



The Oxford Rivers Project

Claire Robertson

#endsewagepollution mid-Thames

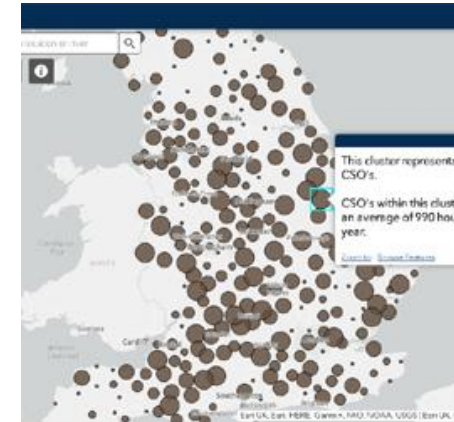
Oxford Rivers Project Officer, Thames21

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The problem

- Sewage should go through 3 treatments before being released into rivers or the sea. Legal to release raw sewage in 'exceptionally heavy rainfall'
- Growing access to and awareness of the scale of the problem: Guardian reporting, Rivers Trust "Is your river fit to play in?" Map
- 2020 across England and Wales: 400,000 raw sewage spills, 3.1 million hours
- Upper Thames 2020 (to Dorchester on Thames): 50,000 hours. Equivalent to each STW discharging for 20 days a year!



• This article is more than 1 month old

Water firms discharged raw sewage into English waters 400,000 times last year

Data published for first time by Environment Agency shows 27% increase on previous year





How to get more information on your local river...

- Is your river fit to play in? A map of location and hours of sewage spills --> <https://bit.ly/3B4p2Fs>
- You can also submit a FOI request to Thames Water for your area – it's simple to do, and they must respond within 20 working days.
- How healthy is my river? Map --> <https://bit.ly/3ryBQAA>
- This map tells you the overall status of your river, and the reasons for not achieving 'good' or above status
- Only 14% of rivers in England and Wales are 'good' or above...and barely any in Oxfordshire!



Give the Thames through Oxford designated bathing water status



EndSewagePollution Thames started this petition to Environment agency
i.e. the undersigned, would support Designated Bathing Water status being granted for a stretch of the Thames through Oxford.

5,233 have signed
Richard Hs
Leon Xavi
En Th
Send a Facebook message
Send an email
Tweet to your followers
Copy link
Show this petition



The campaign

- "End Sewage Pollution mid-Thames" group. Aim: to stop the thousands of raw sewage spills into the upper Thames
- August 2020: ~100 at floating protest, Port Meadow
- September 2020: 5,000+ signed petition for
 - Designated bathing water area in Oxford
 - Real-time alerts of raw sewage discharges
 - Upgrades to wastewater treatment works
- October 2020: Oxford City Council unanimously voted in favour
- December 2020: Meeting with CEO of Thames Water, Sarah Bentley

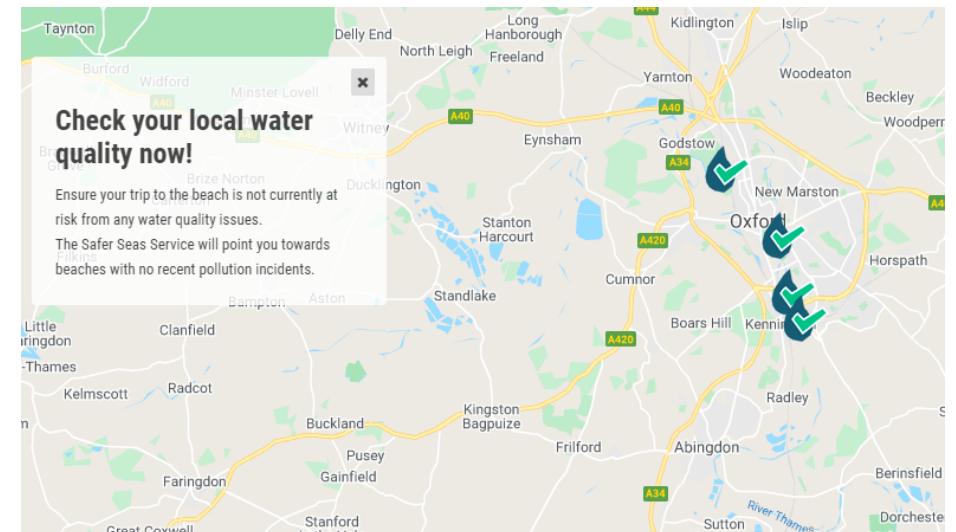


The Oxford Rivers Project

- ...and the local community
- Launched April 2021
- Water quality testing for bacteria – citizen scientists
- Real-time alerts of sewage spills from 6 locations
- Bathing water status application
- One paid position (2 days/week), other hours contracted

Sewage spill alerts

- The aim: alerts from 6 locations in and around Oxford: 2 CSOs, 3 STWs, 1 SPS. Real-time, with a follow up 24 hours later to indicate continuous spilling
- April 2021 - on Twitter @oxthamessewage
- June 2021 - email sign up on Thames Water website: thameswater.co.uk/about-us/performance/river-health
- Alert system failed on multiple occasions – undermined trust
- Oct 2021 Map of notifications – Surfers Against Sewage "Safer Rivers and Seas"
- Thames Water will provide real time alerts from ALL locations by the end of 2022.



