#### **Overview**

<u>10:10 - 10:40</u>	Three minute progress updates
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<u>10:40 – 11:10</u> Weather impacts in the Botanic Gardens

**11:10 – 11:20** BREAK

11:20 – 12:40 Why should we care about severe weather

and climate?

**12:40 – 13:25** *LUNCH* 

<u>13:25 – 14:55</u> How you embed adaptation?

<u>15:00 − 16:00</u> Next steps and reflections





#### Workshop 3: Aims

#### 1. To understand

- how weather impacts differ in different places
- how severe weather events currently impact us in direct and indirect ways
- how severe weather event impacts will be exacerbated with future climate change





#### Workshop 3: Aims

- 2. To learn about embedding adaptation in an organisation
- 3. To establish what adaptation support you would like and in what format
- 4. To motivate and inspire you!





#### **Ground rules**

- Speak one at a time
- There are no silly questions
- Share your experiences, knowledge and ideas
- Give constructive feedback
- Make the most of the opportunity to work together and learn from each other







#### Adaptation Learning Exchange

Workshop 3 – Glasgow City Council

#### Progress:

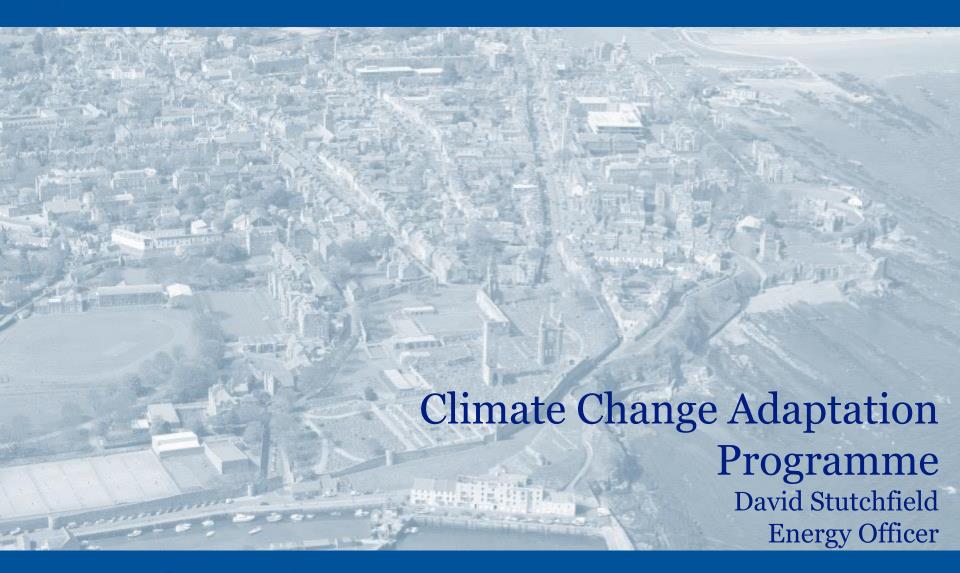


- Review of Glasgow's Local Climate Impacts Profile
- Adaptation business case
  - briefing note circulated to senior management
- Exploration of SWIMS and UKCIP Adaptation Wizard for monitoring risk

#### **Progress:**



- Discussions ongoing with the Resilience Unit and Risk
   Managers to include adaptation in the corporate risk register
- Climate Change Assessment Toolkit (CCAT) workshop.
   Three climate change adaptation workshops were held with different council departments: Parks and Open Spaces, Public Health and Waste, and Transport Planning and Roads.
- On-going work with external stakeholders through two partnership projects, Sustainable Glasgow and Climate Ready Clyde



#### **Adaptation Actions To Date**

- Flood risk assessments of key assets
- Understanding climate impacts
  - Carbon footprint (including travel)
- Working through Toolkit



#### **Adaptation Actions To Date**

- CCAT adaptation workshop at senior level
- Climate Risks on Risk Register Risk Manager has identified two construction projects at risk so far.
- Identifying processes to map Local Climate Impacts – (no student help so far) Fife Council, Tay Bridge, Forth Bridge, Rail
- Agreement for climate workshops in Estates and Residential Business Services



#### **Next Steps**

- Identify future climate vulnerability
- Identify adaptation priorities
- Respond to Climate Change Reporting Duties (Submission due 30<sup>th</sup> November, but reviewed by Principals Office at end of October).
- 1. Evaluate Local Climate Impacts continued research.
- 2. Run climate threat and opportunity assessment process with key stakeholders (Estates & RBS)





#### **University of Strathclyde**

#### **Actions to date**

- Spent the last few weeks understanding the climate change adaptation issues and context at the University.
- Organising a workshop with the Estates Services Team to raise awareness of the issues and to identify the main risk areas.

#### **Next steps**

- To take the findings from the workshop and share them with colleagues at Glasgow City Council (Duncan Booker and Sonia Milne).
- To work with the Council areas of Stirlingshire and West
   Dunbartonshire where we have property in the Loch Lomond and
   Trossachs National Park, and Renfrewshire and North Lanarkshireas
   where we own land.

