

Approaching Climate Change for Water Resource Adaptation (ACCWA)

ACCWA evaluates the social, economic and environmental effects of climate change on water resources in developed and developing countries and impacts on global water governance. Through the development of new tools and interdisciplinary techniques, the project will address the major issues that cut across natural, social and political science disciplines.

Background to ACCWA

In July 2009, two research centres at the University of Leeds, Politics and International Studies (POLIS) and water@leeds, began to develop a project that would seek to bridge the research gap between natural science, social science and policy in water resource management. The impetus for development of the project that would ultimately be called ACCWA (**A**pproaching **C**limate **C**hange for **W**ater **R**esource **A**daptation) was the announcement of the Worldwide Universities Network (WUN) Global Challenge around *Adapting to Climate Change*. The University of Leeds sought to fund an interdisciplinary project with wide international appeal in this area. Submitted to WUN in September 2009, ACCWA was successful in achieving funding and officially commenced in December 2009. The seed-corn funding provided by WUN will help initiate research collaboration between collaborating institutions.

The project builds on the research strengths of University of Leeds staff and national/international partners, all of whom have proven track records of high quality research. By adopting a holistic approach to water resource management, the project crosses international boundaries to generate a global perspective of the local/regional adaptations required to respond to hydrological perturbations resulting from climate change. The results of the project will focus on the development of tools to find solutions to the major questions in this area, the sharing of research expertise making a whole that is greater than the sum of its parts. The collaboration between ACCWA partners is still in its infancy and it is hoped that this will improve rapidly in the next few months as the ACCWA Leeds team develop new mechanisms for developing closer links between all ACCWA members.

Aims of the project

ACCWA consists of three interlinked work packages (WPs) which evaluate biophysical factors (WP1), social and economic influences (WP2), and policy and governance implications (WP3) associated with water resource changes resulting from climate change. The box opposite highlights the general aims across each project.

- Establish a baseline by evaluating current water resource management practices/policy;
- Predict future changes (biophysical, social and economic, and political) based on the most up-to-date climate predictions;
- Develop and/or evaluate adaptations required to ensure the maintenance of water resources.

Meet the ACCWA Leeds team

ACCWA Leeds is a collaboration between different research groups at the University of Leeds. The principal investigator for the project is Professor Joseph Holden, Director of water@leeds - the water research centre at the University of Leeds. Each work package has a leader to help

coordinate activity across the project: Dr Paul Kay (WP1), Dr Nesha Beharry-Borg (WP2), Dr Simon Lightfoot (co-WP3) and James Van Alstine (co-WP3). Further assistance is provided by Dr Rebecca Slack and Samantha Bowman.

Current activities

The leaders of the WPs are in the process of contacting individual ACCWA collaborators to gain a greater understanding of research interests and to start discussing ideas. International partners are already linking ACCWA to project proposals – congratulations to Professor Peter Davies of the University of Western Australia in obtaining a WUN grant for *Global climate change adaptation: freshwater ecosystems*, which will involve a visit to Leeds in Autumn 2010.

The ACCWA Leeds team recently submitted a proposal to the UK Natural Environment Research Council (NERC), which, if successful, will contribute to the ACCWA project.

Next steps, future opportunities

For the project to develop, ACCWA needs the help of all members to identify joint research opportunities. The WP leaders will be contacting you individually and the WUN seed funding for ACCWA will fund joint workshops, virtual seminars and a conference. If you are not yet a member of the ACCWA project but would be interested in finding out more about the aims and objectives of the project, please contact the ACCWA Leeds team using the information provided below.

Through the online survey, you can also provide details of your research for use on the ACCWA website

(<http://www.wateratleeds.org/accwa.php>).

An existing WUN project organised by water@leeds with ACCWA partners at the University of Illinois and Zhejiang University is supporting a conference, Water Quality 2010, at the University of Leeds on 23-24 June 2010. The conference will provide the opportunity for some ACCWA members to visit Leeds and discuss new proposals and projects. An ACCWA conference will follow in 2012.

Joseph Holden and Nesha Beharry-Borg have just returned from the May 2010 WUN convention at Penn State where they spoke with WUN colleagues about the goals of ACCWA. Thank you to everyone who spoke with them during the event!

If you have any news or would like to contribute a column to the next newsletter (due September 2010), please contact Rebecca using the details provided below. The newsletters will be produced quarterly (March, June, September and December).



Contact details

Please contact Rebecca Slack (email: r.slack@leeds.ac.uk; tel. +44 (0)113 343 3373) to submit information to the ACCWA website, newsletter or for general enquiries. Thank you!