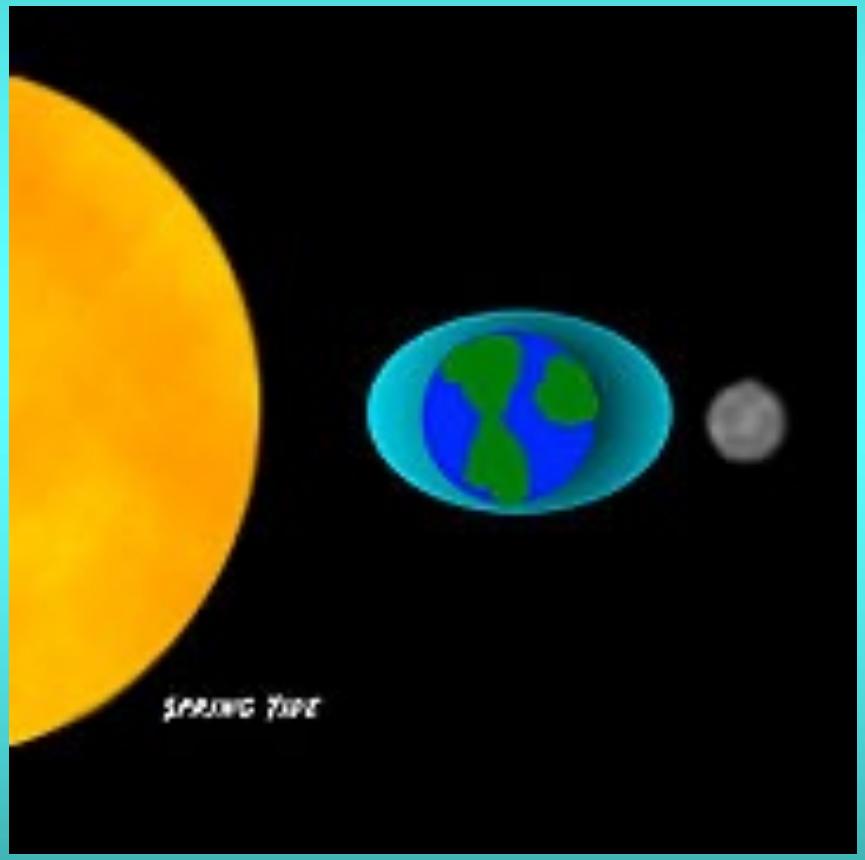
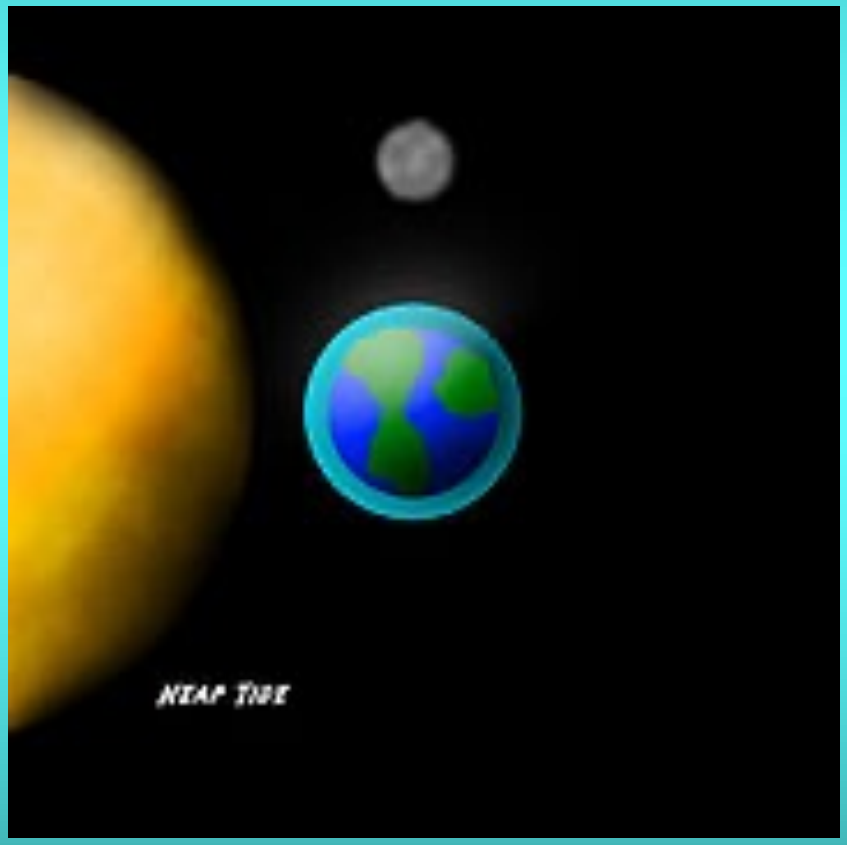
TIDES AND PASSAGE PLANNING (Tidal Ouse to the tidal Trent)

Spring Tide



- A tide with a large tidal range that occurs two times a month (new moon and full moon)
- Sun, Earth, and the moon are aligned

