



## iCASP Confluence: summary of webinar 2

This was a really interesting and timely workshop, titled 'Where next for Yorkshire Soils', which highlighted the diversity of Yorkshire's soil types and land uses in the region, which was reflected by the breadth of topics covered by our presenters.

As Jonathan Leake highlighted in his opening presentation, there has been a near absence of systematic monitoring of soil health, certainly in comparison to water quality and air pollution, and therefore baseline understanding to address the sustainability of soils in all regions is lacking. Pippa Chapman presented some of the critical, and simple, ways to improve soil health, and ways to assess soil health in the field, based on an iCASP project that reviewed the existing literature. However, loss of organic matter, compaction, and erosion remain poorly quantified, and the monitoring fluxes of carbon, soils, and pollutants, through catchments over different timescale, are areas of great concern. Clearly, these challenges will be exacerbated within the context of climate change predictions – a point made by several presenters. The need for a higher priority on the measurement of soil quality, and the development of (dynamic) soil health maps, to support and improve management practices, came through strongly.

Nonetheless, there are opportunities in the context of the changing political landscape, and in the valuation of soils and improved management practices. For example, the Environmental Land Management scheme recognises that good soil management has valuable, and soil as a public good/benefit needs to be rewarded. With this in mind, Elizabeth and Manolis covered some of the new Payments for Outcomes and Agri-payment schemes, and Communities of Practice approaches, that focus on soil health as a public benefit. These collaborations are showing exciting evidence of promoting the valuation of soil health.

There are real, and exciting, opportunities of these approaches within iCASP linking the assessment of soil functions to other aspects of catchment management, such as NFM, wildfires, peatland restoration, water quality etc. As an example of this integration, Kevin Hicks presented on integrated nitrogen management on farms in Yorkshire, one of the newest projects in iCASP, which was distinctive in the component of co-development of the project with farmers as experts, and with positive peer-to-peer learning. This shows that iCASP remains well positioned to adapt and take on new projects. One new opportunity that was flagged is a Met Office collaboration

In summary, understanding how soil-related functions face the predicted future changes in climate, in land use practices, and in erosion and fluxes through our diverse catchment, and rolling out our learnings to other catchment, is a big challenge. This challenge feeds into pushing forward the green growth opportunities, which is critical in the near future. The integrative aspect of iCASP will enable us to be a key region for the water sector that advances the evidence-base for the need and approaches to measure soil health and highlight examples of good practices.

All the partners are thanked for their contributions on the day, and over the last 3 years. But we emphasise that we are only half-way through the NERC funded part of the programme, and moving towards a long-term iCASP presence. So, all our partners are encouraged to continue to engage and collaborate with iCASP over the next few years.

Finally thanks to Jonathan, Pippa, Elizabeth, Manolis, and Kevin for their presentations, and to all the iCASP team for their help in the background. Finally, thanks to Poppy for all her efforts in arranging an unusual yet distinctive Confluence this year.