ROWING ON THE TIDEWAY

A CODE OF PRACTICE FOR ROWING ON THE TIDAL THAMES ABOVE PUTNEY

2009

Thames Regional Rowing Council

PORT OF LONDON AUTHORITY

1909 - 2009

A CENTURY OF SERVICE

CONTENTS

APPENDICES

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FOREWORD

This second edition of the Rowing Code of Practice includes some corrections to the original but is mainly reissued with improvements and changes made in the light of the experience of over two years applying the Code. We hope you you find the new book even more useful. A summary of the more significant changes are listed as APPENDIX A on page 48.

Rowing safely on a tideway requires more than the usual rowing skill. It also demands a sound knowledge of the effects of the tidal stream, including the resultant currents and variable depths. On the Thames, and especially at low water above Putney, rowing is made even more challenging by the exceptionally large number of rowers and other river users all of whom wish to pursue their activity in what is a very confined area and with limited water.

"Rowing on the Tideway", a joint publication produced by the Port of London Authority and Thames Regional Rowing Council brings together practical guidance from experienced rowers, the recommendations of an external risk assessment, and the requirements of local and international regulation. Its objective is to provide the rowing community with a single comprehensive source of information and advice about rowing on the tidal Thames, in which all may have confidence, and which will enhance safety.

To this end, it is vital that all who use the Tideway recognise that others have equal rights to the water, and that safety will best be enhanced by the application of three fundamental principles, namely:

- Keep a proper look out
- Know and follow the rules
- Show consideration for others

Enjoy your river.

David Snelson Ruth Hatton

GENERAL DEFINITIONS

The definitions of specific words that are used in the ColRegs, Byelaws etc. can be found in those publications. The following simplified definitions are words that are either specific to rowing or to the geography involved in this code.

Class V Passenger Vessel: A large passenger vessel.

Coaching Boats/Launches: Any approved vessel containing a coach accompanying a rowing boat in practice.

Crossing: The passage from one Inshore Zone to the other involving the crossing of a fairway, inclusive of the changing from one side of the fairway to another when changing direction to return from where the outing originally started.

Crossing Zone: Areas on the river where Crossing is recommended.

Escorting Vessel(s): Any vessel, usually a coach, but sometimes an Umpire accompanying one or more rowing crews.

Inshore Zone: The Inshore Zone is the area between the river bank and the edge of the fairway generally marked by navigation buoys and the line of boats at Putney.

"as close as is practicable": Is being sufficiently close to the shore that no other boat can "undertake" on the inside between the bank and the boat. Such a distance will vary with the state of the tide and may be as little as 1m at high tide close to a wall and as much as 20m at low tide where there are rocks, debris and bays between sand banks and other shoals jutting out into the river.

Fairway: is the area shown on the Rowing Code chart between the two dashed lines. This definition is contrary to its common usage in PLA regulations.

Restricted Zone(s): Those areas as defined in the code of practice associated with bridges in which special rules apply.

Spinning: The process of alternately backing down and paddling to effect a turn greater than 90 degrees, usually on the spot.

Stopping: Ceasing to row, often with the active process of holding the boat up by placing the blades in the water.

River: The whole navigable part of the Thames.

Rowing Area: The yellow line by the Boat Race step on Middlesex at Putney to the upriver yellow crossing mark in Syon Reach.

Vessel(s): means every description of vessel however propelled or moved and includes any thing constructed or used to carry persons or goods by water.

SECTION ONE - INTRODUCTION

As a result of the increasing numbers of reported accidents on the Tideway involving rowing boats, in 2004 the Port of London Authority (PLA) employed the Salvage Association to undertake an independent risk assessment into rowing practices on the Thames between Putney and the PLA landward limit at Teddington.

The Salvage Association observed the way in which rowers used the tideway with particular emphasis on the practice known as "working the slacks", whereby rowers cross the river to row on the inside of certain bends rather than the starboard side. The conclusions of the Salvage Association Report (the Report) were, in short, that the current system did not work, because the rules were not clear and because there was imperfect knowledge and application of the rules.

An implementation group, consisting of a cross-section of experienced river users, was formed to review the many recommendations of the Report. It concluded that it was not the rules but imperfect application of them that was the main problem. As a result, this Code of Practice did not make many changes from the then current system. Its aim was to make all the rules clear, so they are easier to understand and teach . What changes or additions were made, were simply laying down as regulations what in the past should have been applied as common sense.

It is appreciated that the majority of rowers wished the system to be improved and welcomed the simplification and regularisation of the rules. Any who do not, should appreciate that if this Code of Practice does not maintain the improvement in navigation, rowing practice and ancillary matters, for example, the reporting of incidents by rowers, that the PLA expects, it will be not be a case of simply rescinding it. Should this attempt at a compromise fail, the next step will be a blanket implementation of the International Collision Regulations, which is likely to have a negative effect on the experience of rowing for all.

It is up to the rowing community, individual, club and regions to take responsibility for following the Rowing Code and ensuring the traditional privileges historically enjoyed by the rowing community in this area are not taken away for good.

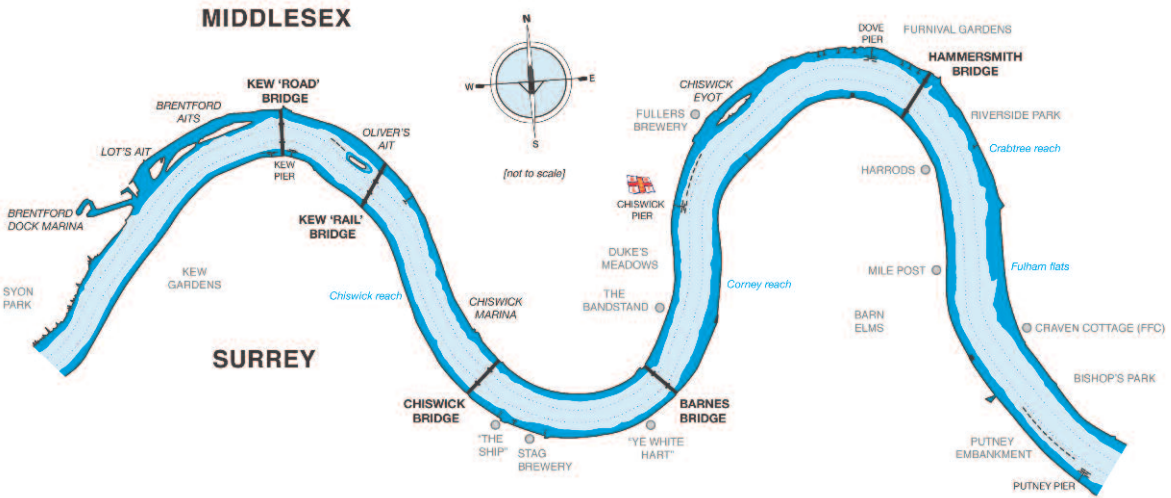
River Byelaws and General Directions

Note: The PLA regulates navigation on the tidal Thames in a number of ways, including through River Byelaws and General Directions. By its very nature, the code must, in part, refer to and recognise those various regulations. Where navigational regulations are quoted in the code they are enclosed in a box for ease of recognition.

THE ROWING CODE AREA

The rowing code area is marked by the yellow line by the Boat Race step on Middlesex at Putney (the down-river side of the Putney Crossing Point) to the upriver yellow crossing mark in Syon Reach (the upriver side of the Syon Crossing Point)

The area in which the specific navigational rules of this Code of Practice apply.



SECTION TWO - GENERAL ROWING RULES

When rowing between Syon Reach and the crossing point at Putney rowers are allowed to avoid the greater part of the tidal stream by 'working' the inside of the bends in the following fashion.

i. When proceeding with the tidal stream, all vessels are to keep to the star board side of the fairway (please see the chart to accompany the Rowing on the Tideway Code for the location of the fairway).

ii. When proceeding against the tidal stream all rowing boats must navigate in the Inshore Zone.

iii. Coaching Launches may either act as rowing vessels following the above rules, or navigate as a power driven vessel abiding by all appropriate regulations.

iv. All masters of boats including those of rowing and coaching launches navigating on the tidal Thames must be aware of their circumstances and keep a proper lookout at all times. If the course shown on the chart is deemed unsafe, then the closest, safe course should be taken. However, this must not be taken as a licence to break navigational rules or ignore selected parts of this code for the purpose of improving the quality of an outing.

Dove Pier – if you are this close on a flood tide you are too close!

2.1 Navigation Buoys

The red and green buoys found only within the rowing code area are in place to mark the edge of the Inshore Zone. Red buoys mark the Inshore zone on the Surrey shore and the green buoys mark it on the Middlesex shore.

When proceeding against the tidal stream, rowing boats should navigate between the buoys and the bank, using the appropriate crossing zones where necessary.

When proceeding with the tidal stream, the buoys are an indication of the limits of the fairway and crews should steer in accordance with the normal navigation rules e.g.:

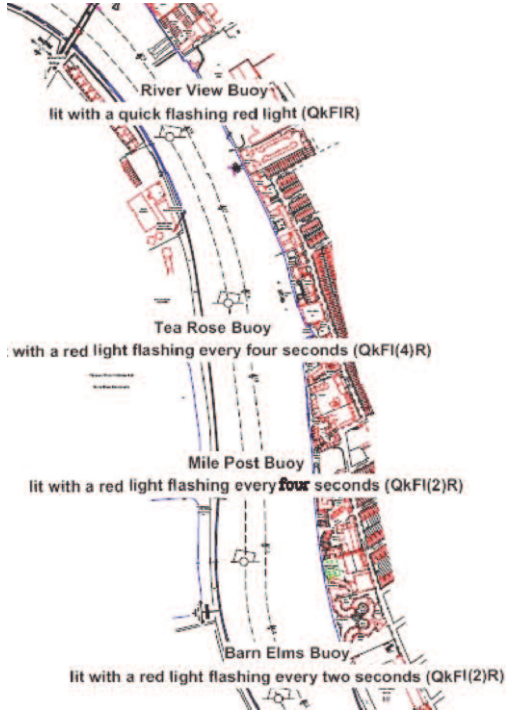
i. When rowing on the ebb tide – leave the red buoys as close to starboard as is safe and practicable; and

ii. When rowing on the flood tide – leave the green buoys as close to starboard as is safe and practible.

iii. When rowing on parts of the river not marked by the appropriate navigation buoys maintain a starboard hand course.

In addition, the buoy opposite the University of London Boathouse (UL) marks the furthest upstream point at which boats from the University Boat Club can enter the Inshore Zone when crossing from the Middlesex to the Surrey side of the river.

Positions of Rowing Navigation Buoys going Upstream



Barn Elms Reach:

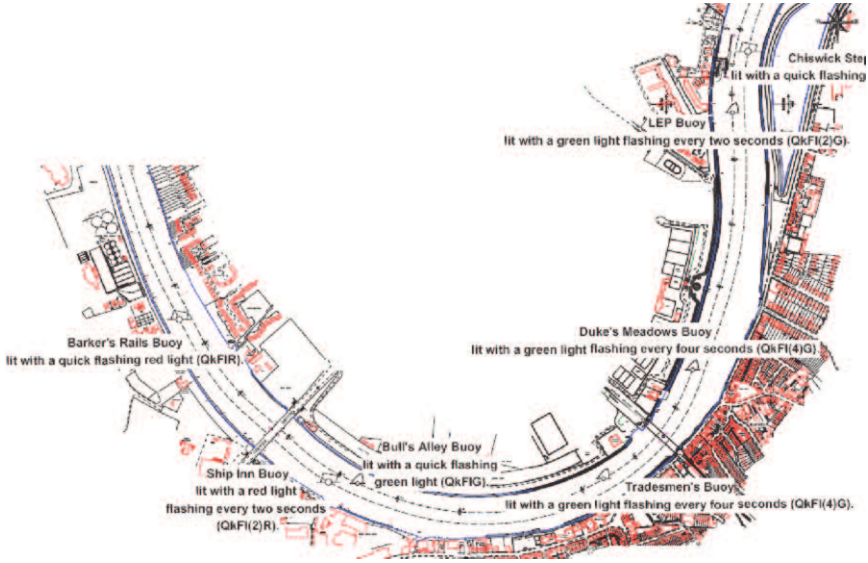
"River View Buoy" (port/red) – 300m downstream of Hammersmith Bridge.

