

## **EDgE**

End-to-end Demonstrator for improved decision making in the water sector in Europe

Dr Gwyn Rees Centre for Ecology & Hydrology, UK





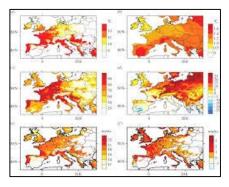
# **EDgE** vision





## Bridging the gap between...

# What climate models produce



# What decision makers need



By placing decision-makers at the heart of the research



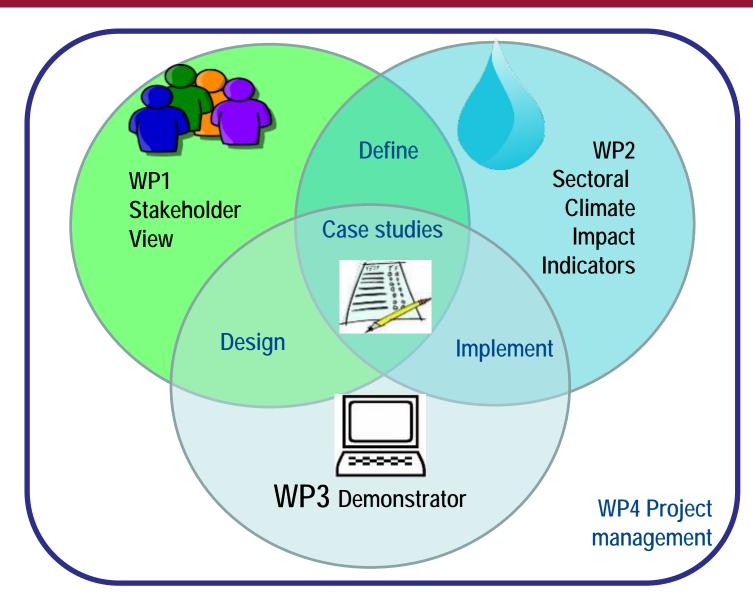




# EDgE delivery







Value: €1.6M

**Duration: 25 mnths** 

Finish: Dec 2017

**Project partners:** 

CEH, UK
UFZ, Germany
EA, UK
NVE, Norway
Princeton, USA
Cetaqua, Spain
MENBO, Spain

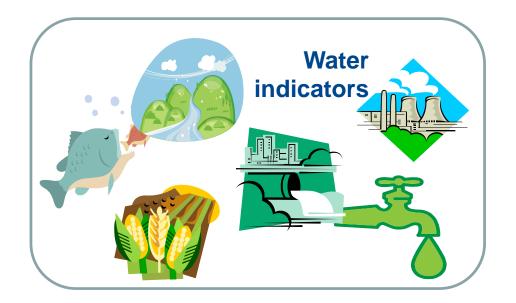


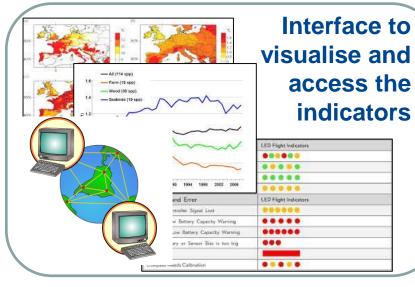


## EDgE outputs











valuation & market analysis



**Users** guide



Technical documentation & protocols

Open-access codes in VPN repository





## EDgE co-design

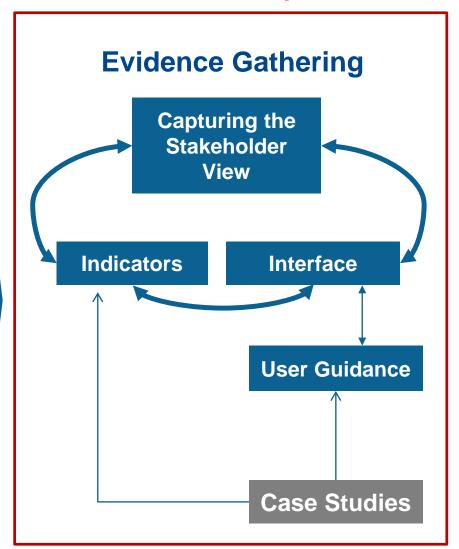




### **Focus Groups**

Theoretical Framework

Stakeholder Engagement Framework



#### **Deliverables**

SCIIs
User friendly interface
User guidance
Technical reports
Case Study fact sheets
Model output





## **EDgE Case Studies**





# Focus Groups & Case Studies in 3 contrasting parts of Europe:

**Spain** 

**Norway** 

**United Kingdom** 



#### **Norway issues**

snow-dominated region, with a powerful hydropower sector strongly dependent on the hydroclimate, and local long-term planning largely impacted by possible shifts in hydroclimatic risks.