Water quality testing

- Testing for 2 different bacteria (E coli and intestinal enterococci) - faecal indicator organisms
- 18 locations, including 4 popular swimming spots in Oxford
- Weekly testing until December
- Volunteer citizen scientists
- The longest study of its kind – key data on effect of sewage and other pollution on rivers.
- Open access water quality results posted weekly: <https://endsewagepollutionthames.wordpress.com/water-quality-testing/>



E Coli and intestinal enterococci =
faecal indicator organisms

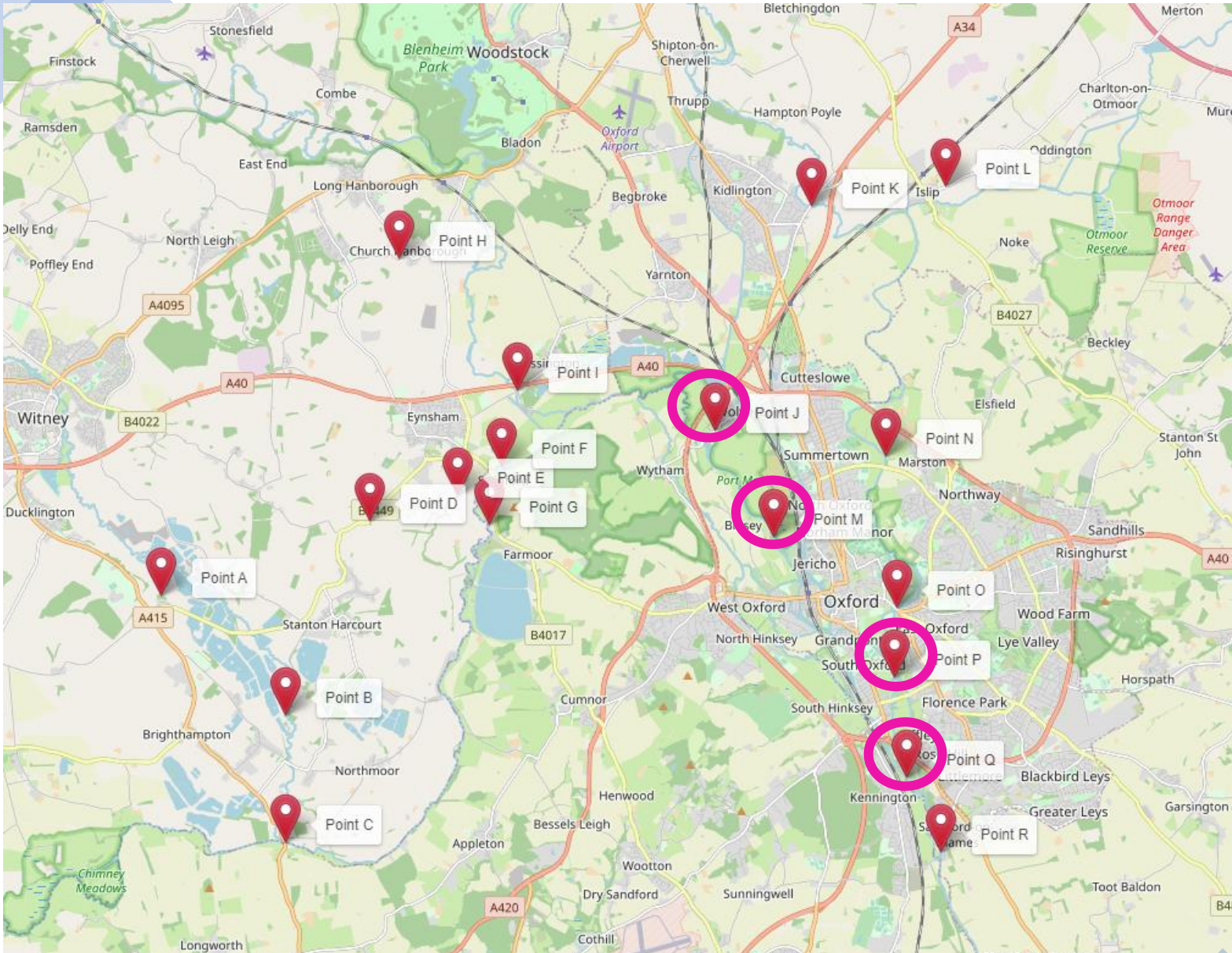
4 popular swimming locations (pink
circles)

Other sites on different tributaries:
Windrush, Evenlode, Cherwell, Ray

Are swimming sites bathing water
standard?

