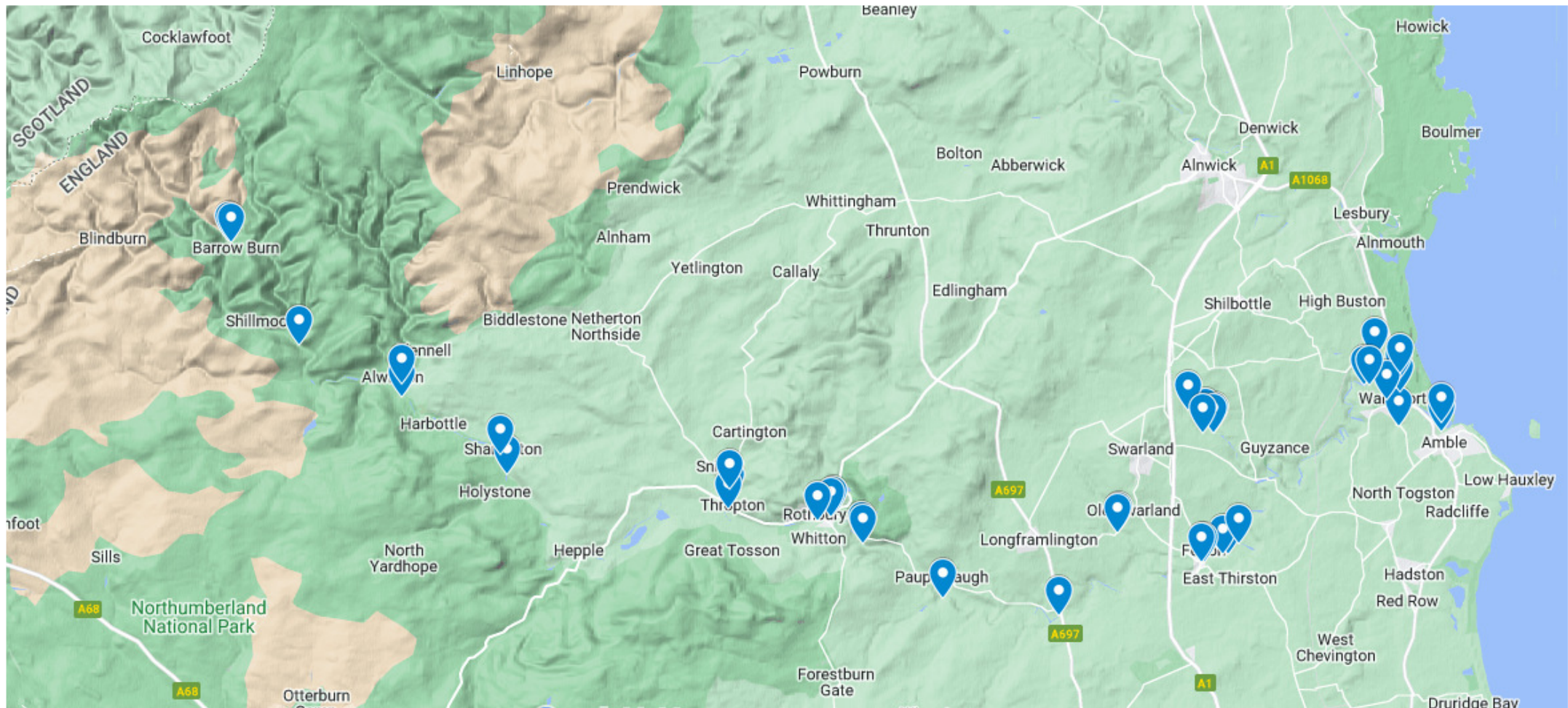




Coquet River Action Group



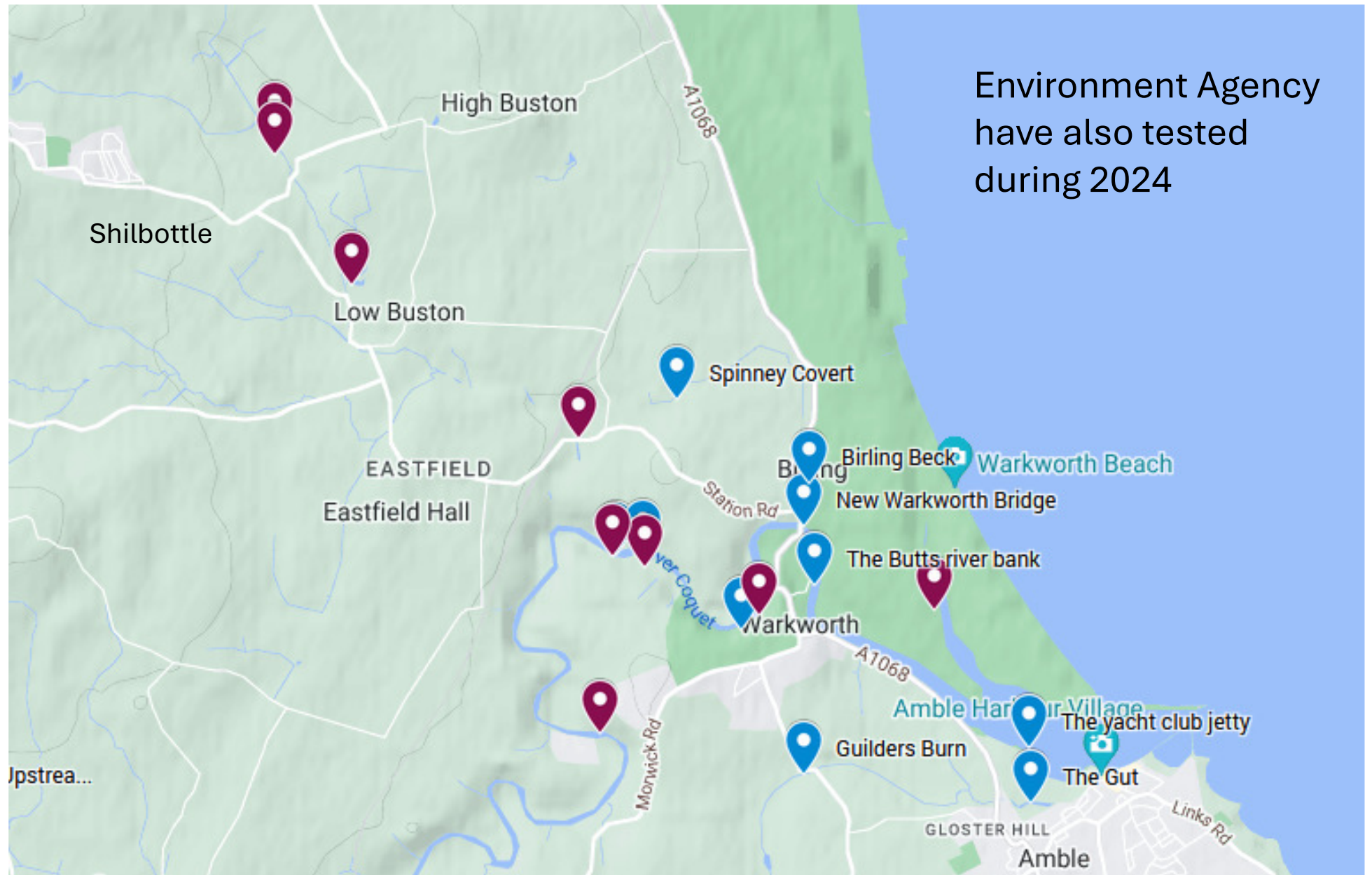
CRAG – where our groups are testing