"Tea Rose Buoy" (port/red) – Midway along Barn Elms Reach abreast of Tea Rose Jetty.

"Mile Post Buoy" (port/red) – Lower Barn Elms Reach, 300m upstream of Fulham Football Ground.

"Barn Elms Buoy" (port/red) – Lower Barn Elms Reach, abreast of Fulham Football Ground, 100m upstream of Barn Elms Boat Club.

Chiswick Reach:
"Black Lion Buoy" (port/red) – Abreast of the downstream end of Chiswick Eyot (not pictured).



Mortlake Reach

"Barker's Rails Buoy" (port/red) – 400m downstream of ULBC abreast of Saffron House.

Corney Reach

"Ship Inn Buoy" (port/red) – 250m downriver of Chiswick Bridge, abreast of Mortlake Brewery.

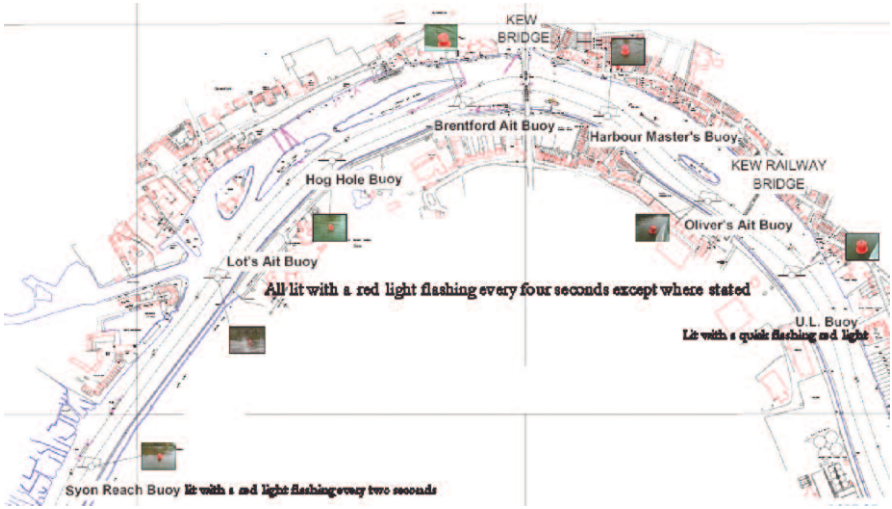
"Bull's Alley Buoy" (starboard/green) – 500m downriver of Chiswick Bridge.

"Tradesmen's Buoy" (starboard/green) – 200m upstream of Barnes Railway Bridge.

"Duke's Meadows Buoy" (starboard/green) – Midway along Corney Reach opposite Barnes and abreast Small Profits Drawdock.

"LEP Buoy" (starboard/green) –250m upstream of Chiswick Pier.

"Chiswick Steps Buoy" (port/red) – 50m upstream of Chiswick Pier.



Syon Reach

"Syon Reach Buoy" (port/red) – 150m upstream of the Driftwood moorings on Syon Reach .

"Lot's Ait Buoy" (port/red) – Opposite the entrance to the Grand Union Canal.

"Hog Hole Buoy" (port/red) – Abreast of Hog Hole Passage between Brentford Upper and Lower Aits.

"Brentford Ait Buoy" (port/red) – Abreast of Downriver end of Brentford Ait Lower.

Mortlake Reach

"Harbour Master's Buoy" (port/red) – 100m downstream from Kew Pier.

"Oliver's Ait Buoy" (port/red) – 100m upstream of Kew Railway Bridge abreast of lower end of Oliver's Ait.

"U.L. Buoy" (port/red) – 200m downstream of Kew Railway Bridge.

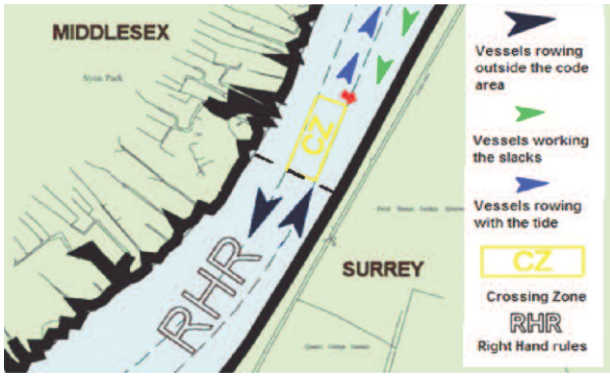
2.2 Rowing Navigation Upstream of the Syon Crossing and downstream of the Putney Crossing Point

Above the Syon Crossing and below the Putney Crossing, normal Starboard navigation rules apply:

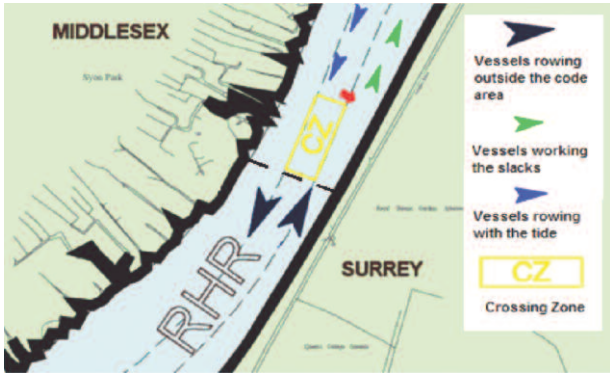
i. Rowing boats must stay as close to the starboard side of the River as is safe and practicable

ii. All vessels must ensure that they use the correct navigation arches on all bridges

iii. Action taken to avoid head on collision should be to pass port to port.

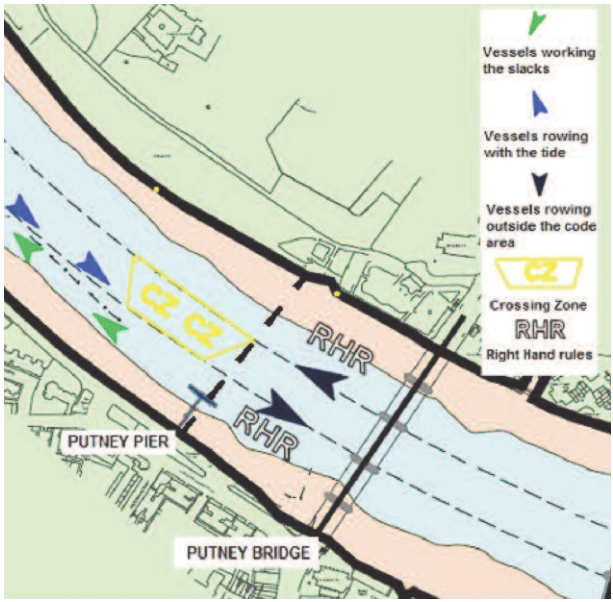


The Syon Crossing on the Ebb Tide

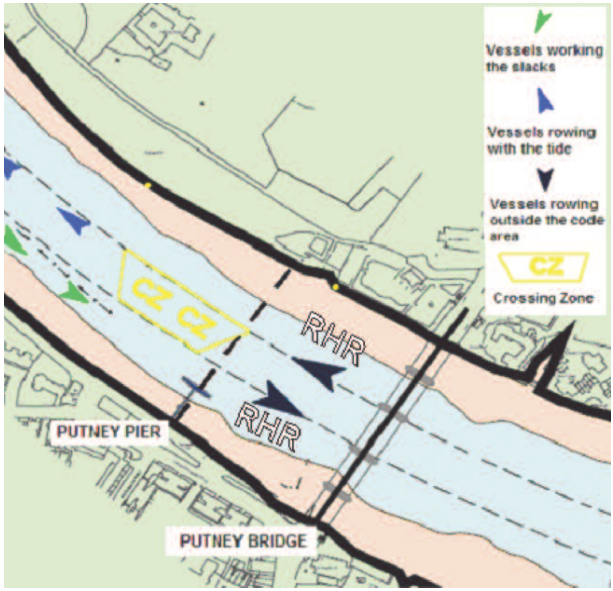


The Syon Crossing on the Flood Tide

The Upstream Syon Reach Crossing Marker



The Putney Crossing on the Ebb Tide



The Putney Crossing on the Flood Tide

The downstream Putney Crossing Mark at the Boat Race Step

2.3 The Tidal Stream

As the rowing rules are based around the tide, when planning an outing, it is vital to be aware of the direction of the tidal flow and the predicted times of high and low water. In this part of the tideway the tide floods in from the estuary in about five hours and then ebbs back out in about six, usually resulting in two full tidal cycles in a given twenty four hour period. Predicted tide times are therefore a useful guide to what both the height of tide and direction of tidal stream are likely to be during any outing.

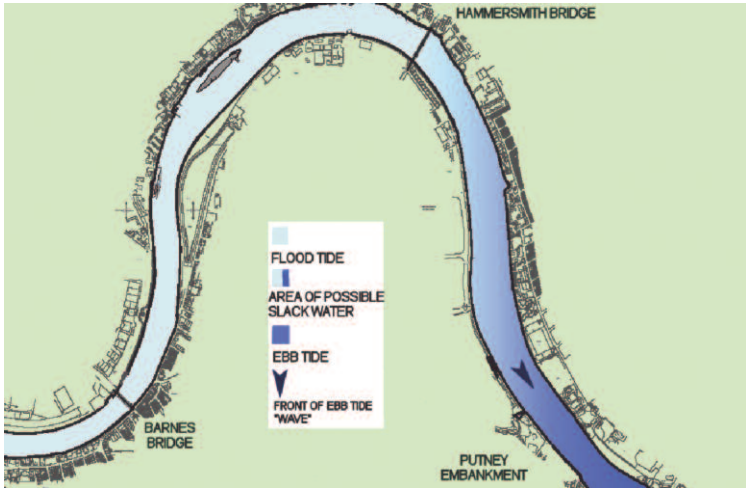
However, tide times and heights can be affected by many external factors, so it is important to ascertain visually the actual state of the tide before boating. If the tidal stream direction is impossible to ascertain then boating should be delayed. These periods of "slack water" rarely last longer than a few minutes but are hazardous as the rowing rules cannot be determined if one can not tell which way the tidal stream is flowing. It is rather like coming up to a T-junction with broken traffic lights - accidents are not certain but are certainly more likely.

The change of tidal cycle can be thought of as a "wave" moving up the river, with the flood "wave" moving faster than the ebb "wave". At the "wave" face, there is a short period/area of slack water. On either side of the change the river runs in the opposite direction. However during or after periods of heavy rainfall a phenomenon known as "swelling" can occur. This is when the height of water is rising but the stream is still running out as if ebbing. In such situations it is important to remember that the rules are based around the tidal stream direction not the state of tide.

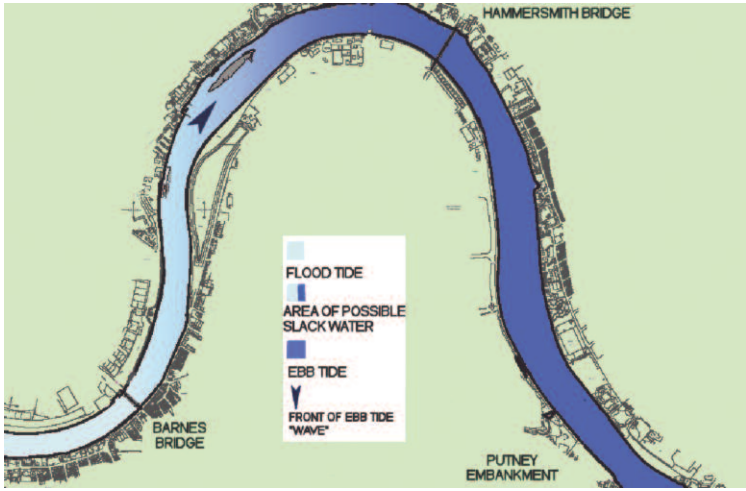
Thames Barrier closures can have a dramatic effect both on the state of tidal stream and the predicted times of high and low tide. In some circumstances a barrier closure can also cause a very prolonged stand. Where there is doubt about the direction of the stream the safest option is to navigate on the star board side of the fairway. Clearly with rowers travelling in both directions in the fairway the chance of an incident is higher, so it is best to avoid the narrower stretches of the river if possible. As with all unusual tidal circumstances navigation should be cautious; keeping a proper lookout with speed reduced appropriately.