Where is bacteria coming from?
Which tributaries (location), sources
(ratios of bacteria, relation to
weather)

Is bacteria higher in any particular
month/day/season/weather?



Results to date

- All four swimming sites would be classed as 'poor' under bathing water regulations
- Rainy months (Jan, Feb, May, June) bacteria levels have been very high. In drier months (Mar, April, July, August), levels have been much lower, at good/excellent levels
- Wider catchment:
- Broadly the same pattern, but some exceptions e.g. some low bacteria levels even in wet weather
e.g. some appallingly high bacteria levels, even in dry weather
- Ratios of bacteria species indicate sewage is the main culprit.

	Log total M	No of Samp	Arithmetic Me	Std Dev
<u>E.coli</u>	42.88	17	2.52	0.51
<u>Enterococ</u>	24.15	17	1.42	0.93

<u>E.coli</u>			
Sufficient (900) B/W standard	90%ile		1491.84
Excellent (500) and Good (1000) B/W	95%ile		2294.46
<u>Enterococci</u>			
Sufficient (330) B/W standard	90%ile		415.29
Excellent (200) and Good (400) B/W	95%ile		916.50

Log total J No of Sample			Arithmetic Mean	Std Dev
<u>E.coli</u>	46.61	18	2.59	0.49
<u>Enterococ</u>	27.44	18	1.52	0.93
<u>E.coli</u>				
Sufficient (900) B/W standard			90%ile	1627.10
Excellent (500) and Good (1000) B/W			95%ile	2454.58
<u>Enterococci</u>				
Sufficient (330) B/W standard			90%ile	526.88
Excellent (200) and Good (400) B/W			95%ile	1162.50

Bathing water status application

- Weekly water quality testing for bacteria harmful to human health and signage
- France has 500+ rivers designated, Italy 73, Germany 38... why so few in the UK?
- 5 years to achieve at least sufficient status
- Applying for Port Meadow: SSSI, SAC, Historic Monument. Common land owned by Oxford City Council, still grazed by commoners.
- Hosts multiple watersports clubs (sailing, rowing, angling, canoeing, kayaking). There is also a marina and it's a navigable channel.
- Popular walking and picnic area, swimmers all year round. Historic bathing area



Bathing water status surveys

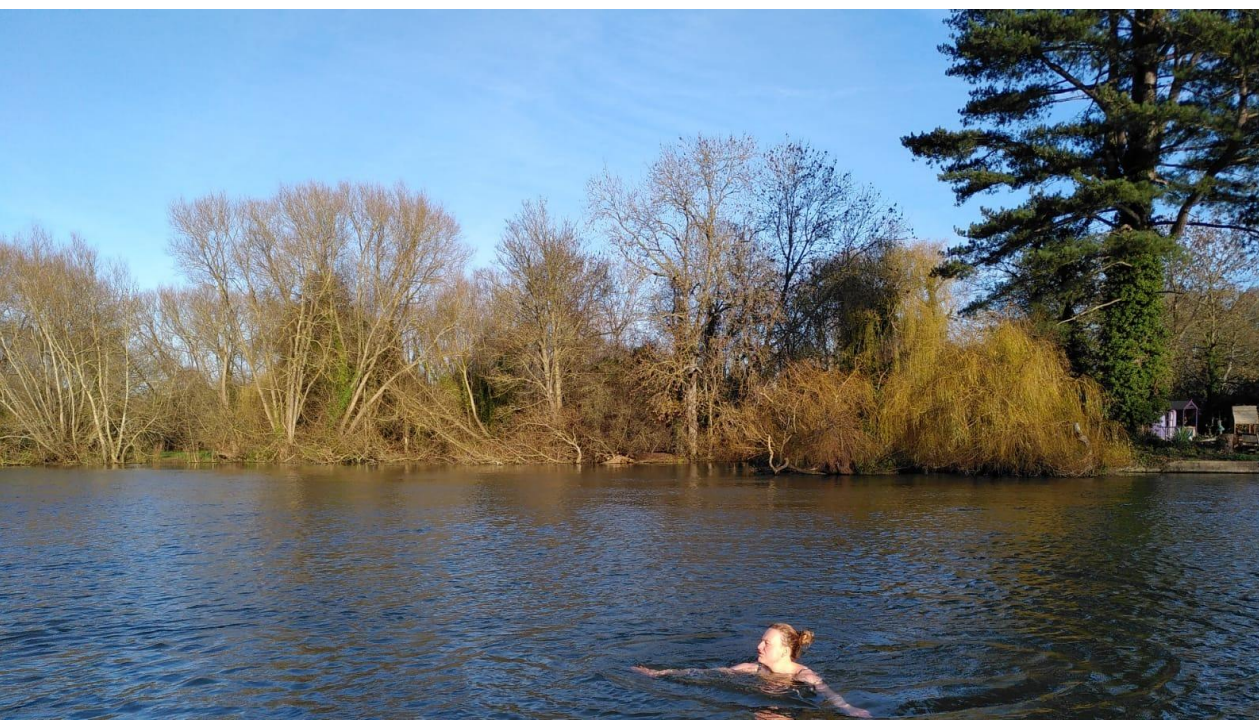
- May – September 2021: 140 counts of swimmers and other river users.
- Over 2,000 use the river (swimming, paddling, kayaking, picnicking) at Port Meadow on sunny days at peak times
- Consultation of residents, businesses, interest groups: 233 responses, 96% in favour of DBWS
- Many express view that monitoring should happen is self-evident: surprise and anger it doesn't happen already
- October 2021: 2 applications sent to DEFRA, for North and South