Warkworth GM and Amble WI testing sites

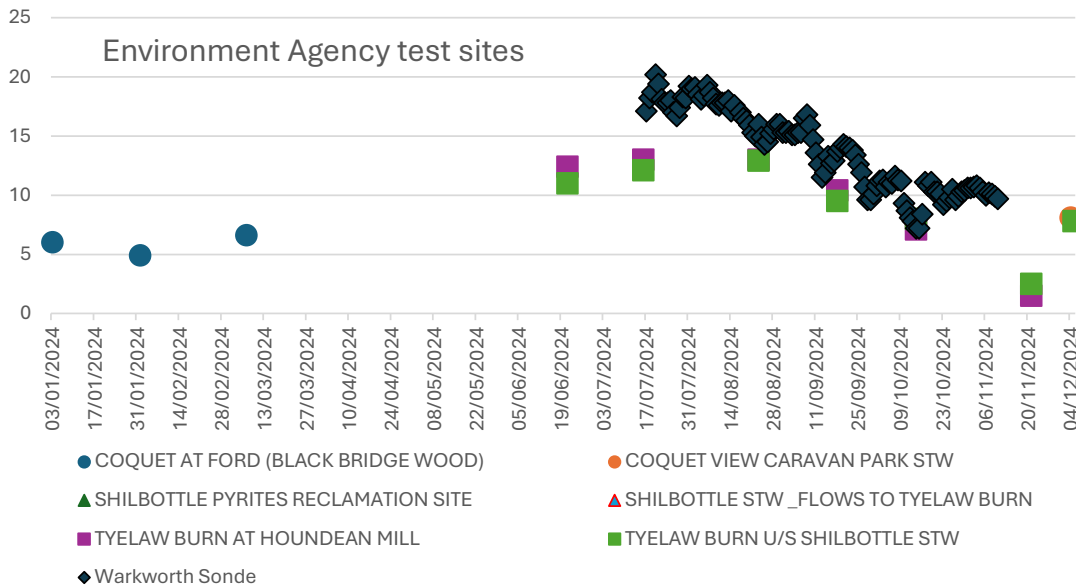
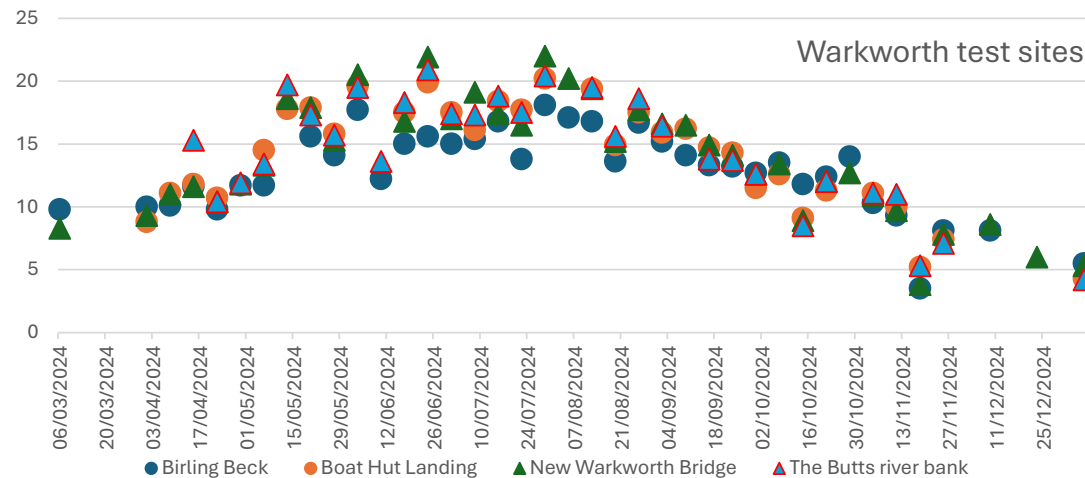
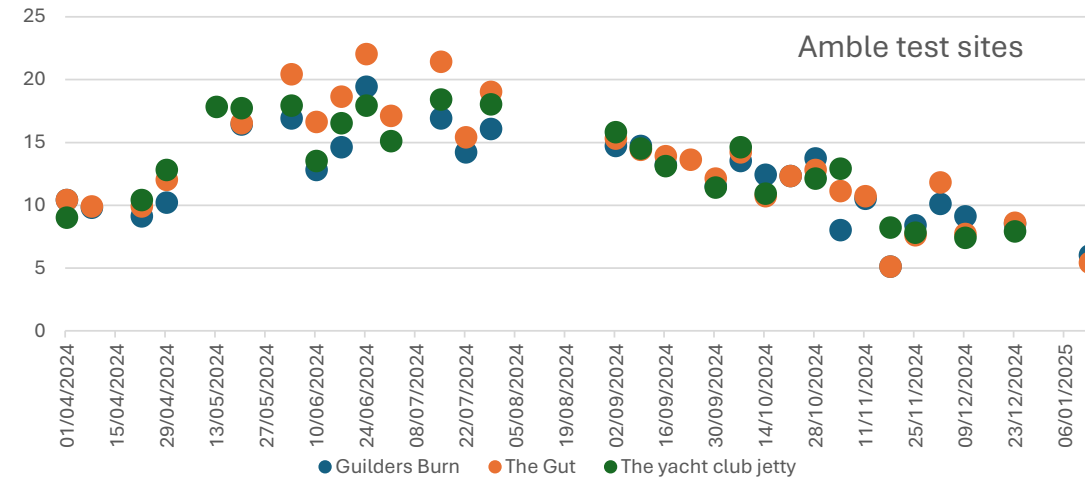


