

Bathing Water Quality
Appendix 2

Date	Meeting Attendees	Meeting Notes Taken	Letter	Notes
2020/01/21	Environment & Community Panel	Yes – attached		Minutes of the meeting attached
2020/01/21				Anglian Water Presentation
2020/01/21				Environment Agency Presentation

BOROUGH COUNCIL OF KING'S LYNN & WEST NORFOLK

ENVIRONMENT AND COMMUNITY PANEL

Minutes from the Meeting of the Environment and Community Panel held on Tuesday, 21st January, 2020 at 6.00 pm in the Council Chamber - Town Hall, Saturday Market Place, King's Lynn PE30 5DQ

PRESENT: Councillors C Sampson (Chair), L Bambridge, C Bower, A Bubb, A Bullen, S Collop, M de Whalley, A Kemp, J Kirk, J Lowe, S Squire and M Wilkinson.

MEMBERS PRESENT UNDER STANDING ORDER 34: Councillors Parish, Rose and Ryves.

OTHER MEMBERS PRESENT: Councillors Moriarty and Rust.

PORTFOLIO HOLDERS:

Councillor I Devereux – Portfolio Holder for Environment

Councillor Kunes – Portfolio Holder for Commercial Services

Councillor E Nockolds – Portfolio Holder for Culture, Heritage and Health

OFFICERS:

Martin Chisholm – Assistant Director, Operations and Commercial

Ged Greaves – Senior Policy and Performance Officer

Dave Robson – Environmental Health Manager

BY INVITATION:

Lorne Greene – Police and Crime Commissioner

Superintendent Dave Buckley – Norfolk Constabulary

Adam Worley – Anglian Water

John Daniels – Environment Agency

Bob Monroe – Environment Agency

EC63: APOLOGIES FOR ABSENCE

There was none.

EC64: MINUTES

RESOLVED: The Minutes from the previous meeting were agreed as a correct record and signed by the Chair.

EC65: DECLARATIONS OF INTEREST

There were no declarations of interest.

EC66: URGENT BUSINESS

There was none.

EC67: **MEMBERS PRESENT PURSUANT TO STANDING ORDER 34**

Councillor Parish – EC70
Councillor Rose – EC73
Councillor Ryves – all items

EC68: **CHAIR'S CORRESPONDENCE**

The Chair informed the Panel that he had received correspondence from Councillor Beal regarding EC70. The correspondence would be read out to the Panel during consideration of the item.

EC69: **POLICE AND CRIME COMMISSIONER ATTENDING TO PROVIDE MEMBERS WITH THE OPPORTUNITY TO DISCUSS STRATEGIC AND OPERATIONAL MATTERS**

The Police and Crime Commissioner Lorne Greene and Superintendent Dave Buckley were present at the meeting. Lorne Greene explained that this was an opportunity for Councillors to express their views and ask questions.

Lorne Greene provided the Panel with an overview of the Police and Crime Commissioner role and the priorities that had been set within the Police and Crime Plan.

Superintendent Dave Buckley informed the Panel that he was responsible for local policing. He provided an overview of recent activity within the force, including increasing the amount of police officers, creation of a proactive drug squad, increasing response strength and County Lines.

He explained that crime was reducing in most areas, but there was a rise in domestic violence and sexual offences. Antisocial behaviour was being managed, but it was recognised that there was still some significant issues.

The Chair thanked Lorne Greene and Superintendent Dave Buckley for the information and invited questions and comments from the Members present, as summarised below.

Councillor Bambridge asked if statistics were kept on the cost of the night time economy in King's Lynn. Superintendent Dave Buckley explained that indicative costs were available and most of the resource focussed on Friday and Saturday nights, between 10pm and 5am, in the Norfolk Street area of King's Lynn and Downham Market.

Superintendent Dave Buckley explained that usually on a Saturday night in King's Lynn there would be a Sergeant and ten officers available to cover the town centre. He explained that having a presence in King's Lynn town centre, rather than just being responsive had helped reduce the amount of incidents and was a preventative measure.

Councillor Wilkinson commented that after the loss of PCSO's she did not feel that there was much of a Police presence on the Estates in King's Lynn. She explained that there was often groups of young people who were dangerous on bikes and could be intimidating. Superintendent Dave Buckley explained that there was dedicated Safer Neighbourhood Teams in King's Lynn and they covered the Estates on foot and by bicycle. He explained that over Christmas more resources had been diverted to the town centre, so there may have been a decreased presence, but they should now be getting back out into the community.

Lorne Greene made reference to the importance of a visible police presence, but asked Members to be mindful of the important issues which needed dealing with and were desk based, such as online fraud and child exploitation investigations.

Lorne Greene explained that antisocial behaviour and substance abuse was a concern within a lot of communities. Therefore he had undertaken to convene round table discussions, which would include representatives from the Borough Council, County Council, Child Services and the Police to look at the situations which got young people engaged in antisocial behaviour.

Superintendent Dave Buckley also encouraged Councillors to get in touch with him or their Local Beat Manager if they had any queries.

Councillor Kemp commented that local consultation was important and asked if the Safer Neighbourhood Action Panel meetings would be reinstated. She also referred to county lines, domestic violence and the need for another domestic violence refuge. Lorne Greene explained that Safer Neighbourhood Action Panel meetings had been effective in the past, but attendance had been dwindling and alternative ways to make use of officer time whilst engaging with the public had been explored. Superintendent Dave Buckley explained that Police Officers were now available to engage with the public in various ways such as a presence in public places such as supermarkets and suggestions on other ways to engage were welcomed.

Lorne Greene made reference to domestic violence and the white ribbon campaign. He explained how he planned to raise awareness and encourage organisations to work together to tackle this issue.

Superintendent Dave Buckley referred to county lines and explained that these did operate in King's Lynn. There was a team available to

work on intelligence received and take action on those who tried to establish themselves in the area. He referred to stop and search powers which were being used and had resulted in more arrests. He also made reference to ANPR cameras which were useful in showing movement in and out of the County and enabled the police to track down offenders and take action.

Councillor Bullen asked about the links between drug use and crime. Superintendent Dave Buckley explained that drug and alcohol abuse was a big factor in violence and antisocial behaviour and there had been an increase in incidents involving young people. He made reference to the bus station in King's Lynn which had been a focus of the Police recently with over 500 interventions in the area.

Councillor Collop referred to Beat Managers newsletters and stated that one of the contact details in a recent newsletter was incorrect. Superintendent Dave Buckley explained that there was lots of different ways to contact the police including via email, mobile or by visiting the police station and he would check the contact details in the newsletter.

Councillor Squire commended her local Beat Manager and explained that she had worked with him on issues relating to antisocial behaviour and parking outside the local school. She also referred to county lines and that a large level of young people with social issues and Autism were being targeted. She hoped that local and national organisations were being engaged and educated on this issue.

Councillor Squire also referred to a knife crime video which had been made available to schools, but she was aware that it had not been shown to all students as it was considered to be too violent. She explained that she had seen the video and felt it was important that it was made available to all, to which Lorne Green agreed, but stated that it would be up to schools on what they showed to their students.

She also stated that she did not feel that Norfolk Police took all harassment cases seriously and this needed improvement. Lorne Greene explained that new powers to address this had now come into force.

Reference was also made to the plans for the Police and Crime Commissioner to take over operation of the Fire Service. Lorne Greene explained that he had explored if it would be worthwhile for the Police and Fire Service to merge. He felt that it would result in efficiency savings and the report prepared as a result of the investigation had also concluded this, however Norfolk County Council did not find merit in the report. Lorne Greene was pleased to announce that there was now enhanced collaboration between the organisation and facilities were being shared, but he still felt that more benefits would be brought forward should there be shared responsibility.

Councillor Ryves addressed the Panel under Standing Order 34. He referred to ANPR in rural areas and how it could help elderly people feel more secure in rural areas. Superintendent Dave Buckley explained that ANPR was a great benefit and was available in most police vehicles as well as static cameras and provided a great deal of intelligence.

Lorne Greene and Superintendent Buckley thanked the Panel for giving them the opportunity to attend the meeting and encouraged Members to contact them if they had any concerns.

EC70: **ENVIRONMENT AGENCY AND ANGLIAN WATER ATTENDING REGARDING BATHING WATER QUALITY**

The Assistant Director, Operations and Commercial explained that Resort Services worked closely with Anglian Water and the Environment Agency regarding bathing water quality.

The Chair welcomed Adam Worley from Anglian Water and John Daniels from the Environment Agency to the meeting. Members received a presentation from both organisations on bathing water quality. Copies of the presentations are attached.

The Vice Chair read out correspondence received from Councillor Beal as set out below:

“As you are not doubt aware all the drainage from Hunstanton promenade goes directly onto the beach. This includes all the waste water from every trader on the promenade. I am constantly told from the Portfolio Holder and Officers of the Council that I’m overplaying the matter and the waste and hazard materials have little or no effect on sea life or bathing water.

This I find hard to believe as I have ice cream machines and I know when we clean the machine every week there are four cycles of cleaning with different types of waste going into the system including in the last cleaning cycle five gallons of steriliser and all this from the multiple of ice cream sellers must have effect on the quality of the sea water. Also all the chemicals that are used to keep the kiosks clean are all going down the promenade drains pictures supplied. Every trader in the town has to pay water rates so how come seafront traders don’t but if it’s claimed they do then why are they allowed to dump it into the sea.

It is felt by lots of the public that a water collection should be made from the seafront traders (by bowser) and pay water rates like other traders do.

So what I need to know is that you can assure me, the residents and tourists that contaminated water that is being dumped on our beach

has no effect on wildlife, bathing water or the blue flag water quality as said by officers and including seafront officers.

Thank you for your attention and look forward to an answer.”

The Assistant Director explained that Resort Services had operational responsibility for the Promenade and did not have any evidence that all traders were doing this. He explained that he was aware of isolated incidents, all of which had been followed up by a visit to the premises by the Community Safety and Neighbourhood Nuisance Team or Environmental Health. He concluded that on occasion it had happened but not every trader could be considered irresponsible in this respect.

John Daniels explained that if there was evidence of waste water being disposed onto the beach then this could be investigated. He also explained the prosecution powers available to the Environment Agency. Adam Worley explained that there was no direct evidence of poor bathing water quality as a result of the issues raised by Councillor Beal.