Neap Tides

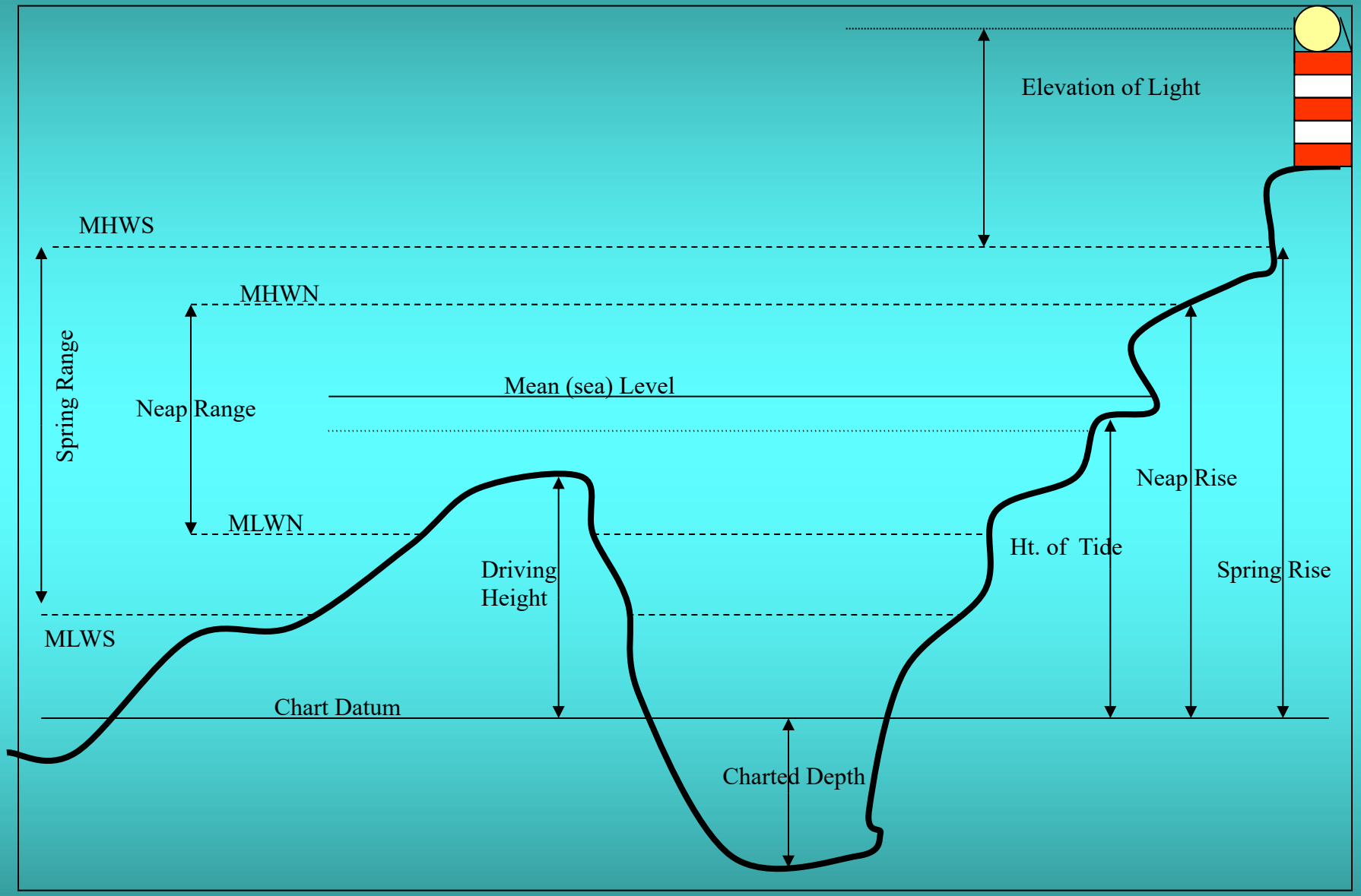


- A tide of minimum range that occurs during the first and third quarters of the moon
- The sun, Earth, and moon form a 90 degree angle

