



**South West
Water**

2019 NATIONAL BATHING WATER CONFERENCE - HIGHLIGHTS

Paul McNie – Waste Water Environment Manager

13th December 2019

2019 NATIONAL BATHING WATER CONFERENCE HIGHLIGHTS



UK Bathing Waters Group

UK Bathing Waters Conference 2019
(Hosted by Department of Agriculture Environment and Rural Affairs)

The Assembly Rooms Belfast
19 - 21 November 2019



Conference sponsors



Belfast
City Council



Cyfoeth Naturiol Cymru
Natural Resources Wales



Department
for Environment
Food & Rural Affairs



Environment
Agency



Llywodraeth Cymru
Welsh Government



National
Oceanography Centre
NATURAL ENVIRONMENT RESEARCH COUNCIL



northern ireland
water

NORTHUMBRIAN
WATER living water

Siren^{SW}
A Plainfast Product



The Scottish
Government
Incorporated in Scotland



SEPA
Scottish Environment
Protection Agency



South West Water



YorkshireWater

Themes:

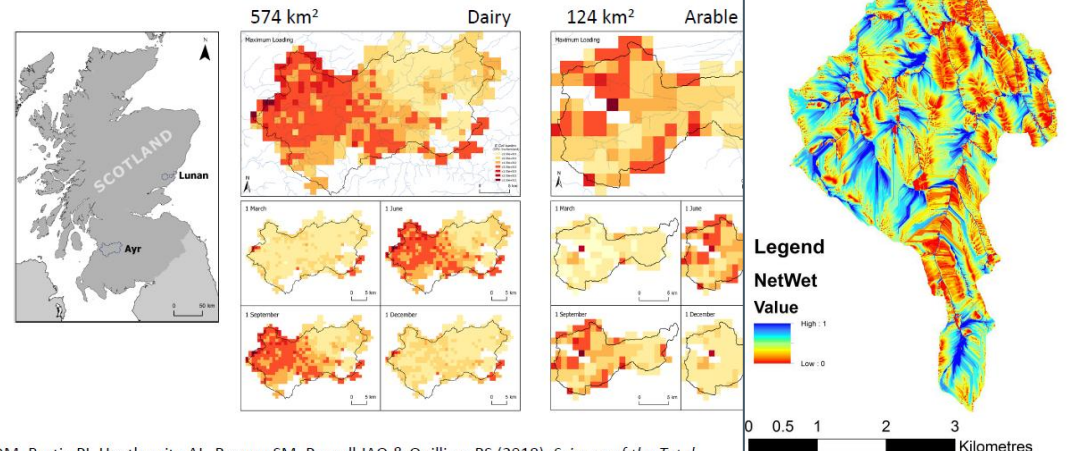
- Tourism
- Access / Recreation
- Quality
- Engagement
- Research & Development
- Benefits
- Emerging Risks
- Partnerships

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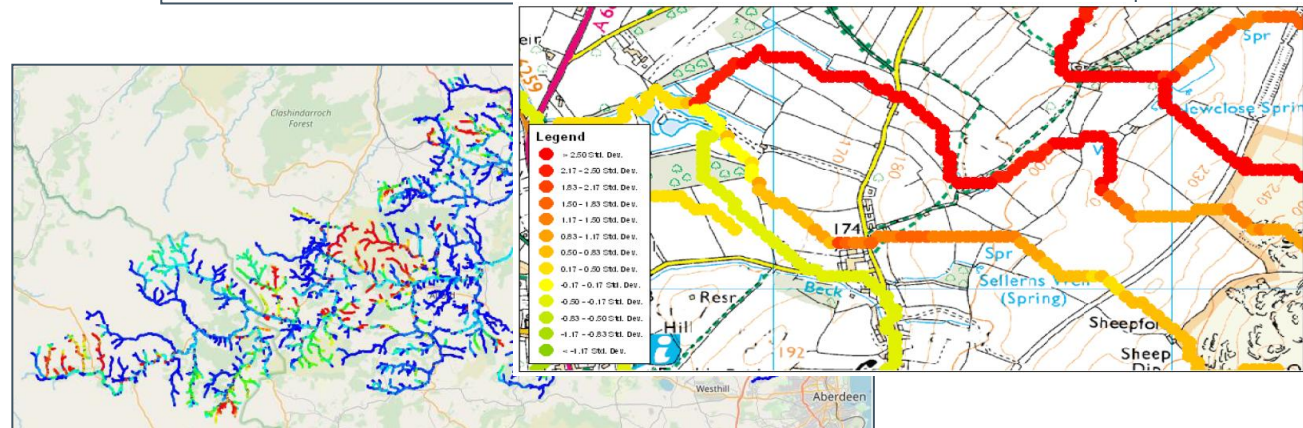
Modelling