Oxford river users survey

- Survey of 'informal river use' (swimming, paddling, kayaking etc.)
- Where and when do people swim, what benefits do they gain, what would they like to see change?
- Launched Feb 2021 – 1,200 respondents. Most popular stretch is Port Meadow (~ a third of all swimmers' top spot)
- **60% of people said their top concern was cleaner water. The second top concern was access (8%)**
- 75% swam in the river weekly in summer months. 1 in 5 swam all year round





What does going in the river mean to you?

- "Sense of peace and calm, at one with nature, viewing the world from a different perspective"
- "I like the old school aspect of it, it feels freeing. It's great that we can do so in an uncontrolled way"
- "It keeps me happy, it's the best part of any day/week/month/year"
- "I have recently been suffering from chronic back pain and the water is one of few places it doesn't hurt"

Recent developments...

- Cassington sewage treatment works, the STW closest upstream to Port Meadow on the Thames, under investigation...
- Our data and film footage raises suspicions Thames Water are not treating to the required standard.
- Report by Windrush Against Sewage Pollution (WASP) suggest 3,000 'dry' or 'early' spills
- Report by Oxford Rivers Improvement Campaign – 104 STWs assessed, over half spilled raw sewage for 500 hours or more, 46 do not have capacity to treat current levels!

Raw sewage spills into Thames tripled since 2018

Ben Webster, Environment Editor

Wednesday January 05 2022, 12:01am,
The Times



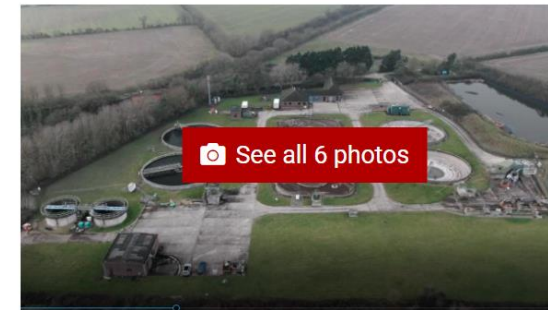
The quality of water in the Thames was studied by the Oxford Rivers Improvement Campaign
ALAMY

News

20th January

Cassington sewage works under investigation ahead of protest against Thames Water

By Miranda Norris
Senior reporter



See all 6 photos

f t in e 0 comment

AD

Grandma Attacked By Coward

Police: Grandma attacked by coward, what she did next had him running scared.

getsafepersonalalarm.com

Open

Most read

Commented

1



Road closed after incident involving lorry and cyclist

Have we been a success?

- Passionate and engaged local community – 20 regular volunteers, around 50 casual volunteers, many more engaged through traditional and social media, sewage alerts and events;
- Positive local council and MP response; local stakeholders (e.g. Port Meadow ranger) on board;
- Engagement from Thames Water;
- Support from Rivers Trust and Thames21



What next?

- Full report on water quality testing due Feb 2021;
- Decision on bathing water status; **consultation runs Weds 9th Feb 2022 to Weds 2nd March 2022**
- Further investigations in 2022 of sources of bacteria – **but we need more regular and informed volunteers**