DEFINITIONS

- CHART DATUM
- THE LEVEL FROM WHICH DEPTHS ON CHARTS ARE USUALLY TAKEN
- LAT LOWEST EXPECTED TIDE

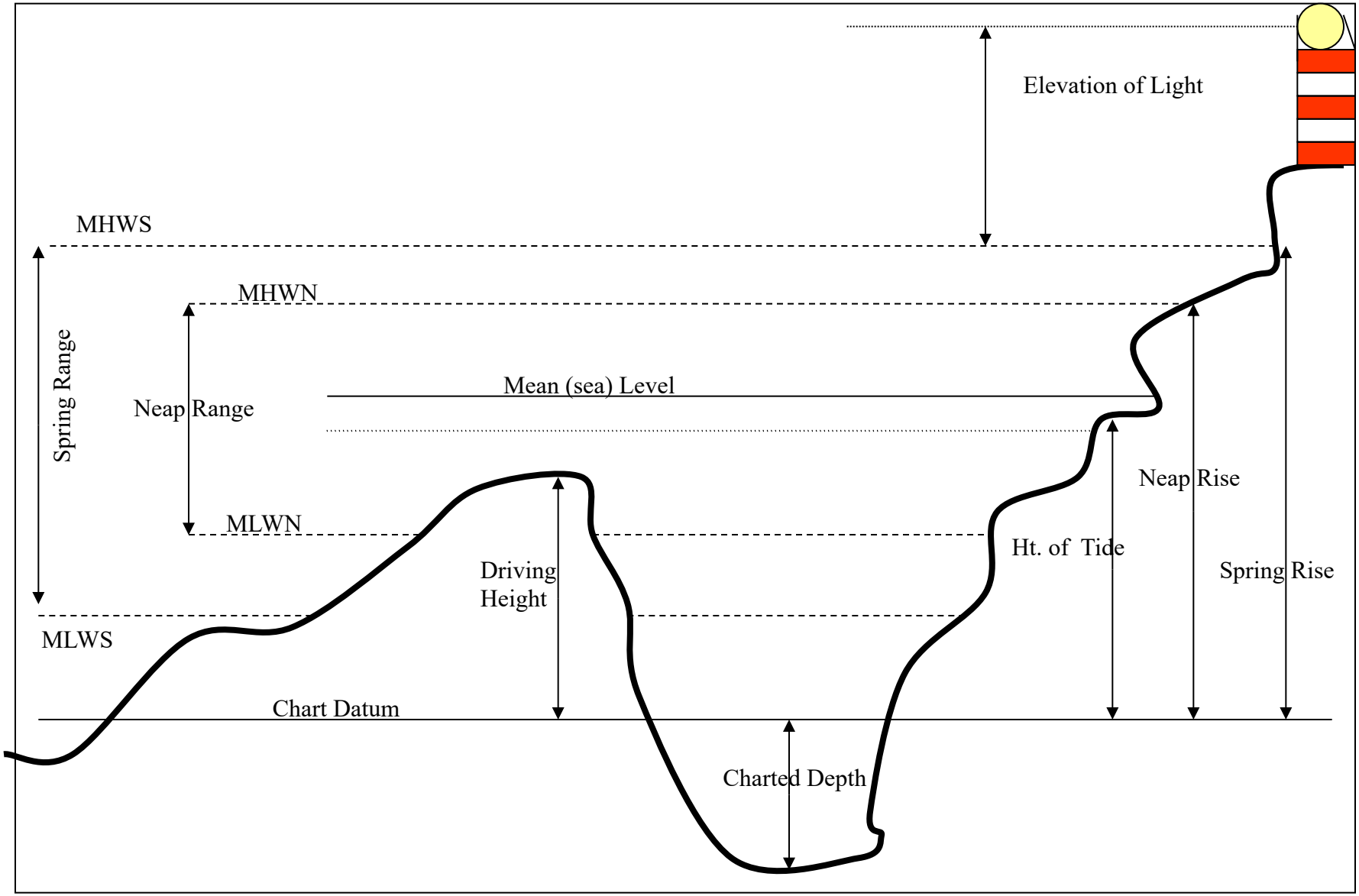
Diagram of Section Through Tides

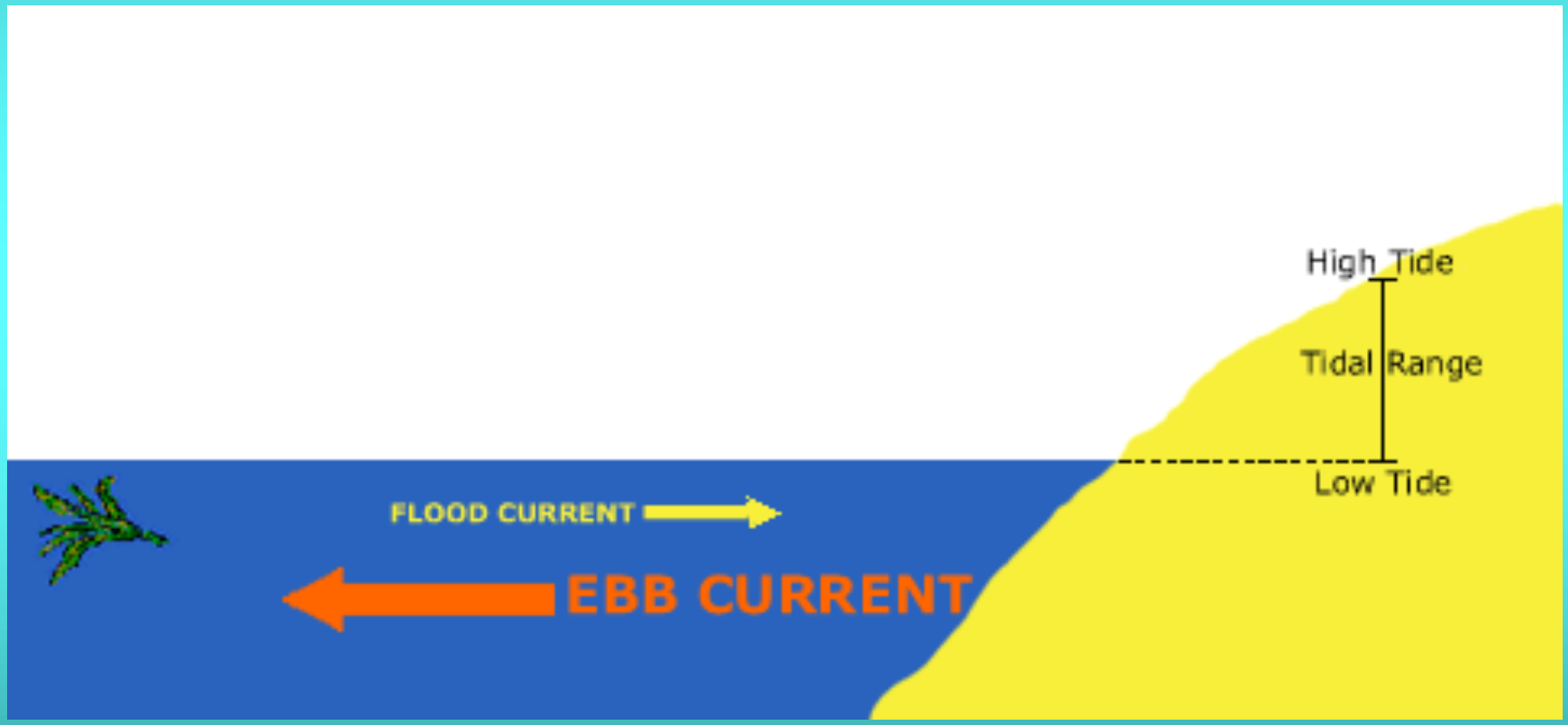


ORDNANCE DATUM

- BASED ON MEAN SEA LEVEL NEWLYN

Diagram of Section Through Tides




High Tide
Tidal Range
Low Tide
FLOOD CURRENT
EBB CURRENT

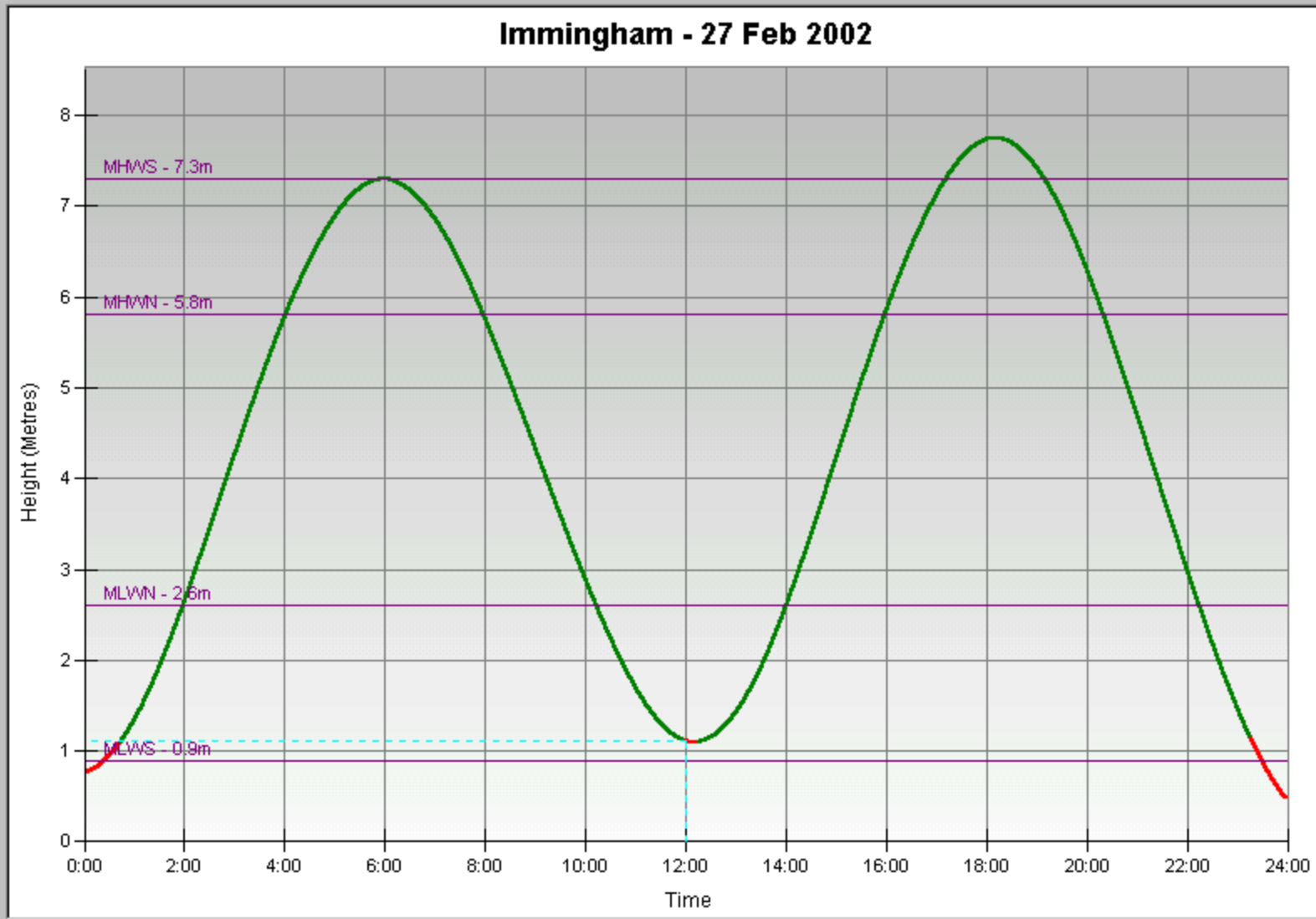
View Help

February 2002

ningham

24 Hour Prediction

- England
- Scotland
- Ireland
- Wales
- France
- Netherlands



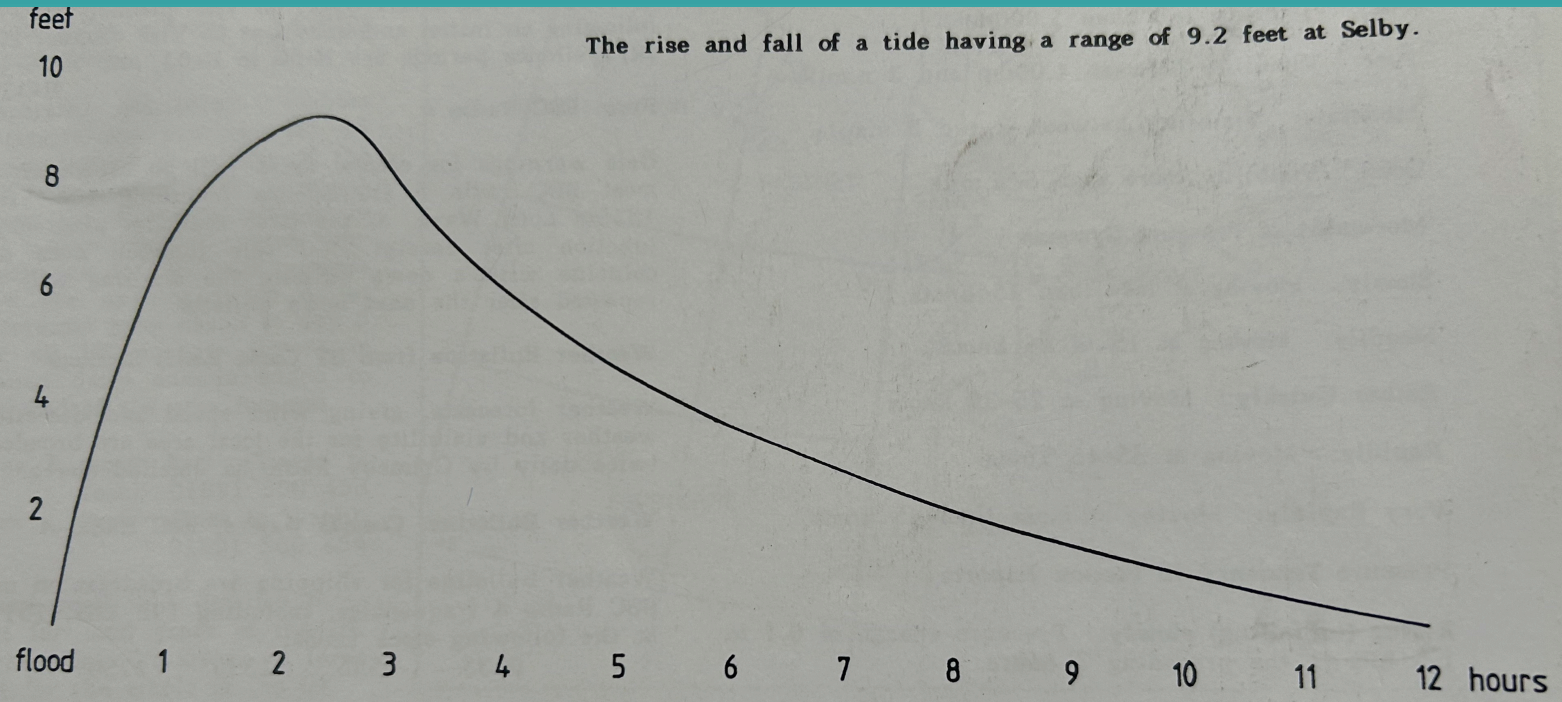
e	Height
7	7.3m
9	1.1m
0	7.7m

Height Above Chart Datum: **1.11m**
Drop to Low Water **0.01m**
Draught of Boat **1.00m**

Time: 12:00
Depth of Water(m): 1.00

ill run aground at the next low water

Sunrise: 06:54 Sunset: 17:33 GMT (+0:00)



The rise and fall of a tide having a range of 9.2 feet at Selby.

1.303

IMMINGHAM ---------- Time Zone: GMT

AUGUST 2004

Time	m	Time	m	Time	m	Time	m
1 0600	7.3	2 0040	1.2	3 0130	1.2	4 0210	1.3
Sun 1220	0.7	Mon 0650	7.5	Tue 0730	7.6	Wed 0810	7.5
1830	7.2	1310	0.5	1400	0.5	1440	0.7