IF IN DOUBT STAY ON THE STARBOARD HAND SIDE OF THE RIVER.

The diagram below illustrates what can occur at high water.



The following diagram shows the same stretch of river roughly twenty five minutes later:

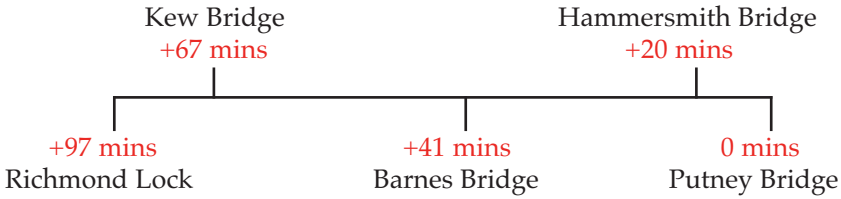


As can be seen, it is possible for a rowing boat coming from Putney to outpace the change in tide and arrive at Barnes to find that they are following an incorrect course.

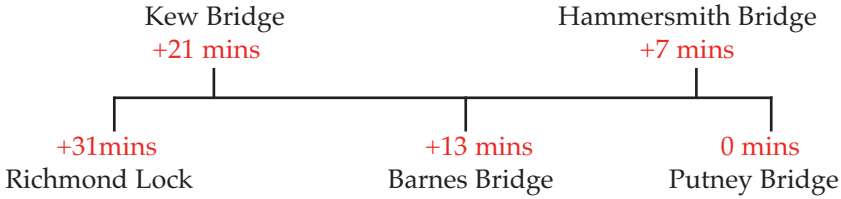
This can result in four lines of traffic, two each on directly opposed courses with the potential of head on collision and with all crews correctly following the rowing rules, but based on different perceptions of which way the tidal stream is running. At high water, this is less of a problem because of the space available, but at low water, as the tide changes from ebb to flood, the river is much smaller and this can make it very hazardous and it is this particular period that should be avoided if at all possible.

The predicted time of the tide change at different points along the river is shown below. The tide times can be found in the PLA Tide Tables and Port Information booklet with the difference given from London Bridge to Putney. Again, this is a guide, which is affected by many factors, but is a good starting point to be used when organising outings:

LOW WATER TIME DIFFERENCE



HIGH WATER TIME DIFFERENCE



If you are unsure as to which direction the tidal stream is running, and if it is safe, stop and square blades in the water and see which way the boat drifts to determine tidal direction but allow for wind.

It can also be possible to tell the tidal stream direction visually without stopping, but you must take the following into account:

i. The tidal stream changes in the Inshore Zone before it does in the fairway.

ii. Wave movement is not a good indicator of tidal stream direction, but can be of limited use to experienced persons.

iii. The effect of the tidal stream on largely submerged (i.e. not wind affected) debris is the best indicator of tidal direction.

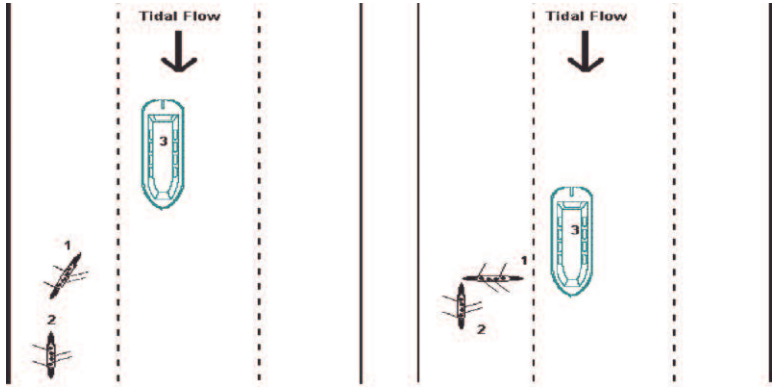
iv. Stream disturbance and direction can easily be seen from the effect of navigation buoys, posts, bridge piers and abutments.

The Thames between Putney and Richmond has a tidal range of over 6m and can flow at up to 4 knots. When you factor in the effects of a headwind it means that a boat can drift over 150m in the time it takes to have a drink of water and put a top on.

The stream can also affect the lateral direction of a vessel, because currents swirl around bridges and islands. Coxes and steerspersons must be aware of these hazards, as indeed must the crew particularly bow and 2 in an eight or coxed four.

When stopped against the tidal stream it is important to keep the bows of the boat pointed into the stream. If the boat is at rest with the bows at an angle to the stream the boat can be spun about.

Being set across the tidal stream



i. Boat 1 is waiting to cross the river, but must wait for vessel 3 to get clear.

ii. As Boat 1 has pulled further out into the stream, the strength of the tidal stream on her bow becomes much greater than that on her stern. The usual end result of this is that the stern remains relatively stationary as the bow swings around it in the direction of the tidal stream.

iii. The quickest way out of this danger would be to row forwards but Vessel 3 is in the way. Straightening the boat back out against the stream is difficult even for an experienced cox with a good crew.

iv. As a result Boat 2 ends in collision with Boat 1.

2.4 The Weather

The weather around the Tideway can have a significant effect on the safety of navigation for rowing boats. Strong winds when in opposition to the stream can whip up dangerous conditions in a matter of minutes. Rain and Snow can both be hazardous, both in terms of their effect on the athletes themselves and on visibility.

The most significant danger to rowers on the Tideway is fog. Fog usually affects the Tideway on days when the conditions are otherwise perfect for rowing, with no wind or rain. The temptation to go out is therefore often very strong as the danger might not be readily apparent to an oarsman. However in fog motor vessels often rely on radar to navigate and as rowing vessels do not show up on radar the chance of a collision is greatly increased. As can be seen in the picture above even large objects like bridges can be difficult to see until one is very close.

In short if the river is fog bound it is recommended that rowing is called off until visibility improves significantly. Where the fog is not thick but still affects visibility lights should be used and high visability attire is recommended.

2.5 Bridge Arches Closed to Navigation

The PLA uses the following marks to identify when a bridge arch is closed to navigation.

Port of London River Byelaws (1978) Rule 29 - Bridges	
(1)	When the arch or span of a bridge is closed to nagivation the person in control of the bridge shall suspend from the centre of that arch or span –
(a)	by day, three red discs 0.6 metres in diameter at the points of an equilateral triangle with the apex downwards and the base horizontal;
(b)	by night, three red lights in similar positions to the discs displayed by day.

CLOSED!

2.6 Restricted Zones

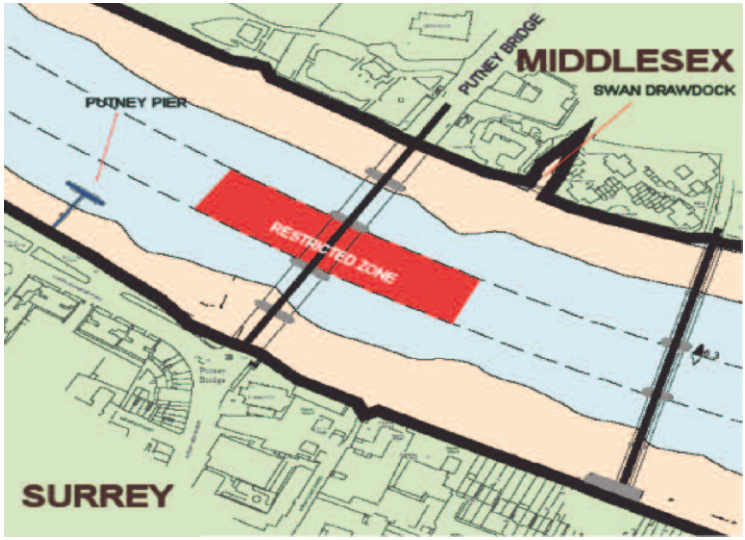
In the rowing code area many of the bridges can present particular hazards to navigation, both to rowers and other vessels whose vision of rowers can be very obstructed by the bridges. Every bridge within the rowing area covered by this code has a Restricted Zone around it. Within these Zones certain actions are proscribed.

Side by side rowing is allowed through the Restricted Zones, but only for a maximum of two crews.

Throughout the area there shall be no overtaking through Restricted Zones of any kind.

When rowing in the Inshore Zone do not stop in the vicinity of or underneath bridges.

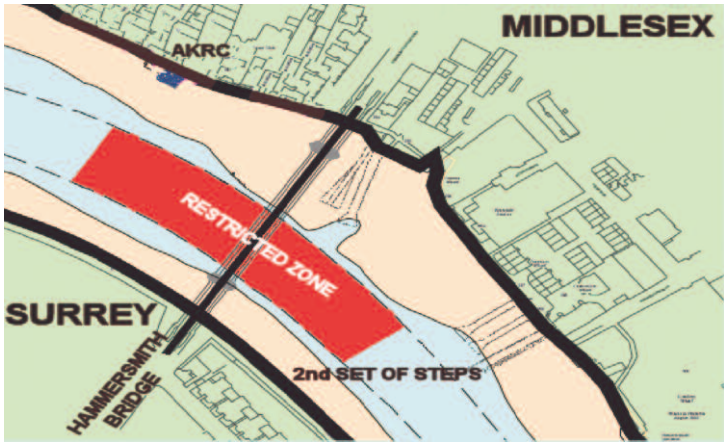
Putney Bridge
Proscribed Actions: No turning, No stopping. No crossing.
Zone Area: The downstream end of the Putney Crossing point (marked with a yellow marker on the wall) to the downstream end of Swan Drawdock.



Hammersmith Bridge

Proscribed Actions: No turning, No stopping. No crossing (Unless for embarking and disembarking in which case the boat should be pulled in as close as possible to the bank in order to avoid obstructing other river users. Blades should be in contact with the bank, if possible, to aid in the ability to remain stationary).

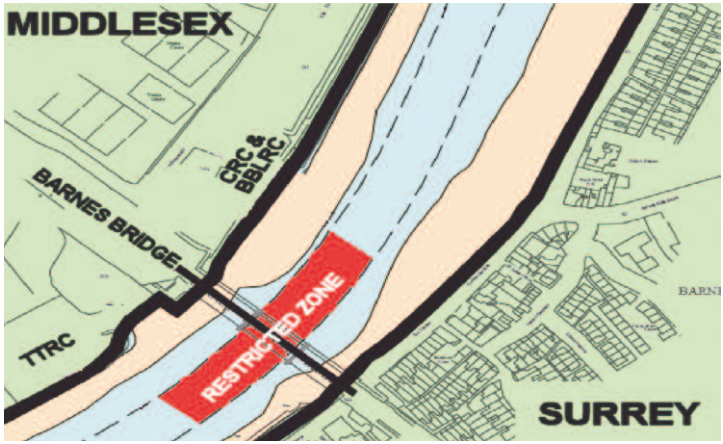
Zone Area: The Downstream end of the Auriol Kensington pontoon to the 2nd set of steps downstream of the Bridge.