Environment Agency
have also tested
during 2024



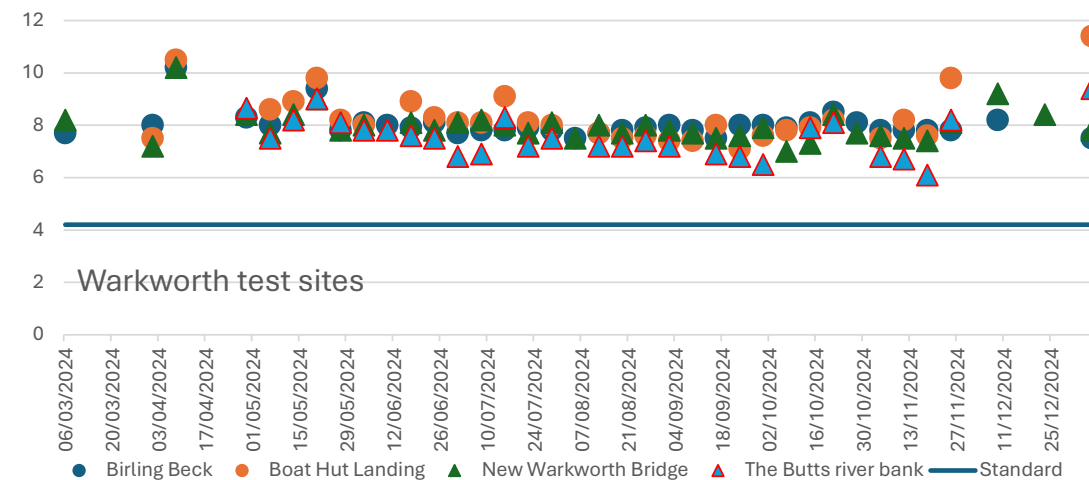
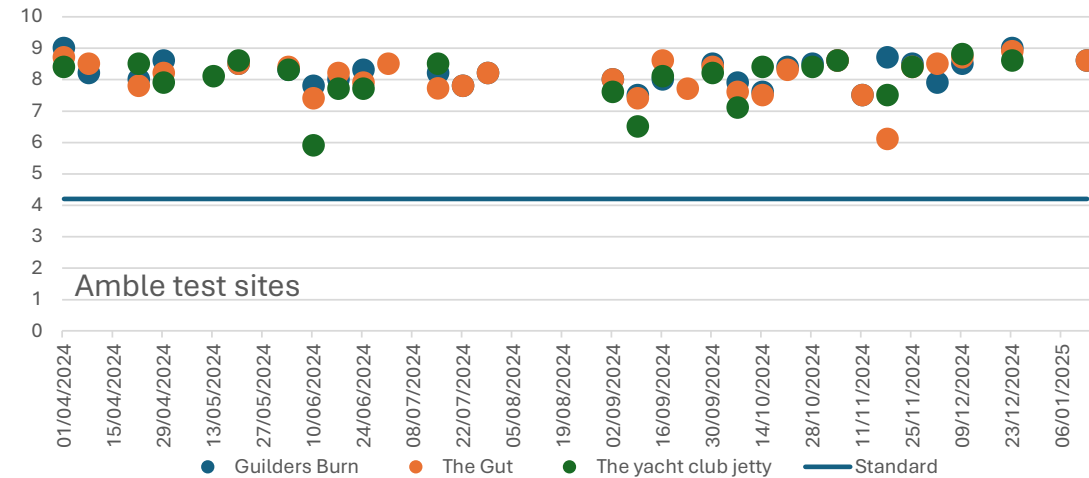
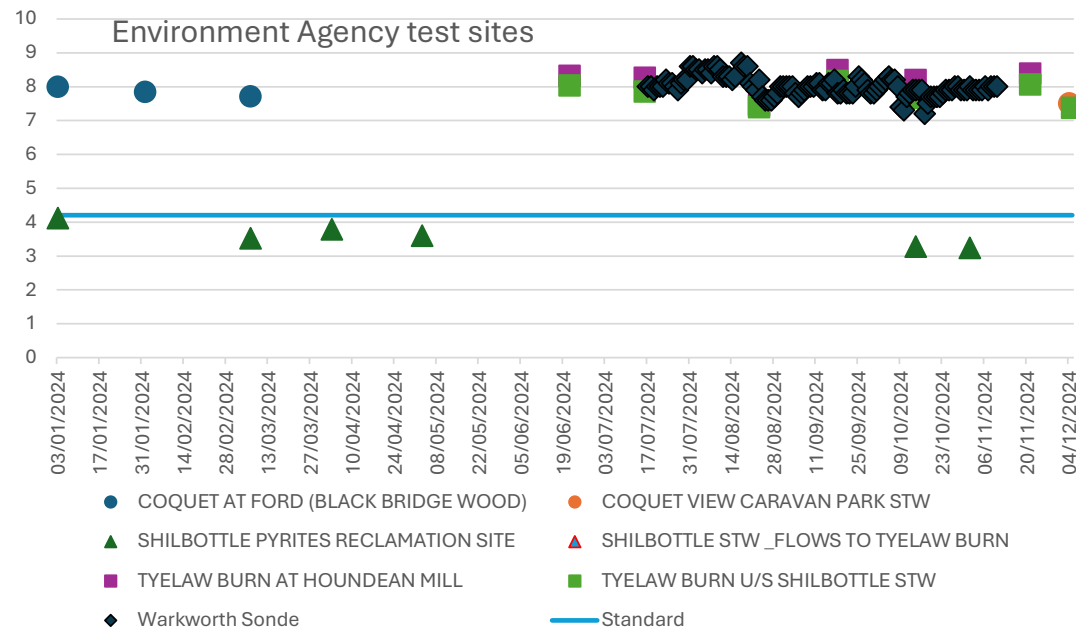
Temperature

- Possibly slightly higher temperatures in estuary than in tributaries



pH

- Some moderate (pH = 6) (The Butts river bank)
- Tyelaw burn Whittle Mine poor (pH < 4.2)
- Heavy metal testing (Arsenic, Lead, Zinc)

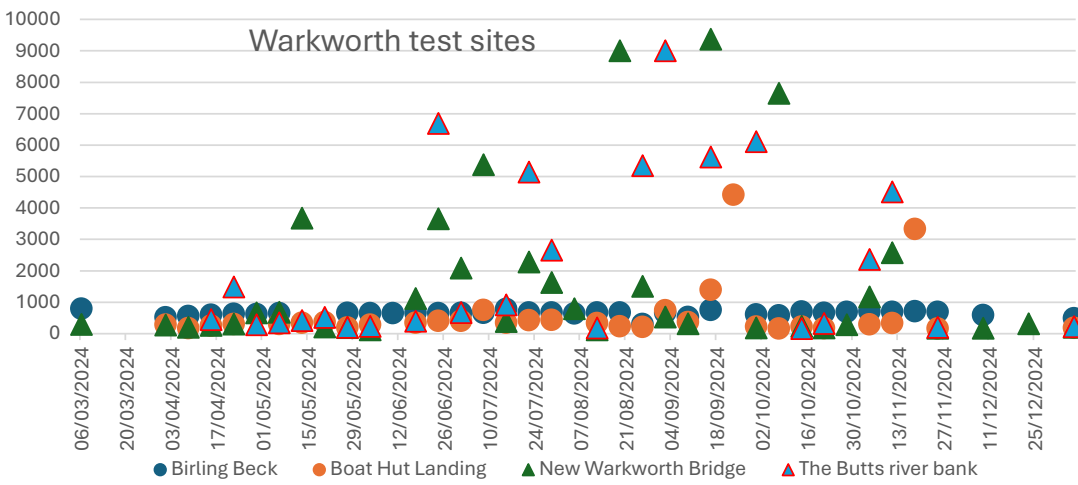
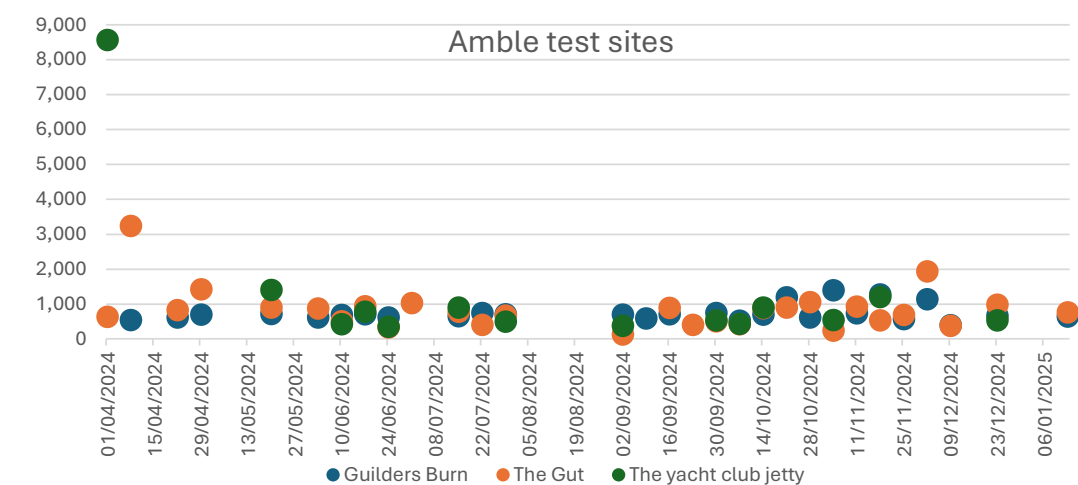
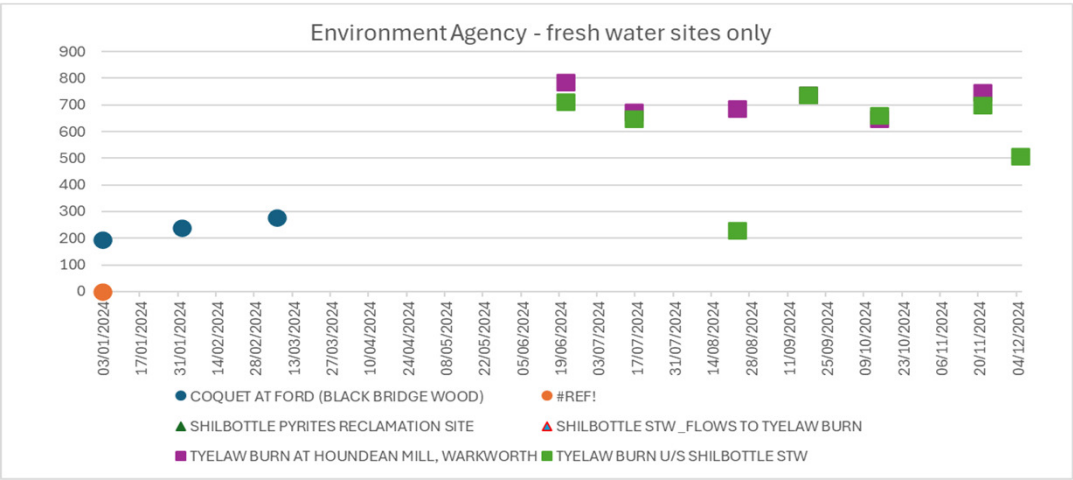