- Improved forecasting
- Relevant variables
- Catchment level
- Sources apportionment
- Pathways
- Understanding
- Communication

Development to Catchment Scale



Oliver DM, Bartie PJ, Heathwaite AL, Reaney SM, Parnell JAQ & Quilliam RS (2018). *Science of the Total Environment*, 616-17, 678-687.

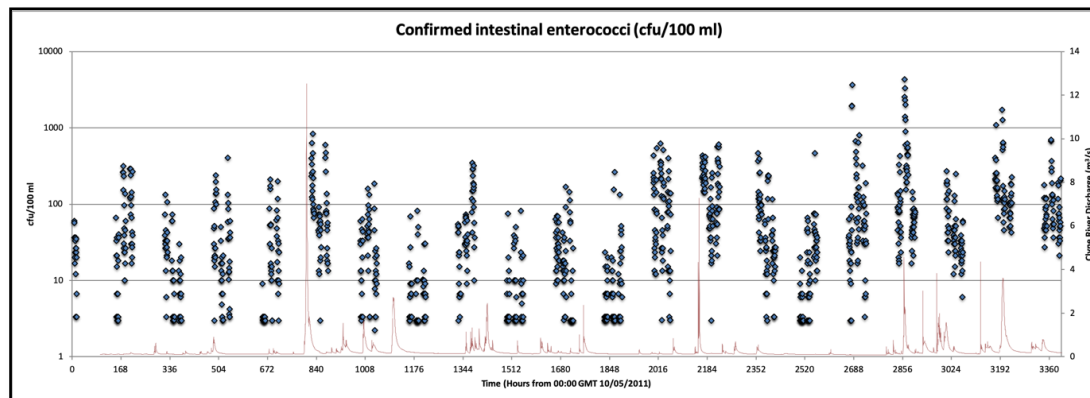


www.nercviper.co.uk ; www.fio.scimap.org.uk

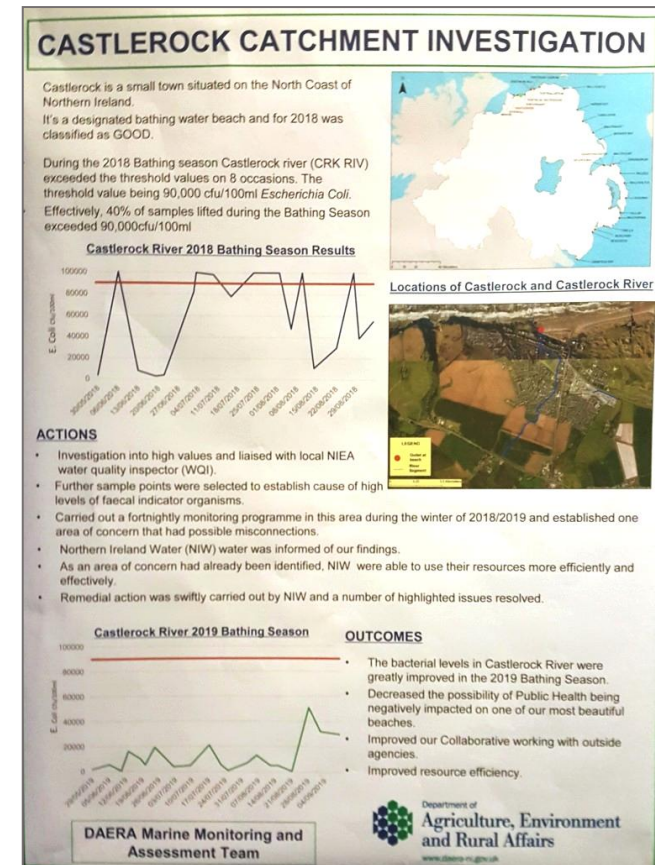
2019 NATIONAL BATHING WATER CONFERENCE HIGHLIGHTS