Barnes Bridge

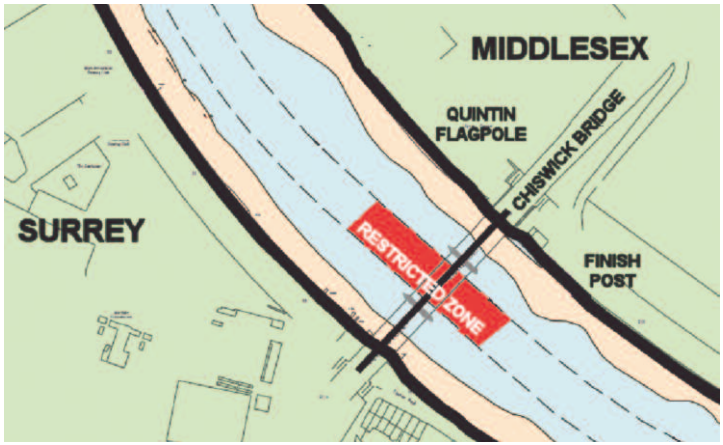
Proscribed Actions: No turning, No stopping.

Zone Area: The Upstream end of Thames Tradesman RC to the downstream. End of cygnet.



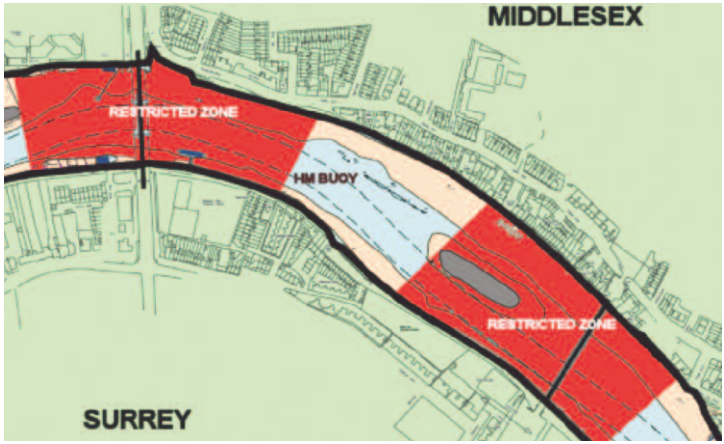
Chiswick Bridge

Proscribed Actions: No turning, No stopping. No Crossing.
Zone Area: Finish post to the Quintin flagpole.



Kew Rail to Kew Road

Proscribed Actions: No turning, No stopping. No Crossing. The gap between the two Zones to be used mainly for turning rather than resting or coaching. Crews are to avoid baulking other vessels by performing reduced speed exercises.
Zone Area: 100m downstream of Kew Rail to the end of Oliver's Ait then from the Harbourmaster's Buoy to the beginning of Brentford Ait. Exceptionally these Restricted Zones are the full width of the river for both Restricted Zones, owing to the inherently difficult nature of safe navigation in these areas.



2.7 The River above Kew Rail Bridge

When the Surrey Arch of Kew Rail Bridge is unnavigeable due to low water conditions, crews should consider turning before the restricted zone and going downriver

Those continuing upriver must ensure that the fairway is clear before entering the Restricted Zone. If there is not sufficient water to pass inside the buoys vessels must not continue upstream.

If the Surrey arch of Kew Road Bridge is impassable rowers may not proceed upstream. When forced to turn in this area, a Restricted Zone, extreme caution must be used.

The Surrey arch of Kew Road Bridge

2.8 Crossing the River

Port of London River Byelaws 1978 **Byelaw 15 - Modifications of the International Regulations for Preventing Collisions at Sea (Colregs).** Crossing	
(a)	A vessel shall not cross or enter a fairway as to obstruct another vessel proceeding along the fairway;

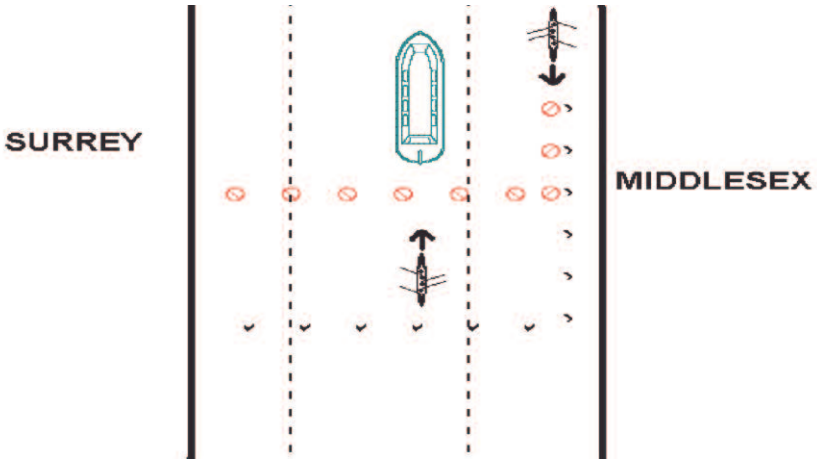
In summary:

i. Crossing must be expedited as quickly as is safely possible.

ii. Crossing should be carried out as near to 90° as is practicable.

iii. Remember to observe the special rules pertaining to crossing in the Restricted Zones.

iv. Do not cross in front of oncoming traffic.



2.9 Crossing Zones

The Crossing Zones should be used, which are described below.

i **Putney Crossing** – marked by two yellow stripes on the Bishop's Park wall. The mark on the edge of the Boat Race steps (closest to Putney Pier) marks where crews may start crossing the river when coming upriver from Wandsworth on the ebb. Additionally the downstream mark indicates the end of the Rowing Code area, where rowers must revert to the right hand rule. The mark further upstream indicates where crews must have finished crossing when proceeding upriver on the flood.

ii **Chiswick Steps Crossing** – marked by four yellow stripes, two on either bank. When coming from either direction the first mark indicates the start of the crossing zone and the second the end of it. Rowing vessels should endeavour to cross in the zone marked out by the four stripes. Additionally the zone is marked by the LEP and Chiswick Steps buoys – rowers should cross after the first buoy and should have finished crossing before reaching the second.

The Chiswick Steps Crossing looking upstream

iii. Chiswick Bridge Crossing – marked by three yellow stripes, two on the Middlesex bank fence posts and one on the metal pile in front of the brewery. Additionally the zone is marked by the Bull's Alley and Ship Inn buoys – rowers should cross after the first buoy and should have finished crossing before reaching the second.

The Chiswick Bridge Crossing Point from the Middlesex Shore

iv. **Syon Reach Crossing** – marked by two yellow stripes on the river wall of Kew Gardens. When coming from either direction the first mark indicates the start of the crossing zone and the second the end of it. Additionally the upstream mark indicates the upstream end of the Rowing Code area, where rowers must revert to the right hand rule. The crossing point is also marked by the Syon Reach buoy after which, rowers should cross.

v. If waiting to cross, wait parallel to the bank and as close to or in contact with the bank as is safe and practicable, so as not to block traffic. Shout out to any crews behind to wait in line astern. Any such crews must not to try to overtake or double park alongside. (Refusal to do so shall be notifiable for disciplinary action.)

vi. Crossing boats must always give way to boats proceeding along the fairway.

vii. Rowing boats and their Escorting Vessels are allowed to cross the river at other places, apart from where it is specifically not allowed (i.e. the Restricted Zones), when boating from or returning to boat houses, provided that they shall do so as quickly as possible and avoid obstructing any other vessel proceeding along the fairway.

2.10 Stopping and Turning

Stopping

i. No stopping in the fairway in the vicinity of the Crossing Zones.

ii. When rowing in the Inshore Zone always pull in as close as is safe and practicable to the bank so as not to block the Inshore Zone.

iii. When rowing with the tidal stream, wherever possible stop as close as possible to the starboard side of the fairway and wherever possible and if it will not obstruct oncoming traffic or increase risk of collision, pull out of the fairway entirely.

iv. Do not stop in front of or baulk power driven vessels. Large power driven vessels proceeding with the tidal stream are severely limited in their ability to stop.

v. Do not stop abreast of other vessels of any sort including coaching launches and rowing boats. If in a group always stop line astern.

vi. If a coach in a launch wishes to stop to talk to the crew the coach must ensure they are not blocking the fairway or the Inshore Zone.

Turning

i. When spinning into the fairway, do not spin in the Inshore Zone. Wait until the fairway is clear and then turn onto the correct side of the fairway.

ii. For turning in the vicinity of bridges please see rules for Restricted Zones above.

iii. When spinning into the Inshore Zone, ensure, firstly that room to move into it exists and secondly that other vessels are not impeded.

iv. No turning in the recommended Crossing Zones, either turn earlier or later.

How not to do it…

2.11 Keeping a Proper Lookout

ColReg Rule 5 - Look-out
"Every vessel shall at all times maintain a proper look-out by sight as well as by hearing as well as by all available means appropriate in the prevailing circumstances and conditions so as to make a full appraisal of the situation and of the risk of collision."

The importance of maintaining a proper and effective lookout, cannot be over emphasized. Failure to keep a proper lookout is the single biggest factor in collisions between vessels.

For a coxless boat the maximum recommended time between checking over the shoulder should be five strokes. (Alternate shoulders are recommended). A coxless four travelling with the tidal stream could cover as much as 100m in five strokes. However, when in heavy traffic or navigating in or around the Restricted Zones this must be reduced appropriately.

A cox's first priority is the safe navigation of the boat, more so than good balance or quickest racing line. Whatever is being said to the cox by the crew or coach it is the cox, as master of the boat who will be liable in the case of an accident. The same applies to the steersperson of a coxless boat.

<u>Shouted Warnings</u>
If you feel that a risk of collision is developing do not assume that the other boat is aware of it and call out in good time to warn them. The conventional calls are:

i. "Take a look" – a risk of collision is developing, have a proper look around.

ii. "Ahead" – You should be taking action now, collision seems imminent.

iii. "Hold it up – lightly" – Collision risk – precautionary stop.

iv. "Hold it hard" – Collision imminent unless you stop.

Whilst it is common practice to complete the above phrases with the type of boat involved i.e. "Take a look four" it can be difficult to positively identify a class of boat from the front. It is often better to call out the club name if possible; as if the wrong class of boat is called the boat in question might ignore the call. However

all rowers when hearing such a call in their vicinity should take a good look to ascertain whether it pertains to them or not.

Coaching launches are in a much better position to see oncoming traffic and the formation of potentially dangerous situations. Coaches should warn rowers of such situations as they develop whilst avoiding giving specific navigational instructions.

Nothing herein removes or alters the obligation of all vessels to comply with ColReg Rule 5 at all times.

2.12 Day Glo Vests

The use of Day Glo vests is strongly recommended for rowers in coxless boats, especially single scullers. In crew boats only the rower in the bow seat needs to wear one. They are also strongly recommended for novice crews or crews with novice coxes, non-local crews or inexperienced school children in particular during periods of low visibility e.g rain, mist, low light and fog. It is also recommended that novice coxes themselves wear day-glo vests.

The purpose of wearing these vests is to increase safety on the river and reduce the incidence of collisions by making crews more visible. It is expected that other river users will be more cautious around such crews and understanding in case of any errors.

SECTION THREE - GENERAL NAVIGATION RULES

Navigation on the tidal Thames is covered by the International Regulations for the Preventions of Collisions at Sea (ColRegs), PLA River Byelaws, PLA General Directions and Notice's to Mariners (Permanent and Temporary). All PLA regulations are subject to regular review and whilst the current content and references are correct at the time of publication, they are subject to change. The latest versions of the various regulations are always available on the PLA website and the ColRegs.

3.1 Narrow Channels

The following rules apply in the tidal Thames. Relevant interpretation, guidance and advice follows each rule.

ColReg Rule 9 - Narrow Channels		
9	(a)	A vessel proceeding along the course of a narrow channel or fairway shall keep as near to the outer limit of the channel or fairway which lies on her starboard side as is safe and practicable."

For the purposes of this code the area between the two dashed lines is referred to as the fairway. In this part of the Thames the fairway limits are approximately the 1m sounding line (i.e. 1m depth when the tide is at chart datum). Please refer to the chart "Rowing on the Tideway" for the position of the fairway.

ColReg Rule 9 - Narrow Channels		
9	(b)	A vessel of less than 20 meters in length or a sailing vessel shall not impede the passage of a vessel which can safely navigate only within a narrow channel or fairway."

