

Supplementary written evidence from The Rivers Trust

1.) Citizen Science – Examples

- Catchment Based Approach Citizen Science and Volunteer Monitoring Guide
<https://catchmentbasedapproach.org/learn/citizen-science-volunteer-monitoring/>
- Guidance on running an ‘outfall safari’ to monitor urban pollution
<https://catchmentbasedapproach.org/learn/outfall-safari-guide/>
- Monitoring Pollution
<https://www.southeastriverstrust.org/get-involved/pollution-patrol/>
- Riverfly – monitoring invertebrate life in rivers to infer water quality
<https://www.riverflies.org/>

2.) The Catchment Based Approach (CaBA)

CaBA was established in 2013 to drive collaborative water management across England. Globally unique in its national coverage, CaBA encompasses 106 river catchment partnerships that either incorporate or work with a range of cross-sector partner organisations including environmental organisations, Government agencies, water companies, local authorities, businesses and civil society. The partnerships work through consensus to build social capital and deliver environmental improvements. Because of the variety of stakeholders and interests represented, partnerships attract a range of funds, multiplying the core monies they receive from Government by a factor of 3.

<https://catchmentbasedapproach.org/>

- Case Studies
https://catchmentbasedapproach.org/wp-content/uploads/2019/01/caba_Workingforahealthyenvironment-compressed.pdf
- Guidance for collaborative urban water management
https://catchmentbasedapproach.org/wp-content/uploads/2018/07/46a_COMPLETE_CaBA_UrbanWater_A4x12_WEB-Copy.pdf
- Academic paper (also provided in full via email attachment)
[https://www.sciencedirect.com/science/article/abs/pii/S1462901120301519#:~:text=The%20Catchment%20Based%20Approach%20\(CaBA,collaborative%20water%20management%20across%20England.&text=Challenges%20of%20legitimacy%2C%20funding%2C%20integration,the%20monitoring%20of%20outcomes%20remain.](https://www.sciencedirect.com/science/article/abs/pii/S1462901120301519#:~:text=The%20Catchment%20Based%20Approach%20(CaBA,collaborative%20water%20management%20across%20England.&text=Challenges%20of%20legitimacy%2C%20funding%2C%20integration,the%20monitoring%20of%20outcomes%20remain.)

- CaBA Annual Report (on partnership activities)
<https://catchmentbasedapproach.org/learn/caba-benefits-report-2018-19/>
<https://catchmentbasedapproach.org/wp-content/uploads/2020/02/CaBA-Benefits-2018-Infographic.jpg>

CaBA Data Package

The CaBA Geographical Information System (GIS) Data Package is a set of over 150 data layers made available to all CaBA partnerships under agreed national licenses with each of the data providers. The national scale data layers include the output from predictive tools, flood risk maps, water quality status, air quality, biodiversity, water resources, social vulnerability and ecosystem service opportunity maps. A guidance document aids interpretation and application of the data and explains the origin of each data layer and its associated licensing requirements.

<https://catchmentbasedapproach.org/learn/national-evidence-desktop-caba-gis-data-packagev5/>

CaBA Catchment Plans

The 106 CaBA partnerships encompassing the whole of England have all developed their own Catchment Plan that are derived through a participatory approach whereby the organisations involved within a partnership collectively agree priorities for action.

Example Plans

<https://www.trentriverstrust.org/wp-content/uploads/2018/03/Soar-Catchment-Management-Plan-March-2018.pdf>

<https://www.groundwork.org.uk/wp-content/uploads/2019/09/Weaver-Goway-17.9.19v2.pdf>

<http://www.wellandriverstrust.org.uk/wp-content/uploads/2020/06/WVP-5YR-PLAN-JUNE20.pdf>

<https://scrt.maps.arcgis.com/apps/MapSeries/index.html?appid=32c48275531947e9a13f9f72c0e39dfd>

CaBA online shared information platforms or ‘Storymaps’

These require no specialist software and through combining data with a narrative, maximise the wider community’s access to, and understanding of, a complex evidence base. The platforms allow partnerships to ‘own’ and augment the regulatory evidence base with their own data, growing it into a resource which is relevant to their priorities and aspirations. These platforms also help to communicate locally derived information to regulatory bodies and other key stakeholders, providing a ‘weight of evidence’ on certain issues. The process of populating and building each platform also drives a participatory and collaborative approach across partner organisations and facilitates knowledge exchange.

Example shared information platforms:

<https://wcrtr.maps.arcgis.com/apps/MapSeries/index.html?appid=d4bc74ba52a2455695444559164d3eac>

<https://theriverstrust.maps.arcgis.com/apps/MapSeries/index.html?appid=4f8187c4b3e34c8f8ac3993f203d3255>

<https://cranevalley.maps.arcgis.com/apps/MapSeries/index.html?appid=25c4e40f3bb0428cbf287a494c43aea2>

The Catchment Monitoring Cooperative

The Rivers Trust is leading the development of a Catchment Monitoring Hub that aims to provide a step change in the contribution of citizen science and community monitoring to the protection of our aquatic environments and their surrounding catchments. For more information see the link immediately below and the associated video therein.

<https://www.theriverstrust.org/2020/06/10/new-initiative-to-drive-citizen-science-forward/>

3.) Public Health Risk – Contamination of Commercial Shellfisheries

The discharge of faecal microbes (and a cocktail of industrial chemicals, heavy metals, hydrocarbons, personal care products, pharmaceuticals, plastics and more) to our rivers and coastal waters not only raises implications for public health via bathing (in both freshwater and coastal) but also through the consumption of contaminated shellfish.

<https://link.springer.com/article/10.1007/s12560-017-9279-3>

<https://aem.asm.org/content/aem/early/2014/04/01/AEM.04188-13.full.pdf>

[https://research.bangor.ac.uk/portal/en/researchoutputs/viral-dispersal-in-the-coastal-zone-a-method-to-quantify-water-quality-risk\(5c51d8f6-285a-4d78-826d-2b87d1d67061\).html](https://research.bangor.ac.uk/portal/en/researchoutputs/viral-dispersal-in-the-coastal-zone-a-method-to-quantify-water-quality-risk(5c51d8f6-285a-4d78-826d-2b87d1d67061).html)

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