John Daniels explained that if it was clean water, which included diluted disinfectant etc. this should not have an impact on water quality, however it was when water sat for a long period of time in the drainage network it could go septic which could have an impact.

The Chair invited comments and questions from the Panel as summarised below.

Councillor Parish made reference to water quality in Heacham and how the increase in caravans and the amount of visitors could have an impact on water quality. He also referred to the water treatment works and stated that there was local concern about the capacity of this, especially when further development took place, and he asked Anglian Water to be mindful of this in the future and the impact that this could have on bathing water quality. Councillor Parish also commented that poor water quality could have a link to the lack of dog waste bins available.

In response to a question from Councillor Parish regarding classification categories, John Daniels explained that the wording was from the European Directive. Councillor Parish asked if officers were satisfied of the rating of 'sufficient'. It was explained that sufficient meant that it was safe to bathe, but of course it would be better to have as higher rating as possible.

Those present were reminded that the warnings were included in the ratings and these warnings were based on rainfall and weather predictions.

Councillor Ryves addressed the Panel under Standing Order 34. He asked if cleaning chemicals would show in the measuring of water

quality. Adam Worley explained that it was bacteria and septic which was being measured. Councillor Ryves also asked why there was no evidence of water waste from promenade kiosks. The Assistant Director explained that officers visited the kiosks annually and asked about waste arrangements. If sufficient arrangements for disposal were in place this would be accepted, unless evidence was produced to the contrary. The Assistant Director reiterated that there had been evidence of occasional situations when waste receptacles had overflowed in peak season, but it was accepted that this could be a one off.

Councillor Ryves raised concern that kiosks were only visited annually. He encouraged self-policing and needed evidence that it wasn't happening. The Assistant Director explained that complaints were taken seriously and where evidence of a breach was confirmed a further visit had been conducted. He explained that resources were limited and the response needed to be proportionate.

The Vice Chair, Councillor Bower explained that the area was self-policing and businesses did pass on their concerns to her and she worked with Resort Services to resolve issues.

The Chair asked for the view of Anglian Water and the Environment Agency on the issues relating to the seafront kiosks. Adam Worley explained that unless run off went into their assets, there was no power for Anglian Water to get involved. John Daniels explained that the Environment Agency dealt with criminal law and did not get involved in civil matters. He explained that fines could be issued only if sufficient evidence was collected.

Councillor Bullen commented that he was surprised that there was a lack of avian pollution given the amount of wildfowl in the area. He also asked if John Daniels and Adam Worley would bathe and allow their family to bathe in waters in West Norfolk. They both stated that they would and explained that it was generally just at certain times of the year that the results were lower. It was also explained that the best time to bathe was in peak sun as it improved the quality of the water.

The Portfolio Holder for Culture, Heritage and Health, Councillor Nockolds referred to previous surveys undertaken and explained that the weather could have an impact on water quality and other factors were ever changing. She felt that all organisations were working hard to ensure good bathing water quality. She also referred to the clean beach award. Councillor Nockolds referred to the Wash and asked if the various ports and shipping activity could have an effect on water quality. John Daniels explained that the contamination recorded was local, and it was unlikely that port activity would have an effect as the Wash was a vast area which meant a lot of dilution.

Councillor Squire commented that she had no confidence in the water quality and she had suffered from health issues as a result of bathing.

She also stated that testing should be carried out during the winter as people did go in the water all year round. She also stated that it was unacceptable for sewage to enter water systems and the sea. John Daniels commented that work was continually being done to try and improve water quality. In response to a further question it was explained that the nearest 'excellent' rated beach was Sherringham. Old Hunstanton was on the border of becoming 'excellent' however some results had been unusual and had resulted in a lower rating. It was also explained that results were dis-counted if a warning was issued not to swim. Signs would be put up when warnings were in place.

In response to a question from Councillor Bubb it was explained that there were nine bathing waters classified in Lincolnshire with six classified as excellent and three as good.

Councillor Ryves asked if data, which did not include the dis-counted results was available. John Daniels explained that raw data was available and the dis-counted results were not taken into consideration until the end of the season. It was explained that information was available on the Environment Agency website.

EC71: **QUARTER 2 2019/2020 PERFORMANCE MONITORING REPORT**

The Senior Policy and Performance Officer presented the report which contained information on the corporate performance monitoring undertaken during quarter 2 2019-2020.

He explained that there were six indicators that had not met target:

- HS1: % of HMO's inspected in accordance with the programmed inspection regime.
- HS10: % of Careline alarms installed within 10 days from date of enquiry.
- HS19: No. of days to process changes to circumstances.
- HS11: Time taken (in weeks) from first contact to completion of work on Disabled Facilities Grant
- HS12: Time taken (in weeks) from first contact to completion of work on Adapt passported cases with a value under £6,000
- HS13: Time take (in weeks) from first contact to completion of work on Adapt grant means-tested cases with a value under £12,000.

The Senior Policy and Performance Officer advised the Panel that the Care and Repair, Repairs and Adaptations Manager would be present at a future meeting of the Panel to provide case studies and information on the indicators relating to Care and Repair.

With regards to the other indicators which had not met target it was explained that HS1 was only 2% under target and HS10 had improved

during quarter 3 and was likely to be reported as meeting its target in the next monitoring report.

The Chair thanked the Senior Policy and Performance Officer for his report and invited questions and comments from the Panel, as summarised below.

Councillor Bambridge asked if there had been an increase in HMO applications and the Senior Policy and Performance Officer explained that it could be because of a recent change in regulations.

Councillor Bubb asked if actual figures could be included in the report rather than just percentages and the Senior Policy and Performance Officer agreed to provide this information.

RESOLVED: The Panel reviewed the performance monitoring report and agreed the actions outlined in the action report.

EC72: **TREE PLANTING**

This item had been withdrawn from the Agenda and would be considered by the Panel at a future date.

EC73: **HUNSTANTON COASTAL MANAGEMENT PLAN**

The Environmental Health Manager presented the Hunstanton Coastal Management Plan to the Panel. A copy of his presentation is attached.

The Chair thanked the Environmental Health Manager for his presentation and invited questions and comments from the Panel, as summarised below.

Members asked questions relating to the public realm and type of materials to be used along the promenade, including art installations and specific colours. The Environmental Health Manager explained that this was not part of the Coastal Management Plan and instead would be taken into consideration during Hunstanton Regeneration and public realm work, but it would be linked to the Plan with regards to timescales for works.

Councillor Rose addressed the Panel under Standing Order 34. He informed the Panel that he was the Borough Council's representative on Hunstanton Sailing Club. He stated that he was pleased to see repairs to groynes included in the plan. He also stated that the area around the Sailing Club needed more sand as it was currently very rocky. The Environmental Health Manager explained that repairs to the groynes would be prioritised and repairs would hopefully mean that more sand would remain on the beach.

Councillor de Whalley asked when the modelling was carried out and how often it would be reviewed. The Environmental Health Manager explained that modelling data would be included in the forthcoming report to Cabinet and erosion rates would be monitored. He also explained that the flood risk would stay the same.

RESOLVED: In accordance with Standing Order 33 at 9.00pm the Panel resolved to continue to sit beyond three hours.

RESOLVED: That the Panel recommend to Cabinet that the Hunstanton Coastal Management Plan be adopted.

EC74: **WORK PROGRAMME AND FORWARD DECISION LIST**

Councillor Squire raised concern that some of the issues she had raised for addition to the Work Programme had still not been scheduled. The Chair agreed to review the unscheduled items at the next sifting meeting.

Councillor Collop asked when an update from Alive West Norfolk would be brought to the Panel and the Chair would discuss this with relevant officers at the next sifting meeting.

RESOLVED: The Panel's Work Programme was noted.

EC75: **DATE OF THE NEXT MEETING**

The next meeting of the Environment and Community Panel would be held on Tuesday 3rd March 2020 at 6.00pm in the Council Chamber, Town Hall, Saturday Market Place, King's Lynn.

The meeting closed at 9.05 pm



Sources of Pollution West Norfolk Bathing Waters

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OF A WHOLE NEW WAY OF LIVING.

BATHING WATER POLLUTION

love every drop
anglianwater

1

Dog Poo

Dog poo contains some nasty parasites and bacteria and any fouling on the beach that's not picked up gets washed into the sea.

4

2

Highways

Pollution can come from highways drainage. Run off from roads during wet weather washes chemicals, traces of oil, dirt and other pollutants into the sea.

3

Grazing Animals

Excrement from grazing animals can wash off fields into bathing waters during periods of heavy rainfall.

4

Bird Droppings

Bird droppings contain harmful bacteria and can wash down from rooftops when it rains into the bathing water. Droppings from large populations of birds under piers and other coastal structures can also be a problem.

5

Overflows

To protect properties from flooding during heavy rainfall combined sewer overflows and emergency overflows can lead to dilute sewage entering the bathing water.

6

Litter

Litter encourages vermin which carry disease. Their excrement gets washed into the bathing water along with the litter.

7

Equipment Checks

Routine visits to Water Recycling Centres and Pumping Stations are essential in discovering and preventing issues which could otherwise affect bathing water quality.

8

Boats

Boats can flush their bilge tanks and discharge onboard toilets directly into the sea.

9

Seaweed and Sediment

Bacteria growing in seaweed can pollute bathing water. Disturbed sand and sediment on the sea bed can release trapped bacteria.

13

Sewer Capacity

Sudden increases in seasonal holiday makers can put extra pressure on sewer capacity. Couple this with a reduction in sewer capacity due to a build up of fats, oils and grease and sewers and Water Recycling Centres can struggle to cope, making a pollution incident more likely.

12

Private Overflows

Discharges from private sewer systems, such as private pumping stations owned by caravan parks or privately owned cess pits, could result in untreated sewage entering the bathing water.

11

Chemicals and Fertilisers

Chemicals and fertilisers wash into rivers from farmland when it rains.

10

Muck Spreading

Muck spreading or the presence of manure heaps can result in bacteria washing into the bathing water when it rains.