Electroconductivity

- The amount of dissolved minerals
- Alwinton ~ 80, Felton ~ 200

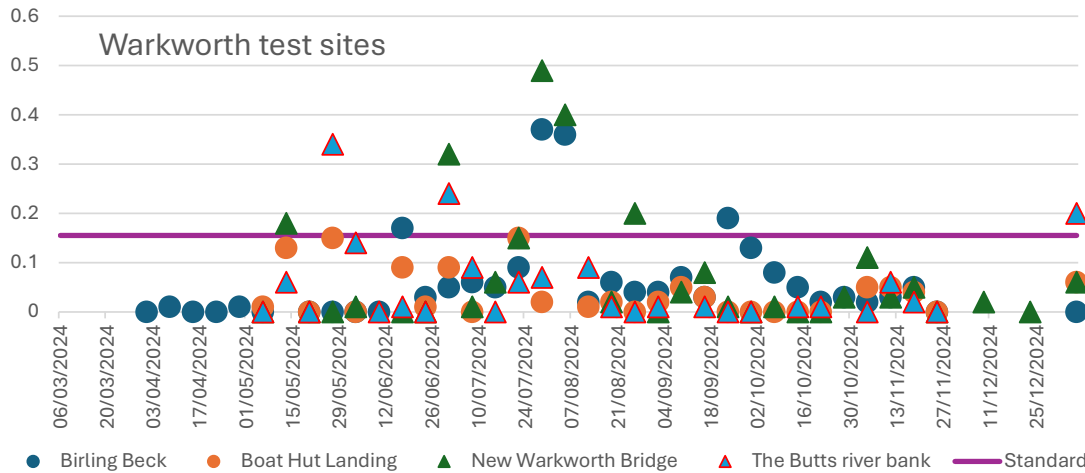
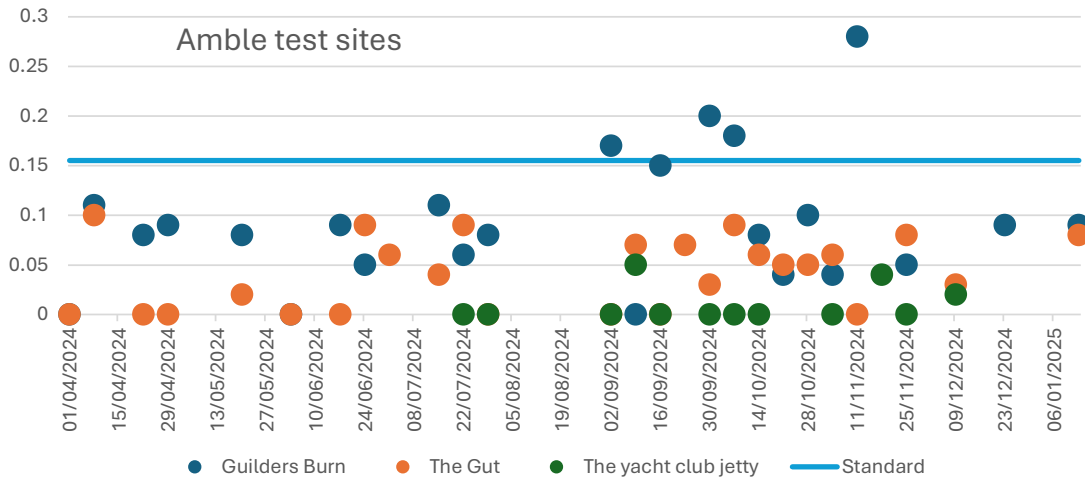
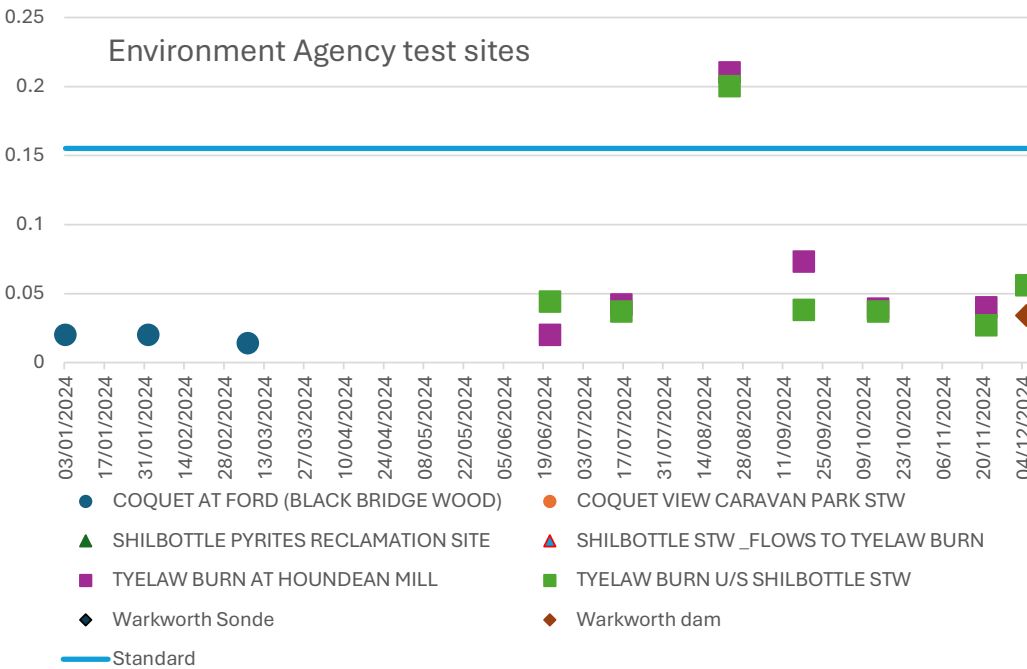
Results show:

