



Launch Operator Manual

8 March 2019

Updated: 8 April 2021

- I. **Objective:** To establish Kitsap Rowing Association (KRA) launch operator requirements to standardize launch training and operations so that rowing can be accomplished safely, coaching supported effectively, and the launch kept in the best material readiness condition possible.

- II. **Background:**
 - A. The KRA safety launch will be within hailing distance whenever a KRA shell is operating in Liberty Bay. During unfavorable conditions (e.g., when the air is below 40 degrees and/or the water temperature is below 50 degrees, or visibility is poor) the launch must stay within 100 yards of all shells.

 - B. The KRA launch supports KRA rowing events in a number of ways:
 1. First and foremost, the KRA safety launch is present to respond to any emergencies that might place KRA rowers or shells at risk.
 2. The KRA launch operator augments the coach and coxswain(s) with an extra set of eyes, always alert for water obstructions, marine traffic (especially inattentive power boats), changing weather, or other developments that might place KRA rowers or shells at risk.
 3. The KRA launch operator positions the launch to best support the coach's observation of the shell and rowers, and facilitates the coaching efforts.
 4. The launch provides support for small equipment adjustments or repairs, to allow rowing to continue.
 5. The launch serves as a platform for extra rowers, shuttling them to/from the shell(s) as required.
 6. In extreme circumstances, the launch can tow a shell back to the dock.

- III. Minimum Requirements.** A KRA launch operator must:
- A. Have completed the USRowing Release of Liability form and the KRA Attestment to Swimming Abilities form.
 - B. Have USRowing Basic Membership (for insurance coverage)
 - C. Be at least 18 years of age.
 - D. Be physically able to:
 - 1. Launch and land the KRA launch without assistance.
 - 2. Help swimmers into the launch from the water.
 - 3. Help move an unresponsive person from the shell and into the launch.
 - E. Possess a valid Washington State Boater Education Card. See Appendix A.
 - F. Complete KRA Launch Operator Certification. See Appendix B.
 - G. Should ideally be qualified or trained in CPR and the use of an AED.

IV. KRA Launch Technical Characteristics:

- A. The KRA launch is a 1982 Boston Whaler 13 Sport. The 13 Sport is 13 feet four inches long, has a beam of five feet five inches, a draft of six inches, weighs 360 pounds, and is of fiberglass construction. Maximum safe operating capacity for the 13 Sport is six people or a maximum of 900 pounds.
- B. The KRA launch is powered by a 25 horsepower, four-stroke Yamaha F25LC outboard engine.
- C. Sitting at the pier, with no one onboard, and the engine in the fully down position, the launch draws 30 inches of water (from the waterline to the bottom of the engine skeg). Given additional loading (operator and coach), water chop, and potential plow conditions, a good rule of thumb is to stay out of water shallower than three feet.

V. KRA Launch Operator Training Qualifications.

A. Technical Qualifications:

- 1. All prospective KRA launch operators shall become thoroughly familiar with the launch, the outboard engine, and the safety-related equipment carried aboard the launch.

2. All launch operators will receive a technical qualifications check from designated qualified personnel.

B. Operating and Safety Qualifications:

1. The launch operator is solely responsible for the safe navigation of the launch. As such, the launch operator is legally and financially responsible for damage or injuries resulting from negligent, reckless, or careless operation of the launch.
2. Safe operation of the launch requires familiarity with the Port of Poulsbo and Liberty Bay. Towards that end, relevant maps and photographs are attached:
 - a. Figure 1 (Page 16): Liberty Bay
 - b. Figure 2 (Page 17): Port of Poulsbo
 - c. Figure 3 (Page 18): North Liberty Bay “No-Go” Areas (low tide grounding risk)
 - d. KRA has identified 13 Emergency Landing Sites (ELs) in Liberty Bay that are available in any tide condition and are readily available to emergency responders. These sites are listed at Appendix C.
3. Alcohol and marijuana are forbidden aboard the KRA launch.
4. No one under the age of 18 is allowed in the launch except in emergencies.
5. All personnel in the launch should wear a life jacket.
6. Ensure clothing is appropriate to the prevailing and anticipated weather conditions. Layer up in cold weather.
7. Keep hydrated, even in cold weather.
8. The launch operator will always have with them a fully charged mobile phone in a floating waterproof pouch. Ensure the phone has the numbers for the cox’s mobile phone, and have a whistle or horn immediately accessible.
9. Ideally, the launch should be operated by two individuals, the launch operator and a coach or crewman, for the following reasons:
 - a. A second individual assists the launch operator by providing a second set of eyes.
 - b. A second individual takes over if the launch operator experiences any difficulties.

- c. A second individual assists the launch operator in emergency situations by helping individuals from the water or the shell into the launch, providing first aid and resuscitation, and coordinating with emergency responders.
- d. Dividing the duties of coaching and launch operations ensures full attention to each task, increasing safety for all.

