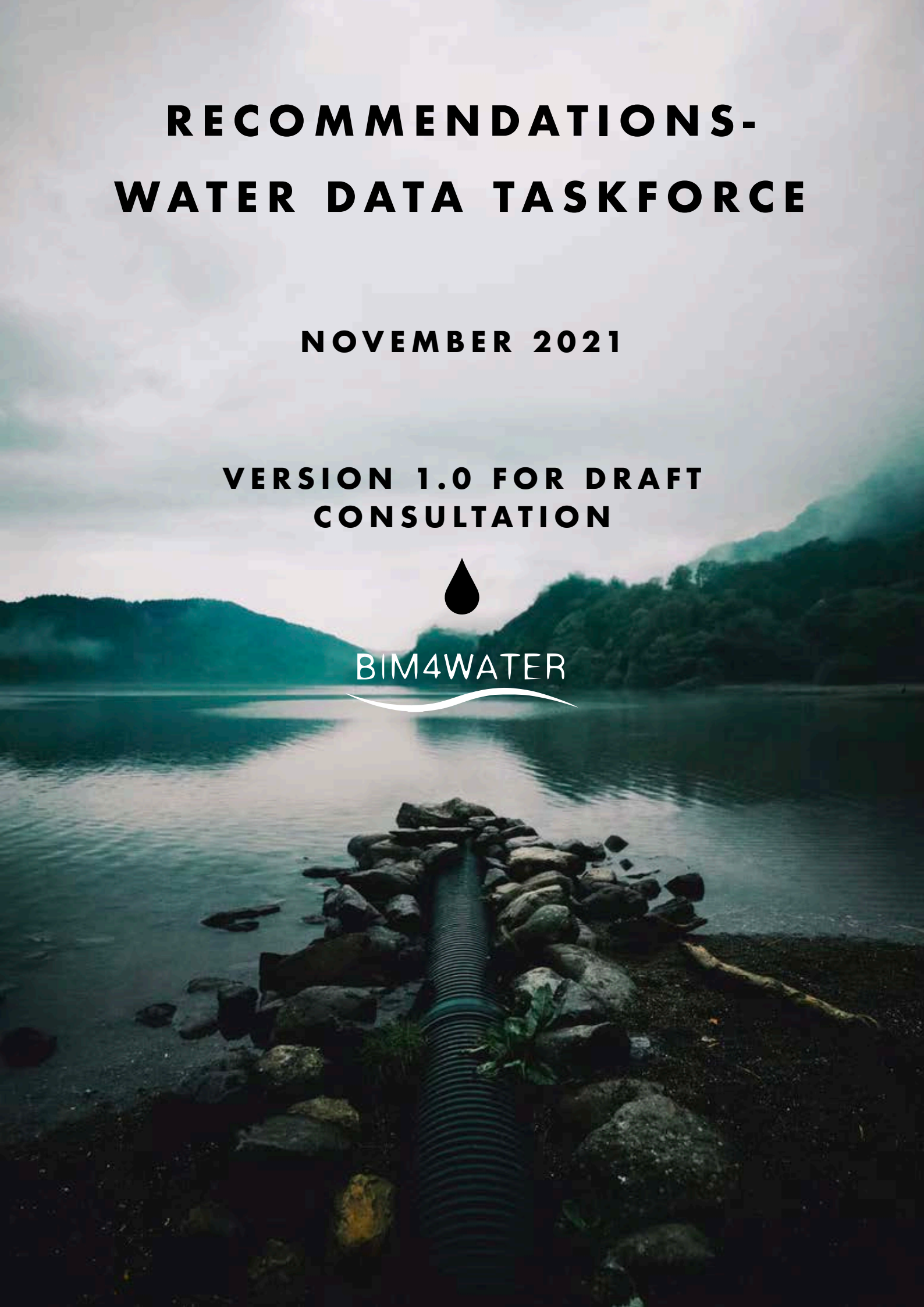# RECOMMENDATIONS- WATER DATA TASKFORCE

## NOVEMBER 2021

## VERSION 1.0 FOR DRAFT CONSULTATION

BIM4WATER

# Foreword

BIM4Water was established in 2013 as part of the UK Government BIM Task Group initiative, and is the Forum that promotes BIM and digital engineering, across the UK water sector.

BIM4Water recognises BIM practises as a core outcome, and we aim to lead the digital transformation of the UK water sector through **B**etter **I**nformation **M**anagement.  BIM4Water is governed by an elected Steering Group. Secretariat services and independent scrutiny is provided by British Water. BIM4Water is not a legal entity and has no funds. All the work carried out is supported by the representative employers throughout the industry.

BIM4Water has nine task groups, each with a Chair, with support from the Steering Group. The Water Data Taskforce was formed back in 2019 to facilitate the value of secure and resilient open data sharing by assisting the development of a more centralised water data framework.

BIM4Water's "Water Digital Roadmap" outlines our ambition to achieve transformation and enable improved collaboration between all industry stakeholders, especially focused towards water industry owner operators – with ambitious targets to reduce water usage, reduce carbon emissions, reach zero leakage, interruptions, and pollution incidents by 2050. To enable this to happen, there needs to be commitment from across the industry with a collaborative vision, adopting a unified and open data strategy to make the change possible. This will require action from regulators, water companies and the wider supply chain.