Anglian Water Assets

love
every
drop. 
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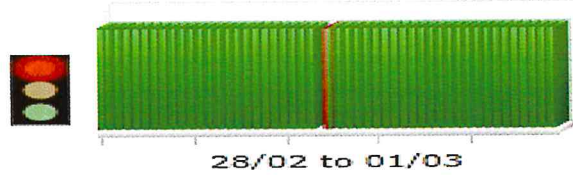
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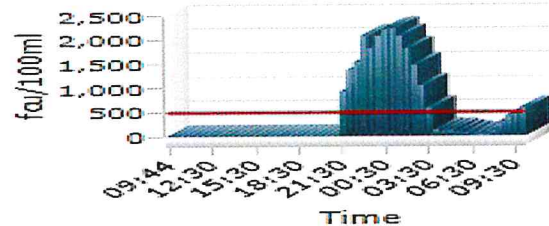
Sewernet System



Southend Thorpe Bay Beach alert status

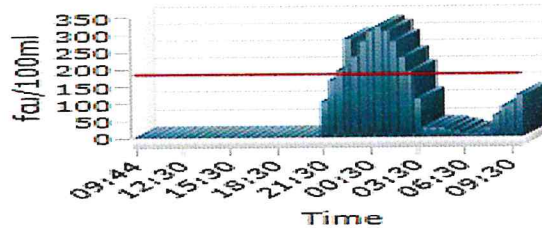


Southend Thorpe Bay Total E Coli load to Beach



■ Total E Coli load to Beach
○ Total E Coli load to Beach

Southend Thorpe Bay Total Enterococci load to Beach



■ Total Enterococci load to Beach
○ Total Enterococci load to Beach



681

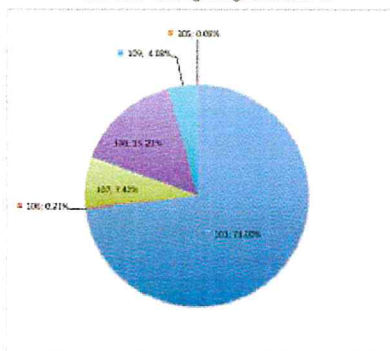
LOVE EVERY DROP. PUT WATER AT THE HEART OF A WHOLE NEW WAY OF LIVING.

CREH Studies

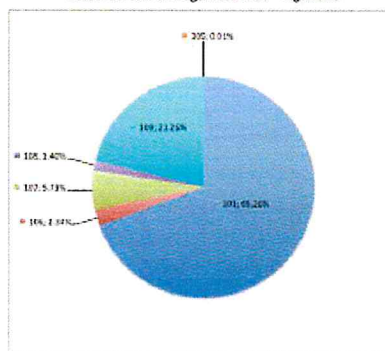


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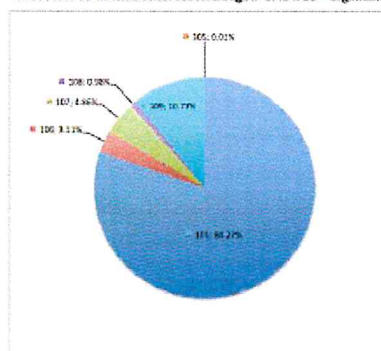
Base Flow Discharge Budget: $5.02 \times 10^6 \text{ m}^3$



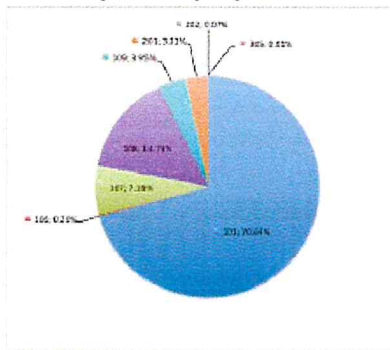
Base Flow E. coli Budget: 2.26×10^{11} organisms



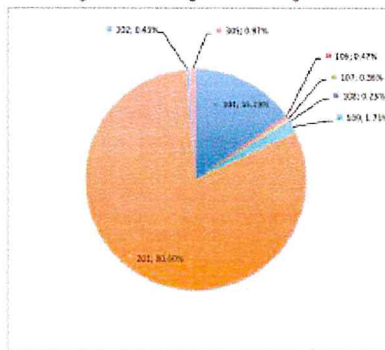
Base Flow Confirmed Enterococci Budget: 1.43×10^{11} organisms



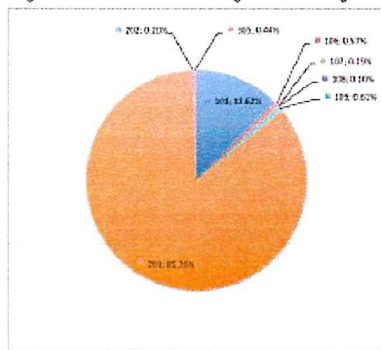
High Flow Discharge Budget: $8.27 \times 10^6 \text{ m}^3$



High Flow E. coli Budget: 2.14×10^{14} organisms

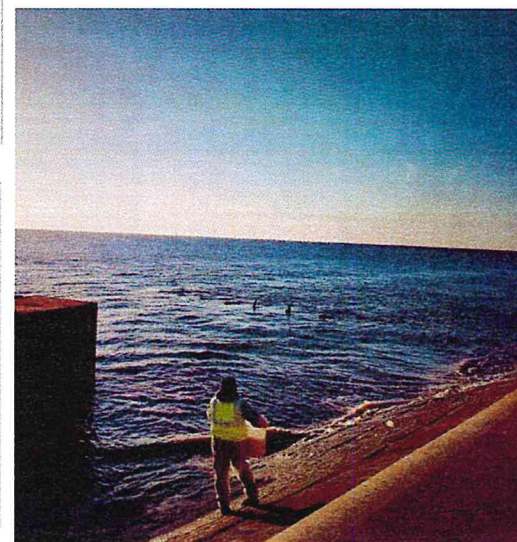


High Flow Confirmed Enterococci Budget: 2.15×10^{14} organisms



- 101 Heacham River
- 106 Searles Outfall
- 107 River Hun
- 108 River Ingul
- 109 Boathouse Creek
- 201 Seagate Surface Water
- 202 Oasis Roof/Surface Water
- 305 South End Rd TPS Outfalls*

* South End Rd TPS outfalls carry the Fring WTW brine effluent during base flows and combined brine effluent and dilute storm sewage overflow effluent from the TPS during high flows.



682

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Surface Water Outfalls



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Assessment of River Heacham



684

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Non-Human Sources

love every drop.

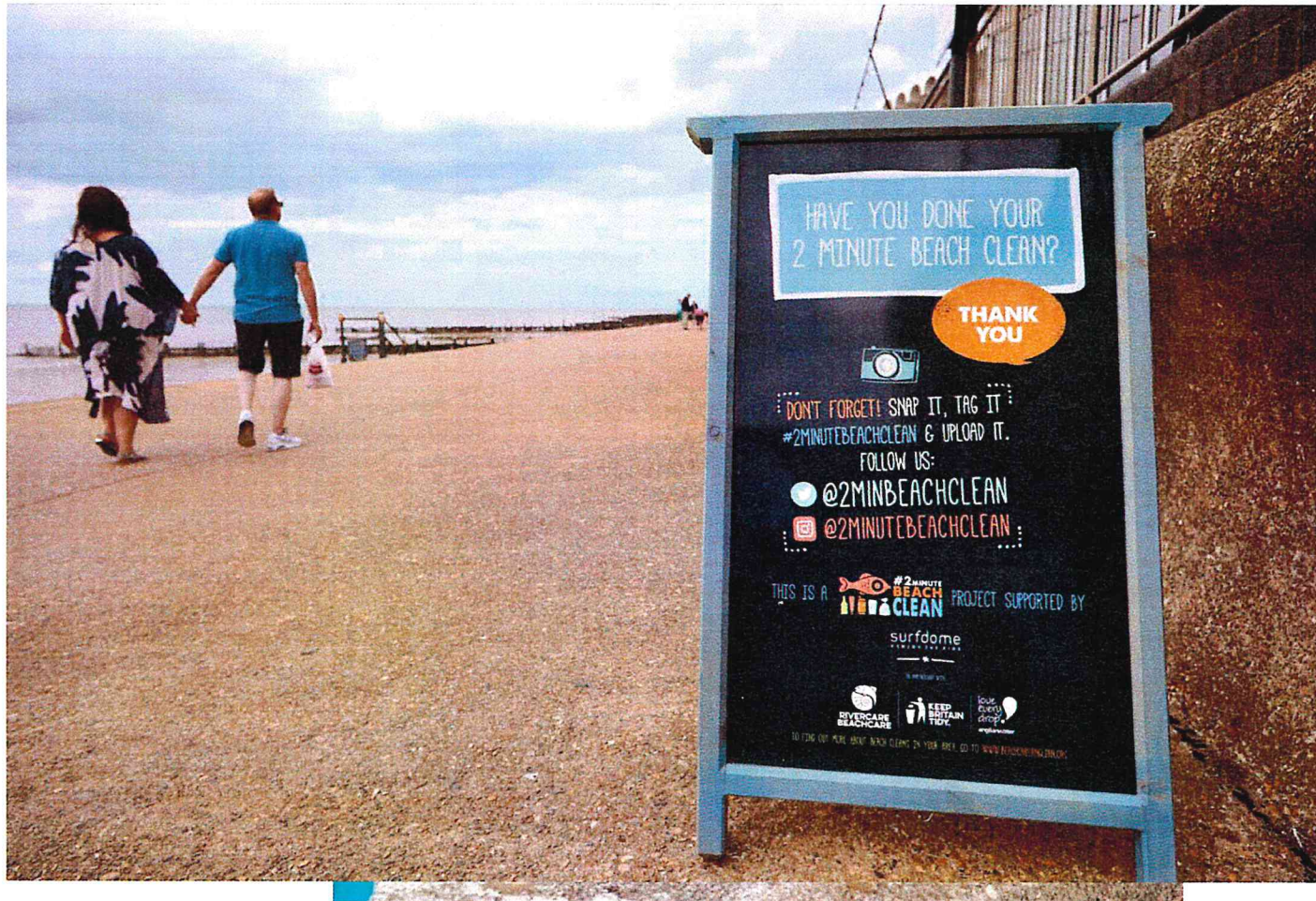
glianwater

685



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OF A WHOLE NEW WAY OF LIVING.

Public Campaigns



989

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OF A WHOLE NEW WAY OF LIVING.