10. Safety-related items carried aboard the launch can be found at Appendix D.

11. Read and understand the *KRA Coxswain Manual* and the *KRA Safety Program*, and review the safety video at the US Rowing Association (USRA) website ([Safety Video - USRowing](#))

VI. Prior to getting underway:

A. A fundamental decision concerns when conditions permit a row and when they do not.

- 1. A key first step is checking the weather and tidal conditions. The National Weather Service [[Seattle/Tacoma, WA \(weather.gov\)](#)] should be considered the authoritative source for weather information. Official National Oceanic and Atmospheric Administration [NOAA] tidal predictions for Liberty Bay can be found at [Tide Predictions - NOAA Tides & Currents](#)):
- 2. KRA will not row in the following conditions:
 - a. Lightning forecast or observed.
 - b. Confirmed/forecast winds greater than twelve miles per hour, or white caps visible. Per the USRowing Safety Guidelines, “do not row in whitecaps or winds of 12 knots or higher under any circumstances.”
 - c. A Small Craft Advisory or Gale Warning is in effect.
 - d. Wind chill temperatures are 35° F or lower at the Poulsbo marina, or ice on the dock.
 - e. When no qualified coxswain is available for an EIGHT. A FOUR may go out without a coxswain only when an experienced crew and coach is available.
 - f. When no launch or qualified launch operator is available.
 - g. A no contact public health advisory issued by the Kitsap Public Health District advising the public to avoid contact with the water in Liberty Bay.

3. KRA may consider not rowing in the following conditions:
 - a. Reduced visibility (heavy fog, haze, smoke, or driving rain). A rule of thumb is ability/inability to see the Poulsbo Yacht Club from the KRA dock; strongly consider cancelling the row if the Yacht Club is not visible. Fog can also be patchy in Liberty Bay. Consider the possibility of reduced visibility throughout the course of the row and in the possible rowing locations.
 - b. Extremely low tides.
 - c. Poor air quality. Rowing should be canceled when the air quality is in the "unhealthy," "very unhealthy," or "hazardous" zones, as measured at the Washington State Department of Ecology monitoring station in Bremerton ([Spruce Ave, Bremerton, Washington, USA Air Pollution: Real-time Air Quality Index \(aqicn.org\)](https://www.airquality.wa.gov/real-time-air-quality)).
 - d. An infectious disease pandemic with health restrictions on public gathering and social distancing.

B. Retrieve the first aid kit (with AED) and electric megaphone from the erg room.

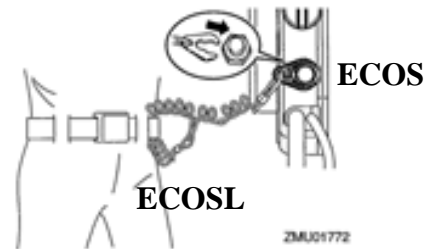
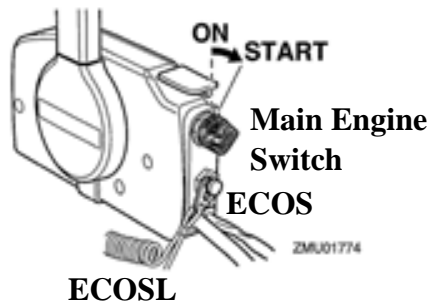
C. Confer with the coach, the cox, the stroke, and all other interested rowers on:

1. The weather and tidal conditions.
 - a. Liberty Bay has a significant tidal range that impacts the rowing plan.
 - b. During lower tidal conditions, the Front Door is not available for the shells to exit or enter the marina. In those cases, the shells will use the Back Door or the Side Door.
 - c. If the shells are using the Front Door to exit or enter the marina, the launch can safely exit/enter between the last two pilings next to the Front Door during high tide. When in doubt, the launch operator can always use the Side Door. The shells draw significantly less water than the launch and are usually able to use the Front Door when it is too shallow for the launch to exit between the pilings. See Figure 2 on page 18.



- d. At lower tidal conditions significant areas of Liberty Bay are inadvisable for rows due to low water. Those areas include the north end of Liberty Bay (anything north of the Gran Kirk condominiums – the gray building, a former church, above the north end of the boardwalk), the west side of Liberty Bay, and portions of the bay north of Lemolo. See Figure 3 on page 19.
2. The area for the row. The most common KRA row involves a run southeast from the Port of Poulsbo, leaving Poulsbo Yacht Club and Liberty Bay Marina to port, through the Lemolo/Keyport narrows, under the power lines, to the Navy Undersea Warfare Center pier, and return.
 3. Drills and training objectives to be covered.
 4. The estimated time to return to the dock.
 5. Pertinent safety issues and questions.
- D. Prepare the launch to get underway:
1. Remove the boat cover.
 2. Check the boat and engine for any obvious damage.
 3. Place the first aid kit (with AED) and the electric megaphone in the launch.
 4. Ensure you have at least a 3/4 full tank of gas/ preferably a full tank. A normal row will not use much gasoline, but you need a full tank of gas should an emergency arise and multiple high-speed runs be needed to address the issue.

5. Make sure the flushing device's garden hose connector is securely screwed on to the fitting at the bottom of the engine cowling.
6. Lower the engine into the water using the Power Trim and Tilt Switch on the Remote Control Lever.
7. Place the Remote Control Lever in neutral.
8. Attach the Engine Cut-off Switch (ECOS) link (ECOSL – or “kill cord” – the plastic coiled cord/lanyard attached to the engine remote control box) to a secure place on your clothing, arm, or leg. Install the clip on the other end of the cord to the ECOS.



9. Turn the Main Switch to the “ON” position.
10. Turn the Main Switch to the “START” position and hold for a maximum of five seconds.
11. Immediately after the engine starts, release the Main Switch and allow it to return to the “ON” position.
12. Check for a steady flow of water from the Cooling Water Pilot Hole.
13. After starting the engine, allow it to idle for three minutes to warm up.
14. Be sure the Low Oil Pressure-Alert Indicator goes off after starting the engine. **If the Low Oil Pressure-Alert Indicator blinks and audible alarm sounds after the engine starts, stop the engine immediately; otherwise, serious engine damage could result.**



15. If High Temperature alarm light and audible alarm sounds, shut off the engine. Investigate possible causes of the alarm: Fresh water flushing fitting not connected properly, blocked water intake ports, etc. Restart the engine after several minutes, if there are no additional alarm lights or audible alarms, return to the dock and flush the system with fresh water.