When navigating in the fairway for whatever reason, all rowing boats and their accompanying coach boats must never impede the passage of a vessel which as a result of its draught or length can safely navigate only in the fairway. The deepest part of the fairway is often not the centre line which can result in large vessels being on the port hand side of the channel at low water. Rowing boats must take the safest course of action to avoid collision even if that means passing to the starboard side of the vessel. This is most relevant if the port to port option would send them into the inshore zone against the flow of traffic. All avoiding action must be taken early, so that your intentions are clear. The most usual vessel to which this would apply are the Class V Passenger vessels which operate on the tideway.

ColReg Rule 9 - Narrow Channels		
9	(d)	A vessel shall not cross a narrow channel or fairway if such crossing impedes the passage of a vessel which can safely navigate only within such channel or fairway."

When crossing the River or turning, all rowing boats must ensure that they have a clear view of the fairway. They are not to cross if they can not clear the fairway with a safe distance between them and any oncoming vessels. If the crossing area is not clear, the crew must stop and wait for an appropriate moment to cross rather than continuing up the incorrect side of the River.

ColReg Rule 9 - Narrow Channels		
9	(f)	A vessel nearing a bend or an area of a narrow channel or fairway where other vessels may be obscured by an intervening obstruction shall navigate with particular alertness and caution and shall sound the appropriate signal prescribed in Rule 34(e). (One prolonged blast).

Rowing boats are not required to make sound signals but should be aware of their meanings as they should be made by relevant vessels approaching the same point. This particular sound signal will often be made by vessels approaching Kew Road Bridge.

3.2 Overtaking

ColReg Rule 13 - Overtaking		
13	(a)	…… any vessel overtaking any other shall keep out of the way of the vessel being overtaken.

In summary:

i. Overtaking should in general be on the outside, i.e. in the faster tidal stream.

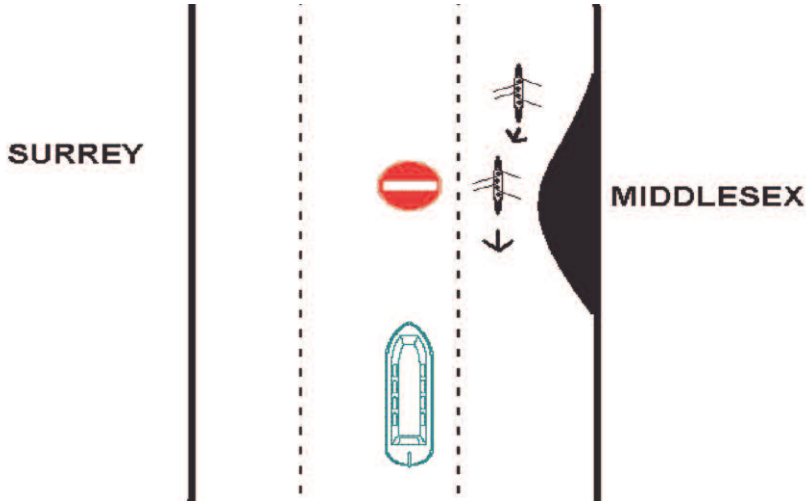
ii. The overtaking crew does not have right of way. (Contrary to popular myth!)

iii. The crew being overtaken should maintain course and speed (the reverse of what generally happens in a head race). Variations of speed for training purposes during the overtaking manoeuvre does not constitute maintaining "course and speed". Baulking the passage of an overtaking vessel is not permitted.

iv. Overtaking shall not take place in any of the Restricted Zones.

v. Overtaking shall not take place if it will put the overtaking boat into the path of oncoming traffic.

<u>An example of when not to overtake</u>



General Directions for Navigation in the Port of London (2003) Direction 13 - Overtaking Manoeuvres	
(1)	Vessels shall only overtake if the manoeuvre can be completed so that the vessels involved do not prejudice their ability to navigate safely, particularly in areas of additional constraint such as river bends and bridges.

3.3 Proceeding Abreast

Port of London River Byelaws (1978) Byelaw 15 - Modifications of the International Rules	
(c)	a power-driven vessel shall not proceed abreast of another power-driven vessel except for the purposes of overtaking that other vessel;
(d)	a vessel in a fairway above Tilburyness shall not overtake a vessel which is herself overtaking another vessel.

A balance has to be struck between the strict adherence to the above regulations and the sport of rowing. This is a privilege and abuse of it will be treated most seriously by the TRRC and the PLA.

DON'Ts

i. Boats must not row abreast if they will obstruct other traffic on the River.

ii. Boats rowing in the Inshore Zone must not row abreast other than when overtaking and must ensure that they will not obstruct vessels proceeding in the opposite direction.

iii. The maximum number of boats allowed to proceed abreast in the channel at any one time is three, but only where a single boat is overtaking a pair of boats (such as an eight overtaking two scullers or vice versa). Two boats abreast can never overtake two other boats rowing abreast, other than by switching to line astern and proceeding past in single file.

DOs

i. Boats rowing abreast must maintain their correct station on the river and should avoid straying across the fairway.

ii. Boats rowing abreast may only overtake another vessel if the river is completely clear and by doing so they will not obstruct any oncoming vessels or impede the passage of the vessel being overtaken. If this is not the case the boat must row behind the boat until it is safe to overtake, or overtake one at a time – as long as it is safe to do so.

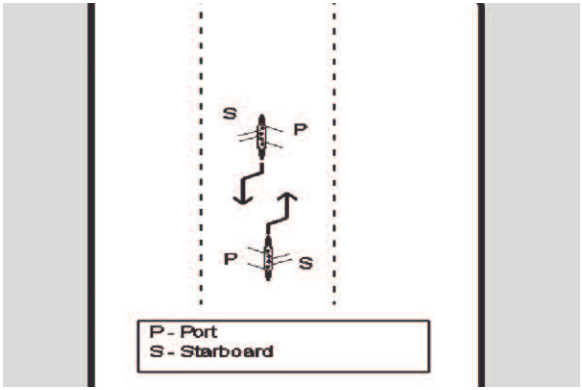
iii. A single boat may only overtake two boats rowing abreast if the river is completely clear and any oncoming vessels are not obstructed or impede the passage of the vessels being overtaken. If this is not the case the boat must row behind the two boats rowing abreast until it is safe to overtake.

Notwithstanding the above "DOs" and "DONTs" the onus for collision avoidance always lies with the overtaking vessel(s).

In the event of an incident where rowing side by side is a contributory factor part or all of the enforcement action may be based on these regulations.

3.4 Emergency avoiding action to be taken in a head-on situation

ColReg Rule 14 - Head-on situation		
14	(a)	When two power driven vessels are meeting on reciprocal or nearly reciprocal courses so as to involve risk of collision each shall alter her course to starboard so that each shall pass on the port side of the other.

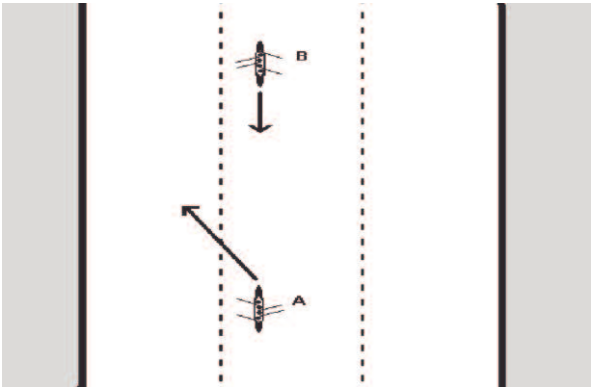


ColReg Rule 14 - Head-on situation		
14	(c)	When a vessel is in any doubt as to whether such a situation exists she shall assume that it does exist and act accordingly.

Alterations of course should be taken in ample time to avoid collision. However, when two rowing boats are on a head on course and a collision is unavoidable without immediate action, both boats should take the emergency avoiding action shown above. This rule also applies to all vessels navigating in the fairway at all times.

For the purposes of this regulation, when in the fairway rowing boats are to act as power-driven vessels.

Note: Steerpersons should note that this rule applies if a collision is imminent and there is not time to get back to the Inshore Zone.



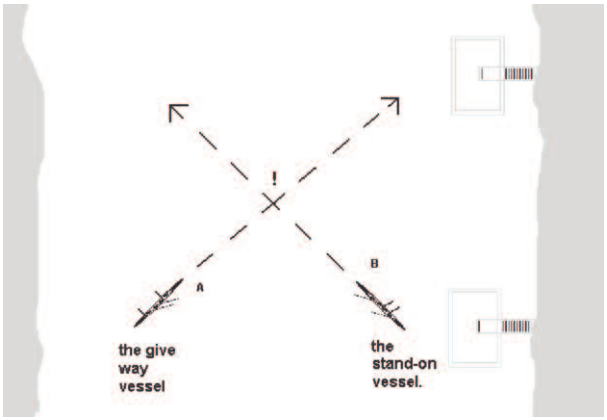
However in the situation illustrated above, Boat A (which has strayed out of the Inshore Zone) has time to steer back into the Inshore Zone before Boat B comes so close as to make collision imminent. In this case emergency avoiding action should not be taken, but rather a sufficiently quick return to the correct course inshore so that Boat B does not have to change its own course.

3.5 Vessels coming together on a collision course (crossing situations)

ColReg Rule 15 - Crossing Situation
When two power driven vessels are crossing so as to involve risk of collision, the vessel which has the other on her own starboard side shall keep out of the way and shall, if the circumstances of the case admit, avoid crossing ahead of the other vessel.

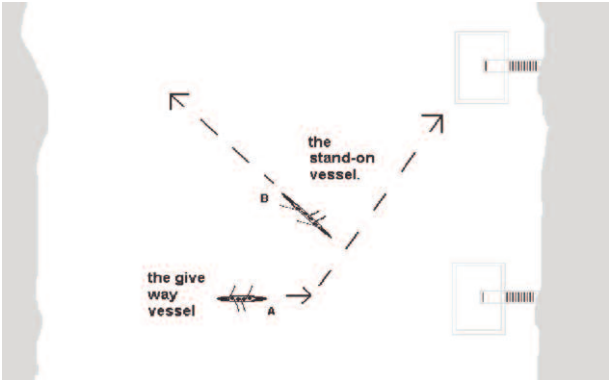
ColReg Rule 16 - Action by Give-way Vessel			
Every vessel which is directed to keep out of the way of another vessel shall, so far as possible, take early and substantial action to keep well clear			
ColReg Rule 17 - Action by Stand-on Vessel			
17	(a)	(i)	Where one of two vessels is to keep out of the way of the other shall keep her course and speed.
		(ii)	The latter vessel may however take action to avoid collision by her manoeuvre alone, as soon as it becomes apparent to her that the vessel required to keep out of the way is not taking appropriate action in accordance with these Rules.

For the purposes of these rules rowing boats are to act as power driven vessels.



The above diagram shows an example of a crossing situation with the potential for a collision. Boat A on the port hand side of the River is returning to shore whilst Boat B on the starboard hand side is boating. If both boats continue on their courses they will collide.

In such a situation the following action must be taken.



Boat B the "stand on vessel" has maintained her course and speed, whilst Boat A the "give way vessel" has altered her course to pass behind Boat A. In many circumstances the "give way vessel" can simply decrease her speed without needing to make a course correction, however the decrease in speed must be significant enough to be observable so that the "stand on vessel" does not feel the need to make her own course correction.

ColReg Rule 17 - Action by Stand-on Vessel		
17	(d)	This Rule does not relieve the give-way vessel of her obligation to keep out of the way.

If the "stand on" vessel considers a close quarters situation has developed to such an extent that a collision cannot be avoided by the actions of the "give way" vessel alone, the "stand on" vessel MUST take such action as will best aid the avoidance of a collision. Whilst a collision is often the fault of both parties involved, if the "give way" vessel has failed to take appropriate action then the majority of the liability is likely to fall on that vessel.

For the purposes of this rule rowing boats must act as power driven vessels.