Advice Leaflets



KEEP IT CLEAR

love every drop. anglianwater

PROTECT YOUR BUSINESS AND THE COAST BY KEEPING SEWERS CLEAR

How to dispose of fats, oils, grease and unflushables correctly

This leaflet cover features a colorful illustration of a coastal town with a lighthouse, buildings, and a beach. In the foreground, a person is shown pouring a dark liquid into a drain. The background shows a blue sky with birds and a yellow beach with people and crabs. The text is in various blue and white fonts.

love every drop. anglianwater

BOATING NEAR BATHING AND SHELLFISH WATERS

Your guide to protecting your local environment

This leaflet cover features a colorful illustration of a beach scene with a boat, people, and a lighthouse. The background shows a blue sky with clouds and a yellow beach with people and crabs. The text is in various blue and white fonts.

687

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Environment Agency's roles & responsibilities as regards Bathing Waters

January 2019

John Daniels
(Senior Environment Officer)

*Status: This is the original version (as it was originally made). UK
Statutory Instruments are not carried in their revised form on this site.*

STATUTORY INSTRUMENTS

2013 No. 1675

WATER RESOURCES

The Bathing Water Regulations 2013

Made - - - - - 3rd July 2013
Laid before Parliament 9th July 2013
Laid before the National
Assembly for Wales - - 9th July 2013.
Coming into force in accordance with regulation 1

The Secretary of State is designated(1) for the purposes of section 2(2) of the European Communities Act 1972(2) in relation to the environment, and the Welsh Ministers are designated(3) for the purposes of that section, in relation to measures relating to water resources.

The Secretary of State in relation to England and Scotland(4) and the Welsh Ministers in relation to Wales, make the following Regulations in exercise of the powers conferred by that section of that Act.

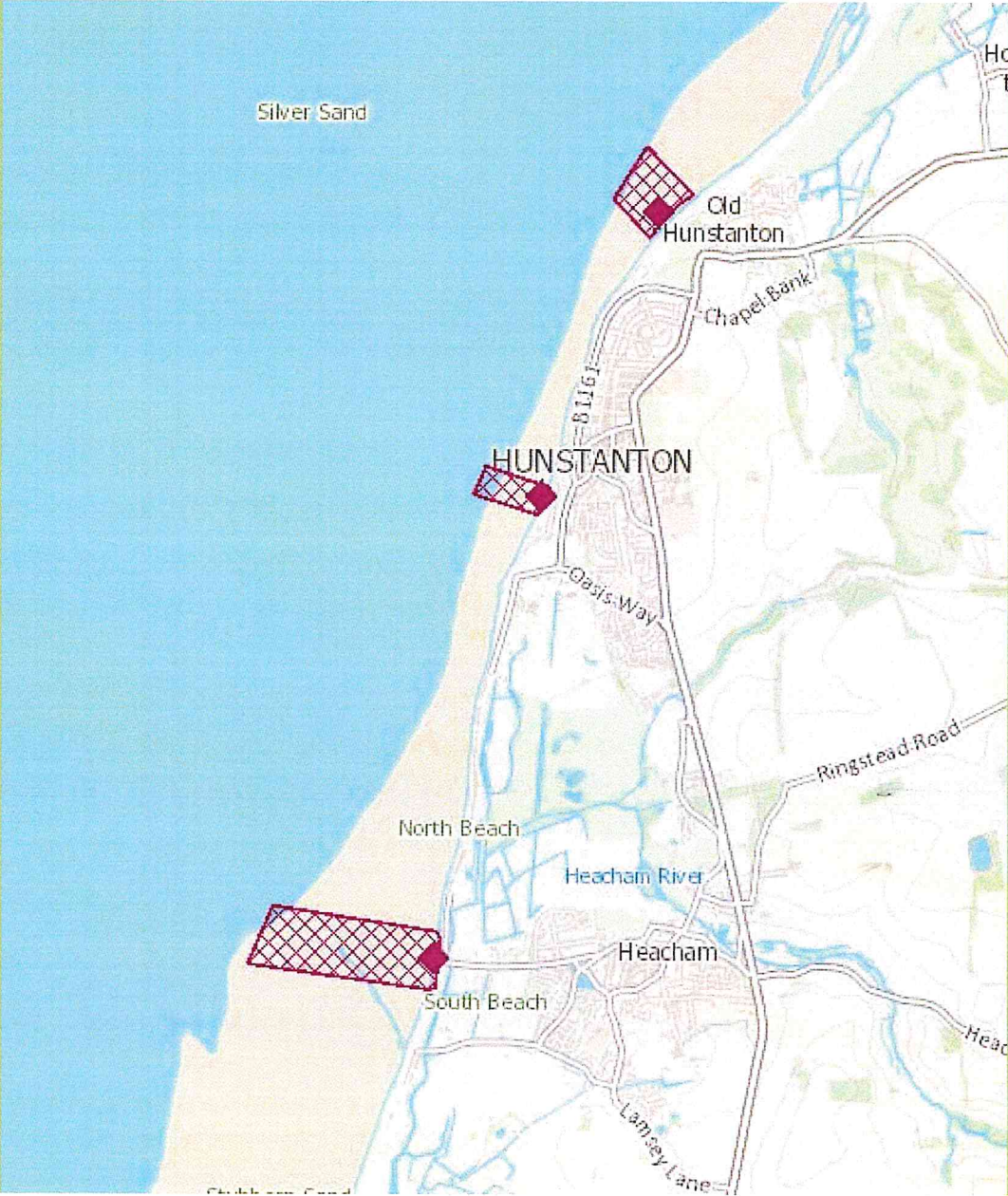
PART 1
GENERAL PROVISIONS

Citation, commencement and extent

- 1.—(1) These Regulations may be cited as the Bathing Water Regulations 2013.
(2) The following provisions come into force on 31st July 2013—
(a) this regulation and regulations 2 to 9;
(b) in regulation 14—
(i) paragraph (1) in so far as it relates to paragraphs (2) to (5);

(1) S.I. 2008/301.
(2) 1972 c. 68; section 2(2) was amended by section 27(1)(a) of the Legislative and Regulatory Reform Act 2006 (c. 51) and by Part 1 of the Schedule to the European Union (Amendment) Act 2008 (c. 7).
(3) See S.I. 2003/2901 for the designation conferred on the National Assembly for Wales. By virtue of sections 59 and 162 of, and paragraph 28 of Schedule 11 to, the Government of Wales Act 2006 (c. 32), that designation is now conferred on the Welsh Ministers.
(4) The power of the Secretary of State to make regulations in relation to matters as regards Scotland is preserved by section 37(1) of the Scotland Act 1988 (c. 46).

Main provisions are to protect public health and to provide information to beach users.



Designation process

- Local Authorities or private owners apply to Defra to have the beach designated
 - Evidence required – usage (surveys), facilities, local consultation
- Defra consult and, if agreeable, designate the bathing water
- Environment Agency samples and assesses compliance

692

Profiles

- Each bathing water has to have a profile published
 - <http://environment.data.gov.uk/bwq/profiles/index.html>
 - Web search “bathing waters”. Often top of the list.
- Provides information relating to:
 - Water quality and classification
 - Catchment description
 - Pollution risks
 - Sewage discharges
 - Agriculture
 - Algae & phytoplankton
 - Pollution management & investigations
 - “working with others” – local authorities, water companies, etc.
- Published by Environment Agency

2019 Bathing Water Profile for Heacham

Norfolk, England

Current water quality classification is **Sufficient**, based on samples taken from 2016 through to 2019. There are no water quality warnings in force today.



Sufficient bathing water quality
★ ★ ★
★ ★ ★
★
—

About

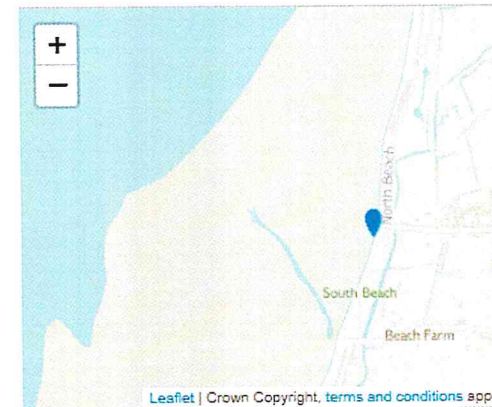
Heacham North Beach is part of an extensive beach line which stretches north from the mudflats at Snettisham, up the eastern side of the Wash and along the Norfolk coast. Heacham is a popular Norfolk coastal holiday resort, with a largely sandy beach. It is one of the few beaches in Norfolk to face west. The majority of beach exposed at low tide is very gently shelving. Tidal movement stirs up sand and sediment in the sea and makes it look cloudy.

Here you can see the recent results from water quality assessments under the Bathing Water Directive. For historical measurements, view the detailed water quality data.



Water quality

Daily pollution update	no warnings issued
Samples taken	weekly between May 1st 2019 and Sep 30th 2019
Most recent sample	was taken 57 days ago <i>Sep 23rd 2019 12:46</i>
2019 classification	★ ★ ★ sufficient
2018 classification	★ ★ ★ sufficient
2017 classification	★ ★ ★ sufficient
2016 classification	★ ★ good



Site details

Local authority	King's Lynn and West Norfolk
Bathing water controller	King's Lynn and West Norfolk
Year of designation:	1988
Water sampling point location	lat, long: 52.91,0.4715, eastings, northing: 566300,337500
Map links	Google Maps , Bing Maps , OpenStreetMap
Nearby bathing waters	Hunstanton Main Beach, Hunstanton (Old Hunstanton), Wells, Skegness

2019 Bathing Water Profile for Hunstanton Main Beach

Norfolk, England

Current water quality classification is **Sufficient**, based on samples taken from 2016 through to 2019. There are no water quality warnings in force today.



Sufficient bathing water quality
★ ★ ★ ★ ★

About

Hunstanton is a popular Norfolk coastal holiday resort with a largely sandy beach and is one of the few beaches in Norfolk to face west. The tide retreats to expose a wide sandy beach, with some stones and rock pools near the red and white striped cliffs at the north end. The majority of beach exposed at low tide is very gently shelving. Tidal movement stirs up sand and sediment in the sea and makes it look cloudy. The beach is backed by a promenade and the town.

Here you can see the recent results from water quality assessments under the Bathing Water Directive. For historical measurements, [view the detailed water quality data](#).