- VII. While underway:** Situational awareness is essential for the launch operator, understanding the geographical environment, the weather, obstructions in the water, other boats, navigational aids, and Navy restricted areas.
- A. Stay within hailing distance of the shells at all times. USRowing further advises that when the air temperature is below 40 degrees and/or the water temperature is below 50 degrees, the rescue launch must stay within 100 yards of all shells. This means that if two shells are out, the coxswains need to stay close to one another so the launch can remain with 100 yards of all shells and respond as needed. As the water temperature in Liberty Bay averages below 50 degrees for eight months of the year, the 100-yard distance requirement will be in effect for all months except July, August, September, and October.
- B. While underway, the primary function of the launch operator is to provide safety services for the shell(s). As such, the launch operator will coordinate the emergency response in the event a shell swamps, capsizes, or collides with an object or other boat; including communicating with emergency responders, as necessary. In the event a rower experiences a medical emergency, the cox will usually communicate with emergency responders while the launch operator transfers the individual into the launch and transports the injured or ill to the care of Emergency Medical Service (EMS) personnel as

appropriate. In some instances, the injured or ill individual may stay in the shell, in which case the launch operator will communicate with emergency responders while the shell transports the individual to the care of EMS personnel. A list of the safety-related equipment carried in the launch is contained in Appendix D.

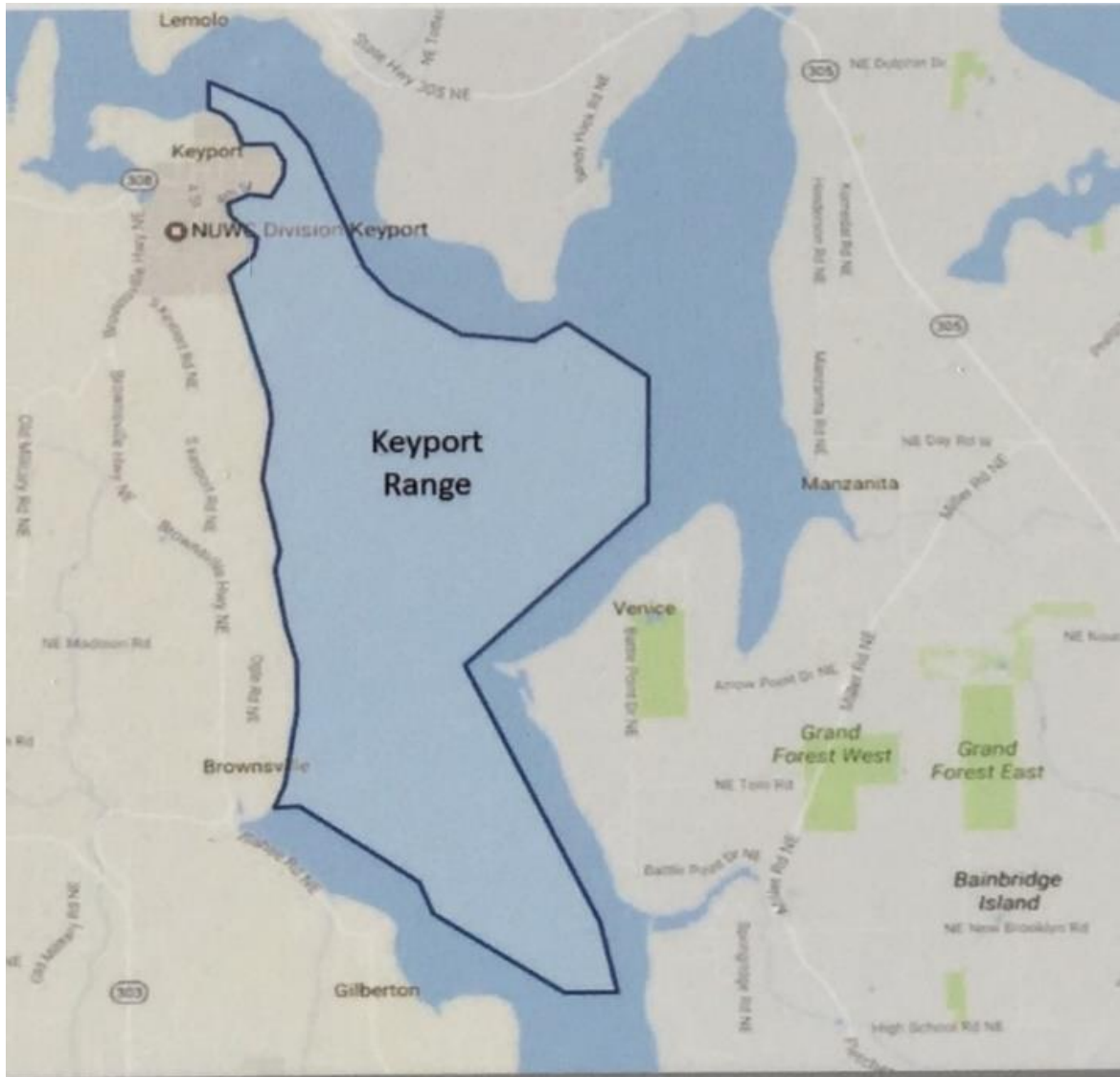
- C. In addition to being prepared to respond to an emergency situation, the launch operator also serves as the “eyes for the KRA row.” The launch operator is free to concentrate on the bigger picture while the cox and the coach are focused on the shell and rowers. Items to watch for to avoid an emergency situation:
1. Changes in weather, especially lightning, but including a rapid increase in wind speed and wave height. If lightning or thunder are observed, or sudden winds come up, return to the dock immediately.
 2. Dead heads (floating logs), especially after a storm or very high tides. Often dead heads float just at or below the surface of the water, and are extremely difficult to see, especially for the cox. Collision with a dead head could damage the shell and swamp the boat.
 3. Kayaks, canoes, and paddle boarders, all of which can be tough to see at dawn and dusk.
 4. If it appears that a rowing shell is on a collision course with an object, attract the coxswain’s attention by voice or the megaphone. If possible, move the launch to a position between the shell and the object of danger. Use hand signals to direct the shell in the direction it SHOULD go.
 5. Many of the power boat operators in Liberty Bay do not pay much attention to their surroundings and/or they are woefully ignorant of the Nautical Rules of The Road. Certainly, few power boat operators are aware of the impact their wakes have on a rowing shell. Towards that end, the launch has to be the protector of the shell, always on the lookout for power boats moving at speed and closing on the shell (including those closing from astern) and keeping the cox aware of possible hazards. Occasionally, and while always operating within guidelines contained in the Nautical Rules of the Road, the launch operator may find it necessary to place the launch between the power boat and the shell to get the power boat operator's attention and to open the distance from the shell. It may be necessary to use the electric megaphone, and its siren function, to get the attention of a power boat driver.
 6. Remember that the rowing shells are extremely narrow, sit low in the water, and, as a result, are extremely difficult to see. This is especially true at night or in reduced visibility situations.
- D. Lights are required from sunset to sunrise, and are recommended in restricted visibility situations (fog, rain, smoke, etc.). As a vessel under 39.4 feet in length, the KRA launch is required to have, and has, fixed red [port] and green [starboard] sidelights mounted on

