

Navigating the Charles River for Power Boaters

Power boaters on the Charles share the river with a multitude of other craft. From just above the railroad bridge through the narrow channel by the Science Museum and into the middle of the Esplanade Basin the Duck Boats run rain or shine. Sailboats from Community Boating, MIT, and Harvard dominate the basin between the Longfellow Bridge and the Harvard (Mass Ave.) Bridge while sailboats from BU are between the Harvard Bridge and the BU Bridge. There are thirteen rowing houses along the river, starting with Union Boat Club near the Longfellow Bridge and ending with the Newton Country Day School boathouse just downriver from the Newton Yacht Club. In addition to the sailors and rowers, there are canoeists, kayakers and paddle-boarders from the Charles River Canoe & Kayak sites on the Broad Canal near Kendall Square and at Herter Park in Allston/Brighton. These paddlers tend to not follow any traffic rules, so be alert for them. The Charles Riverboat Company tour boats run between the Lechmere Canal at the Cambridge Galleria and Harvard Square.

Power boaters should plan on a one hour run from Sunset Bay, home to Newton Yacht Club, Watertown Yacht Club, and the public launch ramp, to the locks leading to Boston Harbor. The speed limit is 6 mph above the BU Bridge, 10 mph between the BU Bridge and the old lock by the Science Museum. Between the entrance to the old lock and the exit of the new locks, speed is limited to headway only. Even at these slow speeds, it is possible to generate enough of a wake to swamp a rowing shell or kayak, so please be courteous and alert. Please also control your wake in the vicinity of a boathouse or marina. The basic navigation rule for powerboats is to keep to the center of the river and use the center arches of the river bridges. Exceptions are the Arsenal St. Bridge (Watertown-side arch in both directions) and the BU Bridge (second arch from Boston downriver and either the taller second or shorter third arch from Boston upriver). Both the Harvard Bridge and the Longfellow Bridge have multiple arches that can be safely used. Extra care should be taken at the Arsenal, the Eliot, the Weeks, and the BU Bridges due to rowers using the same arches.

Below the BU Bridge, the river depth ranges from 5 to 36 ft. A significant unmarked and shallow (as little as 1-2 feet of water) sandbar is present 1000 ft above the Harvard (Mass. Ave.) Bridge and 400 ft from the Boston shore. Between the BU Bridge and the North Beacon St Bridge, the main channel depth varies between 6 and 12 feet depth, although the shoreline can be quite shallow. Above Community Rowing, the depth is less than 5 ft. Stay in the center when approaching the entry channel for the Watertown YC and hug the Newton shore when approaching Newton YC. The limiting height along the river is the 13.5 ft headroom of the Grand Junction Railroad Bridge - the second arch from Boston which is slightly taller than the third arch from Boston.

To pass through to Boston Harbor, boats need to pass under the Craigie Bridge, the MBTA Green Line viaduct, the MBTA commuter rail bridges at North Station, and the Zakim Bridge, before arriving at the Gridley locks. The Craigie Bridge has a clearance of 15 feet and will open for taller vessels on signal (VHF 13).¹ The MBTA Green Line Viaduct has a clearance of 33 feet and does not open. The MBTA Commuter Rail Bridge at North Station has a 4 foot headroom sufficient for small launches, and will open for taller vessels on signal (Tower A on VHF 13, 617.222.5986).² The Zakim Bridge has a clearance of 39

¹ From the *U.S. Coast Pilot, volume 1, Atlantic Coast*: The draw of the Massachusetts Department of Transportation (Craigie) Bridge, mile 1.0 at Boston, shall operate as follows: (1) Open on signal; except that from 6:15 a.m. to 9:10 a.m. and 3:15 p.m. to 6:30 p.m., Monday through Friday, except holidays, the draw need not open for the passage of vessels, except as stated in paragraph (a)(1) of this section. (2) From December 1 to March 31, the draw shall open on signal after a 24 hour advance notice is given. (3) From midnight to 8 a.m., April, May, October, and November, the draw shall open on signal after at least an eight-hour advance notice is given.

² From the *U.S. Coast Pilot, volume 1, Atlantic Coast*: The draw of the Massachusetts Bay Transportation Authority (MBTA/Amtrak) Bridge, mile 0.8, at Boston, shall open on signal; except that from 6:15 a.m. to 9:10 a.m. and 4:15 p.m. to 6:30 p.m., Monday

feet. The Gridley Locks operate 24 hours a day on a whistle signal (two long, two short) using three chambers: two for smaller recreational and private boats and one for large commercial boats. Note that the lock operator does not communicate via VHF. Phone number for the lock operator is 617.727.0488. Clearance for the catwalk at the New Charles River Dam and the Charlestown (Washington St.) Bridge on the harbor side of the locks has 23 feet of clearance at mean high tide.