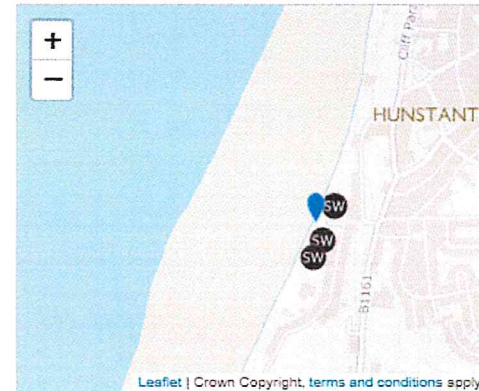


Water quality

Daily pollution update	no warnings issued	
Samples taken	weekly between May 1st 2019 and Sep 30th 2019	
Most recent sample	was taken 57 days ago <i>Sep 23rd 2019 12:20</i>	
2019 classification	★☆☆ sufficient	
2018 classification	★☆☆ sufficient	
2017 classification	★☆☆ sufficient	
2016 classification	★★★ good	

Site details

Local authority	King's Lynn and West Norfolk
Bathing water controller	King's Lynn and West Norfolk
Year of designation:	1996
Water sampling point location	lat, long: 52.94,0.4838, eastings, northing: 567020,340600
Map links	Google Maps , Bing Maps , OpenStreetMap
Nearby bathing waters	Hunstanton (Old Hunstanton) , Heacham , Skegness , Wells



Bathing water sampling location

Surface Water Outfall

2019 Bathing Water Profile for Hunstanton (Old Hunstanton)

Norfolk, England

Current water quality classification is **Good**, based on samples taken from 2016 through to 2019. There are no water quality warnings in force today.



Good bathing water quality
☆☆☆
☆☆
☆

About

Hunstanton is a popular Norfolk coastal holiday resort. The Old Hunstanton beach is at the north end just outside of the town and is a quiet rural beach. The wide sandy beach has a row of colourful beach huts just behind the sand dunes.

Here you can see the recent results from water quality assessments under the Bathing Water Directive. For historical measurements, view the detailed water quality data.



Water quality

Daily pollution update no warnings issued

Samples taken weekly between May 1st 2019 and Sep 30th 2019

Most recent sample was taken 57 days ago
Sep 23rd 2019 12:01

2019 classification ☆☆☆ good

2018 classification ☆☆☆ good

2017 classification ☆☆☆ good

2016 classification ☆☆☆ good

Site details

Local authority King's Lynn and West Norfolk

Bathing water controller King's Lynn and West Norfolk

Year of designation: 1988

Water sampling point location lat, long: 52.95,0.4964,
eastings, northing: 567800,342500

Map links [Google Maps](#), [Bing Maps](#), [OpenStreetMap](#)

Nearby bathing waters Hunstanton Main Beach, Heacham, Skegness, Wells



Bathing water sampling location

Sampling

- Bathing season – 15th May to 30th September
- Generally 20 samples are taken through season (1 prior to 15th May)
 - Frequency can be reduced to 5, 10 or 15 depending on chance of classification change
- Samples should be taken across all tidal conditions and at weekends
 - Some beaches only sampled near high water – H&S or access
- Data also gathered about beach pollution – algae, litter, plastic & dog mess
- Samples analysed by EA National Laboratory Service within 24 hrs of sampling
- Samples analysed for E coli & Intestinal enterococci (FIOs)
- Results published on Bathing Water Explorer ASAP (about 5 days)

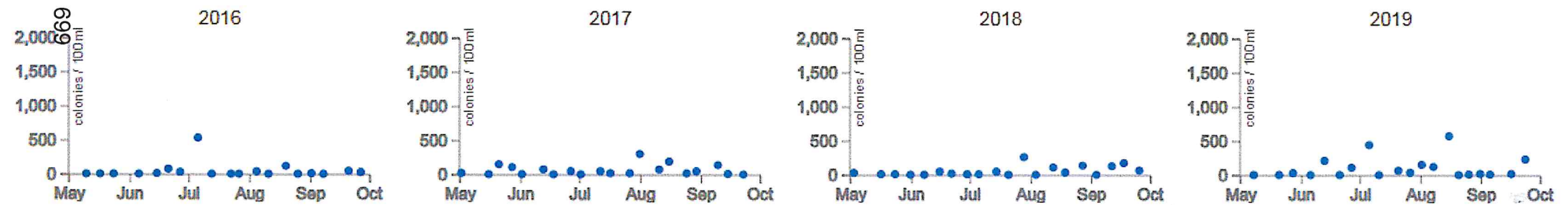


Results for Heacham from BW Explorer

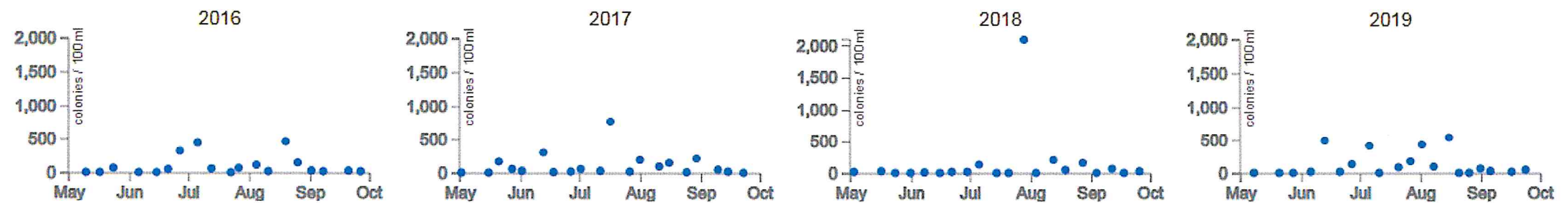
Water quality sample results

See the [help page](#) for additional information on interpreting these charts.

Intestinal Enterococci (IE)



Escherichia coli (EC)

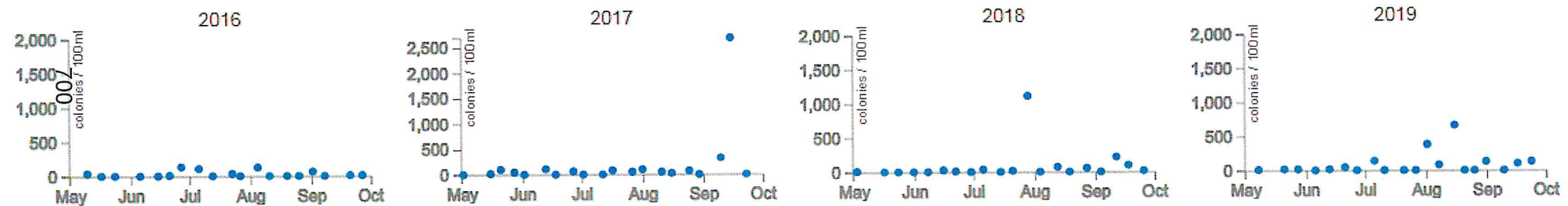


Results for Hunstanton Main from BW Explorer

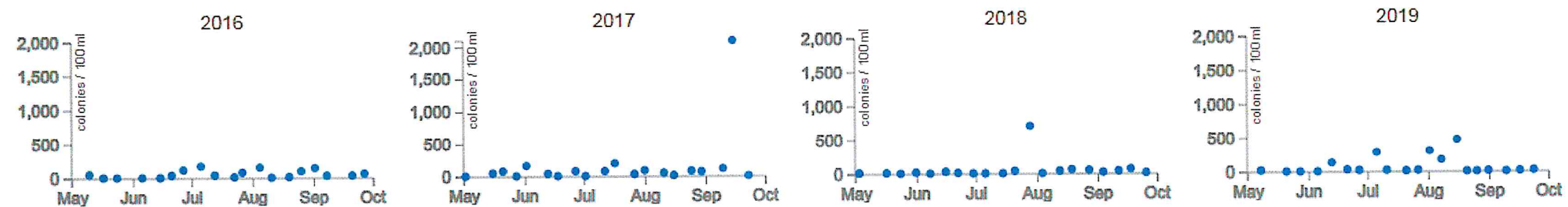
Water quality sample results

See the [help page](#) for additional information on interpreting these charts.

Intestinal Enterococci (IE)



Escherichia coli (EC)

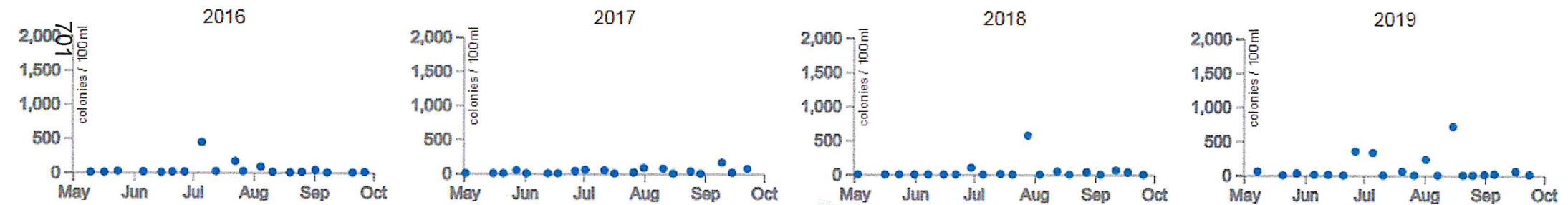


Results for Old Hunstanton from BW Explorer

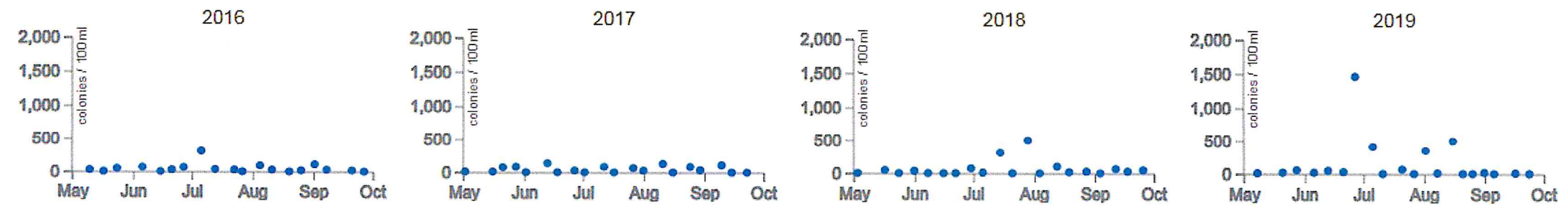
Water quality sample results

See the [help page](#) for additional information on interpreting these charts.