But this isn't just about the water sector's ambitions – we have a bigger mandate to develop the nation's infrastructure, alongside the pressing need to address climate change, which is affecting the very environment that our very precious resource depends on. You will have no doubt seen the impact that climate change is having across the world and the focus at COP26 on speeding up carbon neutrality on a global scale. The water industry is preparing for an unprecedented tide of change to modernise its infrastructure base, turning to analytics, data modelling and digital twinning in the construction, delivery and operation of the environment, its customers and its assets.

None of these ambitions can be achieved without cooperation and collaboration across infrastructure sectors, which, in this digital age, are hugely dependent on the value that data can bring.

That's why we are pleased to see that industry experts are committed towards supporting positive change, and that this clearly demonstrates our ongoing efforts  in transforming the sector's data and its future strategy; bringing fresh thinking and new ideas from around the sector to the table.

We hope you will take pleasure in reviewing the Water Data Taskforce's work and key recommendations, as a key focal point on the opportunities to bring data driven change to the water sector in years to come.
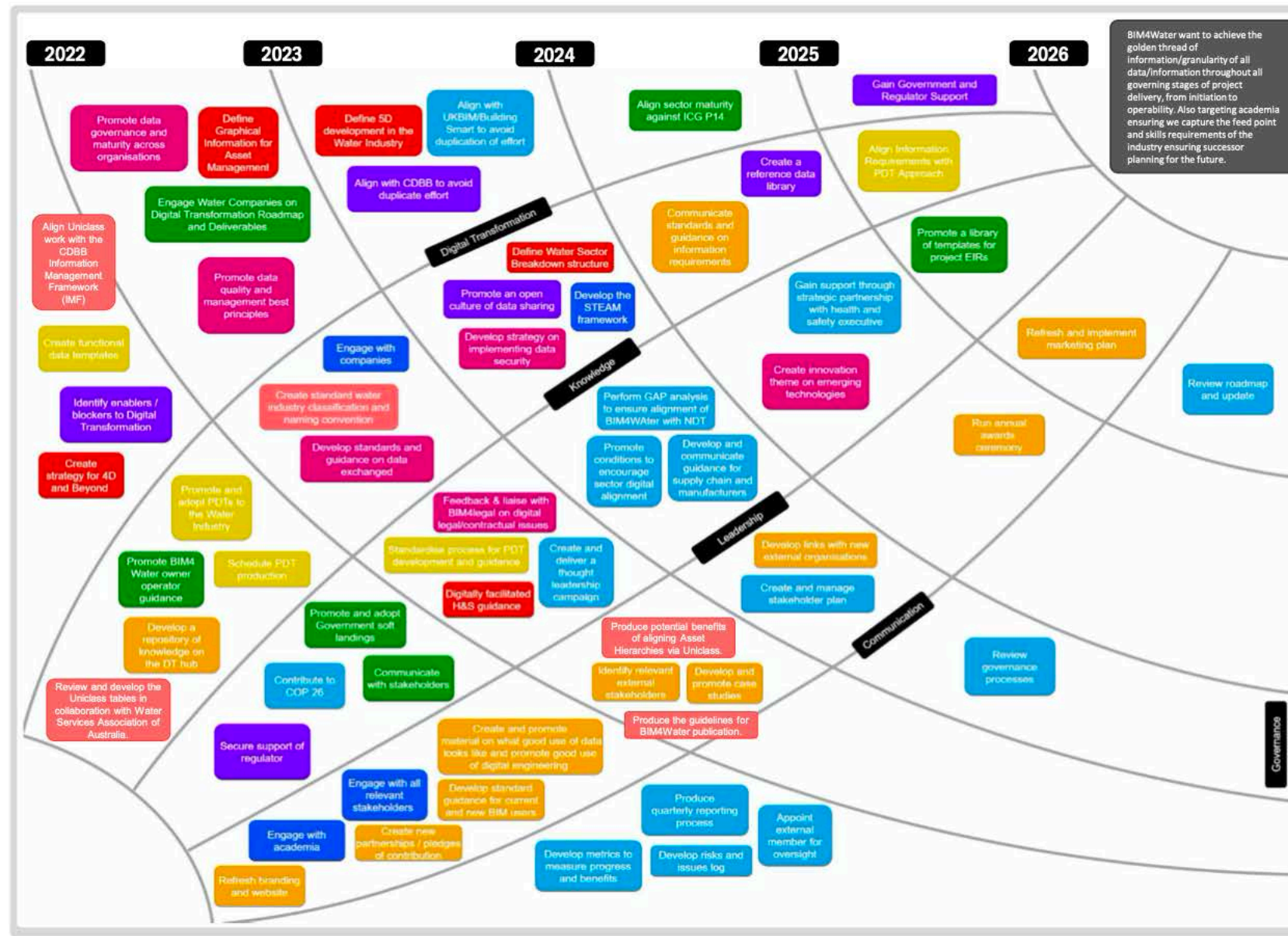

Regards

Max Gamrat
Chair, BIM4Water Data TaskForce

Jamie Mills
Chair, BIM4Water

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# Water Digital Roadmap

# Purpose

- This report details key recommendations made by the BIM4Water Water Data Taskforce (WDTF) and support BIM4Water's wider objectives detailed in the 2021-2026 [Water Digital Roadmap](#).