the bow; and an all-around white light mounted on a pole on the stern. The all-around white light is kept in the locker on the KRA dock, and is fitted aboard the launch as required.

- E. Provide all support required to any other mariners in distress. Anyone rendering assistance at the scene of a boating accident will not be held liable for any civil damages as a result of providing reasonable and prudent assistance. Should the launch be required to leave the shell to assist another vessel in distress, the shell should remain stationary until the launch returns, unless the launch operator and cox agree it would be safe for the shell to land or return to the dock unaccompanied.
- F. Keyport Range Navy Restricted Area (33 CFR 334.1230). The Navy conducts in-water testing, both on the surface and underwater, in the Keyport Range southeast of Naval Undersea Warfare Center Division Keyport.
 - 1. All vessels are requested to monitor VHF Marine Band Channel 16 while in the vicinity of the Keyport Range operating area. Keyport Range Control (when staffed for operations) and Navy range craft will monitor Channel 16 during active range periods. After initial call-up on Channel 16, vessels will be shifted to VHF Channel 12 for further communications. Range Control may also be contacted at (360) 396-2313 for further information.
 - 2. Vessels shall remain clear of all Navy range craft (identified by red flashing lights or other distinct markings identifying the craft. A distance of greater than 100 yards is recommended unless otherwise requested.
 - 3. If warranted, Navy range craft will provide passing instructions or other requests such as stopping propellers, motors, and other equipment generating underwater noise. Vessel operators are reminded to exercise caution and that safe navigation is the vessel operator's responsibility.
 - 4. When the range is active, **SECURITE** calls will be broadcast on Channel 16 at regular intervals throughout the day. The following is an example:

“Securite, Securite, Securite

This is Keyport Range Control. Keyport Range is conducting operations south of Point Bolin and northwest of Battle Point. Mariners are requested to exercise caution and contact Keyport Range Control on VHF Channel 12 for further information. This is Keyport Range Control, out.”



G. Navigational markers. There are three aids to navigation in Liberty Bay:

- 1.** Red beacon number 2, immediately off Lemolo, which marks the right side of the navigational channel entering Liberty Bay.



- 2.** A “No Wake” informational buoy several hundred yards southwest of Liberty Bay Marina.



3. A slightly larger “No Wake” informational buoy several hundred yards west of Liberty Bay Marina.



H. Occasionally check the engine to ensure:

1. There is a steady flow of water from the Cooling Water Pilot Hole.
 2. The Low Oil Pressure-Alert Indicator light is off. **Do not continue to run the engine if the indicator light is on and the audible alarm sounds.**
 3. The Overheat-Alert Indicator light is off. If the engine temperature rises too high, this indicator will light up. **Do not continue to run the engine if the indicator light is on and the audible alarm sounds.**
- I. Tilt the outboard motor to optimize performance for the operating conditions. Normally, a small boat operator raises the bow at higher speeds to create a planing effect and operate more efficiently. However, most of the time, the KRA launch does not operate at speeds high enough to warrant lifting the bow to climb over the bow wave (planing mode). The launch usually operates in displacement (non-planing mode), a condition in which it is desirable to even out the bow and stern waves so as to minimize the wake. As such, the launch operator should be trimming to keep the hull level. When the launch is trimmed up with the bow out of the water, the stern digs in and creates a larger wake. When the launch is trimmed to keep the hull level, the wake is split between the bow and the stern waves, with the two smaller than if it were a large stern wave only. The amount

of trim varies depending on the operating speed, water conditions, and the loading of the personnel in the boat. If a rider is in the bow, then the launch needs to be trimmed up to even out the boat. If two people are sitting in the aft bench seat, then the launch will need to be trimmed down to keep the boat level. Normally, the KRA launch operator should strive to minimize wake by equalizing the bow and stern waves.