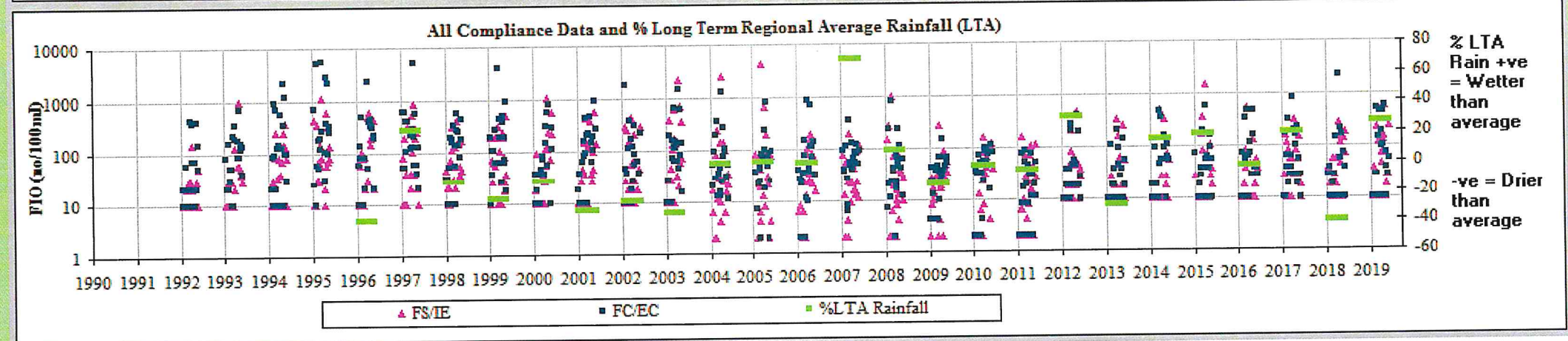
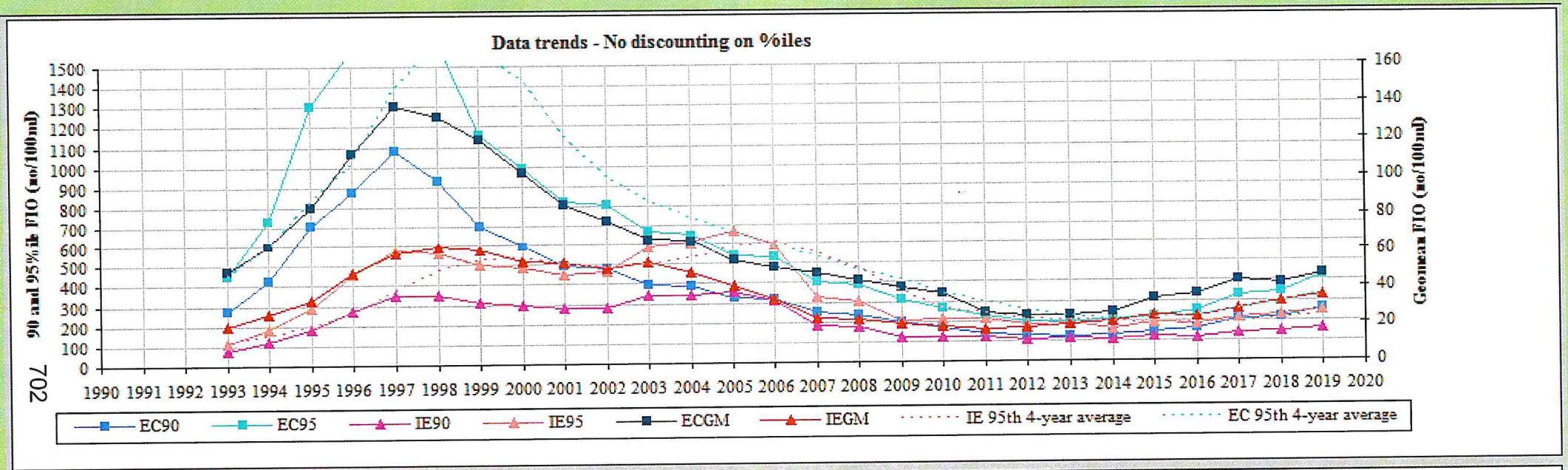
Intestinal Enterococci (IE)



Escherichia coli (EC)

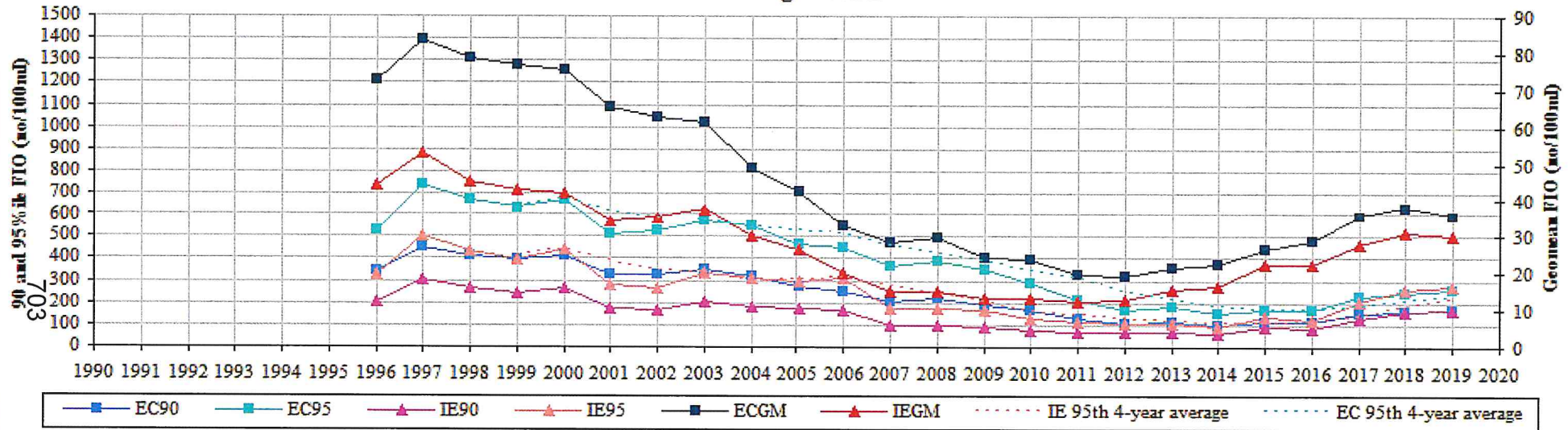


Heacham

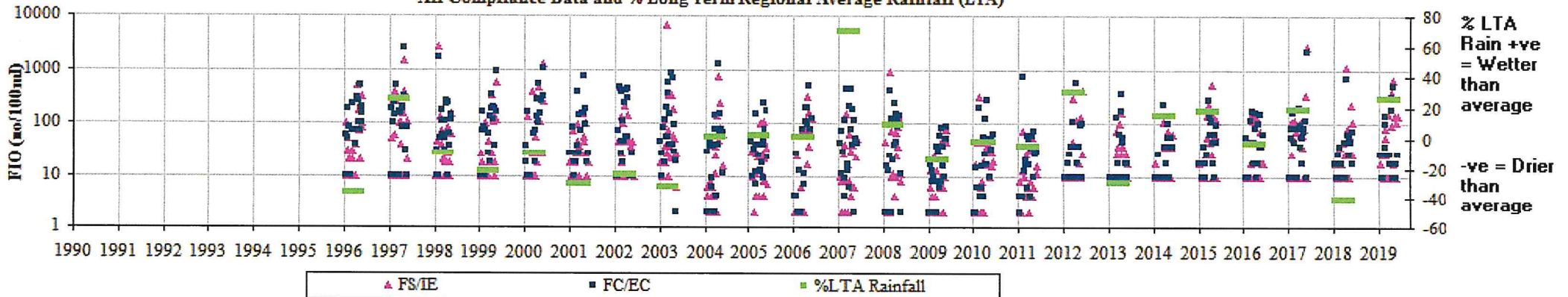


Hunstanton Main

Data trends - No discounting on %iles

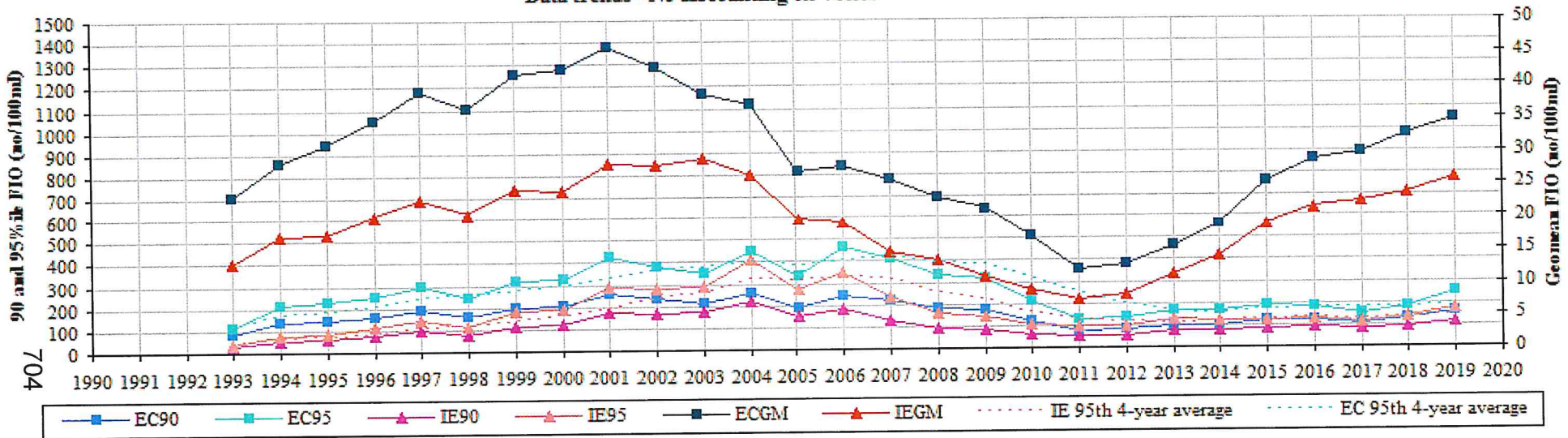


All Compliance Data and % Long Term Regional Average Rainfall (LTA)

