

PRIORITY QUESTIONS FOR UK WATER RESEARCHERS



AN ONLINE QUESTIONNAIRE AND A ONE-DAY WORKSHOP PRODUCED THE FOLLOWING PRIORITY UK WATER RESEARCH QUESTIONS:

- How can we work with natural ecosystems such as wetlands, salt marshes, upland forests, and moorland to reduce flood risk?
- How much water will be coming through UK river networks under different climate change scenarios?
- When considering trade-offs between catchment ecosystem services (e.g. flood water storage versus food production), where does the balance lie between human and environmental needs?
- How can the full value of water be integrated into stakeholder decisions?
- What are the best ways to retain more water upstream for supply purposes in times of drought, or to prevent flooding events downstream during extreme precipitation events?
- How can we efficiently and effectively plan adaptation measures to cope with extreme events given the uncertainty associated with model predictions?
- How do we ensure that innovation, particularly related to sustainable solutions, is maximized in the water industry?
- What would be the best way to modify the current five year Asset Management Plan cycle to incorporate dynamic changes and to achieve long-term sustainability of the water industry?
- How do we improve knowledge transfer from research to stakeholders, with a view to implementation and practical benefits?
- How can we improve flood resilience and adaptation at the individual, community and population level to improve emergency planning and protect key infrastructure?
- How will changing flow regimes affect freshwater and estuarine ecosystem structure and function?
- How are ecosystem function, functional diversity and water quality related?
- What is the full ecosystem service value (water supply, water purification, flood storage, fishery support, leisure and tourism, etc) of fresh waters?
- How do we change consumer behaviour regarding water?
- How can we reduce uncertainty in prediction of floods and droughts?
- How far should we go with improving the environmental quality of water?
- How do we change or align rural land management to reflect long-term water quality, quantity and resource requirements?
- What are the risks to water supply infrastructure under future scenarios of extreme rainfall events?