Modelling

- Within day variability demonstrated at multiple 'at risk' bathing waters
- Up to 90% reduction in high flow bacte catchment loads achievable
- High cost/intensive sampling required
- Could routine predictions replace regulatory sampling (most of the time)?



BeachWise Forum – 13th December 2019



2019 NATIONAL BATHING WATER CONFERENCE HIGHLIGHTS

Modelling



≈



Newport North bathing water (Pembrokeshire)

Diffuse agricultural stream risk upto 1,000,000
Ec/100ml



E.coli
'equivalence'

2019 NATIONAL BATHING WATER CONFERENCE HIGHLIGHTS

Modelling



≈



Intestinal enterococci
'equivalence'

2019 NATIONAL BATHING WATER CONFERENCE HIGHLIGHTS



Inclusive Beaches

In 2016, we initiated design solutions and processes so that people who couldn't participate on beaches in N.I. would be empowered to do so. We gave ourselves a target of creating inclusion on at least one beach in each beach-operating council area. Thanks to partnership with councils and support from funders, we are now **#CreatingChangeTogether**. The summer of 2019 should see 3 out of 4 council areas become operational.



What is an Inclusive Beach?

An Inclusive Beach is a barrier-free environment where people of differing ability, who may have been excluded until now, can come along and take part. All beaches will have beach mobility equipment available to pre-book free of charge. Operating seasons, schedules and equipment options will differ from beach to beach. We ensure that we address toileting need, hoisting and adult changing bench facilities, wheelchair vehicle unloading areas, temporary walkways and accessible beach mobility equipment storage points. If you find you have a need we haven't thought of, please get in touch!

5 Step Booking Process

1. Ensure you have membership of Mae Murray Foundation - which is free!
Go to www.maemurrayfoundation.org
2. On the 'Beach page' of website - read Frequently Asked Questions and Terms & Conditions.
3. Check beach schedules and equipment options for your preferred beach. **NB If unsure about which piece of equipment is best for you, contact MMF office.**
4. Complete online booking request form. **NB You must send your request at least 72 hours in advance.**
5. Await confirmation email with further instruction. If no email is received contact Mae Murray Foundation office on 0300 600 1166.