- All estuary sites (including The Gut and Guilders burn) have variable and often high EC due to salinity
- Tyelaw burn and Birling beck ~ 800 – 1000 – high, possibly due to agricultural land or mine sites



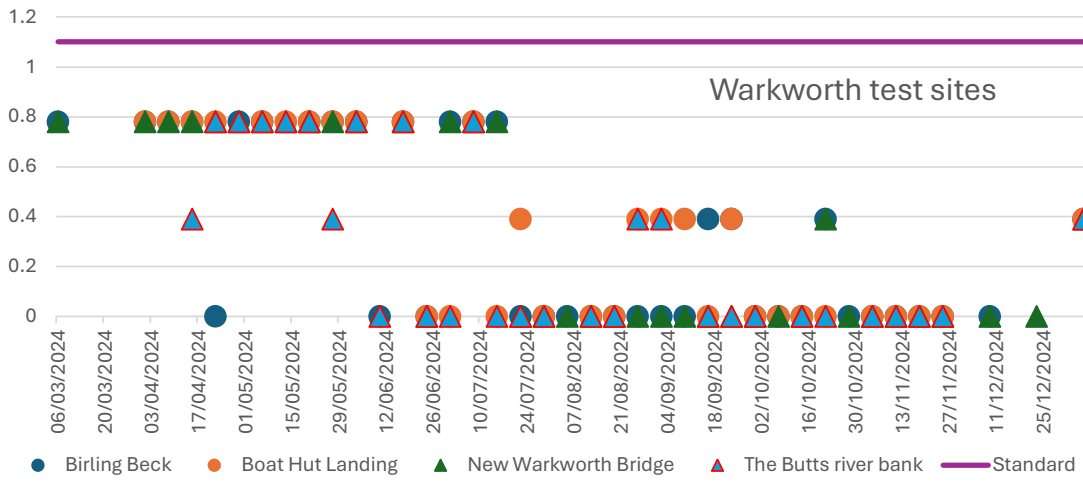
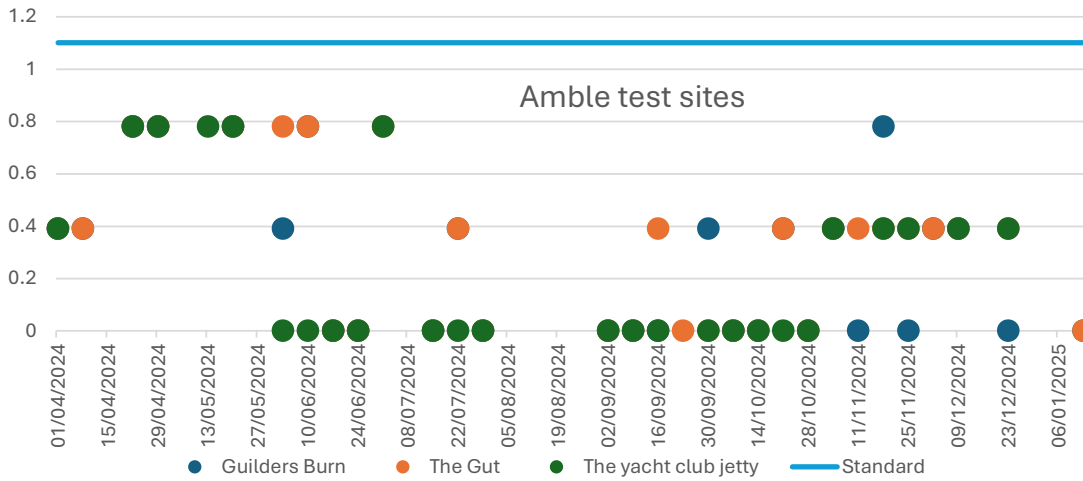
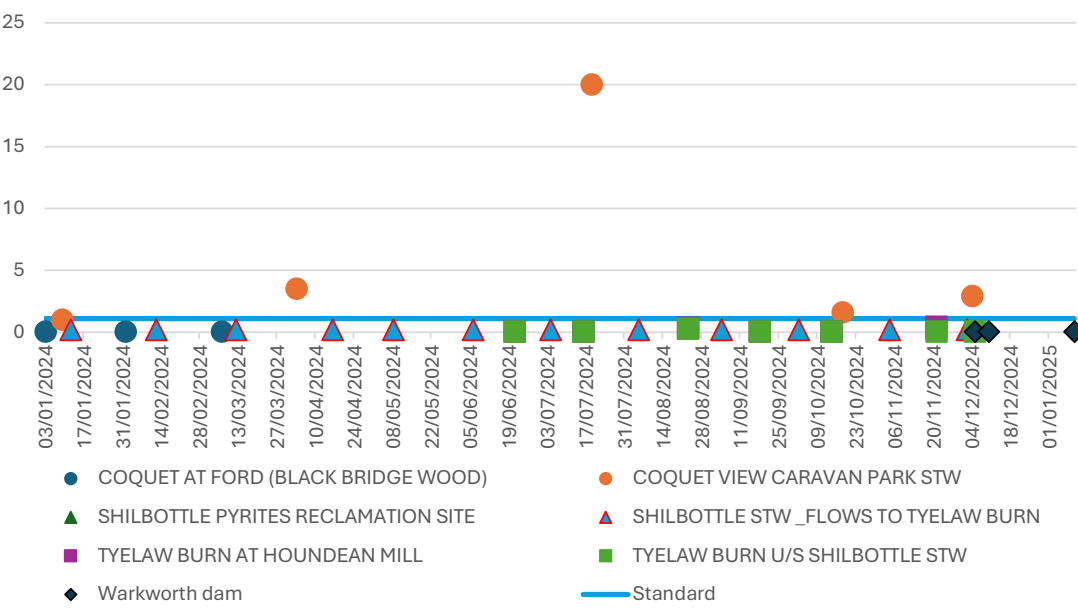
Phosphate

- Guilders burn (early autumn??)
- Birling beck and New Warkworth bridge (summer??)
- Tyelaw burn, one date only (STW??)