3.6 Right of Way

ColReg Rule 18 - Responsibilities Between Vessels Except where rule 9, 10, and 13 otherwise require:			
18	(a)	A power driven vessel underway shall keep out of the way of:	
		(i)	a vessel not under command;
		(ii)	a vessel restricted in her ability to manoeuvre
		(iii)	a vessel engaged in fishing;
		(iv)	a sailing vessel;

Rule 18 means that oar or paddle powered boats must keep out of the way of all the types of vessel listed above.

For the purposes of this Rule, rowing vessels must act as power driven vessels.

Port of London River Byelaws (1978) Byelaw 19 - Vessels above Cherry Garden Pier (Cherry Garden Pier is downstream of Tower Bridge)				
19	(1)	Above Cherry Garden Pier –		
		(a)	a vessel of less than 40 metres in length, and	
		(b)	a sailing vessel shall not impede the passage of –	
			(i)	a vessel of 40 metres or more in length, or;
			(ii)	a vessel engaged in towing.
	(2)	Above Westminster Bridge, and in addition to their obligations under paragraph (1) above –		
		(a)	a vessel of less than 20 metres in length, and	
		(b)	a sailing vessel shall not impede the passage of a vessel of 20 metres or more in length.	

This rule gives priority to vessels such as (but not limited to) Class V Passenger vessels, tugs and tows and, large Dutch barges.

A vessel restricted by its draught transitting the tideway at lower tides may be forced onto the "wrong" side of the channel to stay in the deeper water. In such circumstances rowing vessels must take early and appropriate action to avoid collision. In this situation passing port to port can sometimes force the rowing vessel into the Inshore Zone and create a possible collision situation with rowing vessels working the slacks. In this case if the change of course is made early enough rowing vessels can consider moving well to starboard to give the motor vessel a clear passage.

SECTION FOUR – ADDITIONAL REGULATIONS

The tidal Thames as far as Teddington Lock comes under the jurisdiction of the PLA. The majority of the regulations and instructions concerning navigation are laid down in:

- ColRegs.
- Port of London Act
- Port of London River Byelaws
- General Directions for Navigation in the Port of London
- Permanent Notices to Mariners
- Notices to Mariners

The PLA keeps all its regulations under regular review and the latest additions can be found in their entirety on the PLA website (www.pla.co.uk).

Ignorance of the regulations is not a defence in the event of an incident. Detailed below, are further regulations that have direct relevance to rowing on the tideway.

4.1 The Vessel Master

In the context of the PLA regulations the cox or in the case of a coxless vessel the steerperson is deemed to be the master of the vessel.

	Port of London Act 1968 (as amended) **Section 108 - General rules for navigation**
A master who navigates his vessel on the Thames-	
(a)	without due care and attention; or
(b)	in a manner liable to injure or endanger persons, other vessels, the banks of the Thames (whether above or below mean high water level) or any structure or installation in or beside the Thames; shall be guilty of an offence and liable to a fine not exceeding [the statutory maximum and on conviction on indictment to a fine].

Bearing this in mind coaches and those in loco parentis of Junior coxswains and steerpersons should use this fact in risk assessment when determining the suitability of those underage or who are inexperienced to act as masters of vessels with respect to their knowledge of and ability to adhere to the navigation regulations and this Code.
(The statutory maximum is currently £5,000.)

4.2 Incidents

Port of London River Byelaws (1978) **Byelaw 7**			
Where a vessel –			
(a)	has sunk;		
(b)	has been damaged		
(c)	has caused damage to anything (including a vessel) or is on fire;		
(d)	has lost, slipped or parted from an anchor;		
(e)	has taken the ground (not being a vessel which is berthed or moored);		
(f)	is carrying liquid in bulk and any spillage has occurred, or where the anchor of the vessel has fouled another or cable or other obstruction under water,		
	the master shall –		
	(i)	forthwith give notice and particulars of the occurrence to a harbourmaster;	
	(ii)	unless he has given the notice and particulars in writing, confirm them in writing as soon as practicable after giving them; and	
	(iii)	shall give to the harbourmaster such further particulars as the harbourmaster may reasonably request;	
Provided that this byelaw shall not apply where both the vessel is less than 12 metres in length and the occurrence is one of those described in sub-paragraph (b), (d) and (e) above.			

Reporting Incidents

The majority of incidents and "near misses" will be reported to the ARA/TRRC by using the online reporting systems. This will be the case for all crews whether or not the crew is based in the Thames Region.

Note: Only in respect of Byelaw 7 (a), (b) and (c) above should incidents also be reported to the PLA and in the case of (b) and (c) only when the damage is valued at a cost more than £500 at cost to repair.

However, all incidents involving personal injury must also be reported directly to the PLA.

4.3 Events

Port of London River Byelaws (1978) **Byelaw 10 - Boat races, regattas and processions**
A person who promotes a boat race, regatta or procession shall give to a harbourmaster as much previous notice thereof as practicable (not being less than seven days' notice), and every person navigating a vessel in or in connection with such an event shall comply with the directions of a harbourmaster relating thereto.

Anyone wishing to hold an 'event' (use of the river for anything other than a regular outing, thus, including private matches) of any kind must advise the Harbourmaster at least seven days in advance.

The organiser will be required to provide:

1. proof of public liability insurance;
2. give an undertaking that a risk assessment has been performed;
3. that highlighted risk reduction measures will be in place;
4. and also indemnify the Port of London Authority against any costs or claims arising as a result of the event;
5. Details of any boats involved in the event working for hire or reward.

If the organiser would like an associated Notice to Mariners to be published, or if required by the Harbourmaster, then at least three weeks notice is required. Any event with paid entry will require a Notice to Mariners, as will any event that wishes to deviate from the Rowing Code. Joint Notices to Mariners are possible for congruent events on the Thames that will be run in a similar fashion to each other. In such cases the deadline for information is one month before the first event in the series. Any event that will involve more than 99 craft mandates a full river closure, which requires at least one month's notice.

4.4 Lights

ColReg Rule 20 - Application (Lights and Shapes)		
20	(c)	The lights prescribed by these rules shall, if carried, also be exhibited from sunrise to sunset in restricted visibility and may be exhibited in all other circumstances when it is deemed necessary.

Lights are not only to displayed just for the hours between sunset and sunrise, they should also be used in restricted visibility such as fog, rain or snow. A simple rule of thumb is that if street lights are on then you need lights out on the water.

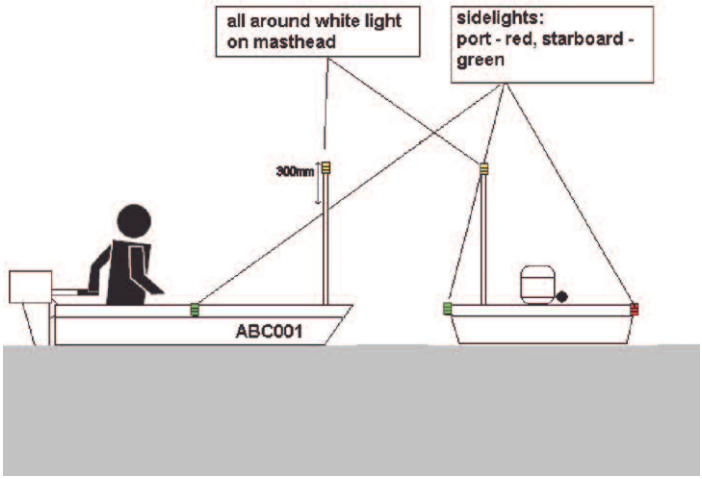
Coach Boat Lights

ColReg Rule 23 - Power driven Vessels Underway (Lights and Shapes)			
23	(a)	A power driven vessel underway shall exhibit:	
		(i)	a masthead light forward;
		(iii)	sidelights: and
		(iv)	a sternlight.
23	(c)	(i)	A power driven vessel of less than 12 meters in length may in lieu of the lights prescribed in paragraph (a) of this Rule exhibit an all-round white light and sidelights.
	(c)	(ii)	a power driven vessel of less than 7 meters in length whose maximum speed does not exceed 7 knots may in lieu of the lights prescribed in paragraph (a) of this Rule exhibit an all-round white light and shall, if practicable, also exhibit sidelights.

In practice this means that all coaching launches should follow the requirements of Rule 23(c) (i), as any vessel being used for coaching will have a maximum speed well in excess of seven knots.

Permanent Notices to Mariners (2005)
P13 - Lights to be Displayed by Vessels Under Oars and Coaching Boats
Power driven vessels used for coaching should, as a minimum, display an all-round white light and, if proceeding at more than 7 knots, port and starboard navigation lights.

It is recommended that the all-round white light is displayed from a masthead rather than the deck, as this not only guarantees 360° visibility but also distinguishes a power-driven vessel from a rowing boat. The masthead light must be at least 300mm higher than the top of the head of the master of the vessel and 1m higher than the sidelights.



Rowing Boat Lights

Permanent Notices to Mariners (2005)
P13 - Lights to be Displayed by Vessels Under Oars and Coaching Boats
Rowing and canoeing after sunset are inherently hazardous and it is vital that other vessels see those who take part in such activities.
Vessels under Oars
Persons in charge of vessels navigating under oars are reminded that compliance with Rule 25 of the ColRegs is mandatory on the Tidal Thames. Therefore rowing vessels and canoes should, as a minimum, have at hand a torch or lantern capable of exhibiting a white light in sufficient time to prevent collision.
In practice, in areas where such vessels may be numerous, vessels under oars can only comply with the above requirement by displaying a continuous white light visible over an arc of 360º (an all-round white light). In certain vessels two lights, one forwad and one aft, may be required to ensure visibility throughout 360º.

ColReg Rule 25 - Sailing vessels underway and vessel under oars		
(a)	A sailing vessel underway shall exhibit:	
	(i)	Sidelights;
	(ii)	A sternlight
(b)	In a sailing vessel of less than 20 metres in length the lights prescribed in paragraph (a) of this Rule may be combined in one lantern carried at or near the top of the mast where it may best be seen.	
(c)	A sailing vessel underway may, in addition to the lights prescribed in paragraph (a) of this Rule, exhibit at or near the top of the mast, where they can be best seen, two all-round lights in a vertical line, the upper being red and the lower green, but these lights shall not be exhibited in conjunction with the combined lantern permitted by paragraph (b) of this Rule.	
(d)	(i)	A sailing vessel of less than 7 metres in length shall, if practicable, exhibit the lights prescribed in paragraph (a) or (b) of this Rule, but if she does not, she shall have ready at hand an electric torch or lighted lantern showing a white light which shall be exhibited in sufficient time to prevent collision.
	(ii)	A vessel under oars may exhibit the lights prescribed in this Rule for sailing vessels, but if she does not, she shall have ready at hand an electric torch or lighted lantern showing a white light which shall be exhibited in sufficient time to prevent collision.

This means that all rowing boats should have a white light affixed to the boat by a secure permanent bracket or similar fixing in front of bow and behind the cox, visible from a minimum distance of 800m. It is recommended that lights designed specifically for rowing boats are used. An additional flashing white light can be used on the bow of the boat to indicate direction of travel, but only in conjunction with a fixed white light. It is strongly recommended that a spare light with means of attachment is carried at all times.

Note: A torch with a directed beam is not suitable. It is required to be a light that is visible throughout the whole of at least 180º for the requisite distance.

The application and enforcement of these regulations has the support of the Amateur Rowing Association.