## Norway Case Study focus

Long-term water resource planning and adaptation measures.

#### Spain issues

shared water
management and water
scarcity in a semi-arid
climate, where water
allocation decisions at
short- and long-term
must account for
multiple and possibly
conflicting water needs.



## Spain Case Study focus

Operation and planning of water supply.

#### **UK** issues

diverse and strongly regulated water supplydemand systems, where climate change impact must be accounted for in all long-term water and drought management plans.

#### **UK Case Study focus**

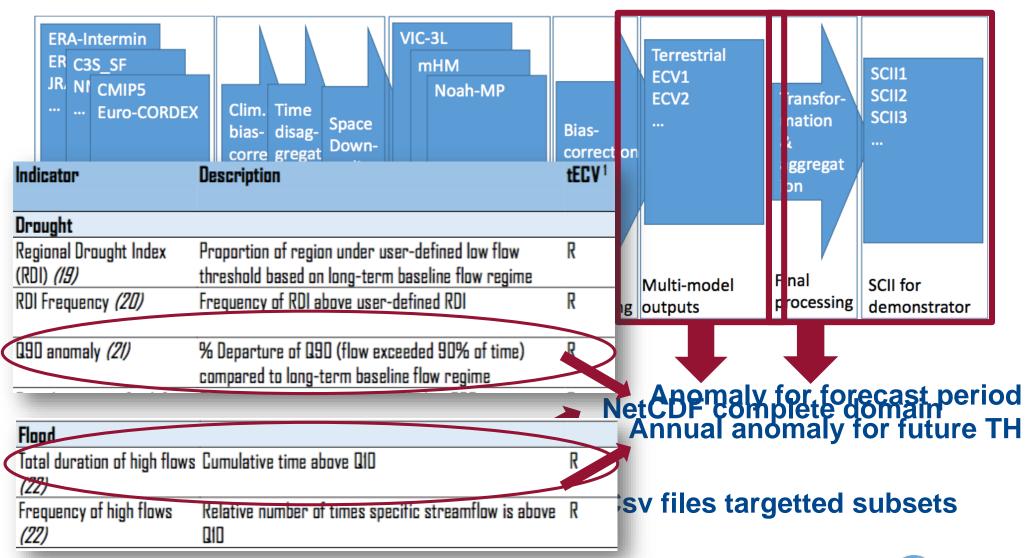
The value of European SIS compared with existing national services.





# EDgE model chain European Commission









# **EDgE Interface**





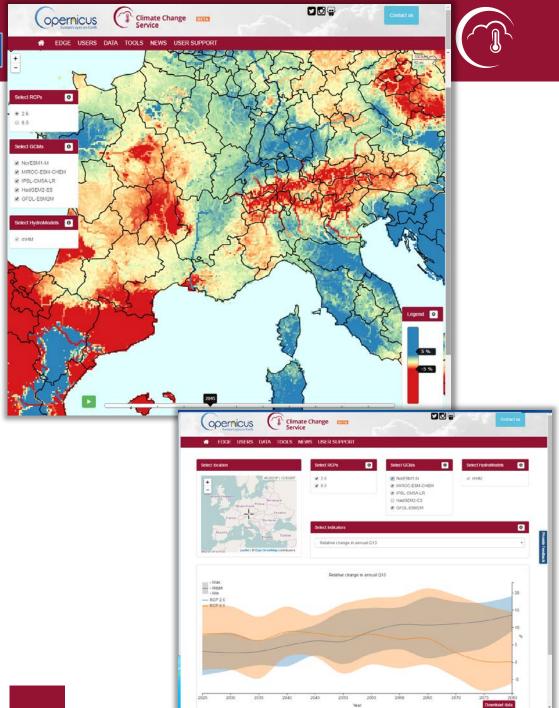
- Maps and time-series plots
- Narrative films

## Uncertainty and model skill

- For seasonal forecasts & longterm projections
- How best to visualise/ disseminate?

## Access to underlying data

- Subset of point data
- Gridded data to drive models
- NetCDF/ csv files/ GIS format







# Thank you

hgrees@ceh.ac.uk