A public launch ramp is on the Brighton/Newton line on the south side of the river, just west of the Community Rowing buildings. Adequate trailer parking is available except for the July Fourth fireworks extravaganza in the lower basin.

Gas is available at both the Watertown and Newton YC's and pump-out is available at WYC and at the Charles River YC (near MIT) and Charlesgate YC (near the Sonesta Hotel). Charles River YC runs a pump-out boat which will service boats moored in the lower basin when a steward is available.

Note that the rowers have their own traffic pattern in that they stay to the right side of the river and use the right hand bridge arches wherever possible, crossing the center only to make their turns. Center arch use is permissible and is the standard for upstream travel at the Eliot and Weeks Bridges, so keep your eyes open. Rowers and power boaters share the downstream arch at the BU Bridge. As the Head of the Charles Regatta approaches in mid-October, the number of rowers increases with many of them unfamiliar with the normal rules of the road, so power boaters must be very alert to avoid problems. Also, as the days get shorter there are apt to be more rowers on the river while it is dark in early morning and late evening. They are supposed to have a red/green split bow light and white stern lights, and almost all do, but the lights are not what we expect from another powerboat and are close to the waterline, so use care.

Below are the minimum clearances of the Charles River Bridges, where available, the MA Regulations for the Charles River Basin, and the federal regulations for the Charles River Dam.

Updated: February 2020

Maximum Clearance on Charles River Bridges (feet) :

Charlestown (Washington St.) Bridge	23 (at mean high tide)
Charles River Dam catwalk	23 (at mean high tide)
Zakim Bridge	39
MBTA Railroad Bridge	4 closed, will open on signal
MBTA Green Line Viaduct	33
Craigie St. Bridge	15 closed, will open on signal
Longfellow Bridge	26
Harvard (Massachusetts Ave.) Bridge	
Grand Junction Railroad Bridge	13.5
BU Bridge	
River St. Bridge	14
Western Ave. Bridge	14
Weeks Footbridge	
Anderson Memorial Bridge	18
Eliot Bridge	
Arsenal St. Bridge	
North Beacon St. Bridge	
Galen St. Bridge	

Regulations for the Charles River Basin:

[Code of Massachusetts Regulations, Section 302.12.07\(23\)](#)

In addition to all other rules of conduct relating to boating set forth in 302 CMR 12.07, for all activities in the Charles River Basin, no person may:

- (a) Operate a watercraft at a speed exceeding ten miles per hour, or in such a manner as to endanger or annoy bathers or the occupants of other boats, or to create a wake within 50 yards of floats.
- (b) Create a wake within 50 yards of a canoe, shell, rowboat, kayak, sailboat or similar non-motorized vessel.
- (c) Pass a canoe, shell, rowboat, kayak or sailboat by a powerboat unless:
 - 1. A powerboat approaching a canoe, shell, rowboat, kayak or sailboat from the opposite direction shall reduce speed to headway only within 50 yards of the non-motorized vessel or within a sufficient distance to avoid endangering the non-motorized vessel, whichever is greater.
 - 2. A powerboat approaching a canoe, shell, rowboat, kayak, or similar non-motorized vessel going in the same direction shall indicate intent to pass and shall wait for a reply. The canoe, shell, rowboat, kayak, or similar non-motorized vessel shall acknowledge at the earliest opportunity and shall stop to allow the powerboat to pass at controlled wake.
- (d) Operate motorized watercraft at speeds greater than five miles per hour in the area between the North Beacon Street Bridge and the Boston University Bridge, which is designated as a controlled wake area.
- (e) Unless otherwise designated or specified by the Department during permitted events, or except in an emergency, anchor or moor any watercraft outside of locations designated for the purpose by buoys or markers set by direction of the Department. Moorings in stream must be of a type and at a location approved in advance by DCR personnel.
- (f) Moor houseboats, barges or similar vessels that cannot be moved under their own power, unless authorized by DCR in writing.
- (g) In accordance with Massachusetts Department of Environmental Protection regulations, moor in the Charles River Basin and discharge sewage into the Charles River Basin.
- (h) Moor a watercraft in excess of 30 feet in the Charles River Basin or upstream of the Boston University Bridge without written authorization from the Department.
- (i) Except in an emergency, moor a watercraft to a public landing for a period of time in excess of 20 minutes, except that at the Hatch Shell Landing, a watercraft can remain only as long as it takes to drop off or pick up passengers.