1. Adjust the outboard motor trim angle using the power trim and tilt switch on the Remote Control Lever.
 2. To raise the bow (and the engine), press the switch “UP”.
 3. To lower the bow (and the engine), press the switch “DN”.
 4. When operating in shallow water, and at slow speeds, tilt the engine up to protect the propeller and lower casing from damage by grounding. When the engine is fully lowered, the skeg (the lowest portion of the lower casing) is between 30-36 inches below the surface of the water.
 5. Do not tilt the outboard motor up so that the cooling water inlet on the lower unit of the engine is above the surface of the water. Without cooling water, the engine will overheat and severe damage can result.
- J.** If a coach is onboard, position the launch to best support the coach’s observation of the shell and rowers, and facilitate coaching efforts. Safety has priority over coaching. Never maneuver the launch unsafely to support coaching.
- K.** As required, provide the cox and rowers with maintenance support for small equipment adjustments or repairs.
- L.** As required, shuttle extra rowers to/from the shell(s) as required.
- M.** In extreme circumstances, tow the shell(s) back to the dock. The tow rope should be looped through the #1 and #2 riggers in the shell. No rower or cox should try to hang on to the tow rope.

VIII. Returning to the dock:

- A.** It is KRA policy that an individual, usually either the launch operator or the coach embarked in the launch, will be on the dock to assist the cox in landing an Eight-person shell (probably a wise policy for a Four-person shell as well). This means the launch has to be landed and secured to the pier before the shell can begin its approach. This can be a dicey process as the launch operator has to adhere to the Port of Poulsbo’s “No Wake rules, and the launch makes a considerably greater wake at speed than do the shells. Coordination with the cox is essential.

1. When returning via the Back Door, the shell either has to proceed slowly through the marina or wait near the KRA pier while the launch lands.
2. When returning via the Front or Side Doors, the launch can get a head start in the water between the Poulsbo Yacht Club and the Port of Poulsbo Marina. Once past the Yacht Club, the shell should slow to allow the launch to slowly pass directly in front. The launch can then gradually increase speed with the shell in the flat water between the wake.

IX. Upon returning to the dock:

- A. Secure the launch to the dock.
- B. Assist the cox in landing the shell, as required.
- C. Before turning the engine off, let it cool off for a few minutes at idle or low speed.
- D. Turn the Main Switch to the “OFF” position.
- E. Raise the engine out of the water using the Power Trim and Tilt Switch on the Remote Control Lever.
- F. Flush the engine by unscrewing the Garden Hose Connector from the fitting on the bottom of the engine cowling.
- G. Screw the Garden Hose Connector onto a garden hose and turn on the water. Let the water flush through the cooling passages for about 15 minutes.
- H. Turn off the water and disconnect the hose from the Garden Hose Connector.
- I. Reconnect the Garden Hose Connector to the fitting on the bottom of the engine cowling. Tighten the connector securely.
- J. Using fresh water from the garden hose, rinse off the engine components and mountings that have been immersed in salt water.
- K. Using a towel, wipe down the launch interior, including the large gray bin.
- L. Place a sling in the launch between the gray bin and the bench in front of the control station.
- M. Recover the boat, ensuring the boat cover is snug and covers the launch gunnels.
- N. Ensure the boat lines are secure, but with enough play to allow the boat to float easily alongside the pier.

- O.** Return the electric megaphone to the locker, and the first aid kit (with AED) to the erg room
- P.** If concluding a morning row, go drink coffee. If concluding an afternoon or evening row, go drink beer. Lots.

