



## World Water Day 2019

### Resilience to Drought and Low Flow Conditions in Scotland

Venue: Apex Grassmarket Hotel

22<sup>nd</sup> March 2019

World Water Day Theme 'Leaving no one behind'



#### Aim

Recent evidence indicates that climate extremes are not only becoming a reality in Scotland, but their severity and frequency is increasing. The summer of 2018 was a clear example, where a drought particularly impacted the North and East of Scotland with record low flows observed in several Scottish rivers. This workshop will have a focus on the resilience of Scotland to climate extremes and, in particular, provide scientists, engineers, planners and managers with a platform to share their observations, experiences, research outcomes, and innovative ideas on building resilience and adapting to low flows and drought conditions from a Scottish perspective.

#### Section I: Challenges

To what extent has drought threatened the supply and provision of water for industry (including tourism and recreation), agriculture, energy, and domestic water supply in Scotland? What measures are in place, or are being considered, to reduce risk and enhance resilience? What are the key areas of research for universities and research organisations?

#### Programme:

9:30 -10:00

**Registration (Refreshments provided)**

10:00 – 10:10

**Opening Address:**

10:10 -10:20

**The importance of a science:policy dialogue in an ever-changing world**

*Bob Ferrier (Director: Centre of Expertise for Waters)*

10:20 -10:40

**Monitoring and early warning to support enhanced resilience to drought in the UK: recent advances, challenges and prospects?**

*Stephen Turner (Centre for Ecology and Hydrology)*

10:40 -10:50

**Scottish Water's Planning, Preparation and Response to the 2018 Drought**

*Mark Hunter (Scottish Water)*

10:50 – 11:00

**Private Water Supplies: the consumer perspective on improving resilience and water quality**

*Rebecca Millar (Citizens Advice Scotland)*

11:00 – 11:30

**Open discussion followed by coffee & tea**

11:30 – 11:45

**The effects of drought on freshwater fish and river restoration options to mitigate impacts**

*Hamish Moir (cbec) and Chris Conroy (Ness District Salmon Fishery Board)*

11:45 – 12:00

**Drought and its effect on agriculture and irrigation practices**

*Paul Hammett (Water Specialist (National Farmers Union)*

12:00 – 12:15

**Managing production in water dependent industries: a Scotch Whisky example**

*Ronald Daalmans (Environment Manager Chivas Brothers)*

12:15 – 12:30

**The future challenges of environmental change on water as an economic resource in Scotland**

*Scott McGrane (Fraser of Allander Institute)*

12:30 – 13:00

**Open discussion**

13:00 -14:00

**Networking buffet lunch and poster session**

**Section II: Breakout sessions (14:00-15:30)**

**Discussion Group 1:** Resilience planning and adaptation strategies

**Discussion Group 2:** Emerging issues for drought and low flow conditions

**Discussion Group 3:** Enhanced monitoring through technical innovation and citizen science

15:30 – 15:45

**Feedback from Hydro Nation Scholars**

15:45 -16:00

**Final perspective and thoughts for the years ahead**

*Jon Rathjen*

16:00 **Close**

