

The Cam Valley Forum is an unincorporated association, registered with HMRC as a charity.

info@camvalleyforum.uk
https://camvalleyforum.uk

# TENTATIVE PROPOSAL FOR A DESIGNATED BATHING WATER AT SHEEP'S GREEN ON THE RIVER CAM

### AN INFORMAL CONSULTATION

- 1. This paper sets out a tentative proposal to designate formally a stretch of the River Cam in Cambridge as a 'bathing water'. At this initial informal consultation stage, we are inviting comments from local interests directly concerned with the River in the City. We know that the proposal cannot proceed without the benefit of widespread support and agreement.
- 2. If there is a positive response, the Forum will revise this proposal to take account of the feedback that we receive and submit it formally to the City Council, and send a copy to all those that we have consulted.
- 3. We would then expect the Council to consult publicly before deciding whether to submit a formal proposal to the Department for Environment, Food and Rural Affairs (Defra). Defra would in turn consult publicly before making a decision on designation.
- 4. Any submission to Defra by the City Council would need to be made by 31 October 2021 in order to enable a decision on designation to be made before the 2022 bathing season.
- 5. We are circulating this tentative proposal initially to local individuals and groups likely to have an interest in the proposals. Please forward this proposal to anyone who you think should see it. We will welcome views from everyone.
- 6. Please send any comments to the Cam Valley Forum at <a href="mailto:info@camvalleyforum.uk">info@camvalleyforum.uk</a> by 21 February. If you would like to have a meeting to discuss the proposals, please let us know.

Cam Valley Forum 1 February 2021

## TENTATIVE PROPOSAL FOR A DESIGNATED BATHING WATER AT SHEEP'S GREEN ON THE RIVER CAM

## Introduction to the proposal

- 1. The process of designating a bathing water is described on the <u>Defra website</u> (Defra 2021). Applications for designation can be made by anyone but usually require the support of the local authority. The applications must include user surveys, information about any facilities at the site, and evidence of a consultation. For consideration for the 2022 bathing season, applications for designation must be submitted to the Department of the Environment, Food and Rural Affairs (Defra) by 31 October 2021. Defra recently designated a stretch of the <u>River Wharfe</u> as an inland bathing water (Defra 2020).
- 2. A bathing water is defined by Regulations (UK Government 2013) as a place where "... the Secretary of State expects a large number of people to bathe, having regard in particular to past trends and any infrastructure or facilities provided, or other measures taken, to promote bathing at those waters." The prime objective of designation is to protect bathers' health. To this end the Environment Agency takes up to 20 water quality samples during the bathing season (15 May to 30 September) to check for intestinal enterococci and E. coli (Environment Agency 2021). In a recent study, Urban et al (2021) used a DNA sequencing device to monitor bacteria in the River Cam as it passes through Cambridge. The levels of harmful bacteria were found to be highest downstream of urban river sections and near a water treatment plant and river barge moorings.
- 3. Each bathing water is classified annually on the basis of samples from the previous four years. These classifications are, from best to worst: 'Excellent', 'Good', 'Sufficient' or 'Poor'; for inland bathing waters they are based on the criteria set out in the table below (Environment Agency 2021). The Environment Agency is under a general obligation to take appropriate action to increase the number of bathing waters classified as 'Excellent' or 'Good'; if a bathing water is classified as 'Poor', action needs to be taken to identify the causes and reasons for the failure to achieve 'sufficient' quality status, and to put in place adequate measures to prevent, reduce or eliminate the causes of pollution.

Classification	Criteria	Confidence level
Excellent	Escherichia coli: ≤500 colony forming units per 100 ml;	95th percentile
	Intestinal enterococci: ≤200 colony forming units per 100 ml.	
Good	Escherichia coli: ≤1000 colony forming units per 100 ml;	95th percentile
	Intestinal enterococci: ≤400 colony forming units per 100 ml.	
Sufficient	Escherichia coli: ≤900 colony forming units per 100 ml;	90th percentile
	Intestinal enterococci: ≤330 colony forming units per 100 ml.	_
Poor	Means that the values are worse than the sufficient	

4. The Chalk streams that flow into the River Cam are rare globally and should run clear and be rich in wildlife. Sadly they are currently threatened by low flows caused by water abstraction from the Chalk aquifer, and polluted by inadequately-treated wastewater discharges from sewage works and run-off from farmland and urban land. Modifications to river channels and their banks have further degraded their value. The 'Cam water body' (the River as it passes through the City) is classified as of 'Moderate', rather than 'Good' or 'High', ecological quality, indicating great scope for improvement (Environment Agency 2019). Actions taken to improve the quality of bathing water could also contribute towards restoring the overall health of the River Cam and its tributaries.



The area tentatively proposed for the designated 'bathing water' is indicated by the red line along the riverbank on the map and satellite images above (Source: Google Earth).