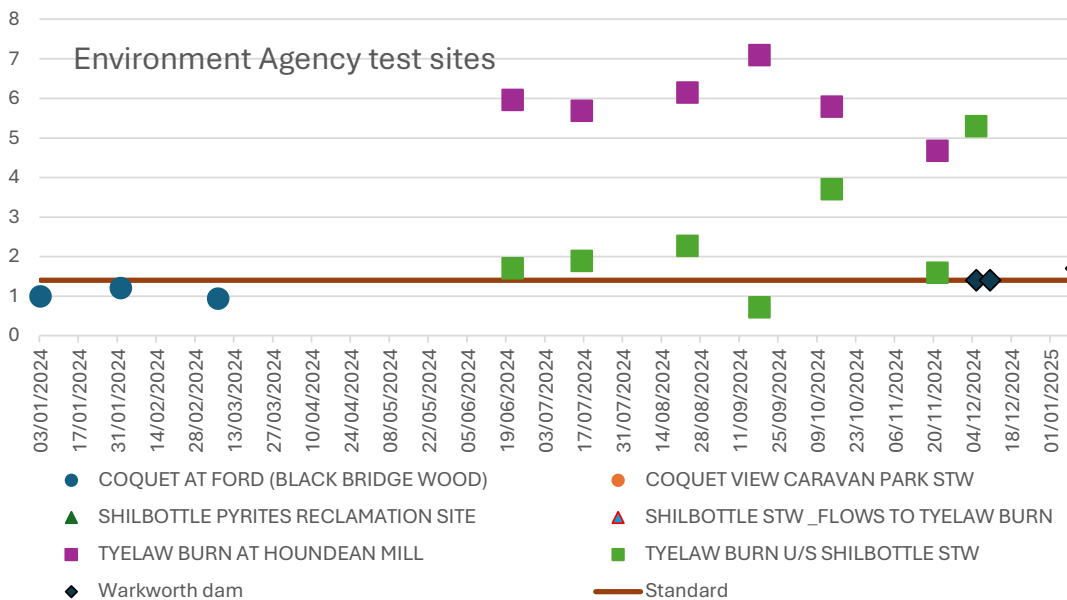
Ammonia as N

- Measurements generally lower than the standard
- Possibly higher Ammonia earlier in the year
- Coquet View Caravan Park STW

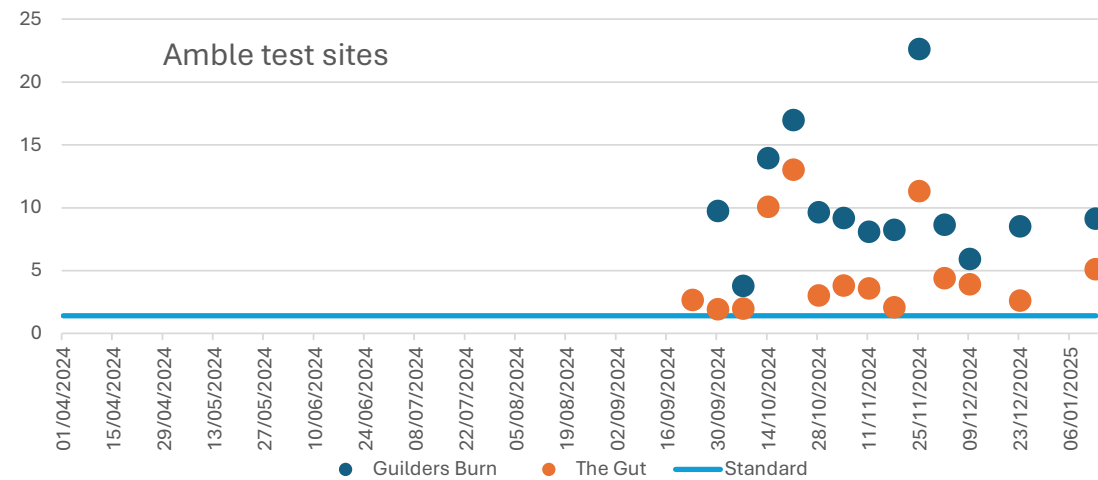


Nitrate as N

- Nitrate high – Guilders burn, The Gut, Birling beck and Tyelaw burn
- Nitrate levels in the main river and estuary are largely okay

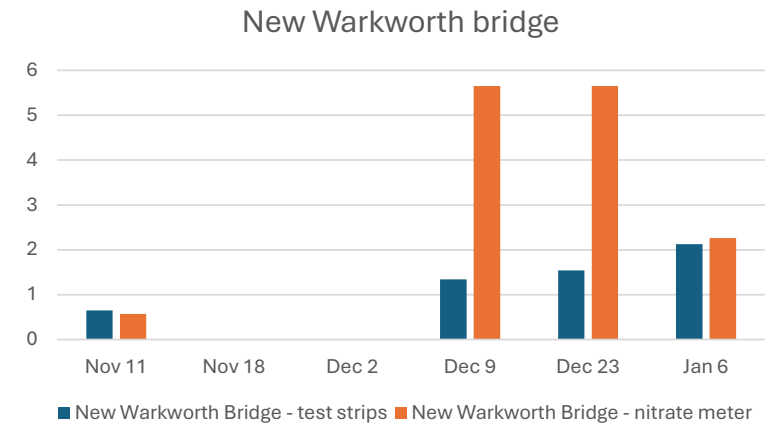
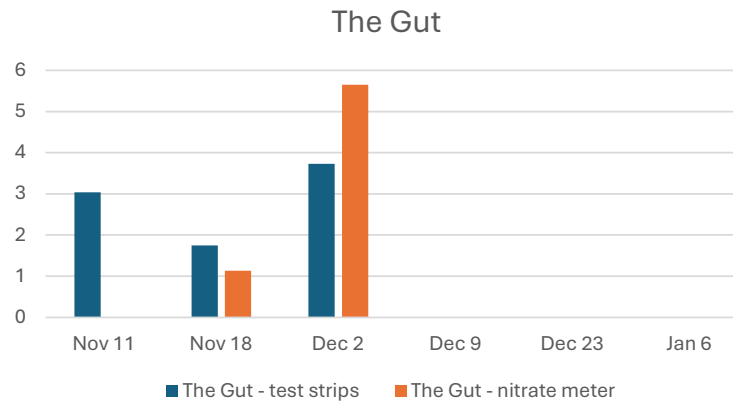
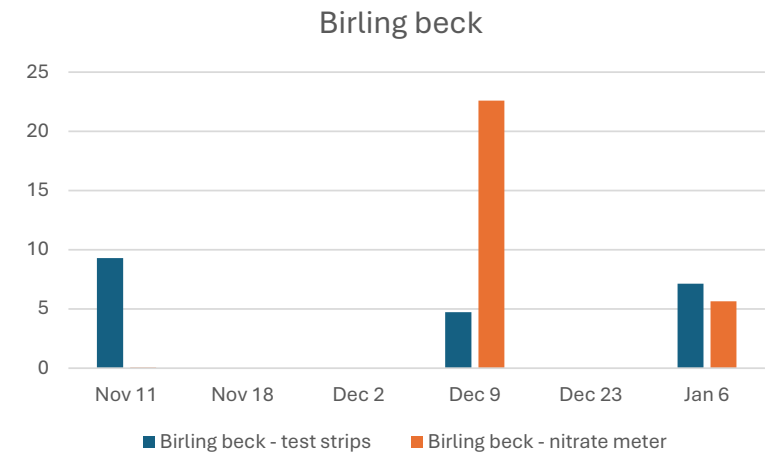
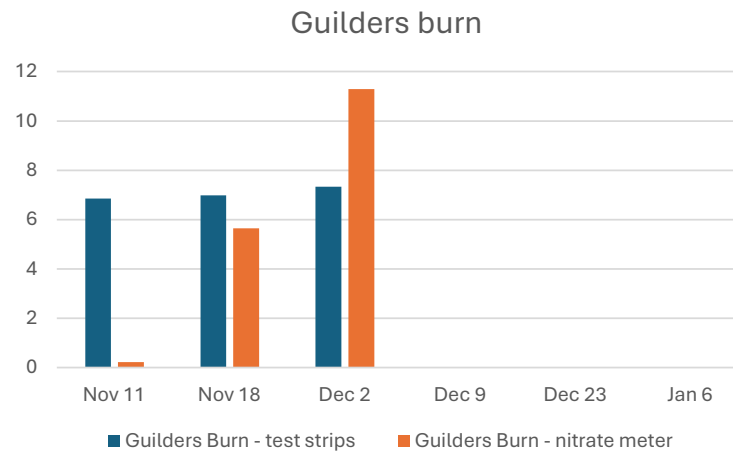


