stay warm.

Emergency Pull-out Maps and Locations

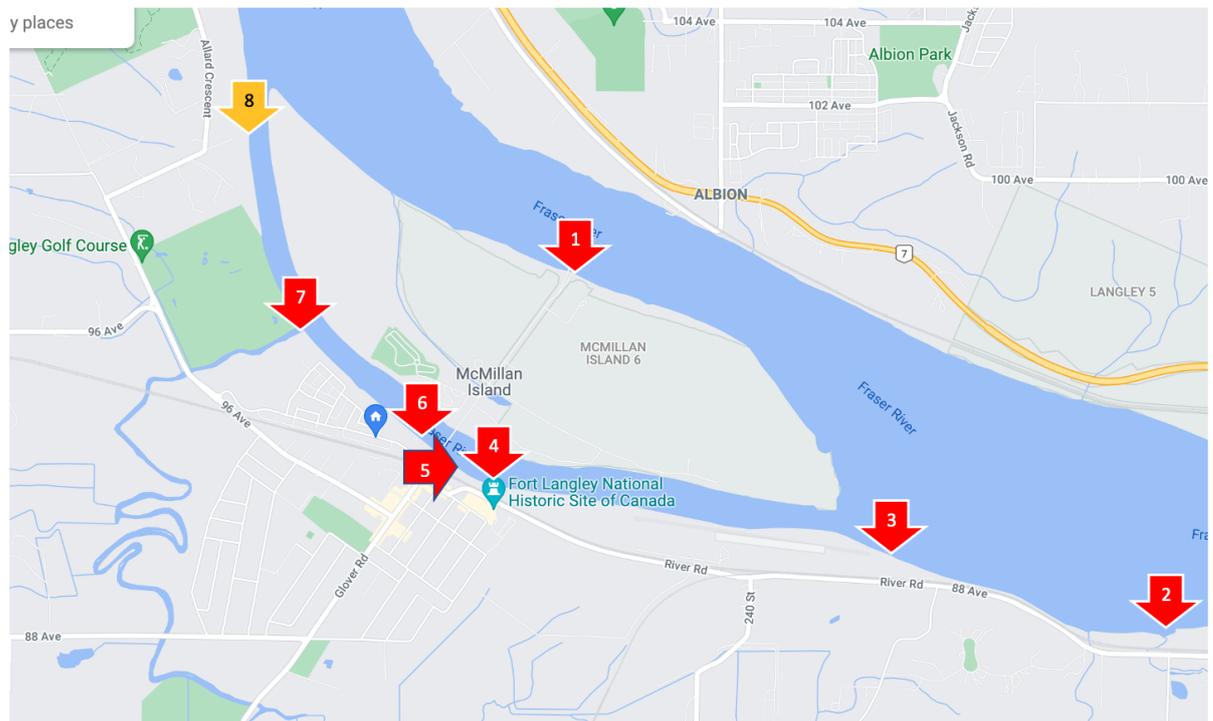
The pull-out spots on the map are registered in the Emergency Health Services database of **COMMON PLACE NAMES**. When you contact 911 tell the operator you need an ambulance at ... “Common Place Names, Fort Langley Canoe Club, pull-out number X”. For example, the Fort Langley Airport, is “Common Place Names, Fort Langley Canoe Club, pull-out number 3”

In all cases you will need to send someone to the nearest main road to direct emergency vehicles to the pull-out area.

If, and only if, the dispatcher is unsuccessful in pulling up the Common Place Names data use the descriptions below.

1. **Old Albion Ferry Dock, north end of Glover Road at Fraser River, 9500 BLK Glover Road. (49.17984° , - 122.56762°)**
2. **North end of 252nd Street at Fraser River, off 88th Ave (River Road) 25200 88th Ave, Get someone out to 88th Ave (River Road) (49.16220° , - 122.52528°)**
3. **Fort Langley Airport, 23945 River Road. The gate is almost a kilometre west of the airport dock. Get someone to 23945 River Road/88th Ave. (49.16579° , - 122.55702°)**
4. **Boat Launch at east end of Marina Park, at north end of Church Street. (49.16987° , -122.57341°)**
5. **Canoe Dock – north end of Church Street. (49.17065° , -122.57574°) AED**
6. **Paddlesport Dock – access east of 23285 Billy Brown Rd (49.17129° , - 122.57818°) AED**
7. **Salmon River at Fraser River. Access Road is at 22969 Coulter Court, with a locked gate. Get someone to the gate. (49.17590° , -122.58630°)**
8. **DO NOT USE unless you can't paddle to Salmon River or Paddlesport Dock.. Muench Private Dock Road extends off Allard Crescent at 10000 Block to Fraser**

River – Get someone up to the main Allard Crescent to direct emergency vehicles down to the dock area. (49.18617°, - 122.59030°)

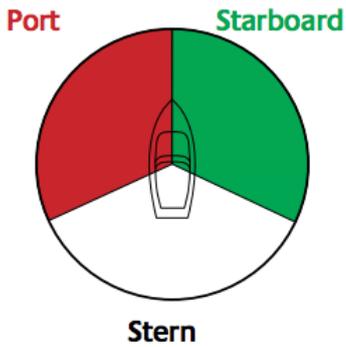


When you contact 911 tell the dispatcher, you need an ambulance at, “Common Place Names, Fort Langley Canoe Club # ”

Boating Right-of-Way

Rules that deal with situations likely to occur in the Fort Langley area:

- Vessels that are restricted in their ability to manoeuvre (ie. tugboats towing a load and a vessel engaged in fishing) have the right of way.
- In Canadian waters, a vessel crossing a river shall keep out of the way of a power-driven vessel ascending or descending the river.
- All motorised boats, sailboats and human-powered boats under 20m in length must steer clear of larger less manoeuvrable vessels.



Rules of the Road from the Canadian Safe Boaters Guide:

Left (Port): If any vessel approaches within this sector, maintain your course and speed with caution.

Right (Starboard): If any vessel approaches within this sector, keep out of its way.

Stern: If any vessel approaches this sector, maintain your course and speed with caution.

	<p>A blows one blast and alters course to starboard. B blows one blast and alters course to starboard.</p>
	<p>A keeps clear of and must avoid crossing ahead of B.</p>
	<p>Any vessel overtaking another must keep clear.</p>
	<p>A keeps clear of B B keeps clear of D C keeps clear of A and B D keeps clear of A and C</p>
	<p>A power-driven vessel keeps clear of a sailing vessel.</p>

Known Water Hazards in the Bedford Channel

Known hazards that move or drift:

- Deadheads and snags come and go in the channel and all users must be vigilant in watching for them.

Known hazards that do not move:

- The area of turbulence and eddies at the eastern end of McMillan Island and the interface between the Bedford Channel and the main channel. Navigating boats in this area may require strong paddling and steering. Use caution. Give rip-rap (large rocks for shore stabilization) a wide berth for possible rocks below the surface. Stay to the south of the channel marker for safety.
- The rocks on the south side of the channel at the pipeline crossing. These rocks, to the west of the Haldi Bridge, are above the surface during times of low water. They can be quickly covered by incoming tidal activity or higher water. Stay more in the centre of the river to avoid this hazard.
- The bridge footings. The bridge footings change current direction, cause turbulence and catch debris. They, themselves, are a collision hazard. Pass under the bridge straight between the footings. Do not pass through the bridge footings using the northernmost arch.
- Debris deflectors at the Canoe Dock. During freshet stay away from the debris deflectors and the area above the deflector. An incident happening in this area could result in boaters being swept into the deflectors and possibly under the deflectors and docks.