### The historic context

- 5. The Cam has been used for bathing for over four centuries. Traditionally men and boys from the town swam from the banks of Sheep's Green, whereas those from the University swam a little further upstream. By the early nineteenth century, at least, both sites had become official bathing places known as the Town Sheds and the University Sheds. In the nineteenth century and for much of the twentieth, swimming in the river was immensely popular, and both sites had steps into the river, spring-boards, slides and diving platforms.
- 6. The Town Sheds were more lavishly equipped. They were managed by a custodian who, amongst other duties, taught boys to swim in Snobs' Stream (the Millstream that branches from the Cam just south of Hodson's Folly to serve Newnham Mill). The Town Sheds were a male preserve until, in 1896, the corporation opened the Ladies' Bathing Place at the southern tip of Sheep's Green where Snobs' Stream leaves the river. In 1962 the Ladies' Bathing Place was closed and mixed bathing was allowed at the Town Sheds.
- 7. In the 1970s, concerns about the health risks of polluted river water led to the closure of the Town Sheds and, by 1980, the site had become the base for the Cambridge Canoe Club. In the following decades swimming in rivers was discouraged and the Cam Conservancy, whose remit as the navigation authority includes the upper river, forbade swimming in daylight hours except at designated bathing places. By the beginning of this century there were no such designated places.
- 8. However, people continued to swim from the area of the Town Sheds. Jumping off the bridge remained popular. The secluded site of the University Sheds, by then renamed the Newnham Riverbank Club, provides simple wild swimming facilities for paying members. In recent years, people have increasingly enjoyed swimming from Sheep's Green and Grantchester Meadows, and membership of the Newnham Riverbank Club is

over-subscribed. Now, the Cam Conservancy allows swimming in the whole upper river from Byron's Pool, above Grantchester, down to the King's Mill Weir in Cambridge.



Swimming in the river in the 1970s. The Learner Pool, behind the honeycomb block enclosure, was built in 1972, and replaced Snobs' Stream as the place where swimming was taught.





The same riverbank in dismal January 2021. The popular learner pool is now enclosed by metal railings.

9. The Cam Valley Forum suggest that the site of the former Town Bathing Place be officially designated as a bathing water under the Regulations. Designation would mean that, between May and September, the Environment Agency would monitor the water for faecal bacteria, those most likely to cause illness among water users. The results of the tests would be displayed at the site and elsewhere. If the quality of the water fell below the required standard, the Environment Agency would need to investigate the sources of pollution and recommend appropriate remedial measures.

- 10. Designation would benefit not only swimmers but also the many other river users for whom water quality is important, such as punters, canoeists, kayakers and paddleboarders. Since any pollutants would be coming from upstream, water quality monitoring would also benefit swimmers at the Newnham Riverbank Club. As our summers are getting hotter, the popularity of swimming and other water-based activities is likely to increase. Designation could encourage people to swim at Sheep's Green rather than Grantchester Meadows, which lacks the facilities available at Sheep's Green, and hence is less safe.
- 11. Designation could also benefit the NHS and the wider community, if it led to action to reduce pollution that in turn reduced the incidence of sickness and diarrhoea among water users. Releases of untreated sewage from wastewater treatment works (WWTW) during periods of high rainfall pose an obvious risk; in 2019, for example, the storm overflow at Haslingfield WWTW on the River Rhee, upstream of Cambridge, discharged untreated sewage on 88 occasions for a total of 1,009 hours (Rivers Trust 2021).
- 12. Eutrophication (nutrient enrichment) is harmful to many Chalk stream plants; hence improvements in water quality would also benefit the river flora. For example, Long-stalked Pondweed, *Potamogeton praelongus*, was described as 'Locally abundant in R. Cam above Cambridge as far as Byron's Pool', and was found at the 'junction of Snobs' Stream and University Bathing Sheds' by E. A. George in 1940. Now, according to local botanical authority C. D. Preston, this species 'is no longer found in the Cam here nor in many of the localities in which it was recorded up to the mid-1950s.' (Crompton 2001). Improvements in water quality might allow the reintroduction of this species from local extant sources at Wicken Fen, and recolonisation by many other sensitive water plants.

#### Suitability of the site for designation

- 13. Designation would be in keeping with, and add to, the recreational nature of Lammas Land with its expanse of grass and trees, playground and paddling pool. Young children play in the paddling pool there while older children learn to swim in the supervised Sheep's Green <a href="Learner Pool">Learner Pool</a> (Cambridge City Council 2021) next to the Canoe Club. Children also paddle and play in the natural waters of the recently rejuvenated Rush that flows across Sheep's Green to the Newnham Millpond. This stretch of the River is also used by a range of other water users.
- 14. Further reasons to support and promote bathing at this site include:
  - (a) The River Cam here is relatively weed-free and has a riverbank managed to facilitate swimming, with steps into the water.
  - (b) The location is easily accessible for walkers and cyclists, being only a 10-minute walk from the centre of Cambridge.
  - (c) Buses stop on the nearby Barton Road and the Lammas Land car park is nearby.
  - (d) The proximity of the popular paddling pool at Lammas Land and the Learner Pool on Sheep's Green.
  - (e) There is a kiosk and café on Sheep's Green.