4.5 Coaching Launch Regulations

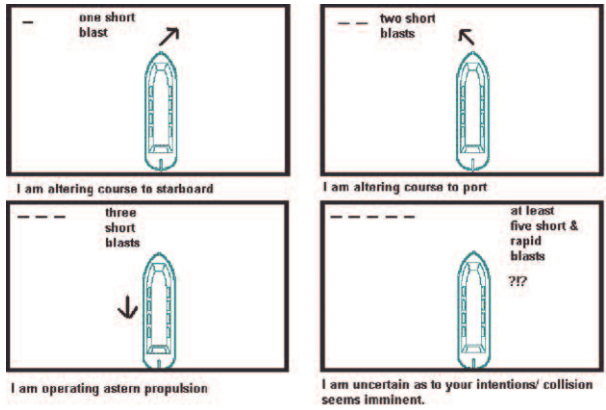
Port of London River Byelaws (1978) **Byelaw 48 - Speed limits**				
(1)	The master of a power-driven vessel navigating in a part of the Thames to which this byelaw applies shall not cause or permit the vessel to exceed a speed of eight knots through on or over the water:			
	Provided that this byelaw shall not apply –			
	(b)	where –		
		(i)	the vessel (having for the purpose of this byelaw been approved by a harbourmaster as one which may exceed a speed of eight knots through the water) is engaged in escorting a rowing boat in training; or	
		(ii)	the vessel is engaged in escorting a boat race or regatta; or	
(2)	The parts of the Thames to which this byelaw applies are –			
	(a)	the Thames above Wandsworth Bridge;		
	(b)	Deptford Creek;		
	(c)	the River Lee or Bow Creek;		
	(d)	Barking Creek		
	(e)	Dartford Creek;		
	(f)	the creeks to the north and west of Canvey Island and of the island known as Leigh Marsh or Two Tree Island, that is to say –		
		(i)	Holehaven, Vange and Pitsea creeks north of line drawn from Holehaven Point on a bearing 270° reckoned clockwise from the true north point of the compass; and	
		(ii)	Leigh Creek, Hadleigh Ray, Benfleet and East Haven Creeks west of a line drawn from Canvey Point on a bearing 000° reckoned as aforesaid to the Leigh-on-Sea shore; and	
	(g)	Yantlet Creek.		

All club registered coaching launches carrying one or two people are automatically eligible for the 8 knot speed exemption, whilst engaged in escorting a rowing boat in training or a boat race or regatta. Any vessel carrying more than two people must pass the PLA's coaching launch wash test and be licensed so to do by the PLA.

This does not relieve all vessels on the Thames from their duty to ensure they do not create wash that will cause a hazard to navigation or to other users of the River. This is especially important in the vicinity of boat moorings where people are working or living on their vessels.

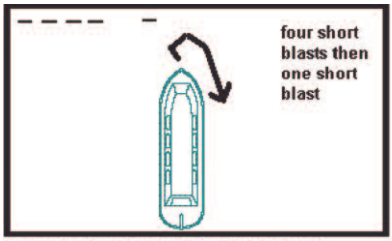
4.6 Manoeuvring and Warning Signals

ColReg Rule 34 - Manoeuvring and Warning Signals		
34	(a)	When vessels are in sight of one another, a power driven vessel under way, when manoeuvring as authorized or required by these Rules, shall indicate that manoeuvre by the following signals on her whistle:
		one short blast to mean "I am altering my course to starboard";
		two short blasts to mean "I am altering my course to port";
		three short blasts to mean "I am operating astern propulsion".
	(d)	When vessels in sight of one another are approaching each other and from any cause either vessel fails to understand the intentions or actions of the other, or is in doubt whether sufficient action is being taken by the other to avoid collision, the vessel in doubt shall immediately indicate such doubt by giving at least five short and rapid blasts on the whistle.

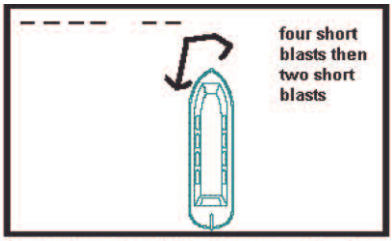


ColReg Rule 34 - Manoeuvring and Warning Signals		
34	(e)	A vessel nearing a bend or an area of a channel or fairway where other vessels may be obscured by an intervening obstruction shall sound one prolonged blast. Such signal shall be answered with a prolonged blast by any approaching vessel that may be within hearing around the bend or behind the intervening obstruction.

Port of London River Byelaws (1978)
Byelaw 35 - Vessels turning about
A power-driven vessel intending to turn about in a fairway shall sound four short and rapid blasts and after a short interval shall, if turning to starboard, sound one further short blast or, if turning to port, sound two further short blasts. During the turn the signal shall be repeated from time to time to warn any approaching vessel.



I am turning about in the fairway and turning 180 degrees to starboard



I am turning about in the fairway and turning 180 degrees to port

Rowers must be aware of the meaning of the above sound signals. Power-driven vessels, especially the larger commercial (passenger) vessels are much more likely to use sound signals than they are to shout. Equally, emergency vessels such as the lifeboat and police will use their siren rather than shout.

SECTION FIVE – THE INSHORE ZONE AT LOW WATER

Permanent Notices to Mariners (2005)
P28 Reduced Upriver Depths
Mariners are reminded that depths in the upper reaches of the tidal Thames are greatly affected over the low water period by the amount of land water flowing over Teddington Weir.
The area particularly affected lies between Kew Railway Bridge and Richmond half-tide lock.
Under low flow conditions water levels in the above area will remain at or less than chart datum between three hours before and one hour after the time of predicted low water at Richmond Lock. Low water levels of 0.5 metres below Chart Datum are to be expected.
During such periods of reduced depths, Masters of vessels navigating upriver of Putney should only do so with caution and should also make every effort to avoid impeding the passage of commercial vessels, which are highly con strained in their ability to manoeuvre in such conditions.
In order to assist passage planning upriver of Putney, London VTS broadcasts the height of tide at Richmond as part of the half-hourly broadcast on VHF Channel 14.

When there has been a period of low rainfall or an increase in the amount of water being extracted upstream of Teddington, the depth of water in the Inshore Zone can be considerably reduced, particularly upstream of Kew Rail Bridge.

This warning is reiterated in the PLA tide tables.

Local Notices to Mariners

Notice to Mariners are issued to provide river users with navigational information and advice, including highlighting of new regulations (such as changes to "rowing rules", special events (such as Head races), temporary restrictions to navigation (bridge closures, low water levels) etc.

All Club Captains, Water Safety Advisers, coaches and members with steering responsibilities should sign up on the PLA website to receive automatically Notices to Mariners pertaining to their stretch of the river by email. The address is:

www.pla.co.uk/notice2mariners/index.cfm/site/maritime

APPENDIX A – Changes or Updates to Previous Version of Rowing Code

This is not an exhaustive list of all the changes in this document, rather it is intended to guide users of the previous code to the most relevant sections to them. New users should still read the entire document.

Definitions – the phrase **navigation/navigational channel** has been replaced with the word **fairway**.

2.1 – Removal of Navigation Diagrams replaced with explanation of the navigation buoys.

2.2 – Navigation outside code area new diagrams showing crossover sections.

2.4 – New section on weather conditions on the tideway.

2.7 – New section on the river upstream of Kew Rail Bridge.

2.10 – Mandatory recommendation to stop with blades in contact with bank replaced with similar but less prescriptive advice. Instructions on switching from inshore zone to fairway made more explicit.

2.12 – Day glo vests reference to TRRC colour code removed.

3.1 – Narrow channels and the difficulties that large motor vessels can have at low water.

4.2 – Incident reporting procedure changed to reflect new guidelines.

4.3 – Section on Drink and Drugs removed.

4.5 – Rowing Lights recommendation to carry spare light.

Appendix C – Hammersmith Bridge and Dove Pier Section updated to reflect signage and with new information.

APPENDIX B

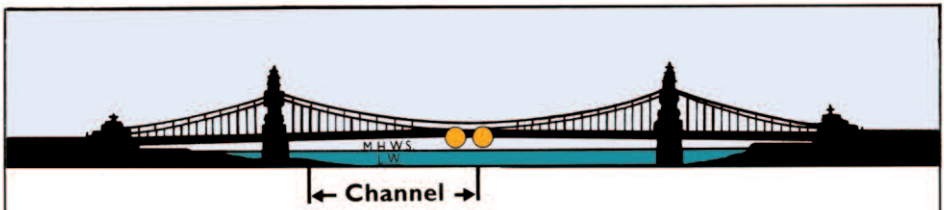
Bridge Silhoeuttes (upstream and downstream from Lambeth Bridge to Richmond Footbridge, Lock and Weir.

PROCEEDING UPSTREAM

PUTNEY BRIDGE

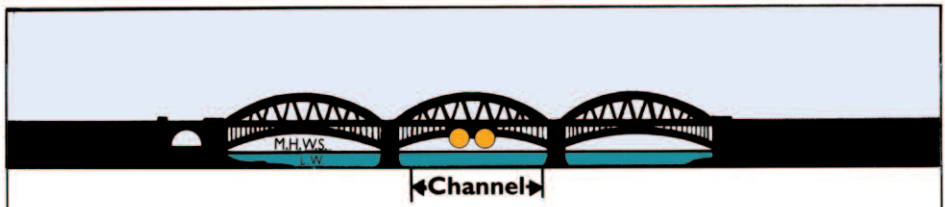
Headway above M.H.W.S.				
3.5m.	4.4m.	5.3m.	4.4m.	3.4m
Width of Arches at M.H.W.S.				
34.1m.	39.3m.	43.9m.	39.3m.	34.1m.

HAMMERSMITH BRIDGE



Headway above M.H.W.S.	2.5m.	3.6m.	2.4m.
Width of Arches at M.H.W.S.	44.2m.	122.1m.	43.7m.

BARNES RAIL BRIDGE



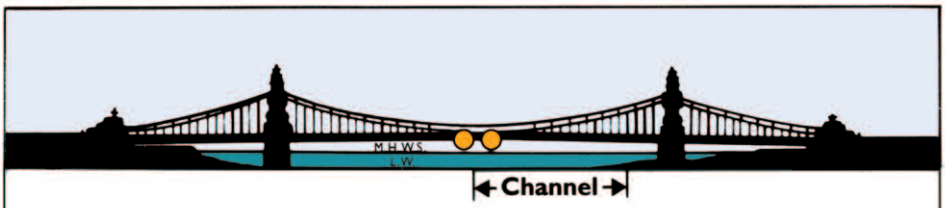
Headway above M.H.W.S.	5.3m.	5.4m.	5.4m.
Width of Arches at M.H.W.S.	36.6m.	36.6m.	36.6m.

PROCEEDING DOWNSTREAM

PUTNEY BRIDGE

Headway above M.H.W.S.				
3.5m.	4.4m.	5.3m.	4.4m.	3.4m
Width of Arches at M.H.W.S.				
34.1m.	39.3m.	43.9m.	39.3m.	34.1m.

HAMMERSMITH BRIDGE



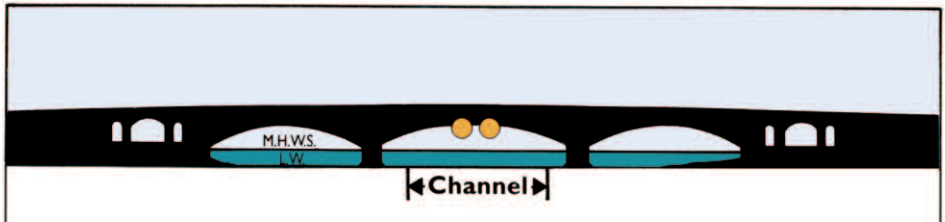
Headway above M.H.W.S.	2.4m.	3.6m.	2.5m.
Width of Arches at M.H.W.S.	43.7m.	122.1m.	44.2m.

BARNES RAIL BRIDGE

Headway above M.H.W.S.	5.4m.	5.4m.	5.3m.
Width of Arches at M.H.W.S.	36.6m.	36.6m.	36.6m.

PROCEEDING UPSTREAM

CHISWICK BRIDGE



Headway above M.H.W.S.	6.4m.	6.6m.	6.4m.
Width of Arches at M.H.W.S.	38.1m.	45.7m.	38.1m.

KEW RAIL BRIDGE

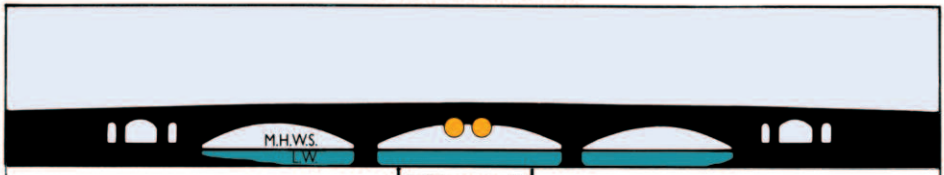
Headway above M.H.W.S.				
5.5m.	5.5m.	5.3m.	5.3m.	5.3m
Width of Arches at M.H.W.S.				
31.5m.	31.5m.	31.5m.	31.5m.	31.5m.