		1920	7.2	2000	7.1	2050	6.9
5 0250	1.5	6 0330	1.8	7 0410	2.1	8 0500	2.5
Thu 0900	7.2	Fri 0940	6.9	Sat 1020	6.5	Sun 1110	6.1
1520	1.0	1600	1.5	1640	1.9	1730	2.3
2130	6.6	2210	6.3	2250	5.9	2340	5.6
9 0550	2.8	10 0050	5.4	11 0200	5.3	12 0310	5.4
Mon 1200	5.7	Tue 0700	3.0	Wed 0810	3.0	Thu 0920	2.8
1830	2.7	1310	5.4	1430	5.4	1540	5.6
		1940	2.9	2050	2.9	2150	2.7
13 0400	5.7	14 0450	6.1	15 0530	6.4	16 0600	6.8
Fri 1020	2.5	Sat 1110	2.1	Sun 1150	1.7	Mon 1220	1.3
1630	5.8	1720	6.2	1750	6.4	1830	6.7
2240	2.5	2320	2.2	2400	1.9		
17 0040	1.7	18 0110	1.5	19 0140	1.4	20 0220	1.4
Tue 0640	7.0	Wed 0710	7.2	Thu 0740	7.3	Fri 0820	7.3
1300	1.1	1330	0.9	1410	0.9	1440	1.0
1900	6.8	1940	6.9	2010	6.9	2050	6.8
21 0250	1.5	22 0330	1.7	23 0420	2.0	24 0520	2.3
Sat 0900	7.2	Sun 0940	6.9	Mon 1030	6.6	Tue 1130	6.2
1520	1.2	1610	1.5	1700	1.9	1800	2.3
2130	6.6	2210	6.3	2310	6.0		
25 0020	5.8	26 0140	5.8	27 0300	6.0	28 0410	6.5
Wed 0640	2.5	Thu 0800	2.4	Fri 0930	2.0	Sat 1030	1.5
1300	5.9	1430	5.9	1550	6.2	1650	6.6
1920	2.5	2050	2.5	2200	2.2	2300	1.8
29 0500	6.9	30 0550	7.3	31 0030	1.2		
Sun 1120	1.0	Mon 1210	0.7	Tue 0630	7.6		