Where two tests on the same day, I have used the average (e.g. reading from meter and test strips (see next slide))



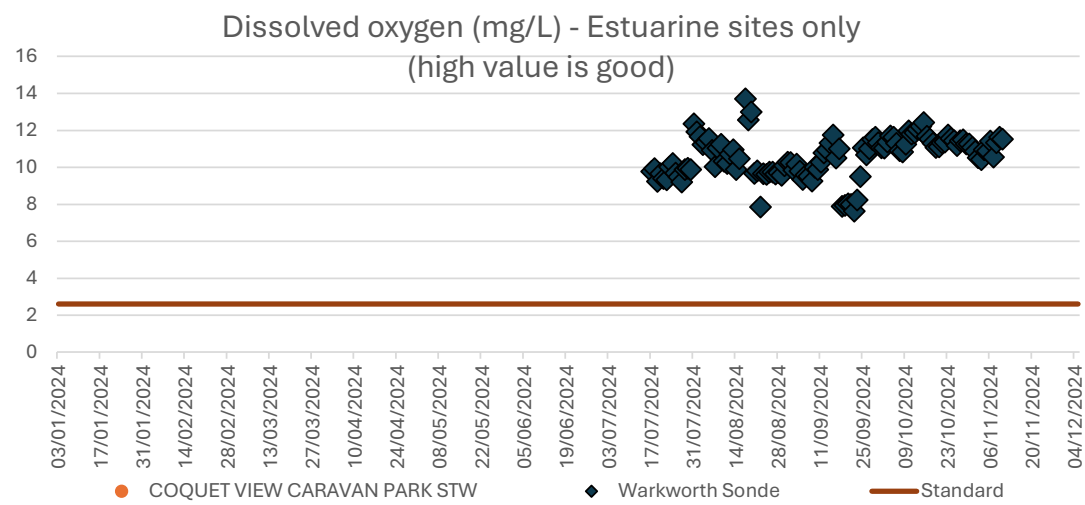
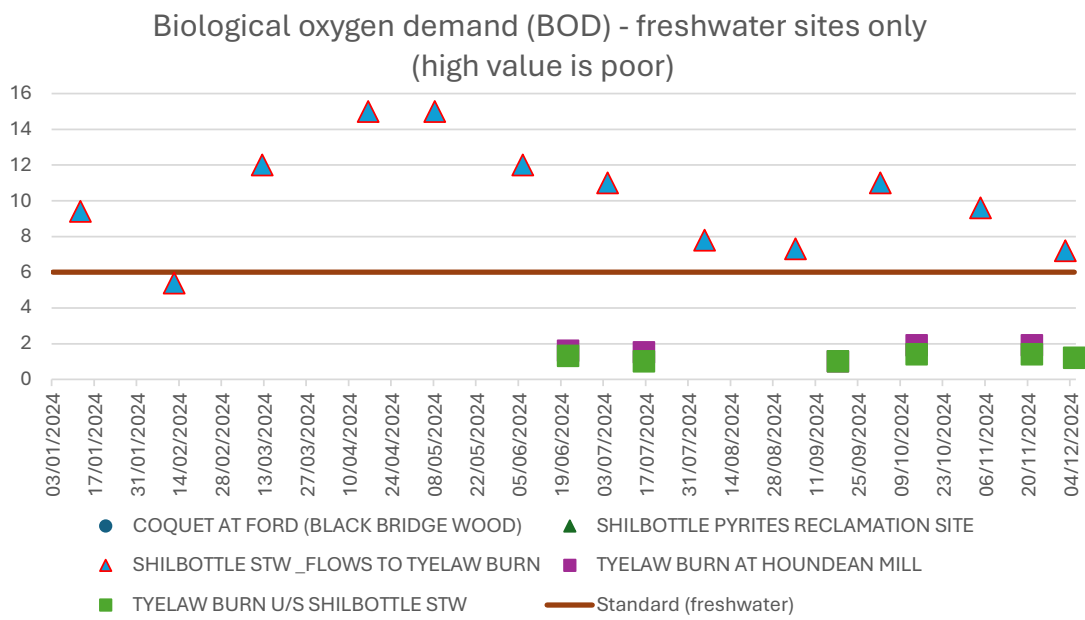
Nitrate as N – Comparison of nitrate meter and test strips

- Nov 11 – nitrate meter readings lower than test strips
- December nitrate meter readings higher than test strips
- Need more comparisons to confirm accuracy of both strips and meter



Oxygen

- High oxygen demand at the Shilbottle STW suggests high algal growth
- Low oxygen demand both above the STW and where Tyelaw burn joins the Coquet
- Oxygen in estuary is good



Summary of chemical measurements

Point sources for poor quality water are:

- Shilbottle STW – oxygen
- Tyelaw burn outflow from Whittle mine – pH
- Coquet view caravan park STW – ammonia

Water bodies with problems:

- Tyelaw burn, Birling beck and Guilders burn – phosphate and nitrate

Needs more investigation:

- Salinity varies considerably at estuary test sites – does this affect any of the measures (we know it affects electroconductivity and nitrate meter, but others should be fine)?
- Need more nitrate meter versus test strip measurement to understand why these are often different

Search

Find Bathing Water, ...