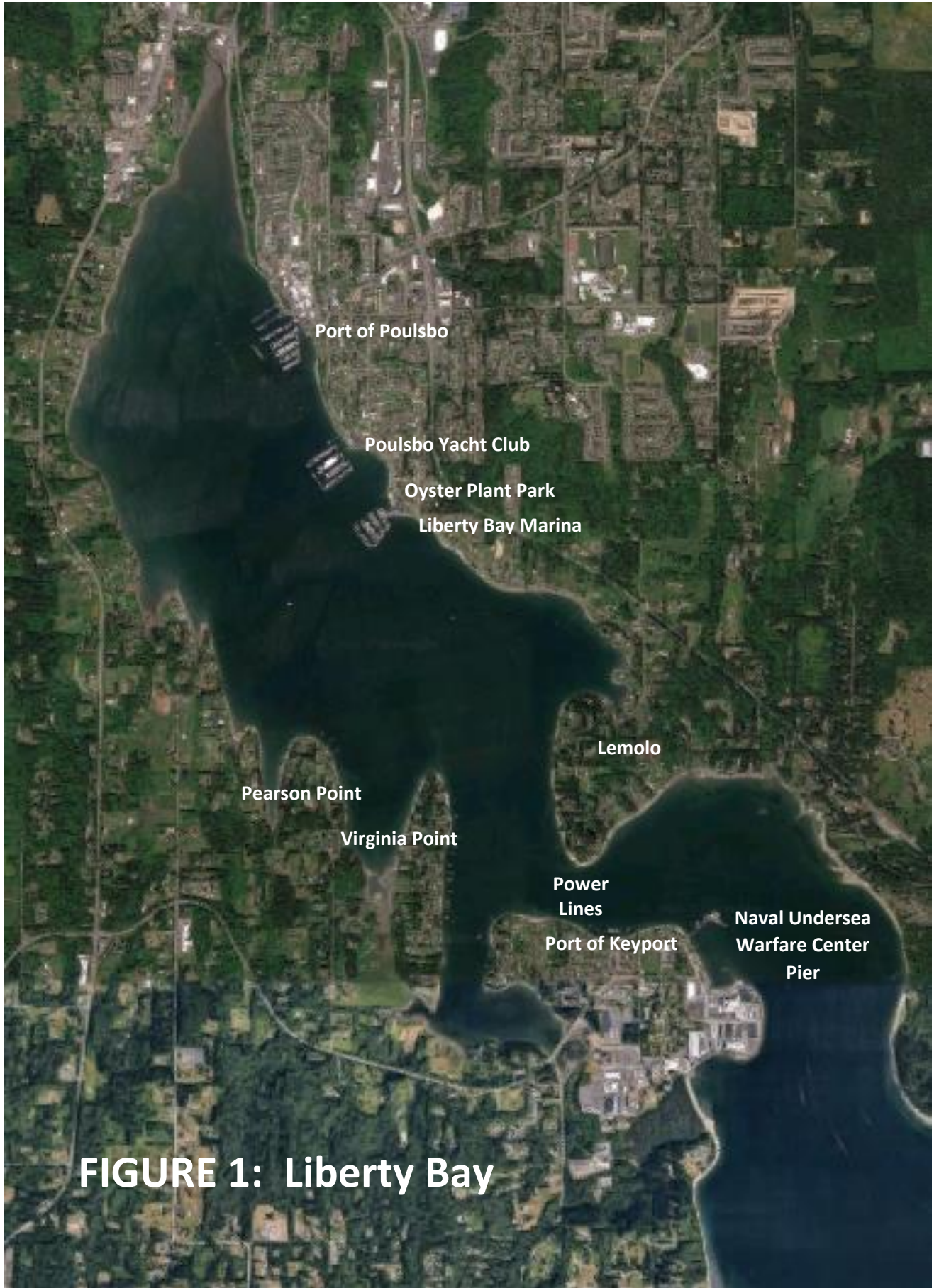


FIGURE 1: Liberty Bay

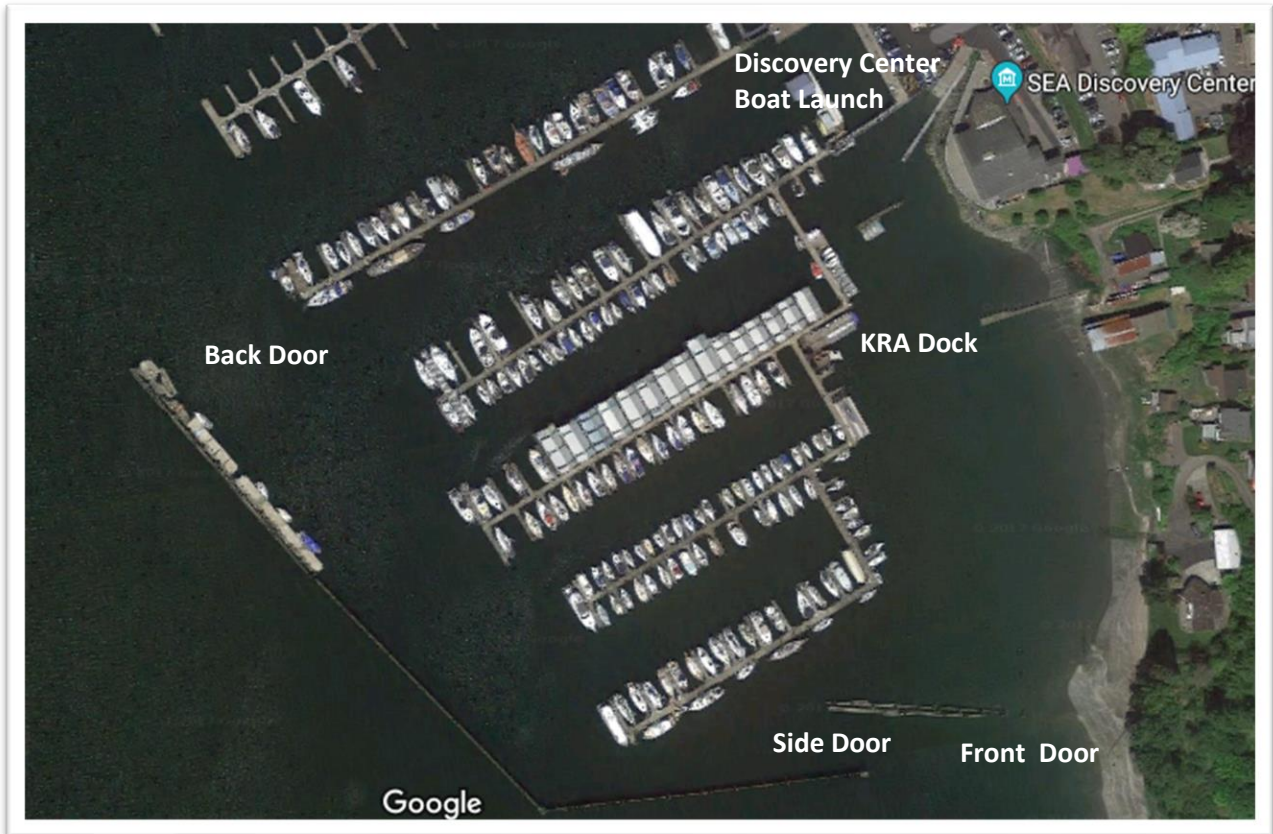


Figure 2: Port of Poulsbo

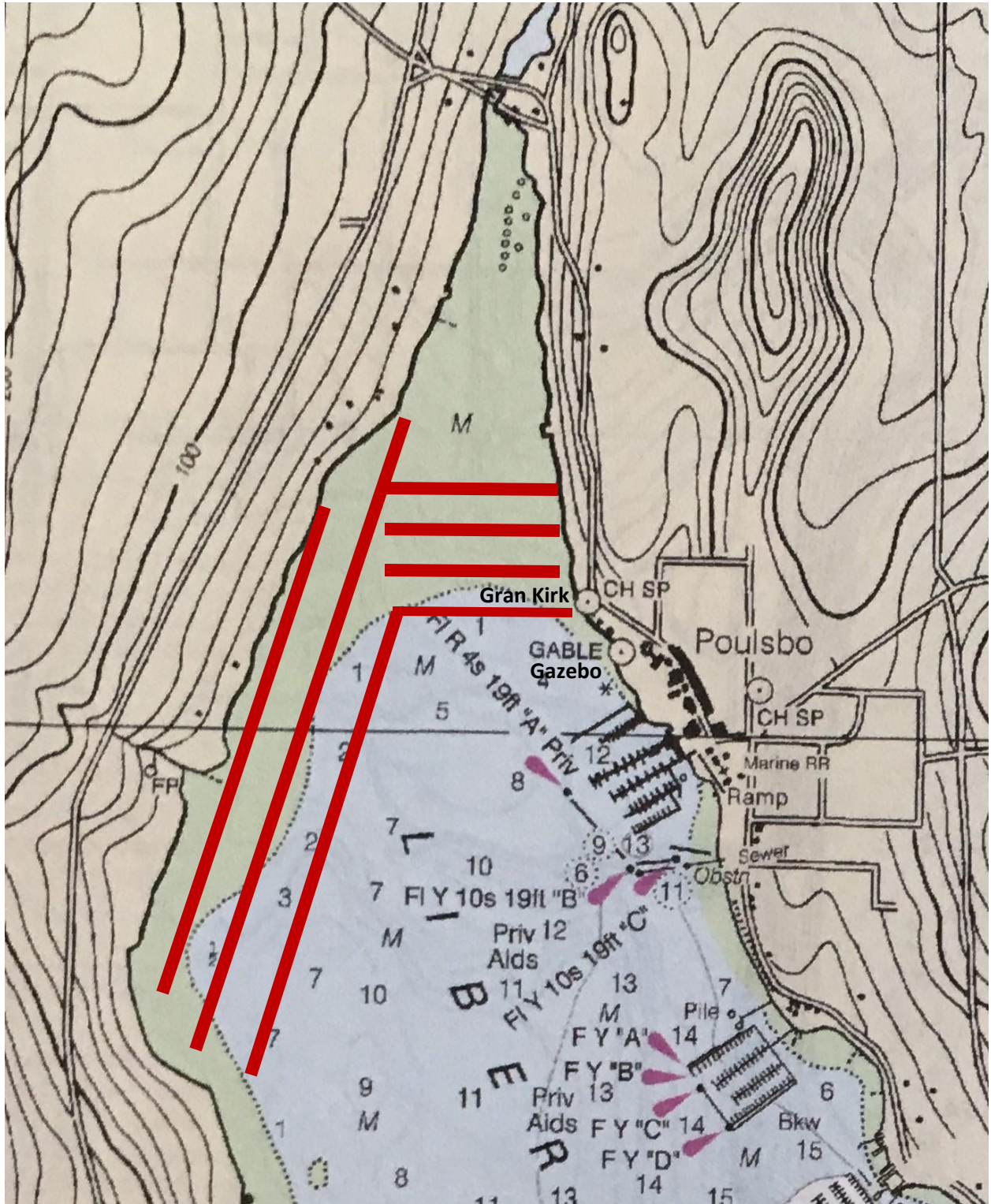
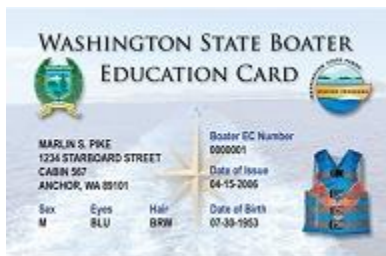


Figure 3: North Liberty Bay “No-Go” Areas (low tide grounding risk)

Appendix A

Getting a Mandatory Boater Education Card



- I. If you are boating in Washington, you must have a Washington State Boater Education Card ([Boating - Washington Recreation & Conservation Office](#)) with you when operating a boat of 15 horsepower or greater.
- II. If you were born before 1 January 1955, you are exempt.
- III. To get a card, follow these easy steps:
 - A. Take an approved boater education course ([Mandatory Boater Education | Washington State Parks and Recreation Commission](#))
 1. [Classroom Courses](#):
 - a. The Coast Guard Auxiliary offers a one-day class entitled “[About Boating Safety](#).” This beginner boating class will give you the knowledge needed to obtain a Washington State Boater Education Card. The Coast Guard Auxiliary course costs \$35.
 - b. The US Power Squadron offers an eight-hour “America’s Boating Course.” Course fees vary by location.
 - c. The Washington State Parks and Recreation Commission sponsors a course, “Adventures in Boating Washington,” taught by independent instructors certified by the agency. Course length, date, and cost all vary depending on the independent instructor teaching the course.
 2. [Equivalency Exam](#) - If you are an experienced boater and have a good working knowledge of navigation rules and Washington laws, you may opt to take a 75-question equivalency exam with no reference material.
 3. Hands-On Training Courses - The on-the-water boat handling skills are designed to make you comfortable, knowledgeable, and safe. Washington State Parks and

Recreation Commission has a [list of organizations that offer boating education with classroom and hands-on training](#). Classroom and hands-on courses vary in length and cost, depending on the course provider. Classes offer students the chance to take a certified boater safety course, while interacting with an instructor who is an experienced boater. The on-the-water boat handling skills are designed to make you comfortable, knowledgeable, and safe. The following organization offers boating education classroom with hands-on training.

