



ADUR & WORTHING
COUNCILS

Key Decision [No]

Ward(s) Affected: Marsh Barn, St Nicolas,
Marine, St Marys

Report by the Director for Communities

Officer Contact Details

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Executive Summary

1. Purpose

- 1.1. The purpose of the report is to advise the Committee of the recent Consultation undertaken by Southern Water on their draft Drainage and Wastewater Management Plan.
- 1.2. The report also considers and responds to the JOSC recommendation “To work together to designate the river Adur in Shoreham as a bathing river to enable bacterial testing” following discussions between Officers and Cabinet Members.

2. Recommendations

- 2.1. To note the Council’s response to the draft Drainage and Wastewater Management Plan.
- 2.2. That members consider the challenges outlined in this report of designating the river Adur as a bathing water at the current time.
- 2.3. To note that bacterial testing already takes place at 4 locations on the River Adur and the results are publicly available.

2.4. Note that the Council is working with Southern Water to implement improvements to water quality on the river Adur.

3. Draft Drainage and Wastewater Management Plan

- 3.1. Southern Water have recently consulted on their first regional Drainage and Wastewater Management Plan (DWMP) which sets out their long term plan, identifying investment needs for drainage and wastewater systems. The plan outlines what needs to be done in the next 20-30 years to meet the challenges of a growing population and protecting our environment in a time of a changing climate.
- 3.2. The regional plan is supported by five Investment Plans and is based on the plans for each River Basin Catchment and the drainage and wastewater systems within these. The Adur and Ouse catchment DWMP identifies flooding, pollution and water quality as the main concerns in the Shoreham wastewater system. It highlights that sewer flooding, storm overflow performance, flooding due to hydraulic overload and surface water management as very significant risks. The DWMP lists investment needs with an estimated cost of some £2.6 billion across the region over the next 25 years which includes improvements to infrastructure and storm overflows in Shoreham.
- 3.3. Supporting information within the DWMP acknowledges that on average there are 45 overflow discharges per year which will be having an impact on water quality in the Adur.
- 3.4. The Council already undertakes extensive water quality sampling on the river Adur in Shoreham and levels of Escherichia coli and Intestinal enterococci have been recorded at levels that are considered high and would have public health implications.
- 3.5. A response to the consultation has been provided to Southern Water and can be found in Appendix 1 & 2.

4. Background to Bathing water

- 4.1. A bathing water is a coastal or inland water that attracts a large number of bathers in relation to any infrastructure or facilities that are provided, to promote bathing at the site. There's no set limit for how many bathers are needed for a site to be identified as a bathing water. A bathing water could be

a coastal water in a large resort or a smaller site attracting a large number of bathers for its size.

- 4.2. Local authorities usually apply for designation, but anyone can apply. Local authorities must support all applications and landowners must support applications for privately owned sites.
- 4.3. The following sites in Adur and Worthing are already designated bathing waters and attained the following classification last year. The Environment Agency monitors seawater bathing quality at Lancing, Shoreham Beach, Southwick and Worthing.

Site	Classification 2022	Year first designated
Worthing	Good	1988
Lancing, Beach Green	Excellent	1988
Shoreham Beach	Excellent	2014
Southwick	Excellent	1988

- 4.4. In England, there are currently 419 designated bathing waters; 405 coastal and 14 inland. The inland bathing waters are situated on eight lakes (Windermere has four bathing waters and Hampstead Heath has a further three) and one newly-designated stretch of the River Wharfe in Yorkshire (a second is proposed nearby). Being designated means that they are monitored by the Environment Agency for pollution that contains bacteria harmful to health. The Council already undertakes monthly monitoring at four sites on the River Adur (see 6.4).
- 4.5. The Joint Overview Scrutiny Committee met Southern Water in January which resulted in a number of recommendations. One of the recommendations was *“To work together to designate the river Adur in Shoreham as a bathing river to enable bacterial testing.”*

5. Process for obtaining bathing water designation

- 5.1 To obtain a bathing water designation an application has to be made to DEFRA by 31st October and accompanied by supporting evidence. A valid application requires the landowners agreement to support the application.