#### **CLIMATE CHANGE ADAPTATION**

- Climate Change Assessment Tool workshop held on 25<sup>th</sup> August.
   Adaptation section now complete and overall action plan being prepared for discussion at Council's Climate Change Board in December.
- Weather impacts profile no further progress re. discussions with
   ✓ University of Dundee to recruit student intern to take forward.
- Discussion/briefing with Council's new Elected Member champion for climate change. Elected Members (and senior officers) briefing session re-scheduled for 5<sup>th</sup> November.
- Dundee Partnership support to sign up to new **EU 'Covenant of Mayors** and prepare a **SEAP**. Six programmes, one of which is Adaptation/Resilience. Seeking approval via CCB on 20/10 before taking to Committee.



#### Weather impacts at RBGE









Ruth Monfries, RBGE

## Four gardens





Inverleith: the driest



Dawyck: the coldest







Benmore: the wettest



Logan: the mildest



#### Methodology

- Weather experienced
- Impacts observed
- Known risks / opportunities
- Actions taken
- Actions considered unable to follow up?



#### Extreme weather: storms







#### Extreme weather: floods

- 2012 Wettest year on record at Inverleith with 959.9mm rain (average 636mm)
- July 2015 was the wettest July on record at Benmore with 296.3mm rain, twice the July average







#### **Plants**









# People – staff & visitors







#### Infrastructure









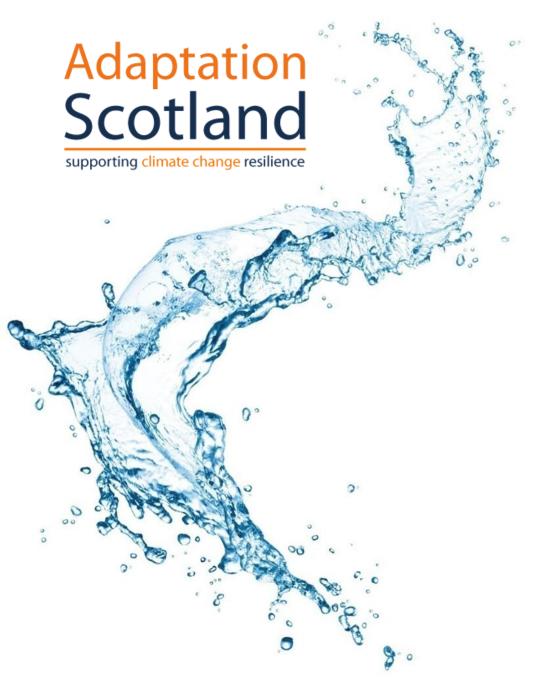
# Next steps



# Thank you



r.monfries@rbge.ac.uk



11:10 - 11:20

Break



# Why do we need to build resilience to severe weather and a changing climate?

#### What do we mean by resilience?

The ability to cope well with sudden, undesirable, and unpredictable events and maintain business continuity, and learn.