	+/-	td spr	Td neap	+/-	Td fld spr	Td fld neap	Ht above CD	
Immingham	+	00:00	00:00	-	05:53	06:20	7.3	5.8
Hull	+	00:20	00:21	-	05:15	05:50	7.5	5.8
Hessle	+	00:30	00:35	-	04:45	05:20	7.3	5.3
Ferriby	+	00:35	14:10	-	04:15	04:50	6.7	4.6
Trent Falls	+	00:50	01:00	-	02:50	03:20	5.9	4
Blacktoft	+	00:55	01:05	-	02:35	03:05	5.6	3.8
Goole	+	01:15	01:30	-	02:00	02:30	5.6	3.9
Barmby	+	01:30	02:00	-	01:15	01:45	4.2	2.8
Selby	+	02:00	02:30	+/-	00:15	00:15	4.2	3
Cawood	+	02:45	03:35	+	01:30	01:15	3.8	2.3
Naburn	+	03:30	04:30	+	02:00	02:30	3.9	2.3
Keadby	+	01:15	01:30	-	01:45	02:15	4.7	2.6
Stockwith	+	02:20	02:50	"-	00:10	00:00	3.2	1.9
Gainsborough	+	02:45	03:15	+	00:30	00:45	3	1.7
Torksey	+	03:40	03:45	+	01:45	01:10	3.4	2.8
Cromwell	+	05:00	05:00	+	04:00	04:00	3.9	3.4

Using the previous tables work out the following

HW FOR 17 TH AUG

0640 GMT = 0740 BST

NOW USE THIS TO PLAN A PASSAGE FROM NABURN TO SELBY

- HW IMMINGHAM = 0740BST
- USE THE TABLE OF TIDAL DIFFERENCE TO WORK OUT THE TIMES OF FLOOD AND HW AT NABURN, SELBY AND CAWOOD

	+/-	td spr	Td neap	+/-	Td fld spr	Td fld neap	Ht above CD	
Immingham	+	00:00	00:00	-	05:53	06:20	7.3	5.8
Hull	+	00:20	00:21	-	05:15	05:50	7.5	5.8
Hessle	+	00:30	00:35	-	04:45	05:20	7.3	5.3
Ferriby	+	00:35	14:10	-	04:15	04:50	6.7	4.6
Trent Falls	+	00:50	01:00	-	02:50	03:20	5.9	4
Blacktoft	+	00:55	01:05	-	02:35	03:05	5.6	3.8
Goole	+	01:15	01:30	-	02:00	02:30	5.6	3.9
Barmby	+	01:30	02:00	-	01:15	01:45	4.2	2.8
Selby	+	02:00	02:30	+/-	00:15	00:15	4.2	3
Cawood	+	02:45	03:35	+	01:30	01:15	3.8	2.3
Naburn	+	03:30	04:30	+	02:00	02:30	3.9	2.3
Keadby	+	01:15	01:30	-	01:45	02:15	4.7	2.6
Stockwith	+	02:20	02:50	"-	00:10	00:00	3.2	1.9
Gainsborough	+	02:45	03:15	+	00:30	00:45	3	1.7
Torksey	+	03:40	03:45	+	01:45	01:10	3.4	2.8
Cromwell	+	05:00	05:00	+	04:00	04:00	3.9	3.4

- SELBY HW = 0740 + 2 = 0940
- CAWOOD HW = 0740 + 2.45 = 1025
- NABURN HW = 0740 + 3.30 = 1110
- SELBY FLOOD = 0740 + .15 = 0755
- CAWOOD FLOOD = 0740 + 1.30 = 0910
- NABURN FLOOD = 0740 + 2.00 = 0940

HW 0940	HW 1025	HW 1110
SELBY	CAWOOD	NABURN

FLD 0755	FLD 0910	FLD0940

- WE TIME OUR TRIP TO TRY TO COMBINE GETTING THE BEST OUT OF THE TIDAL FLOW AND HAVING SUFFICIENT DEPTH TO NOT GO AGROUND

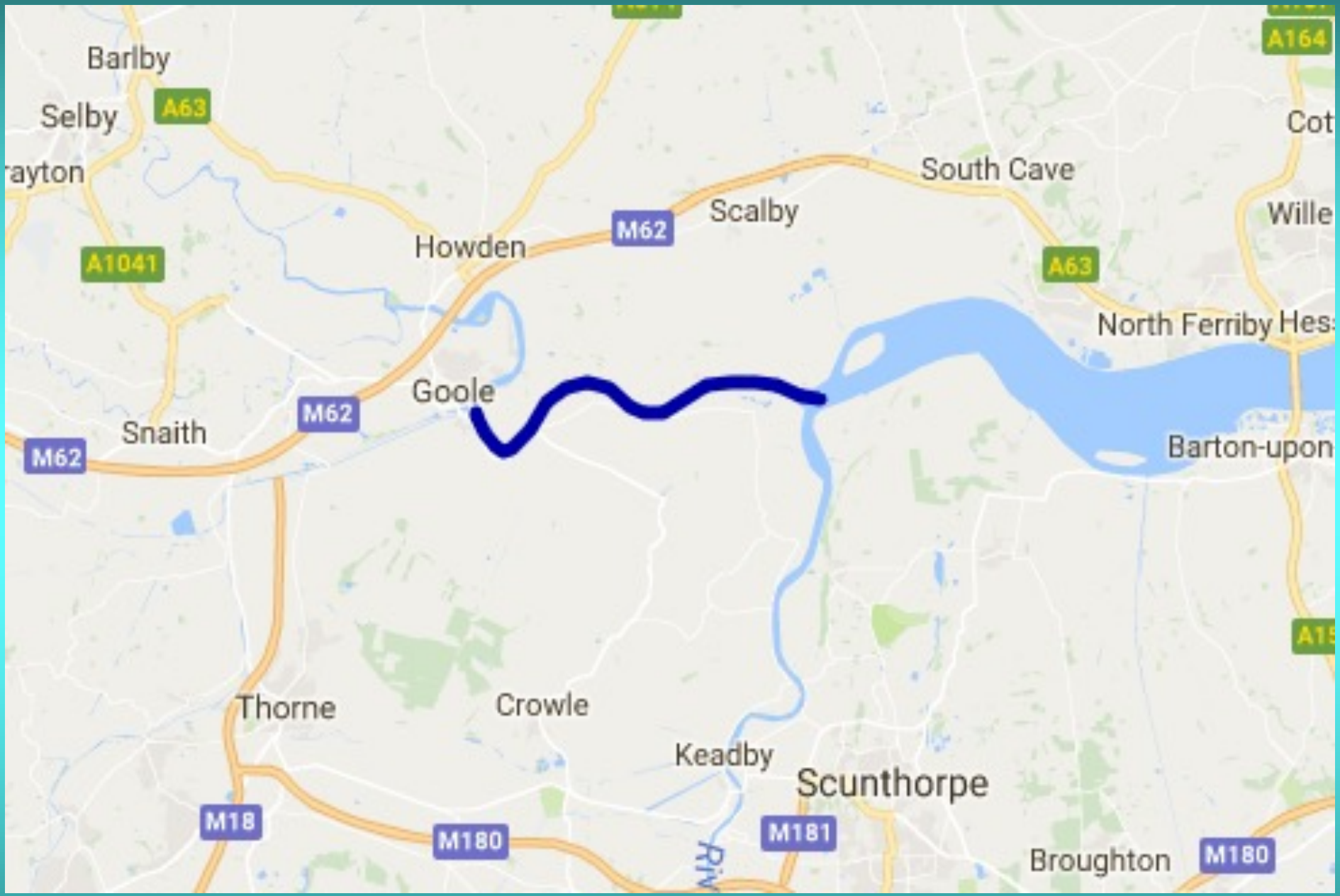
- LEAVE AFTER THE FLOOD HAS BUILT TO AT LEAST HALF ITS DEPTH AT NABURN IE 1025 YOU WILL THEN HAVE PLENTY OF WATER IN THE UPPER PART OF THE RIVER AS THE TIDE WILL STILL BE RISING.

