

NERC/ERFF SKILLS NEEDS REVIEW – PUBLIC CONSULTATION

INVITATION

1. We would like to invite you to contribute to our review of **postgraduate skills needs in the environmental sciences sector**. Our organisation, [the Natural Environment Research Council \(NERC\)](#), is the UK's main agency for funding and managing research, postgraduate training, and knowledge exchange in the environmental sciences. One of our priorities is to *develop skilled people to meet future science priorities*.
2. As global and environmental priorities change, we need a better understanding of the skills which will be required by the environmental sciences sector. This understanding will guide NERC's investment (currently over £30m per year) in training and developing postgraduates. We would very much value your help, drawing on your own expertise, in developing our draft skills framework and answering some questions. This will help us ensure that there are people with the right mix of skills and knowledge available to employers in the future.

THE SKILLS NEEDS REVIEW

3. NERC is undertaking the skills needs review in conjunction with [the Environment Research Funders' Forum \(ERFF\)](#) – an organisation which comprises the main UK public sector sponsors of environmental research. Two sister research councils (also ERFF members) have contributed to the work – the Biotechnology and Biological Sciences Research Council and the Economic and Social Research Council. We have also had support in-kind from other ERFF members including the Environment Agency. Accordingly, the review is not confined to the NERC remit - we are looking much more broadly at the skills needs of the environmental sciences sector.
4. For the purposes of the review, we are defining the sector as *those parts of the UK economic, political and social systems that significantly rely on, or generate knowledge concerned with investigating the state and condition of the Earth*. The Review is focussing on three parts of the sector:
 - The environmental sciences research base.
 - Public sector bodies charged with a responsibility for various aspects of the environment eg policy makers and regulators
 - Major industrial/commercial organisations where the principal activity is the significant provision or use of environmental resources/services/products/expertise
5. Further details of the review are available at:
<http://www.nerc.ac.uk/funding/news/documents/skills-review-info.pdf>

THE DRAFT SKILLS FRAMEWORK

6. There is little existing evidence upon which to build a clear picture of current and future postgraduate skills requirements across the environmental sciences sector. Therefore, an important milestone in the project has been the development of a “structured framework for skills thinking” known as the ***draft skills framework***. This framework captures:
 - the eight high-level drivers influencing the environmental sciences sector
 - the challenges that the environmental sciences sector face as a result of these drivers, and
 - information on the postgraduate skills which will be required in the environmental sciences sector to address these challenges

6. The eight drivers we are using (based on earlier work by NERC and ERFF) are climate change; sustainable use of natural resources; changing technologies; changing ecosystems; societal change; economic-political change; Earth system science and natural hazards; and environment and health. Inevitably, they overlap to some extent. They are important because they provide the context for the study and form the main headings in the framework.
7. For each driver, the challenges to be faced by the environmental sciences sector as a consequence, over the next decade and beyond, are identified. For each challenge, the postgraduate capabilities and skills that will be needed by people working to address that challenge are shown. For instance, as a result of the driver *climate change*, the environmental sciences sector needs to address the challenge of *dealing with uncertainty* for which skills in *uncertainty modelling* are required. To date, the framework has been refined and populated through a small pilot consultation and desk-based research. We believe that the framework will prove a useful way of illustrating and understanding what is a complex and dynamic picture.

YOUR CONTRIBUTION

8. Developing the skills framework is proving a difficult and challenging task particularly for some drivers. We need help from our stakeholders in the research base, public and private sectors to populate it further. Please help guide NERC's future investment in training and development by telling us what you think are the capabilities and skills that will be needed to meet the challenges facing the environmental sciences sector. Is the skills framework a good approach? What is missing?
9. Please let us know your views by sending us a completed response form (<http://www.nerc.ac.uk/funding/news/documents/skills-review-form.doc>). You can use this to: register your details; add your views to the framework; and answer five supplementary questions. Before starting, please read the guidance at the beginning of that document. We estimate that it will take about an hour to make your response and hope that you will agree that it is time well spent.

HOW WILL THE INFORMATION BE USED?

10. The information received from consultees will be collated and used to update the draft skills framework. This will be considered by the Review Group who will advise the Project Board. We expect to receive a wide range of opinions and inevitably there will be some requirement to aggregate consultees' comments and present a majority view. However, account will be taken of all inputs, and, as noted above, the outputs of the review will guide future training strategy and NERC's investment in postgraduate training and development.
11. The findings will also be valuable to the other members of the Environment Research Funders' Forum. By contributing to the review, you will help ensure that the UK has individuals with the appropriate postgraduate skills to address the challenges facing the environmental sciences sector.

RETURNING YOUR COMPLETED RESPONSE FORM

12. The deadline for submitting responses is close of play **Friday 8 January 2010**. Please return your completed form to our dedicated consultation mail box at skillsreview@nerc.ac.uk. If you have any queries about the consultation or the skills needs review, please send an email to the same address.