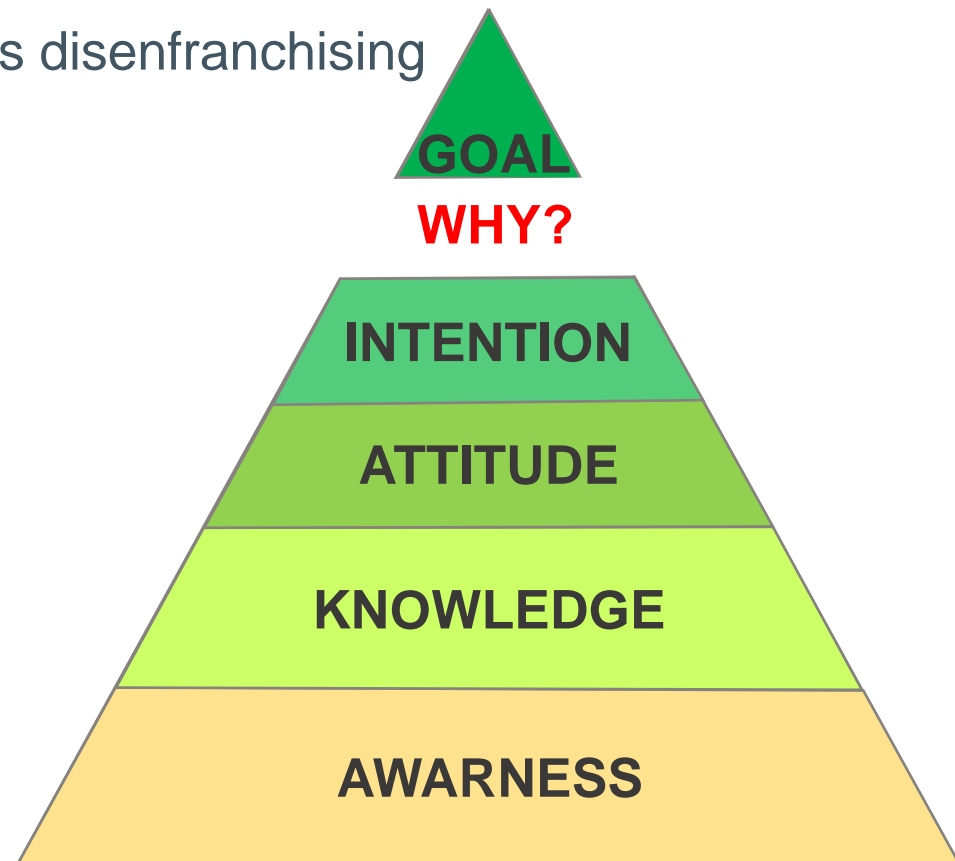
Access

- UN Declaration of Human Rights
- Inclusive / Enabling
- Free
- Membership led
- Individuals & families supported
- Council partnerships
- RNLI partnership

www.maemurrayfoundation.org

Blockages and Behavioural Change

- 80% of 40K blockages/yr = SRD
- Negative/directed messaging is disenfranchising
- Understanding social decision making processes
- Social collective normalisation
 - targeted marketing
 - moments of change
 - comparative marketing
 - 'gamification'
 - repetition
- 89% reduction in sanitary item flushing



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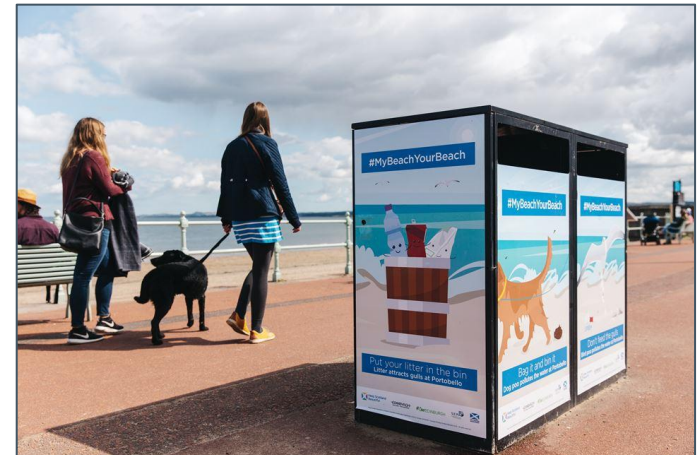
Dog & Gull Fouling, Littering and Behavioural Change

- Targeted - 3 beaches
- 2 year campaign – social media & site
- local groups and business engagement
- FOG/SRD & Misconnections
- Sustained presence / maintain facilities
- Monitoring

Benefits:

- 95% engagement of beach users
- 48-70% reduction in litter (Yr 2)
- Dog fouling significantly reduced at all sites
- Online toolkit

(www.keepsotlandbeautiful.org/mybeachyourbeach/toolkit)



Benefits of Cold Water Swimming

- **What is meant by cold?**
- **What is meant by swimming?**
- **Cold adaptation – extends benefits**
- **Physiological responses**
 - **increased blood flow**
 - **improved heart function**
 - **immune response**
 - **reduced depression**





South West Water