- 5.2 An application must include a user survey, information about facilities at the site and evidence of a consultation.
- 5.3 User surveys have to be undertaken during the bathing season (15 May to 30 September) at peak use times (weekends, bank holidays and school holiday periods). They should cover a minimum of 20 days, including 10 weekend or bank holiday days. Half of all survey days must be during school holiday periods.
- 5.4 Surveys should be undertaken when high numbers of users are expected. This could be during the warmest part of the day and must show a breakdown of the swimmers, children paddling and other beach and water users (Defra counts adults swimming and children both swimming or paddling as bathers).
- 5.5 Information is to be provided on available facilities and infrastructure that support and promote bathing including; ease of access to the site, public toilets, changing facilities, parking or public transport, provision of lifeguards, first aid service, cafes, shops, kiosks, signage, boardwalks, pontoons, safety ropes and buoys.
- 5.6 The consultation requires evidence of local groups who would be affected by the designation such as water users, waterside businesses, residents, local environmental and civic groups, chamber of commerce, natural England, RSPB, etc. We would seek opinions about the most suitable part of the river as a bathing water (around 500m in length).

6. The River Adur

- 6.1 Going upstream from its estuary at Shoreham-by-Sea, the river is subject to strong tidal currents and remains tidal inland to a point beyond Henfield and has a right of navigation from the estuary to Shermanbury. The river has one of the greatest tidal ranges in the country from 0.2m to 7.0m.
- 6.2 The Environment Agency has the most statutory duties and responsibilities regarding water quality, water resources, Biodiversity, flood risk management, etc. The Estuary is a Site of Special Scientific Interest (SSSI) so Natural England is also very much involved. Much of the Estuary is owned by the RSPB who have a large Wildfowl Reserve on the River Adur. The River Adur is claimed by the Duke of Norfolk, with the consequence there are no public rights of navigation or fishing. Permission for these activities should be obtained from Norfolk Estates in Arundel. Shoreham is still an important south

coast port administered by Shoreham Port Authority. Principal cargoes include timber, refined oil and gravel dredged from the sea.

6.3 Along the length of the River Adur there are a number of combined sewer overflows which discharge during peak periods. In addition bacteria and other pollutants can come from many other sources including agricultural livestock, wildlife, birds and road drainage as well as misconnections of foul and grey water into storm water sewers which feed into the river.

6.3 There are over 40 houseboat mooring plots within the area, on which are situated houseboats of varying size, age and appearance. The houseboats are connected to mains water and electricity but, with a few exceptions, are not connected to the public sewer (Southern Water). Sewage is discharged directly into the river (in the majority of cases first having been macerated).

6.4 Officers take samples of water from the River Adur to check for the presence of potentially harmful bacteria such as Escherichia coli (E.coli). Samples are collected monthly from the following sites along the river's estuary (known as transitional water) :

- Old Shoreham Toll Bridge
- Adur Ferry Bridge
- Norfolk Bridge
- from the channel to the west of Adur Recreation Ground

6.5 Officers monitor the quality of the transitional water because this part of the river is used by the public for leisure activities and water sports. These sampling sites all have public access bridges which allows water samples to be collected without unsettling the riverbed, even at low tide. This ensures the sample does not contain too much sediment or mud.

6.6 Results are provided as a coliform count per 100ml. The higher the coliform count, the poorer the water quality. As a guide, levels of over 2,000 per 100ml are considered high. Results can be found on the Councils website here. <https://www.adur-worthing.gov.uk/media/Media,157702.smxx.pdf>. Coliforms in excess of 2000 per 100ml have been found in the river every year since 2010.

6.7 Although paddling and swimming are uncommon, boating, sailing, yachting, rowing, windsurfing and canoeing are all popular activities on the river and in the Port of Shoreham. There are various clubs which provide canoeing, sailing, rowing with a number of slipways allowing access to the River Adur.

7. Issues for consideration

- 7.1. A number of issues should be carefully considered before proceeding with applying for designation of the River Adur as a bathing water.
- 7.2. The landowner where the designation would be applied would need to support any application. In addition the Council/landowner would need to consider what facilities currently exist or need to be provided in the future to support bathing.
- 7.3. The river is tidal from the mouth at Shoreham Port all the way to Henfield and the water is fast flowing with a number of nautical obstructions including bridges. There is concern that by being designated as a bathing water this may promote wild swimming in an unpatrolled tidal river, with strong tidal currents that are particularly hazardous to novice swimmers, although even experienced swimmers would find swimming challenging. Outfalls and confluences of ordinary watercourses with the river may result in additional submerged dangers and currents.
- 7.4. Parts of the riverbed are sharp, shellfish beds, exposed at low tide and obscured at other times. The remainder of the bed and banks are thick mud that present slip and trip hazards as well as the possibility of becoming stuck. Access to these areas may also encourage bathers to stray onto SSSI land and possible nesting sites.
- 7.5. Access would need to be controlled at specific locations for safety, the creation of any new access points would likely result in a loss of protected saltmarsh. It is anticipated that Natural England would not support any proposals to further encourage passage of people over the saltmarsh.
- 7.6. The majority of the 40 houseboats on the river discharge macerated sewage directly into the river. This will continue to have an impact upon the bacteria levels in the river until an alternative means of waste disposal is achieved such as connecting to the mains sewer system.
- 7.7. The Council already undertakes routine water quality sampling throughout the year on the River Adur and these results are published on the Council's website. The sampling demonstrates that on occasions bacterial levels at all 4

sampling locations exceed 2,000 per 100ml and are considered high which would make any application unlikely to be successful.