KEW BRIDGE

Headway above M.H.W.S.	4.2m.	5.2m.	4.3m.
Width of Arches at M.H.W.S.	35.5m.	40.5m.	35.5m.

PROCEEDING DOWNSTREAM

CHISWICK BRIDGE

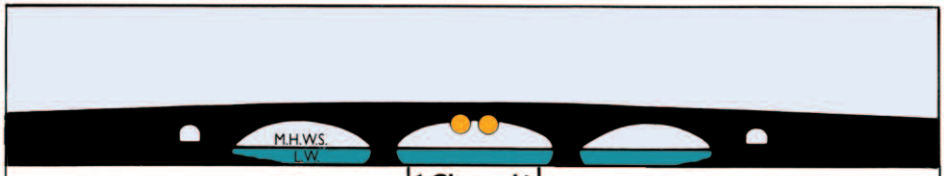


Headway above M.H.W.S.	6.4m.	6.6m.	6.4m.
Width of Arches at M.H.W.S.	38.1m.	45.7m.	38.1m.

KEW RAIL BRIDGE

Headway above M.H.W.S.				
5.3m.	5.3m.	5.3m.	5.5m.	5.5m.
Width of Arches at M.H.W.S.				
31.5m.	31.5m.	31.5m.	31.5m.	31.5m.

KEW BRIDGE

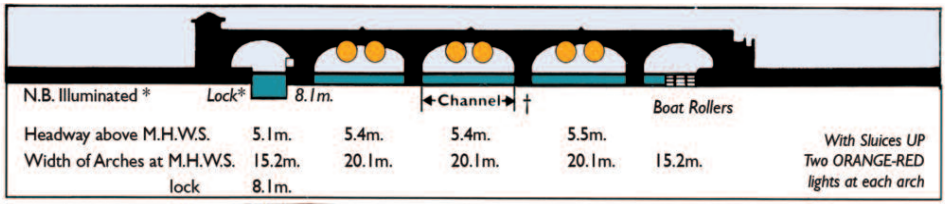


Headway above M.H.W.S.	4.3m.	5.2m.	4.2m.
Width of Arches at M.H.W.S.	35.5m.	40.5m.	35.5m.

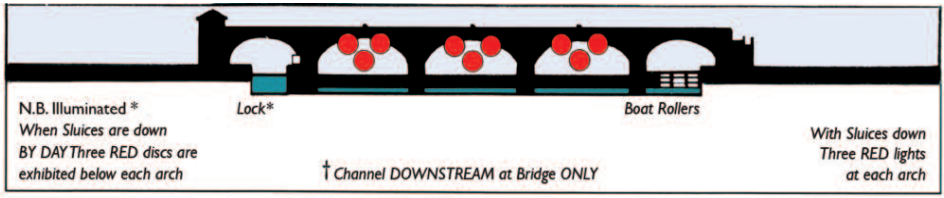
PROCEEDING UPSTREAM

RICHMOND FOOTBRIDGE, LOCK & WEIR

Sluice Gates Open



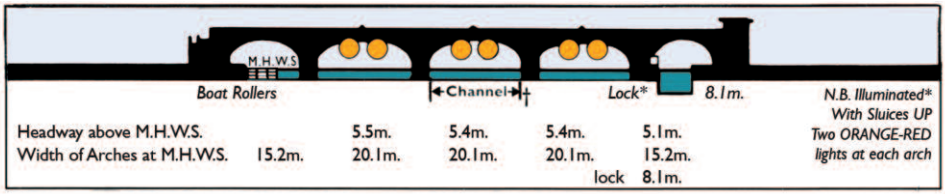
Sluice Gates Closed



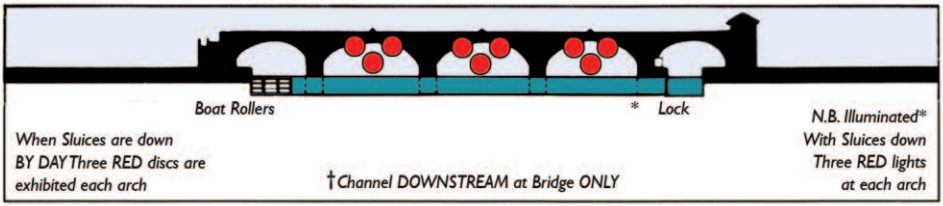
PROCEEDING DOWNSTREAM

RICHMOND FOOTBRIDGE, LOCK & WEIR

Sluice Gates Open



Sluice Gates Closed



APPENDIX C - PHYSICAL HAZARDS OF THE TIDEWAY

As well as other vessels the tideway also contains numerous physical hazards of which rowers must be aware, such as:

- bridges & piers
- mooring buoys
- floating debris (tree trunks, packing crates, wheelie bins etc.)
- shoals
- sunken debris.

The following areas pose particular hazards and dangers to rowers.

Putney Bridge to Hammersmith Bridge

Crossing Point
100m upstream of Putney Bridge

Hazards

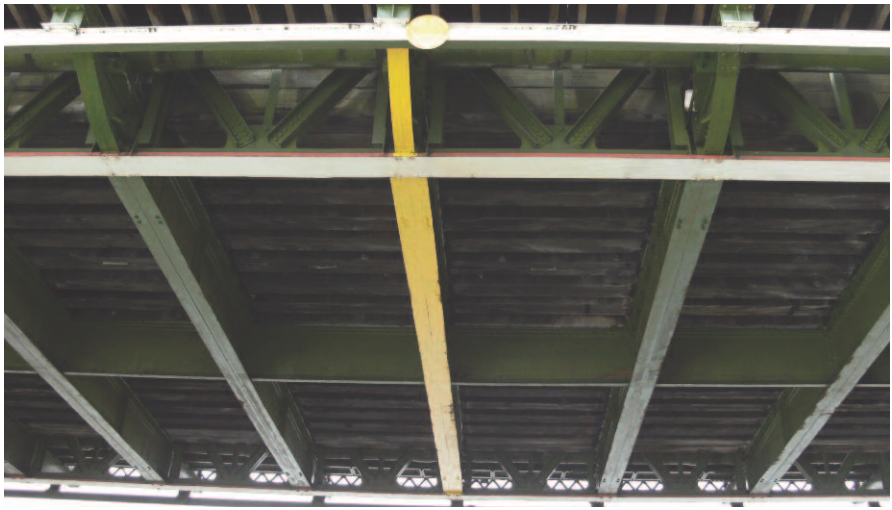
- Steep walls on Middlesex side increase wash and make rescue very difficult.
- Putney Pier.
- Moored boats on Surrey side along the embankment ending with the Black Buoy.

From Fulham Football Ground to just above Hammersmith Bridge at low water there are extensive flats.

Hammersmith Bridge to Chiswick Pier

Hazards

- Hammersmith Bridge.
  The Middlesex arch is impassable at most states of tide. Surrey arch impassable around low water. As a result a special channel has been designated for rowers proceeding against the tidal stream on the Surrey side of the centre arch. This is marked with a yellow spot on either side of the bridge parapet and a yellow stripe underneath the bridge. Rowers proceeding against the tidal stream through the center arch must stay between this stripe and the bastion. Rowers proceeding downstream with the ebb must not stray into this channel.



When proceeding upstream with the flood tide rowers should not be too far outside the fairway as such a course can make Dove Pier an extreme hazard. The word "bridge" on the parapet is a useful marker as a rowing boat passing under this will be just on the edge of the fairway.

- Surrey bank shelves gradually so at low water boats have to steer wide.
- Dove Pier and boats moored below it, crews not following the advice in the previous paragraph on Hammersmith Bridge put themselves into extreme hazard of colliding with the pier on a flood tide. **(see "The Dove Pier Report" - http://www.thames-rrc.org/safety/)**
- Chiswick Pier and boats moored below it.

Chiswick Pier to The Stag Brewery

Crossing Point - Chiswick Steps Crossing – 100m upstream of Chiswick Pier

Hazards

- Spurs of land and shoals at Small Profits at low water.
- Surrey arch of Barnes Bridge is difficult at low water.
- Storm water outfalls on Surrey above the "White Hart" and just above Barnes Bridge that can cause severe turbulence.

The Stag Brewery to Kew Rail Bridge

Crossing Point - Chiswick Bridge Crossing – opposite the "Ship" pub.

Hazards

- Chiswick Bridge.
- Entrance to Chiswick Quay Marina.
- Disused piles on Middlesex side just downstream of Kew Rail Bridge.

Kew Rail Bridge to Isleworth Ferry Gate

Hazards

- Kew Rail Bridge. Surrey arch impassable at low water.
- Current coming off downstream end of Oliver's Eyot pushing craft from Middlesex over towards Surrey.
- Narrow channel past Oliver's Eyot.
- Current pushing craft onto Kew Midstream Mooring.
- Approach to Kew Road Bridge is a blind corner.
- Kew Road Bridge. Surrey arch very difficult at low water – navigation against the stream through center arch forbidden.
- Pontoons with moored barges either side of Kew Road Bridge, on the Surrey bank.
- Class Vs using pontoons downstream of Kew Road Bridge.
- River narrowing past Kew Road Bridge.
- Vessels coming out of Brentford Dock and Grand Union Canal.
- Shoal at entrance to Brentford Dock can cause grounding at Low water.
- PLA Driftwood moorings.

Isleworth Ferry Gate to Richmond Lock

Crossing Point - Syon Crossing – Syon Reach, opposite the Isleworth Ferry Gate.

Hazards

- Lack of Inshore Zone at low water.
- Turbulence from sewage outfalls on Isleworth Eyot.
- Current off the upstream end of Isleworth Eyot.
- Vertical banks on Middlesex side.

APPENDIX D - NEW SIGNS FOR THE TIDEWAY

Wash and Speed Limit Signs

Rowers Crossing Sign

APPENDIX E – BLADES OF THE TIDEWAY

Putney

ACH  ARCHERONIANS

BAE  BARN ELMS

CRB  CRABTREE

DUL  DULWICH COLLEGE

IMP  IMPERIAL COLLEGE

WIC  KING'S COLLEGE WIMBLEDON

LOS  LONDON ORATORY SCHOOL

LRC  LONDON

PAR  PARRS PRIORY

TTN  THE 1829 CLUB

VRC  VESTA

TRC  THAMES

WES  WESTMINSTER SCHOOL

Hammersmith

ASL  AMERICAN SCHOOL OF LONDON

AKN  AURIOL KENSINGTON

BBL  BARNES BRIDGE LADIES

COL  COLET

CYG  CYGNET

DAC  DACRE

EMA  EMANUEL SCHOOL

FSC  FURNIVALL SCULLING CLUB

GLT  GODOLPHIN AND LATYMER SCHOOL

LTU  LATYMER UPPER SCHOOL

ORI  LONDON ORION

SON  SONS OF THE THAMES

SPS  ST PAUL'S SCHOOL

TTR  THAMES TRADESMENS'

Chiswick

MAA  MORTLAKE ANGLIAN & ALPHA

IMM  IMPERIAL COLLEGE SCHOOL OF MEDICINE

KCB  KINGS COLLEGE LONDON

PTR  PUTNEY TOWN

QMC  QUEEN MARY

QBC  QUINTIN

RHO  ROYAL HOLLOWAY

RUM  ROYAL UNIVERSITY MEDICAL STUDENTS

SBA  ST BARTS AND ROYAL HOSPITALS

SGH  ST GEORGES HOSPITAL MEDICAL SCHOOL

TSS  TIDEWAY SCULLERS

UNH  UNITED HOSPITALS

UCL  UNIVERSITY COLLEGE LONDON

ULO  UNIVERSITY OF LONDON

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