





# Co-development of national projections: the UKCP18 experience so far

ClimateEurope webinar on user interaction during the development of national climate scenarios

18 April 2018

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**UKCP18** 

Sexton & Harris

Kendon et al

Brown et al

**UK Climate Projections** Continual improvement Tiered messaging Improved data access More extremes Keep probabilities Spatial coherence Launch of Start of UKCP18 **User requirements** UKCP09 **Project** workshops **UKCIP98** 2009 2013 2015 UKCIP02 2010 2014 **UKCP09** additional **New science** published products

Wind projections

Spatially coherent

projections Technical notes







Working together on UK Climate Projections

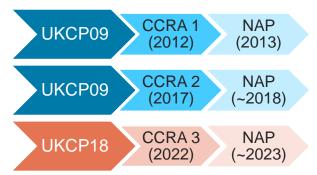
# **UK Climate Projections**

#### Science

- Improved models, new observations, faster supercomputers
- In the meantime, UKCP09
  continues to be valid for adaptation
  planning. Info from CMIP5 should
  be used alongside UKCP09 for
  summer rainfall.

#### **Policy**

 To help inform the third Climate Change Risk Assessment (due Jan 2022) and refresh of the National Adaptation Programme (2023)





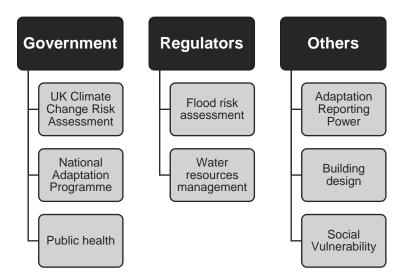




## The audience for UKCP18



Examples where UKCP09 used as a basis for climate risk assessments

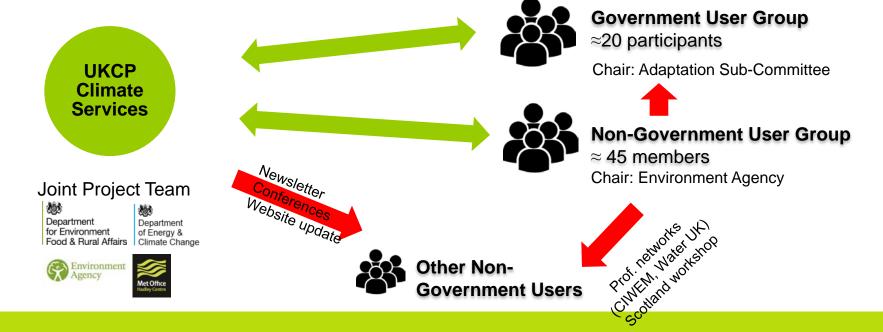








## Engaging the Audience for UKCP18

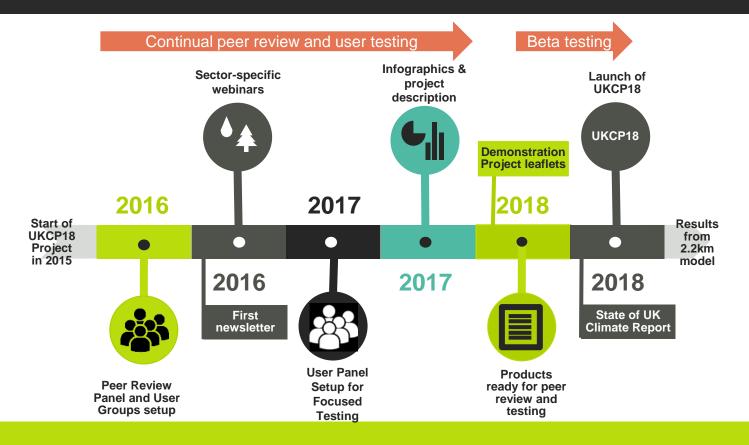








#### **UK Climate Projections**



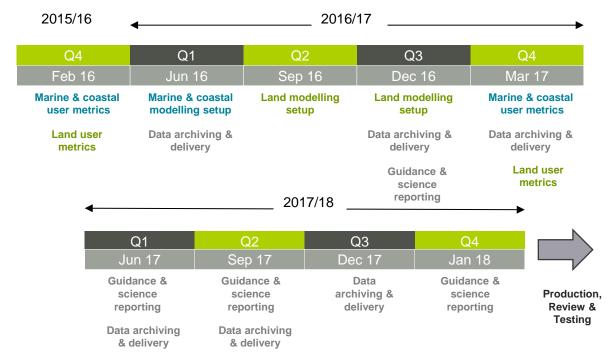






## Project decision timeline

- Marine and coastal user metrics
- Marine and coastal modelling setup
- Land user metrics
- Land modelling setup
- Data archiving and delivery
- Guidance and science reporting







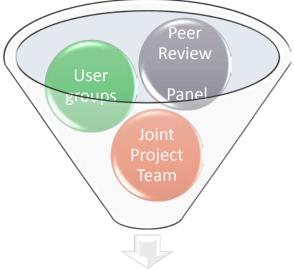


Working together on UK Climate Projections

How are decisions made that shape the UKCP18 project?

Influence of each group dependent on decision type

Scientific integrity must be maintained



**Governance Board: Project decision** 









# Working together on UK Climate Projections

## **Demonstration Projects**



Application of UKCP18 outputs for water resources planning and drought risk assessment for the UK water industry





Use of high resolution climate projections for sub daily rainfall within national scale pluvial flood hazard maps





Risk assessment of tree species suitability to climate change using Ecological Site Classification





Yorkshire Climate Change Risk Assessment





Effect of UKCP18 data on models of climate and weather information for the analysis of building thermal and energy performance at design stage.







Coastal Sensitivity to Climate Change Projections









### Thanks

For more information please contact



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