7.8. The Environment Agency takes up to twenty water samples at each of England's designated bathing waters during the bathing water season between May and September each year. A classification for each bathing water is calculated annually based on samples from the previous four years.

7.9. These classifications are:

- Excellent – the highest, cleanest water quality
- Good – generally good water quality
- Sufficient – the water meets the minimum standard
- Poor – the water has not met the minimum standard

7.10. Although designation of the River Adur would mean that sampling could increase from monthly to weekly, it should be noted this would only be at one site associated with the bathing water (the sites mentioned in section 6.4 would be closed down). No sampling would be undertaken from October until May.

7.11. Sampling frequencies may be reduced due to data confidence or resource pressures (Southwick bathing water sampling was halved during the 2017,2018 and 2022 bathing seasons). This would reduce the annual number of river samples collected from 48 to 20, with the potential of dropping to 10.

7.12. The DEFRA standards have no pass/fail standards for individual water samples, instead the classification is based on a statistical measure of all samples, known as a percentile. Percentiles use the range of all samples taken to estimate the probability of higher results occurring. The classification uses either the 95% or 90% percentile depending on the classification.

DEFRA Coastal and Transitional Water Quality Assessments

Inland Bathing Water	Escherichia coli	Intestinal enterococci
Excellent	≤ 250 colony forming units/100ml	≤ 100 colony forming units /100ml (95th percentile)
Good	≤ 500 colony forming units /100ml (95th percentile)	≤ 200 colony forming units /100ml (95th percentile)
Sufficient	≤ 500 colony forming units /100ml (90th percentile)	≤ 185 colony forming units /100ml (90th percentile)
Poor	Means the values are worse than sufficient	Means the values are worse than sufficient

- 7.13. The Environment Agency publish every classification via the 'Bathing water quality compliance report':
<https://www.gov.uk/government/publications/bathing-waters-in-england-compliance-reports> If water is classified as Poor, then the symbol for "poor" together with a sign showing advice against bathing must be displayed in the following year at the bathing water. On the Environment Agency's website, red, prohibitory 'Advice against bathing' icons highlight poor bathing waters: <https://environment.data.gov.uk/bwq/profiles/>. If designated, the River Adur would obtain a profile page on which a symbol must display any poor classification. Any poor result would be listed on this page for a further four years (a similar profile page for Southwick may be found at <https://environment.data.gov.uk/bwq/profiles/profile.html?site=ukj2401-15100>). The Adur and Worthing bathing water page would also highlight any failures: <https://www.adur-worthing.gov.uk/environmental-health/pollution/water-quality/bathing-water-seawater/>
- 7.14. A sign displaying a "poor" classification and advice against bathing does not mean bathing is banned or that a beach is closed, beaches remain open for people to enjoy. The Environment Agency may still issue 'pollution incident' warnings that would prompt 'do not swim' signage to be erected. Such incidents may relate to sewage discharges. Additionally, an 'abnormal situation' is termed as a one-in-four-year event that can require the landowner

to prohibit bathing via the closure of a beach or prevent access to the bathing water. All sampling is suspended during an abnormal situation. An abnormal situation was declared at Lancing Beach Green and Worthing bathing waters for the final four weeks of the 2016 bathing season. This was in response to dredging works associated with the Rampion wind farm that reduced bathing water quality and posed a threat to users.

