



Floods and Droughts Research Infrastructure (FDRI) – Spring 2022

Introduction: The FDRI is a community-driven initiative for a large capital investment. Community consultation was central to the FDRI Scoping Study. The high level of enthusiasm and engagement across the community has been invaluable in making the most of this timely opportunity for an investment in an innovative, strategically vital, national-scale observational and digital infrastructure.

FDRI consultation: Options for the design of the FDRI have been driven by the community's requirements. These were identified through a 21-month consultation exercise which included two stakeholder workshops, in January and June 2021, involving 81 participants, 127 responses to a community-wide questionnaire, targeted group discussions with environmental regulators, water companies and relevant government departments, and further one-to-one conversations with over 50 subject-matter specialists. Having broadly identified community requirements at the first, January workshop, subsequent consultations (group discussions, questionnaires, etc.) were used to generate proposals for different FDRI observational and digital infrastructures that were tabled for discussion and further development at the second, June workshop. Following further work to integrate and cost the infrastructure, a proposal was submitted to NERC in January 2022, providing a coherent set of options reflecting different levels of potential investment in observational and digital infrastructure, ranging from £20M - £45M over a 5-year implementation period.

FDRI Infrastructure: All proposed investment options provide a digitally-supported flood and drought observation and innovation capability. Through the consultation, the need for a mix of fixed and mobile infrastructure was clear. For the preferred investment option three observatories would host fixed infrastructure and another two would be the focus of mobile infrastructure deployments. However, observatories are distributed UK-wide to ensure mobile infrastructure is available for deployment in all locations outside of the specified observatories.

The five observatories proposed through the scoping study included basins in the following UK regions: Southeast England, Northwest England, Northeast England, Wales and East Scotland.

FDRI scoping study deliverables: The FDRI Scoping study was supported by NERC to provide the knowledge needed to develop the business case. In January 2022 the delivery team provided NERC with:

- **an internal report** - meeting the requirements of the Strategic Outline Case and including details of proposed investment options (indicating the preferred one);

- **annexes to the internal report** - including the FDRI Science Case, scoping methodology, innovation and sustainability strategy and benefits realisation plan;
- **an evidence pack** - providing comprehensive information on the consultation; and
- **an external report** - now reviewed and finalised and ready for dissemination to the FDRI community.

FDRI funding: The FDRI Scoping Study provided the basis of a NERC submission to the UKRI Infrastructure Fund on 1st Nov 2021. An indication of the UKRI intent to fund (or otherwise) and the agreed level of funding is anticipated by mid-2022.

Next steps and further information: The next steps for FDRI are largely dependent on the reaction/decision of the UKRI Infrastructure Fund. Meantime, in order to maintain momentum, the Scoping Study team are working with the NERC Major Programmes team to develop a full and detailed business case for the FDRI. This will include: agreeing an appropriate governance structure and administrative arrangements; determining specifically the level of resource required to implement the respective investment options; and corresponding refinements to the observational and digital infrastructure specifications and costs. Knowledge imparted by the leads of other similar large NERC capital investment programmes is proving extremely valuable to the FDRI. The next FDRI Community Report in May will provide more detail on the scoping study and the proposed investment.