- (f) Public toilets and changing facilities are available.
- (g) There are lifeguards, a defibrillator, and first-aid facilities at the Learner Pool.
- 15. It is generally accepted that 'wild swimmers' and other water users do so at their own risk and it is assumed that the bathing water normally would be unsupervised. However, were funds or volunteers available, additional lifeguards might be provided at peak times.
- 16. The site would need to be managed to avoid conflicts between swimmers and the launching of canoes. There would be scope to demarcate a zone for canoe launching in front of the Canoe Club building, with access for swimmers either side. The site of the former Ladies Bathing Place, in the triangle between Snobs' stream and the river, offers more space for swimmers to enter the river as well as space for sunbathing.
- 17. The River here would also need to be checked periodically for submerged objects (e.g. bikes thrown in from bridges) that pose underwater hazards (City Council 2001).
- 18. The site is well used, especially in warmer weather, but some people swim regularly from Hodson's Folly even in winter. We would hope that the City Council would organise surveys of levels of usage during the summer (this could involve volunteers).



Diverse water users - swimmers, canoeists, paddleboarders - enjoying the River Cam.

## **Bibliography**

Anon 2012. *Going with the slow flow*. www.cam.ac.uk/research/news/going-with-the-slow-flow.

Anon 2021. Cambridge Swimming History. <a href="www.hungouttodry.co.uk/wild-swimming-cambridge">www.hungouttodry.co.uk/wild-swimming-cambridge</a>.

Cambridge City Council 2011. *Coe Fen and Sheep's Green Conservation Plan 2001*. <a href="https://www.cambridge.gov.uk/media/5753/coe-fen-and-sheeps-green-conservation-plan-2011">www.cambridge.gov.uk/media/5753/coe-fen-and-sheeps-green-conservation-plan-2011</a> 0.pdf.

Cambridge City Council 2021. *Sheep's Green learner pool*. <a href="https://www.cambridge.gov.uk/sheeps-green-learner-pool">https://www.cambridge.gov.uk/sheeps-green-learner-pool</a>.

Crompton G 2001. Cambridgeshire flora records since 1538. www.cambridgeshireflora.com.

Defra 2020. Consultation on proposal to designate an area of the River Wharfe in Ilkley as a bathing water under the Bathing Water Regulations.

 $\underline{www.gov.uk/government/consultations/bathing-waters-designation-of-an-area-of-the-river-wharfe-ilkley/outcome/summary-of-responses-and-government-response.}$ 

Defra 2021. *Bathing waters: apply for designation or de-designation*. https://www.gov.uk/guidance/bathing-waters-apply-for-designation-or-de-designation#apply-for-designation.

Environment Agency 2019. *Catchment Data Explorer: Cam Water Body*. https://environment.data.gov.uk/catchment-planning/WaterBody/GB105033042750

Environment Agency 2021. *Bathing Water Quality*. <a href="https://environment.data.gov.uk/bwq/profiles/help-understanding-data.html">https://environment.data.gov.uk/bwq/profiles/help-understanding-data.html</a>.

European Union 2006. *Directive 2006/7/EC of the European Parliament and of the Council of 15 February 2006 concerning the management of bathing water quality and repealing Directive 76/160/EEC*. <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32006L0007&from=EN">https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32006L0007&from=EN</a>.

Ilkley Clean River Group 2021. <a href="https://sites.google.com/view/cleanwharfeilkley/swimming-in-the-river">https://sites.google.com/view/cleanwharfeilkley/swimming-in-the-river</a>.

Perraton J 2013. Swimming against the stream. Jon Carpenter. Cambridge.

Rivers Trust 2021. 'Is my river fit to play in?' <a href="https://experience.arcgis.com/experience/555f3807d2a1499cbbf5ca2dd58df0f3">https://experience.arcgis.com/experience/555f3807d2a1499cbbf5ca2dd58df0f3</a>.

UK Government 2013. *The Bathing Water Regulations 2013. Statutory Instrument 2013: No 1675*. https://www.legislation.gov.uk/uksi/2013/1675/contents.

Urban L, Holzer A, Baronas J J, Hall M B, Braeuninger-Weimer P, Scherm M J, Kunz D J, Perera S N, Martin-Herranz D E, Tipper E T, Salter S J, & Stammitz M R 2021. Freshwater monitoring by nanopore sequencing. *eLife* 2021; 10:e61504. DOI: 10.7554/eLife.61504

\*\*\*