4. [Home Study Course](#) - This course consists of an online study guide and certification exam booklet. The course offers the basics of safe boating that all recreational boaters should know, and covers a number of important laws and regulations. A certificate of accomplishment is issued after successful completion of the exam.
 5. [Online Courses](#) - Washington State Parks has a list of approved online courses. These are run by private companies. Some are free and others have a fee.
- B.** After taking the boater education course, submit the [Boater Education Card Application](#) to State Parks, along with \$10, and a legal copy of your proof of course completion.

Appendix B

Kitsap Rowing Association

P.O. Box 232

Indianola, WA 98342

www.kitsaprowing.org



LAUNCH OPERATOR CERTIFICATION

_____ has completed the following KRA Launch operator requirements.

- Washington State Boater Education Card
- Briefing on launch operations to include
 - Fueling
 - Outboard motor operation
 - Navigation lights
 - Discussion of navigational waters at low tide
 - Discussion of equipment carried
 - Emergency procedures
 - Discussion of swapping out rowers
 - Discussion of operations within the Marina
 - Discussion of docking procedures (launch and shells)
 - Post operations fresh water engine flush procedure
 - Launch cover installation
- Check ride with experienced (qualified) launch driver
- KRA Swim Attest form
- KRA Release of Liability form
- USRowing Basic membership

Completion date _____ Certifier _____

Appendix C

Emergency Landing Sites (ELs)

KRA has identified 13 Emergency Landing Sites (ELs) in Liberty Bay. These sites are available in any tide condition and were selected based on closeness to KRA rowing routes, ease of making a beach or pier landing, and ease of access for Emergency Medical Services (EMS -- normally the Poulsbo Fire Department).

1. The Port of Poulsbo – The Discovery Center Boat Launch, 18743 Front St NE, Poulsbo, WA 98370
2. Oyster Plant Park, 17791 Fjord Dr NE, Poulsbo, WA 98370
3. Redacted for web use
4. Redacted for web use
5. ~~Redacted for web use~~ **NO LONGER APPROVED**
6. Redacted for web use
7. Redacted for web use
8. The Port of Keyport, 15501 Washington Ave NE, Keyport, WA 98345
9. ~~Redacted for web use~~ **NO LONGER APPROVED**
10. Redacted for web use
11. Redacted for web use
12. Redacted for web use
13. Redacted for web use



KRA Emergency Landing Sites (ELs)

Appendix D

Launch Equipment List

In the Gray Bin:

- Eleven Type III Life Jackets*
- One Type II Life Jacket*
- One B-II Fire Extinguisher*
- Three Nylon Lines
- Seven Very Old Space Blankets

In the Clear Bin Under the Control Station:

- Two Rescue Straps
- Four Handheld Red flares*
- One Air Horn (sound producing device)*
- One Stanley Fatmax Flashlight
- One Throwable Line
- KRA Emergency Contact List
- Boat Registration

In the Bow Compartment:

- Two Hand Pumps

Loose in the Launch:

- One Boathook
- Two Oars
- One Megaphone
- Sponge (for de-watering)
- Oar Handle (training device)
- One Type IV Throwable Device*

Items to Be Carried Aboard (From the Erg Room):

- KRA First Aid Kit (in orange backpack)
- Megaphone (in blue bag)

In the KRA First Aid Kit:

- One AED
- One Towel
- One Scissors
- One CPR Mask
- Disposable Gloves
- Two EpiPens
- One Bag – “Emergency Protection” (side pocket)
- Twelve New Space Blankets (side pocket)
- Medical Supplies:
 - A Cold Compress
 - Two Packages of Bandages
 - Two 4 x 4 Gauze Pads
 - Four 2 x 2 Gauze Pads
 - Two Gauze rolls
 - Four Tongue Depressors
 - Numerous Antiseptic Hand Wipes
 - Two Antibiotic Ointment Packs
 - Ten Cotton Swabs
 - Adhesive Tape
 - Skin Tape

* Coast Guard Required Items. The Coast Guard requires

- (1) One Type I, II, III, or IV wearable life jacket for each person onboard. All must be US Coast Guard-approved. The KRA launch has 12 onboard to ensure a life jacket is available for everyone in the launch and shell.
- (2) A Type IV throwable device is required for vessels over 16 feet in length. The KRA launch is 13 feet four inches in length but carries a Type IV anyway.
- (3) A vessel under 16 feet in length is required to carry three combination day/night red flares
- (4) A vessel under 16 feet in length is required to carry one B-I fire extinguisher if the vessel has an enclosed engine compartment. The KRA launch does not have an enclosed engine

compartment but carries a B-II fire extinguisher to provide assistance to other vessels in distress.

- (5) A vessel of less than 39.4 feet in length must, at a minimum, have some means of making an efficient sound signal – i.e., a handheld air horn, an athletic whistle, etc. A human voice/sound is not acceptable. The KRA launch has an air horn, and the electric megaphone has a siren capability.

APPROVAL AND REVIEW

APPROVAL AUTHORITY	KRA BOARD	COMMENT
DATE APPROVED	8 March 2019	
REVIEW AUTHORITY	Safety Committee	
DATE OF UPDATE	8 April 2021	
NEXT REVIEW DATE	1 March 2022	