- THE SECOND PART OF THE TRIP THE TIDE WILL BE FALLING AND THE RIVER WILL BE EBBING
- THIS WILL GET YOU TO SELBY AT ABOUT 1230 – 1245
- THIS IS 3 HOURS AFTER HW SELBY
- SELBY LOCK CAN EASILY BE ENTERED
- CALL FIRST ON 74

Now the more complex stuff

We will now look at going round
Trent Falls

- To complete the journey we have to go down the Ouse to Trent Falls which is at the junction of the Trent, Ouse and Humber


Barlby
Selby
A63
ayton
A1041
Howden
M62
Scalby
South Cave
A164
Cot
Wille
A63
North Ferriby
Hes
Goole
M62
Snaith
M62
Barton-upon
Thorne
Crowle
Keadby
Scunthorpe
M18
M180
M181
M180
Broughton

- At 6knots it takes about 5 hours from Naburn to Trent Falls and another 5 from Naburn to Torksey or 3 to West Stockwith we have to go down the Ouse on one tide anchor up and wait for the next tide to take us up the Trent

Basic plan

- Not so different from our previous trip to Selby, we go about half an hour after flood at Naburn
- This means punching the tide down to Cawood
- Then going with the ebb to Trent Falls

- We then anchor till the flood has run up for about half an hour

Choice of date

- To avoid travelling at night you need to choose a date with 2 useable tides in one day.
- If you look for a High Water Immingham at about 0330 in the morning this will be an early start but will allow best use of daylight

First Task

- Work out the Flood and HW for Naburn based on the first tide of the day

On this day HW Immingham is 0340 (BST adjusted) and work out times for Naburn

9 June Sat	0240	5.7		
	0840	2.65		
	1450	6.0		
	2120	1.91		
10 June Sun	03:40	5.99		
	0950	2.32		
	1550	6.31		
	2220	1.59		
11 June Mon	0430	6.35		
	1040	1.91		

- HW Immingham = 0340 just after Neaps
- Flood Naburn =
- 0610
- HW Naburn =
- 0810
- Flood Cawood =
- 0455
- HW Cawood =
- 0715
- The Cawood figures are to give us an idea when the tide will turn.

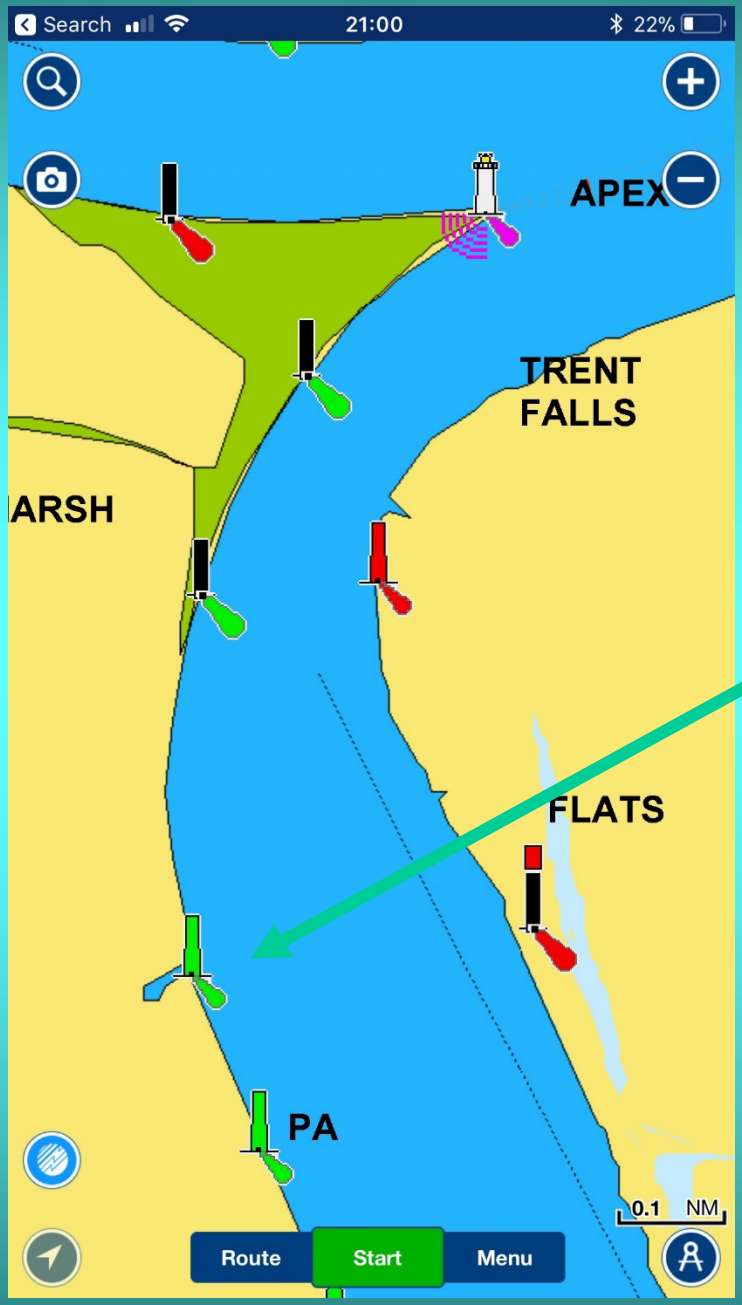
- So if Flood Naburn = 0610 we leave it half an hour to ensure we have enough water in the shallow part by Acaster Selby
- Depart 0640
- HW Cawood = 0715
- So the water will be falling by the time we get to Cawood but we might still need a bridge swing
- Call the keeper to check on CH 9

