Landmark® INFORMATION GROUP

MODELLING FLOOD FUTURES

Paul Drury, Product Manager

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AMBIENTAL – ABOUT US

- Specialists in flood hazard and flood risk
- Built UK wide national scale flood hazard map: UKFLoodMap4™
- Developed flood risk analytics database: FloodScore™
- Strong research and development focus
- Working with leading experts in climate change modelling
- Now launching flood hazard modelling products which take climate change scenarios into account: FloodFutures™

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CLIMATE CHANGE PREDICTIONS

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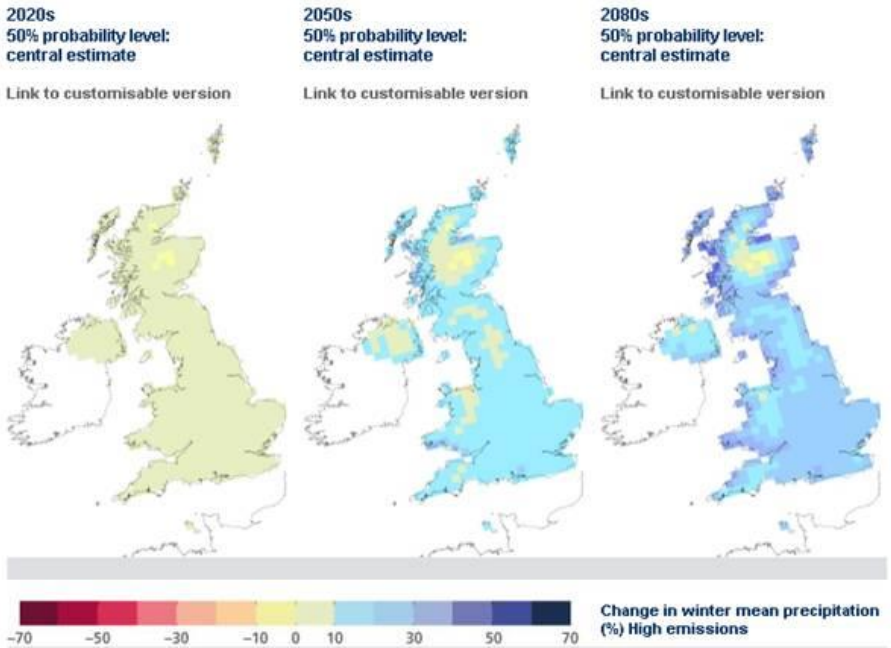
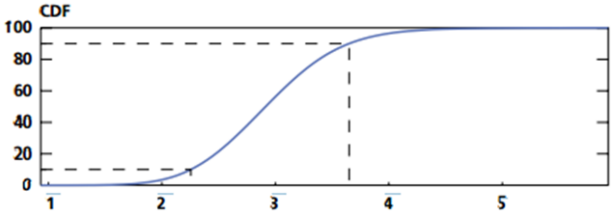
Projected increases in future rainfall/tides will increase risk of flooding.



- UK Climate Change data from UKCP09 probabilistic climate projections
- Likelihood of occurrence expressed as probability percentile

UK CLIMATE PROJECTIONS

UKCIP



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FLUVIAL UPLIFTS

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An example of flood risk increases:

- Fluvial flow increases for year 2080 predicted rises due to estimated rises in atmospheric carbon.

Uplifts based on EA 2016 Guidance Recommendations

% increases to Peak River Flow (m^3/s)

	EA Guidance 2016		
Region	**Lower**	**Central**	**Upper**
Northumbria	10%	20%	50%
Humber	10%	20%	50%
Anglian	5%	25%	65%
Thames	5%	25%	70%
South East	5%	35%	105%
South West	10%	30%	85%
Severn	5%	25%	70%
Dee	5%	20%	45%
North West	10%	30%	70%
Solway	13%	25%	60%
Tweed	5%	20%	45%

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MULTIPLE DATA LAYERS FOR ANALYSIS

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- Spanning time epochs of 2020, 2050 and 2080.
- Enables analysis of low, medium and high emissions scenarios.
- Full coverage of Great Britain, incorporates guidance from EA, SEPA and NRW.
- Presented as a total of 43 GIS layers, available in multiple formats.
- Covering 7 themes of flood hazard and risk:

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