[Code of Federal Regulations, Title 33. Navigation and Navigable Waters, Chapter II. CORPS OF ENGINEERS, DEPARTMENT OF THE ARMY, DEPARTMENT OF DEFENSE, Part 207. NAVIGATION REGULATIONS, Section 207.10. Charles River, Mass.: dam of Charles River Basin Commission.](#)

- (a) The movements of all vessels or boats in and near the lock shall be under the direction of the superintendent in charge of these structures and his assistants, whose orders and signals shall be obeyed.
- (b) Every vessel using the lock and drawing more than 10 feet shall be accurately and distinctly marked at the bow and stern, showing the exact draft of water at such portions of the vessel.
- (c) All steam vessels desiring to pass through the lock shall signal for the same by two long and two short blasts of the whistle.
- (d)
 - (1) All vessels passing through the lock shall have their outboard spars, if any, rigged in, and booms amidships, and secured. All standing and running rigging must be triced in to keep it from blowing out and fouling the drawbridge. Every vessel of 200 tons and under shall be provided with at least two, and every vessel of more than 200 tons shall be provided with at least four good and sufficient lines, cables, or hawsers. Anchors shall either be stowed or shall hang from hawse pipes, hauled up close, clear of the water if possible. Vessels with anchors under foot or hanging from catheads will not be permitted to enter the lock.
 - (2) All vessels must be sufficiently manned and must have a sufficient number of round and fore-and-aft fenders to protect the lock from injury. All heavy rope fenders must be securely lashed to prevent their falling into the lock and interfering with the gates.
- (e) All vessels approaching the lock while any other vessel going in the opposite direction is in or about to enter it shall be stopped where they will not obstruct the free passage of such other vessel.
- (f) It shall be the duty of every master or person in charge of any vessel upon approaching the lock from the upstream end to ascertain by personal observation whether or not the upper lock gate is open, and a vessel shall not be permitted to come within 100 feet of the upper lock gate until the gate has been wholly withdrawn into its recess.
- (g) All towboats, whether towing or not, and other steam vessels of less than 100 tons gross may enter the lock under their own power and without having lines out, but all other vessels, including those which are accompanied by towboats, must attach not less than two good and sufficient lines, cables, or hawsers to the bollards or other fixtures provided for the purpose to check the speed of the vessel and to stop it as soon as it has gone far enough to permit the lock gate behind it to be closed, and each line, cable, or hawser shall be attended on board while passing into the lock by one or more of the vessel's crew. Where vessels are so long that in order to get them wholly within the lock it is necessary to approach within 150 feet of the lock gate ahead, the speed of the vessel must be slow and fully under control by the lines, cables, or hawsers. Steam vessels of more than 100 tons gross, not including towboats, will not be permitted to turn their propellers on entering the lock after the bow of the vessel has entered, but will be drawn in by means of capstans on the lock walls or otherwise, and their speed must be checked and the vessel stopped by lines, cables, or hawsers as in other cases. All steam vessels may leave the lock under their own power. The master or person in charge of a vessel shall arrange to have any line, cable, or hawser handed or thrown from the lock walls by the superintendent or his assistants, made fast on the vessel as requested or directed, so that in cases of emergency such line, cable, or hawser may also be used to check the speed of and stop the vessel.
- (h) When a vessel is in position in the lock it shall be securely fastened in a manner satisfactory to the superintendent, or his assistant in charge of the lock at the time, to prevent the vessel from moving about while the lock is being filled or emptied, and the lines, cables, and hawsers used for this purpose shall be attended as far as is necessary or required while the filling or emptying is in progress.
- (i) No vessel which has iron or irons projecting from it or lumber or other cargo projecting over its sides shall enter the lock, except at such time and with such precautions to prevent damage to the lock or its appurtenances as the superintendent, or the assistant in charge of the lock at the time, may require.
- (j) All persons, whether in charge of vessels or not, are prohibited from willfully or carelessly damaging the lock, any of its appurtenances or the grounds adjacent thereto, and from throwing any material of any kind into the lock. No line shall be attached to anything except the bollards and other fixtures provided for the purpose.
- (k) Upon each passage through the lock, the master or clerk of a vessel shall make a statement of the kind and tonnage of the freight carried.
- (l) No person shall cause or permit any vessel or boat of which he is in charge to remain in the lock or its approaches for a longer time than is necessary for the passage of the lock, unless he is especially permitted to do so by the superintendent or the assistant in charge of the lock at the time, and if such vessel or boat is, in the opinion of such superintendent or assistant, in a position to obstruct navigation it shall be removed at once as requested or directed by such superintendent or assistant.
- (m) All registered merchant vessels shall pass through the lock in the order directed by the superintendent or the assistant in charge of the lock at the time. Unregistered craft will not be allowed to pass through the lock separately unless especially permitted by such superintendent or assistant.
- (n) The lock shall be operated promptly for the passage of all vessels upon signal excepting only in such cases as are specifically provided for in this section.