Rest of the trip down the Ouse

- After Cawood the water will be ebbing all the way so it is important to follow detailed charts and keep to the recommended course
- It is possible to break the journey by going into Selby

- The basic rule is the deepest water is on the outside of the bends but there are some unusual bits (all detailed on the charts by a red line)

- When you get to Apex Light at Trent Fall
- Give it plenty of clearance before turning up the Trent
- You will now be going against the flow
- Your speed will noticeably drop


Search
21:00
22%
APEX
TRENT
FALLS
ARSH
FLATS
PA
0.1 NM
Route
Start
Menu

Anchorage

Anchoring

- If you are using just chain use a minimum of 3 x depth
- For Rope or Rope and chain use a minimum of 5 x depth
- Ensure you have enough room for the boat to swing 360 degrees

2nd stage trip up the Trent

- You need to work on the 2nd tide of the day

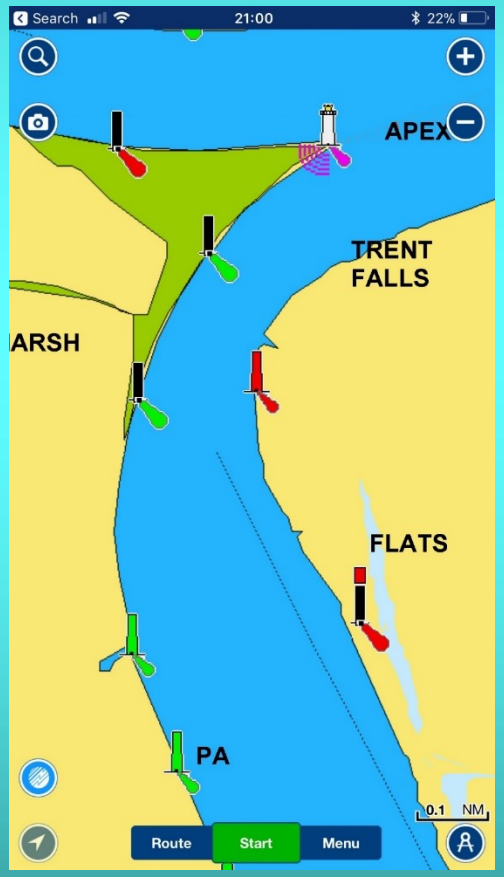
9 June Sat	0240	5.7		
	0840	2.65		
	1450	6.0		
	2120	1.91		
10 June Sun	03:40	5.99		
	0950	2.32		
	1550	6.31		
	2220	1.59		
11 June Mon	0430	6.35		
	1040	1.91		

HW Immingham 1550

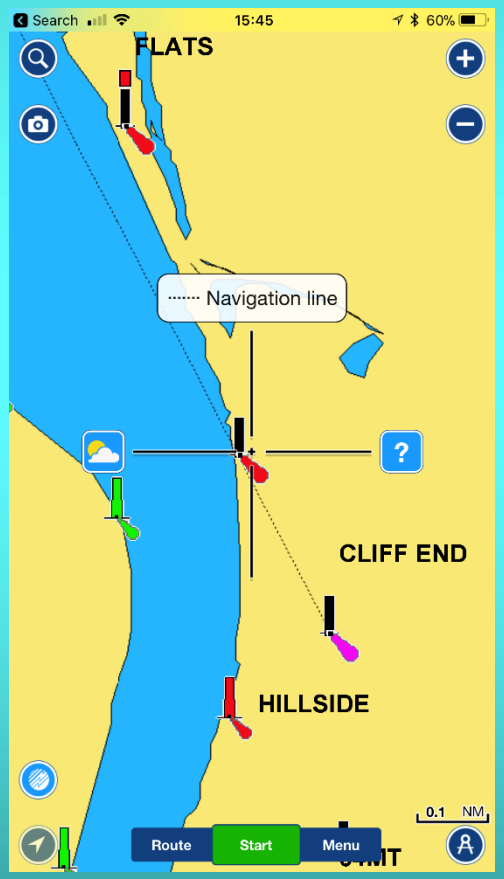
- Flood Trent Falls =
- 1230
- Flood Keadby =
- 1335
- Flood West Stockwith =
- 1550
- Flood Gainsborough =
- 1635
- Flood Torksey =
- 1700

It is normal to allow about 30 minutes after flood to let the tide run up and increase the depth of water available so leave at 1300 assuming the tide was on time

Initially you have to go back down towards Trent Falls



Then turn and follow the leading lights on the shore and cliff



It is 9 miles to Keadby

- You will have the flow with you, it will take about 10 mins to get to the turning point then about an hour to Keadby allowing for 6 knots travel and 3 knots flow. This means you will arrive at approx 1410 which is 35 mins after flood

It is a further 13 miles to West Stockwith

- At 6 knots plus say another 2 knots from the flow it this will take about 1 hour 40 mins
- So you will arrive at West Stockwith at 1550 however the river here will only just be flooding so this is a bit early
- It would be wise to slow down after Keadby to avoid being at West Stockwith too early