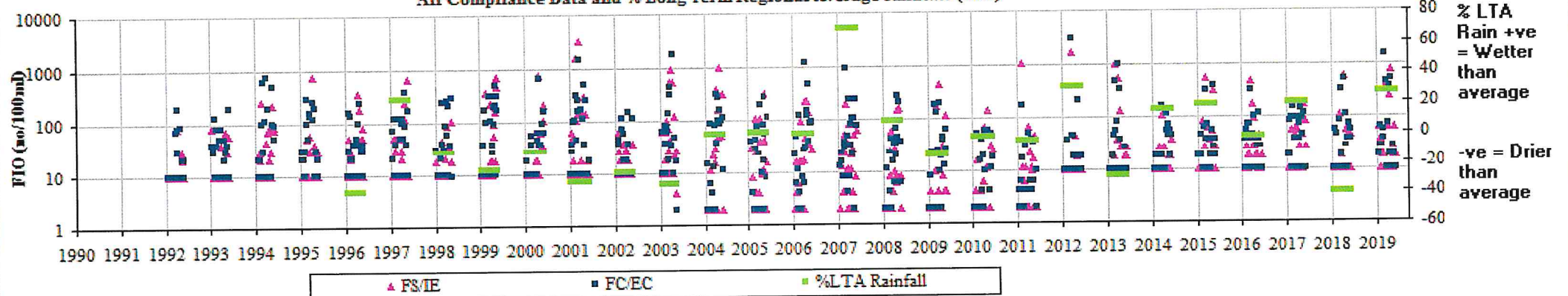


Old Hunstanton

Data trends - No discounting on %iles



All Compliance Data and % Long Term Regional Average Rainfall (LTA)



Classification

- Sample results gathered over 4 years
 - Number of samples range from 20 to 80 depending on sampling frequency
- Classification based on a percentile value (either 90th or 95th percentile)

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Standards (Coastal Waters)	Classes			
	Excellent	Good	Sufficient	Poor
E.coli (EC/100ml), must be <=	250	500	500	>500
IE (IE/100ml), must be <=	100	200	185	>185
	95th percentile	95th percentile	90th percentile	90th percentile

- Results are a national statistic and published by Defra in mid November



THE WASH N BEACH HEACHAM S SANDS CLUB

Results for each parameter

E.coli	
Mean LOG=	1.661741974
Standard Deviation LOG =	0.585144168
95%ile =	424
90%ile =	258

Intestinal Enterococci

Mean LOG=	1.544881533
Standard Deviation LOG =	0.519929132
95%ile =	253
90%ile =	163

Number of results (ecoli)	79
Number of results (IE)	79

Discounted results	0
Number of results inc disc	79
Discounted percentage %	0

4) Classification and standards

Standards (Coastal Waters)

E.coli (EC/100ml), must be <= 100
IE (IE/100ml), must be <= 185

Classes

Excellent	Good	Sufficient	Poor
250	500	500	>500
100	200	185	>185
95th percentile	95th percentile	90th percentile	90th percentile

Classifications

E.coli	Good
Intestinal Enterococci	Sufficient

Overall Classification	Sufficient
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WASH MAIN BEACH HUNSTANTON ADJACENT TO THE OASIS LEISURE CENTRE

3) Results for each parameter

E.coli

Mean LOG=	1.549489988
Standard Deviation LOG =	0.501757329
95%ile =	238
90%ile =	156

Intestinal Enterococci

Mean LOG=	1.482109412
Standard Deviation LOG =	0.551685771
95%ile =	247
90%ile =	155

Number of results (ecoli)	78
Number of results (IE)	78

Discounted results	1
Number of results inc disc	79
Discounted percentage %	1

4) Classification and standards

Standards (Coastal Waters)

E.coli (EC/100ml), must be <= 100
 IE (IE/100ml), must be <= 185

Classes

Excellent	Good	Sufficient	Poor
250	500	500	>500
100	200	185	>185
95th percentile	95th percentile	90th percentile	90th percentile

Classifications

E.coli	Excellent
Intestinal Enterococci	Sufficient
Overall Classification	Sufficient

THE WASH OLD HUNSTANTON BEACH CLIFF PATH

Results for each parameter

coli		
Mean LOG=		1.540176328
Standard Deviation LOG =		0.518216285
95%ile =		248
90%ile =		160

Intestinal Enterococci

Mean LOG=		1.411757859
Standard Deviation LOG =		0.499845439
95%ile =		172
90%ile =		113

Number of results (ecoli)	79
Number of results (IE)	79

Discounted results	0
Number of results inc disc	79
Discounted percentage %	0

4) Classification and standards

Standards (Coastal Waters)

E.coli (EC/100ml), must be <= 100
IE (IE/100ml), must be <= 100

Classes

Excellent	Good	Sufficient	Poor
250	500	500	>500
100	200	185	>185
95th percentile	95th percentile	90th percentile	90th percentile