- The purpose of these recommendations is to highlight and outline areas of opportunity to help unlock the value of data in the water sector, through improvements in data sharing, data publishing and data usage.

# About BIM4Water

BIM4Water WDTF was set up in 2019 to help water companies to connect with government, regulators and wider industry stakeholders to foster collaboration on such projects as NUAR, the National Digital Twin Programme.

Part of the group's remit was also to gather industry evidence for opportunities which would help to address the challenges discussed in the government's innovation strategy, the national data strategy and the industrial strategy.

# Glossary

- DCMS: Department for Digital, Culture, Media & Sport.
- CPNI: Centre for the Protection of National Infrastructure.
- UKRN: UK Regulators Network.
- MOSL: Marker Operator Services Limited.
- CDBB: Centre for Digital Built Britain.
- NDT: National Digital Twin.
- FCERM: Flood, Coast, Erosion Risk Manager Strategy.
- OGL: Open Government Licence.
- NUAR: National Underground Asset Register.
- UKRI: Uk Research and Innovation.
- GC: Geospatial Commission.

Recommendations legend: red indicates the action from the recommendation should be led (or jointly led) by the party (or parties) highlighted, orange indicates support is required from that party.

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# Key Stakeholders, Partners & Influencers

Who's been involved in our Taskforce meetings

- **Regulators:** Ofwat, Environment Agency, MOSL, UKRN, Telecoms Data Taskforce.

- **Water companies:** Affinity Water, Yorkshire Water, Thames Water, Thames Tideway, Anglian Water, United Utilities, Northumbrian Water, Scottish Water, South East Water, Welsh Water.

- **Government & Ministerial:** Geospatial Commission, BEIS, DCMS, CPNI.

- **Other Stakeholders:** CDBB, British Water, Energy Systems Catapult.

DISCLAIMER: All stakeholders listed above were consulted either through the taskforce meetings or through meetings held by BIM4Water. The views in this document are therefore a summary of which has been condensed and prepared by BIM4Water to represent opinions and discussions from the aforementioned individuals within those organisations - they do not necessarily represent the views of the bodies or organisations themselves.

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# Key Recommendations:

| | Recommendation | What does good look like | Best practice examples implemented |
|---|---|---|---|
| | Develop an industry strategy and charter code for data structure standardisation, data sharing best practice and quality assurance. | Guide outlining what is expected to be published by companies & regulator – and what is expected to be exchanged between companies.<br><br>• Data requirements mapped against strategic industry needs.<br>• Management of data protection & security<br>• Categorisation of asset classes, company structures and data standards code. | National Data Strategy: National Data Strategy - GOV.UK (www.gov.uk)<br>Ofgem DAG guidance: Data Assurance Guidance \| Ofgem<br>MOSL Market Information Charter: (PowerPoint Presentation (mosl.co.uk)) |
| | Modernise reporting methodologies, increase visibility of industry and company data. | Being able to see actual performance for all companies, key information & asset inventory, published in annual reports through online portal or dashboard (similar to Ofgem data portal). | Ofgem Data Portal: Data portal \| Ofgem<br>Data Mill North: https://datamillnorth.org/ |
| | Develop an integrated strategy to quantify opportunities to develop collaborative use of utility (Transport/Water/Energy/Telecoms) assets through use of data & digital information. | Sharing of infrastructure space, mapping & identifying potential use of assets for collaborative projects in helping to meet Water resources, Environmental, Net Zero and low carbon objectives. | Fibre in water project; Broadband rollout trial to target hard-to-reach homes through UK's water pipes - GOV.UK (www.gov.uk)<br>5G Rural Dorset; 5G RuralDorset |
| | Strengthen relationship with TechUK and Catapult network to develop water centre of excellence beyond AMP7, to tackle industry's strategic infrastructure challenges through data. | Opportunities for industry to tap into cross industry funded initiatives. A dedicated research and innovation centre of excellence to foster digital skills, data driven industry solutions, in a more permanent function beyond the Innovation fund. | Catapult network: Home - The Catapult Network<br>TechUk Open Data working group: Data (techuk.org) |
| | Encourage visibility of asset information across asset owners and regulators. | NUAR, NDT Management Framework, FCERM Data Sharing, Vulnerable customer data sharing between utilities. | NUAR: National Underground Asset Register (NUAR) - Economic Case Summary - GOV.UK (www.gov.uk)<br>Western Networks Mapping Platform: Western Power Distribution - Network Capacity Map Application |

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BIM4Water is continuously looking for new partners and stakeholders to collaborate with.

For more information, visit our web page or contact us on the email below:

https://www.britishwater.co.uk/page/BIM4Water

bim@britishwater.co.uk

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