Going all the way to Torksey

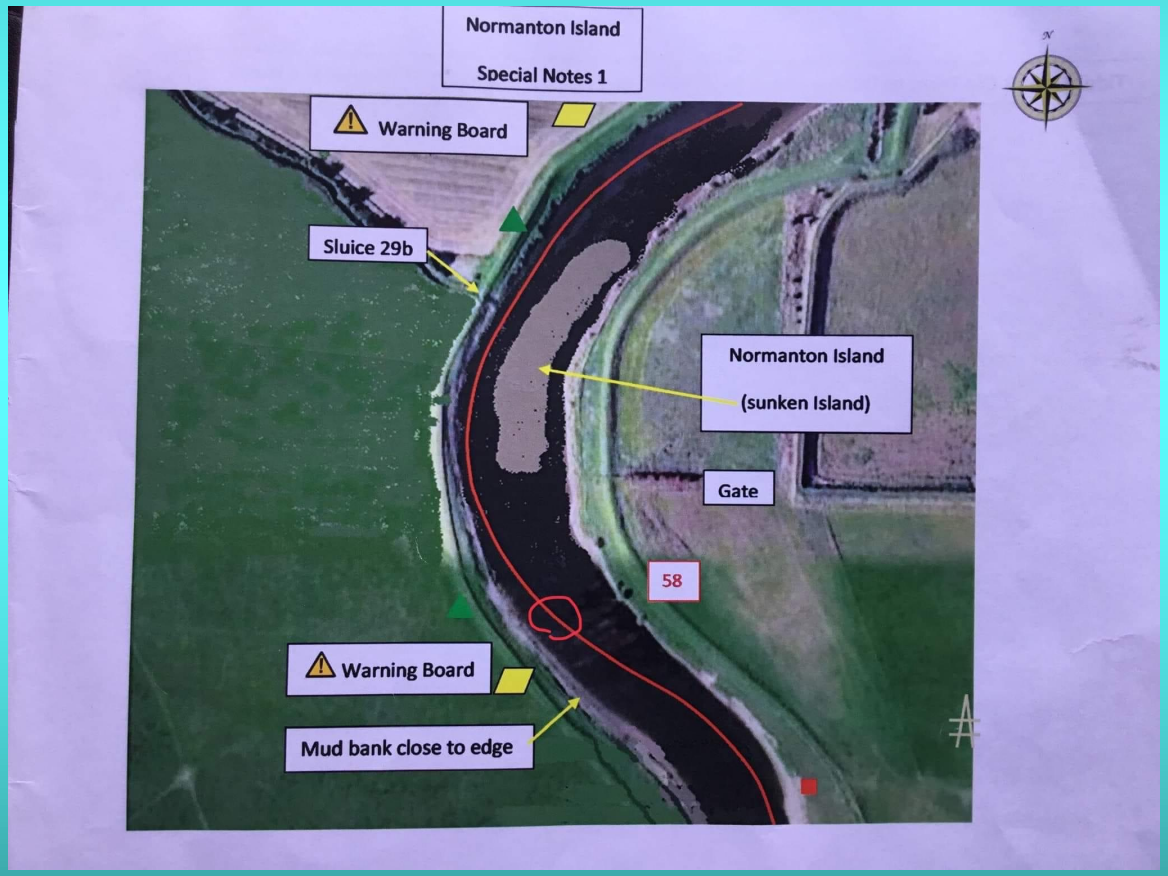
- This usually takes about 4.5 hours
- So if we left at 1330 we would arrive at
- 1800
- This is an hour after flood so plenty of water
- However always take care look at the depth sounder and use the charts

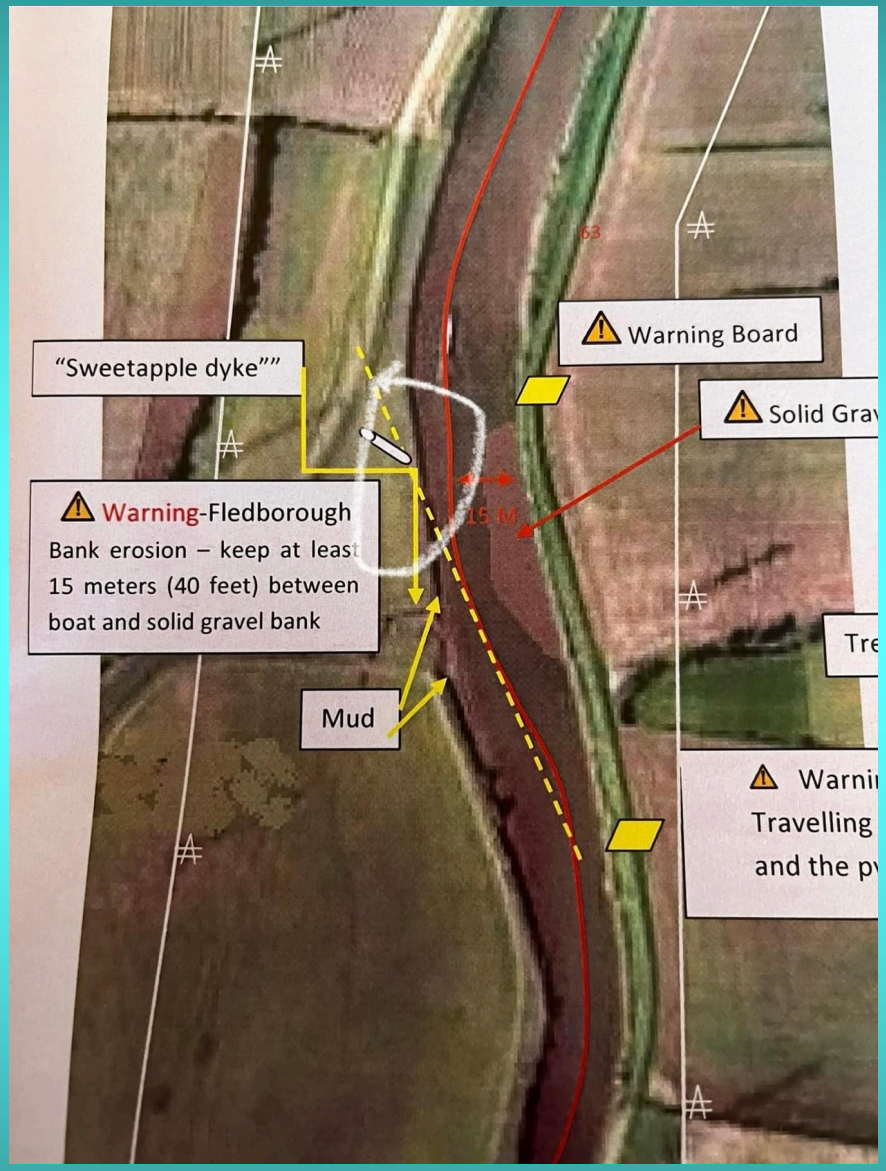
Return Journey

- Use exactly the same principles
- The earlier you get to Trent Falls the more water you have, to do this from Torksey you will have to push the tide for the first part
- From Stockwith you can leave at High Water
- Remember to follow the leading lights
- Anchor in the same place and allow tide to run for 30 mins before setting off

Sometimes Leading Markers are used

Further up the Trent there are sunken islands




"Sweetapple dyke""
Warning Board
Solid Grav
Warning-Fledborough
Bank erosion – keep at least
15 meters (40 feet) between
boat and solid gravel bank
15 M
Mud
Tre
Warni
Travelling
and the pv

Radio Communications

- Locks Ch 74
- Bridges Ch 9
- Goole Dock Ch 14
- VTS Humber Above Humber Bridge 15
- Trent Wharves Ch17
- VTS issues 2 hourly updates with Nav Info

Any Questions