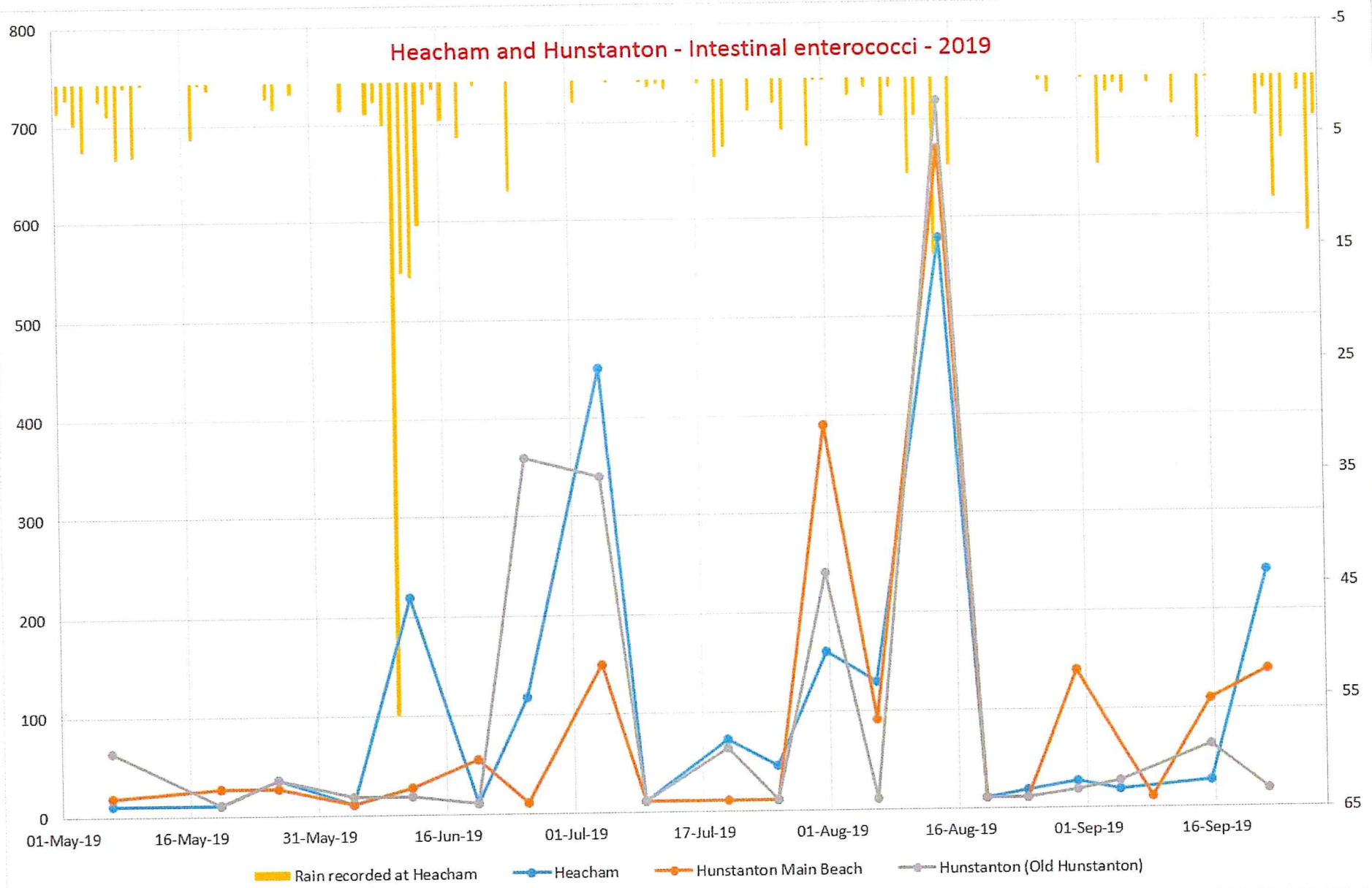
Classifications

E.coli	Excellent
Intestinal Enterococci	Good
Overall Classification	Good

Classification record

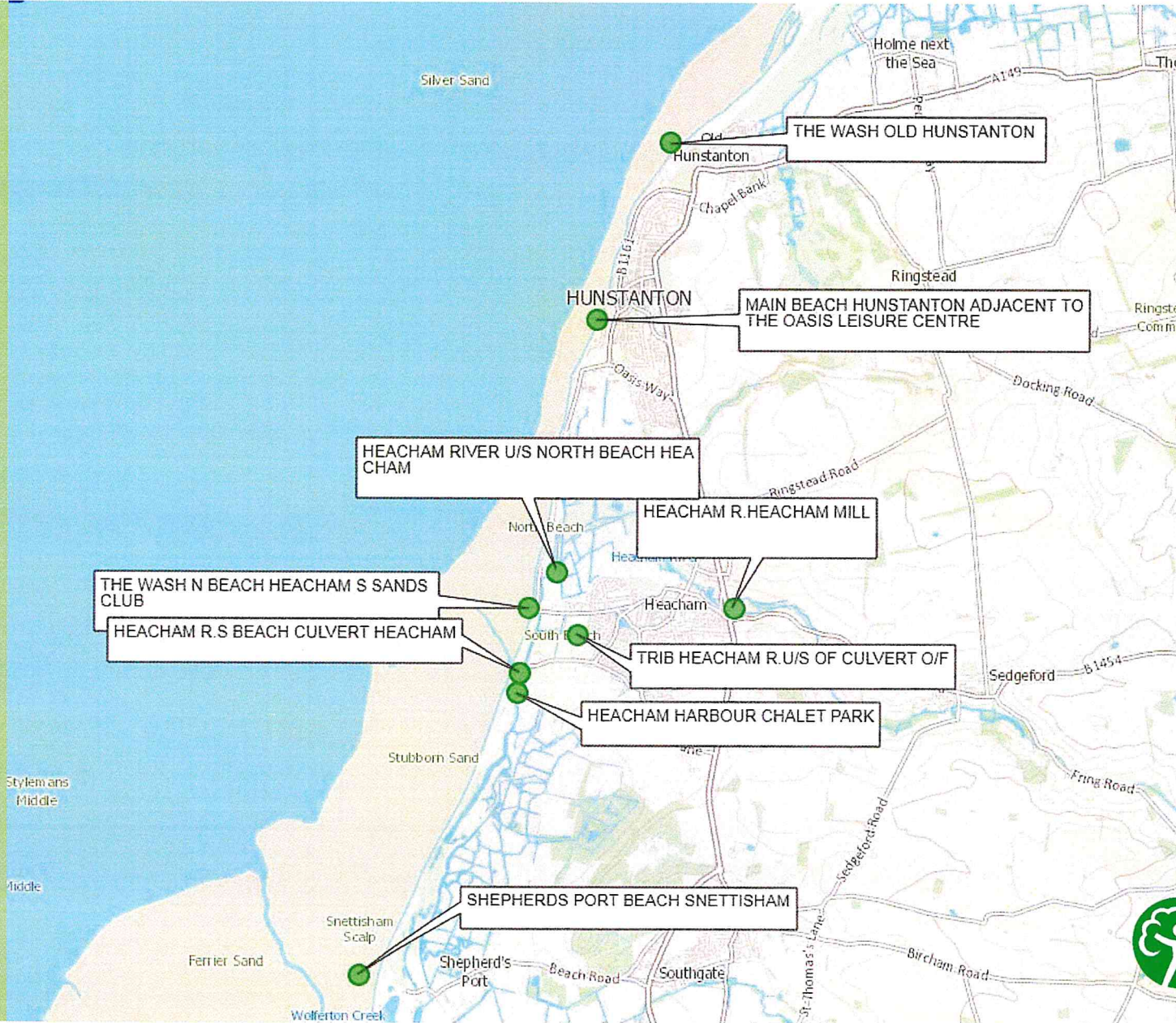
Beach	Des_year	2011	2012	2013	2014	2015	2016	2017	2018	2019
609 Heacham	1988	Sufficient	Good	Good	Good	Good	Good	Sufficient	Sufficient	Sufficient
Hunstanton Main Beach	1996	Good	Good	Good	Excellent	Good	Good	Sufficient	Sufficient	Sufficient
Old Hunstanton	1988	Excellent	Excellent	Good	Good	Good	Good	Good	Good	Good

Heacham and Hunstanton - Intestinal enterococci - 2019



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MST assessment from 2018 & 2019

BEACH	No of MST samples	HUMAN	SEABIRDS	RUMINANT	CANINE	AVIAN
THE WASH OLD HUNSTANTON BEACH CLIFF PATH	4	strong	strong	1 sample positive	none	none
THE WASH MAIN BEACH HUNSTANTON ADJACENT TO THE OASIS LEISURE CENTRE and off sailing club	6	weak	strong	1 sample positive	1 sample positive	none
THE WASH N BEACH HEACHAM S SANDS CLUB	3	moderate	strong	none	none	none
HEACHAM R.S BEACH CULVERT HEACHAM	4	1 sample positive	significant	strong	none	none
HEACHAM RIVER U/S NORTH BEACH HEACHAM	2	1 positive sample	weak	strong	none	none
HEACHAM HARBOUR CHALET PARK	4	moderate	weak	strong	v weak	none
TRIB HEACHAM R.U/S OF CULVERT O/F	4	strong	weak	v weak	none	none

Pollution Risk Forecasting

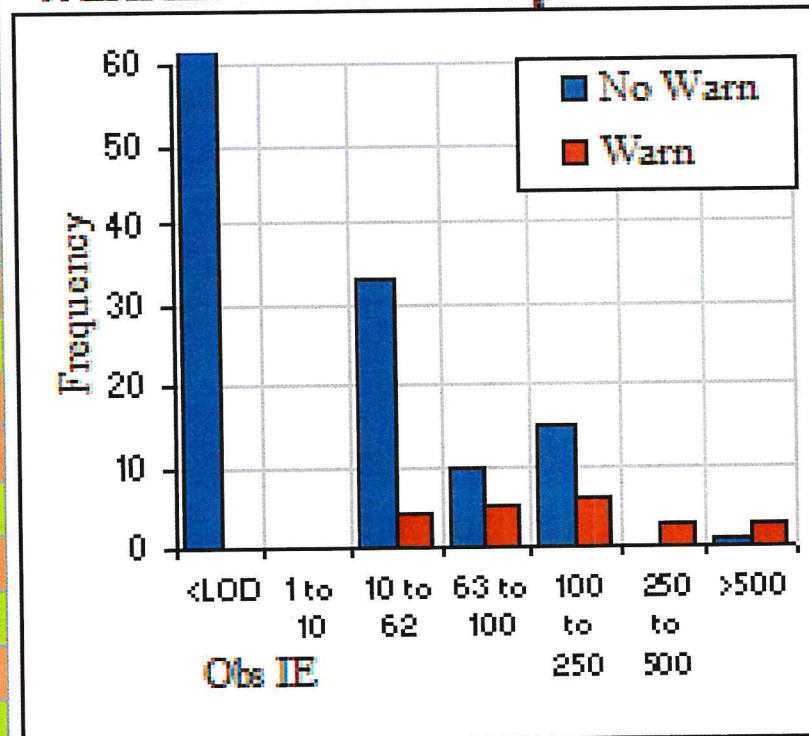
- Provides information to the public when it is possible to predict water quality
- Applies if there is a strong link between rainfall and bathing water quality
- A sign has to be posted throughout the season to inform the public
- Every morning (9am) during the BW season the EA uses measured rainfall (rain radar) in the catchment to determine the risk to water quality
- If it exceeds a predetermined threshold a warning is issued by email and/or text message
- A notice has to be posted at the beach (LA) by 10am and a message included on the BW Explorer advising that water quality may be poor
- If a warning is issued **and** a sign is posted at the beach **and** the EA sample the beach the sample result can be discounted from the annual classification.
- The forecast & warning applies for 24 hrs.

Scenario 5 Raw Data

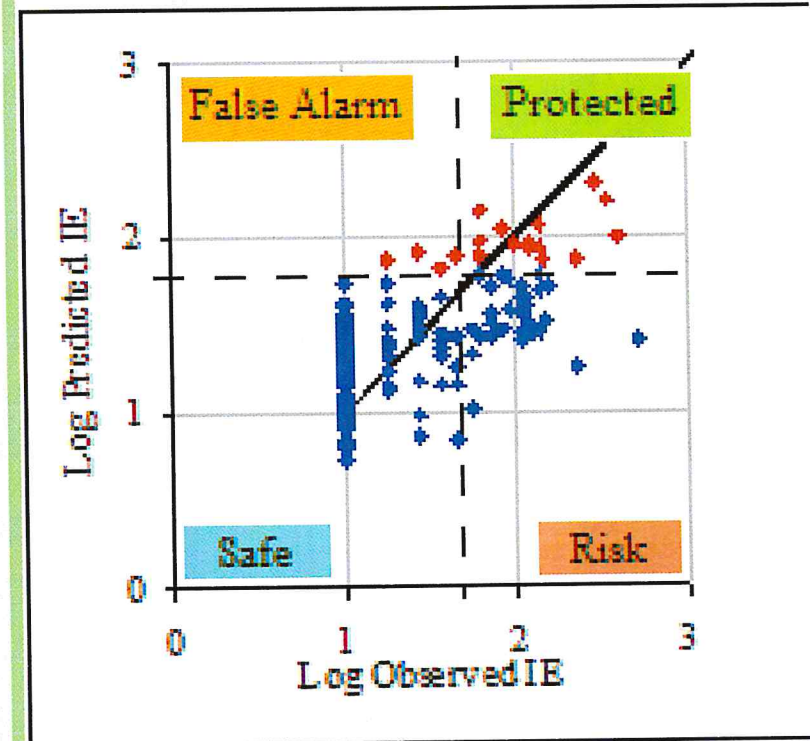
Sampling Date/Time	Purp	Sample IE	MLR 70%
4/09/17 12:44	MS	2700	232
8/07/18 09:31	MS	1118	689
5/08/19 09:01	MS	670	470
4/08/15 09:25	MS	520	25
1/08/19 10:00	MS	390	96
9/09/17 09:31	MS	340	159
6/07/12 11:55	MS	294	198
1/09/18 09:53	MS	230	74
6/07/15 09:30	MS	230	17
0/08/13 11:25	MS	155	52
5/07/19 10:15	MS	150	33
6/06/16 10:45	MS	144	74
1/08/19 09:27	MS	140	49
3/09/19 12:20	MS	140	28
4/07/15 10:15	MS	136	117
9/08/15 10:31	MS	136	60
4/08/16 11:05	MS	136	83
0/09/12 14:05	MS	127	27
05/07/16 10:00	MS	118	87

PRF calculations for Hunstanton Main

Warn and Non Warn Days



Observed vs Predicted



Pollution Risk Forecasting

715

Beach	PRF in 2019	PRF in 2020	Likely number of warnings per season
Heacham	Yes	Yes	26
Hunstanton Main	Yes	Yes	20
Old Hunstanton	Yes	Yes	9

Pollution incidents

- Report to Environment Agency – 0800 80 70 60
- EA will investigate and determine impact, severity & probable duration
- Liaise with local authority and water company as appropriate
- Message (advice against swimming) may be published on Bathing Water Explorer
- The sampling programme could be suspended
- Local Authority may be required to place notices at the beach to advise against swimming.

7/16

If you see a problem:

Report it to 0800 80 70 60

Environment Agency 24hr hotline



Thank you

Any questions