- 7.15. Unless work is undertaken to reduce the levels of bacteria, there is a risk that a designated River Adur would be classified as a 'Poor' bathing water and subject to the negative requirements stipulated in points 7.13 and 7.14. The only other river bathing water in England (*Wharfe at Cromwheel, Ilkley*) was designated in May 2021 and has a current classification of 'Poor'. A proposed site nearby (*Wharfe at Ilkley Stepping Stones*) has returned even higher concentrations of bacteria and is therefore not likely to achieve designation. Bacterial counts are measured as 'coliform forming units' (cfu's) per 100ml of water. Although the River Adur has greater fluctuations in bacteria than both of these sites, it has returned similarly high levels (E.Coli has ranged from 5000 to <10 cfu's between February and April this year and peaked at 14000 cfu's in 2015).
- 7.16. Undertaking the necessary 20+ surveys and consultation to submit an application for bathing water designation is resource intensive and this year we have already completed the necessary survey and consultation for Worthing Beach House. Other water activities may be considered in the designation process to establish user numbers on the river. However, designation is not required for those water craft mentioned in 6.7.
- 7.17. The desire to improve river quality is fully acknowledged by Officers and Cabinet Members but designating the River Adur as a bathing water will not achieve this in the short to medium term. Applying for bathing water status with the knowledge of poor water quality may cause reputational damage to the authority. It will prove more effective to work with Southern Water and houseboat owners to help influence the reduction of effluent discharges directly into the river, which officers are committed to doing.
- 7.18. An initial meeting has already taken place with Southern Water to examine the steps necessary to improve water quality. These include implementation of the Draft Drainage and Wastewater Management Plan, seeking an application for first time connections for the houseboats and examining funding solutions.
- 7.19. Other options include the creation of a River Adur Bylaw which would prohibit the discharge of sewage into the Adur from houseboats but this needs to be

considered carefully. Such a Bylaw is likely to cause significant financial burden and disenfranchise the houseboat community.

8. Engagement and Communication

- 8.1. As part of any bathing water designation application there is a need for a consultation that requires evidence of local groups who would be affected by the designation such as water users, waterside businesses, residents, local environmental and civic groups, chamber of commerce, natural England, RSPB, etc.

9. Recommendations

- 9.1. The Committee should acknowledge that there are currently both public safety and public health risks associated with bathers using the River Adur.
- 9.2. The Committee is asked to consider the issues outlined above, which highlight that an application for bathing water designation for the River Adur will not achieve improvements to water bathing quality and that any such designation would create operational and reputational issues for the Council at the current time. Any application for bathing water designation should be put on hold until storm overflow improvements have been made and works have been undertaken to connect the houseboats to the main foul sewer.
- 9.3. The Council will continue to facilitate a working group with Southern Water to implement river quality improvements including seeing through their proposed improvements to infrastructure, Storm Overflows and identifying how the houseboats can be connected to the foul sewer. It is hoped that future meetings will involve both the Environment Agency and Houseboat Owners.

10. Financial Implications

- 10.1. There are no financial implications arising from the report.

Finance Officer: Sarah Gobey

Date: 20th September 2022

11. Legal Implications

- 10.1 Under Section 111 of the Local Government Act 1972, the Council has the power to do anything that is calculated to facilitate, or which is conducive or incidental to, the discharge of any of their functions.

- 10.2 s1 of the Localism Act 2011 empowers the Council to do anything an individual can do apart from that which is specifically prohibited by pre-existing legislation
- 10.3 Section 3(1) of the Local Government Act 1999 (LGA 1999) contains a general duty on a best value authority to make arrangements to secure continuous improvement in the way in which its functions are exercised, having regard to a combination of economy, efficiency and effectiveness.

Legal Officer: Joanne Lee

Date: 26/08/2022

Background Papers

- None

Appendices

- Appendix 1 - Adur Letter to Southern Water in response to Draft Drainage and Wastewater Management Plan
- Appendix 2 - Adur Response to Southern Water on Draft Drainage and Wastewater Management Plan

Sustainability & Risk Assessment

1. Economic

- Designated bathing waters can attract tourism to an area but it is likely that there would be associated facilities costs to be incurred. Should designation be achieved with no significant improvement in water quality this would have an adverse impact on the economy if the designation was subsequently removed and the negative perception of poor water quality.

2. Social

2.1 Social Value

- The river is already used by different groups such as sailing, paddle boarding and canoeing clubs and other water users. Water quality testing is already undertaken and designating it as bathing water would not provide any social benefits except for the designation title itself.

2.2 Equality Issues

- Matter considered and no issues identified.

2.3 Community Safety Issues (Section 17)

- Matter considered and no issues identified.

2.4 Human Rights Issues

- Matter considered and no issues identified.

3. Environmental

- There is concern that such a designation may encourage further recreational use of the river where a SSI is currently situated and this may subsequently damage the mud flats and bird nesting locations.

4. Governance

- Should the Council proceed with achieving designated bathing water status there will be an expectation that water quality will be improved and adequate facilities/lifeguards would be provided which is currently not budgeted.
- Should designation be achieved without water quality improvements or life saving facilities it is likely reputational damage would result particularly should there be associated illness or injury as a result of swimming in the river.