



Adapting transport infrastructure to climate change: An introduction

Darren Lumbroso, HR Wallingford
Steven Wade, HR Wallingford

- > Introductions
- > Structure of the three days
- > What are your objectives for the three days

- > Introduction to climate change risk assessment and possible impacts
- > Working group session to identify the risks posed to transport assets and road infrastructure by climate change
- > Climate resilient roads – adapting the road network
- > Definitions and hydrometric data and analysis
- > Introduction to hydrology and possible impacts of climate change on rainfall and flood flows

- > Concepts and principles in hydraulics
- > Introduction to hydraulic structures
- > Working group on culvert and drainage design
- > Introduction to culvert drainage design - Part 1
- > Introduction to culvert drainage design - Part 2
- > Assessment of existing culverts

- > Development of approaches to road drainage
- > Working groups on the philosophy for drainage design
- > Introduction to freely available hydrological and software for culvert and road drainage design
- > Exercises using software



Any questions?

HR Wallingford
Howbery Park, Wallingford, Oxfordshire OX10 8BA, United Kingdom
tel +44 (0)1491 835381 fax +44 (0)1491 832233 email info@hrwallingford.com