Symbols

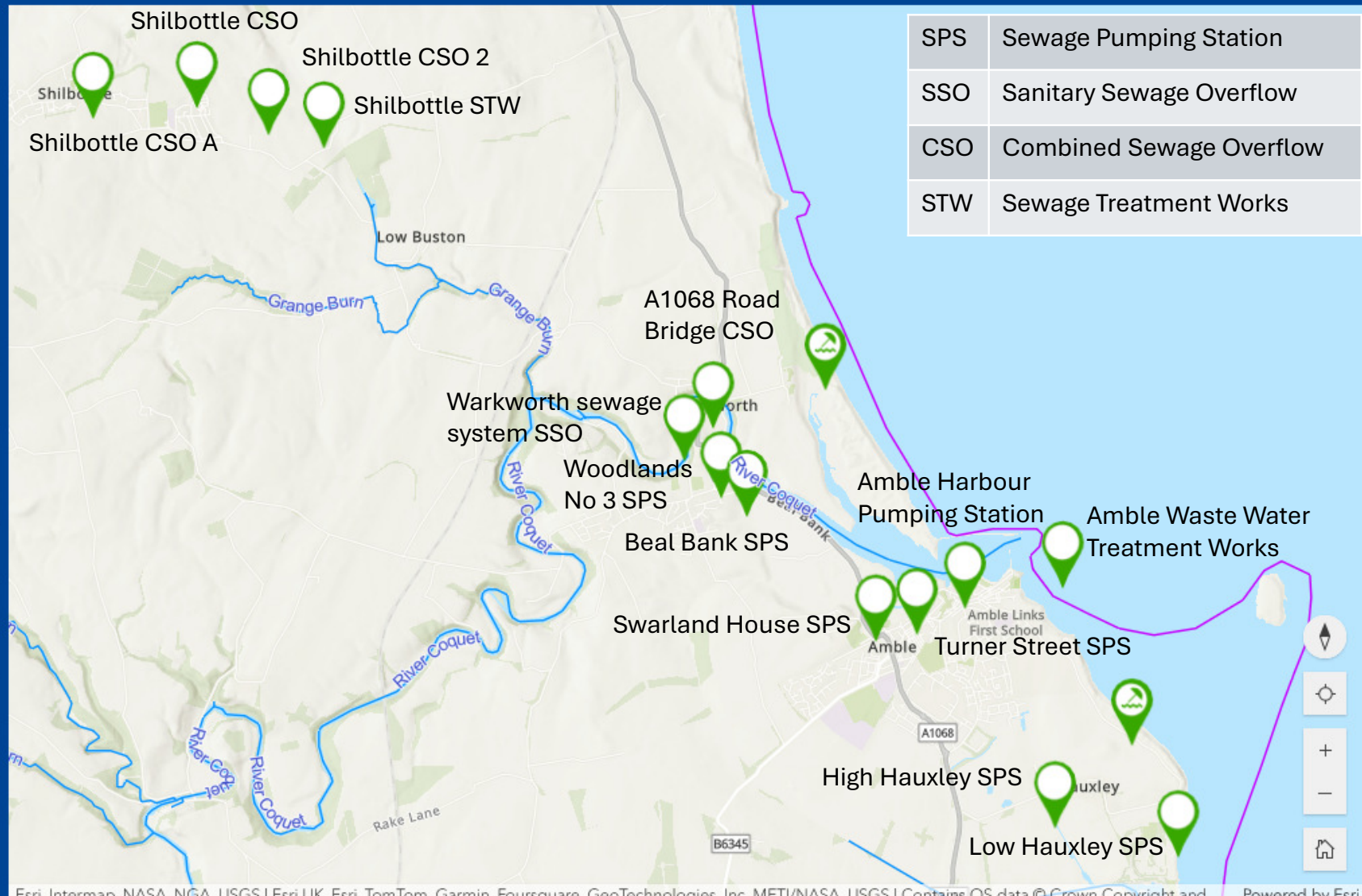


Spill Status

- No Recent Spill
- Recent Spill
- Spilling
- Unavailable

Outfall Filter

- ☒ No Recent Spill
- ☒ Recent Spill
- ☒ Spilling
- ☒ Unavailable

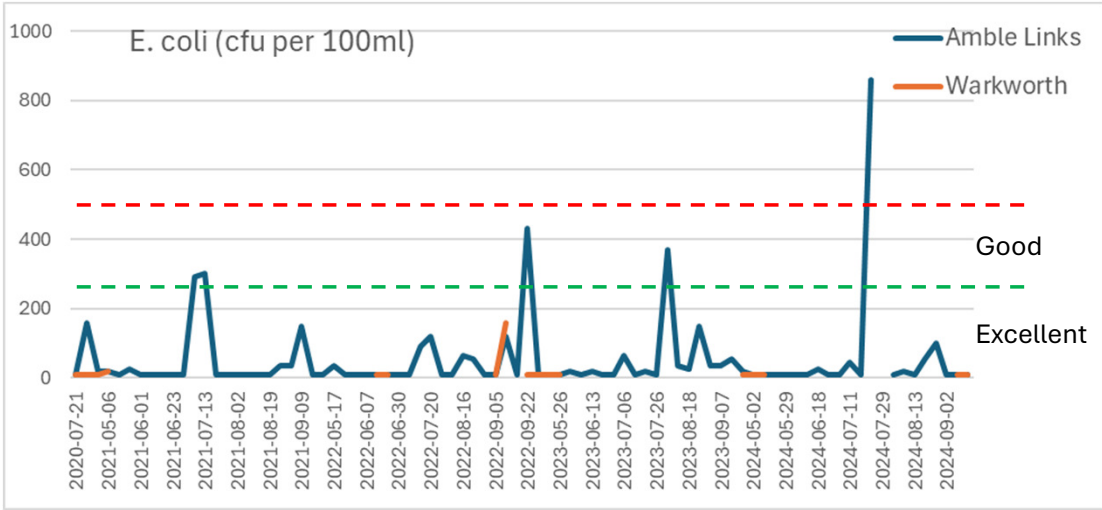
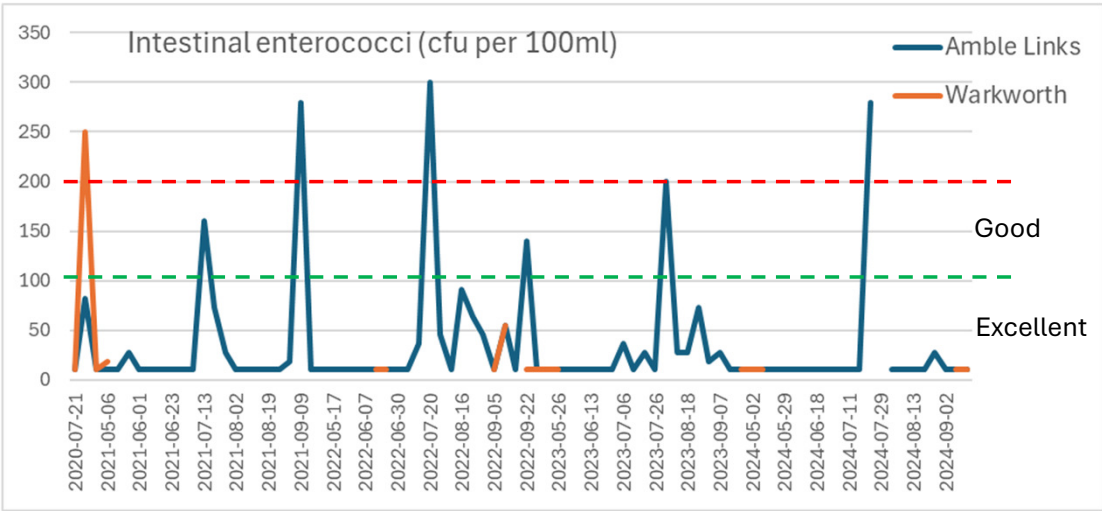


Sewage overflows in 2023

Site name (EA)	Spills	Total discharge hours	Average spill length (hours)
A1068 ROAD BRIDGE CSO	9	14.17	1.6
AMBLE HARBOUR PUMPING STATION	24	148.73	6.2
AMBLE WASTE WATER TREATMENT WORKS	166	872.64	5.3
BEAL BANK SPS	7	6.37	1.1
SHILBOTTLE CSO A	3	1.50	0.5
SHILBOTTLE CSO NO. 2 A015	34	137.25	4.0
SHILBOTTLE STW	112	1715.75	15.3
WARKWORTH SEWERAGE SYSTEM SSO MH NO	4	18.17	4.6
WOODLANDS NO 3 SPS	4	16.50	4.1

Bathing Water E. coli measurement

- Environment Agency
- Measure at least every month from Mid-May to end of September
- Use the most recent 16 measurements from the most recent 3 years



Year	Warkworth beach	Amble Links
2021	Excellent	Excellent
2022	Excellent	Excellent
2023	Excellent	Good
2024	Excellent	Excellent