David Pencheon, Sustainable Development Unit, NHS

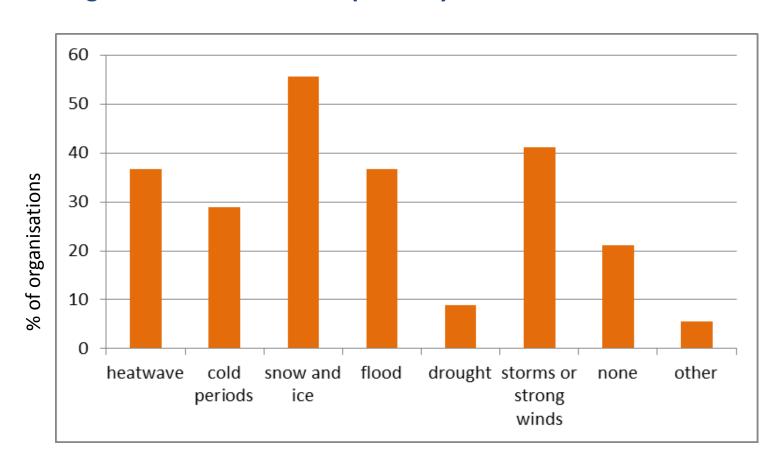


### Extreme?

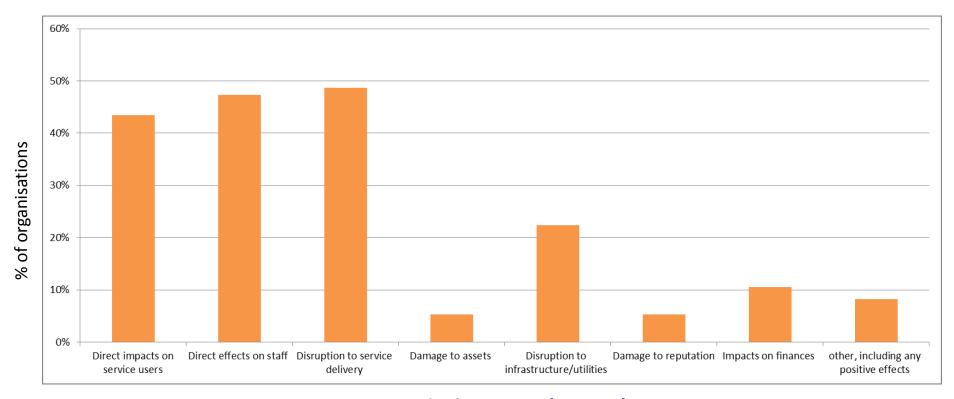
2000 – flooding	2009 – flooding
2001 – flooding	2009 – snow and ice
2003 – heatwave	2010 – flooding
2005 – flooding	2010 – snow and ice
2006 – drought	2012 – drought
2006 – heatwave	2012 – flooding
2007 – flooding	2013 – heatwave
2008 – flooding	2013 – flooding
2008 – snow and ice	2014 – flooding

#### Are organisations being affected?

Has your organisation been directly or indirectly affected by any of the following weather events in the past 10 years?



#### In what ways?



- Disruption to service delivery (49%)
- Direct effects on staff (47%)
- Direct impacts on service users (43%)

# How does a changing climate affect organisations?



staff



direct service delivery



premises and equipment







investments

advocacy

# One of many pressures...

# Increase in proportion of elderly people in the UK

Winter deaths rise blamed on fuel prices

females (18,000) than in males (13,100). The north-west of England had the highest rates and London the lowest.

ing the companies for "tragic and un

A 2011 World Health Org

Fears for the old and cold after winter deaths rise by a third

# Soaring fuel bills blamed for 31,000 rise in winter deaths

o blame yesterday for a huge

Consumer Affairs Editor

London, with women making up 58 per cent of the total.

Neighbours urged to help elderly this winter as death rates soar

31,000 died in winter's iciest blasts



austerity measures



the ratchet effect



personalisation of care



pressure for new housing

# Consequences of not engaging

'in the UK the people most likely to be vulnerable to climate change are those that are already deprived by their health, the quality of their homes and mobility; as well as people who lack awareness of climate change, the capacity to adapt and who are less well supported by families, friends and agencies"

SNIFFER, 2009



### **Weather & climate**

### Things we care about

#### **Trends**

Hotter, drier summers

Milder, wetter winters

Greater proportion of rain in heavy downpours

Rising sea level

### **Events**

Heat waves

**Droughts** 

Heavy rainfall

Cold snaps

**Storms** 

### **Impacts**

Damage to physical assets

Loss of access to buildings

Effects on biological/ industrial processes

**Uncomfortable indoor environments** 

Damage to critical infrastructure

**Changing lifestyles** and consumer tastes

Changing commodity prices/ availability

#### **Consequences**

Loss of business continuity

Changing raw material, repair, maintenance, insurance costs

Health/ comfort implications

Increased/ decreased productivity

**Changing markets** 

**Effect on reputation** 

### **Exercise 1: In the headlines**

Look at recent news reports about severe weather.

### In your role:

- How would the severe weather described in these news reports impact your organisation?
- What would be the consequences for your role?

# The key long term climate change trends for Scotland are:

- Weather will remain variable and may become more variable
- Typical summer is hotter and wetter
- Typical winter/autumn is milder and wetter
- Sea level rise

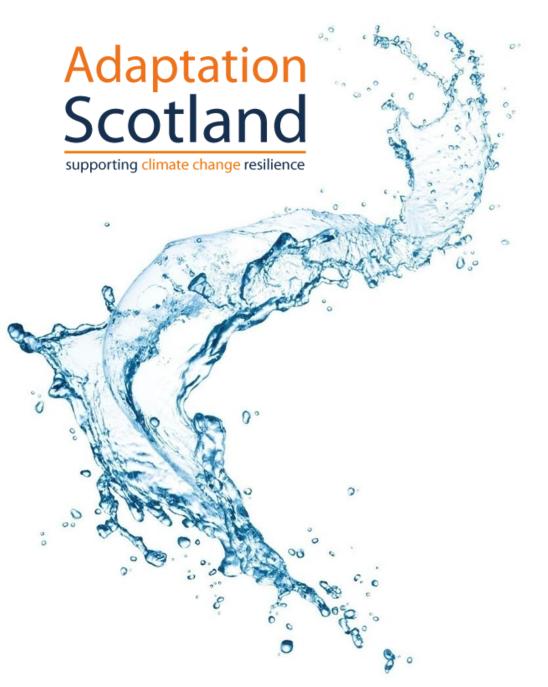
#### We can also expect to see:

- Increase in summer heatwaves, extreme temperatures and drought
- Increased frequency and intensity of extreme precipitation events
- Reduced occurrence of frost and snowfall

What 3 things would you want to include in an adaptation plan (linked to potential funding!)?

## **Questions for feedback**

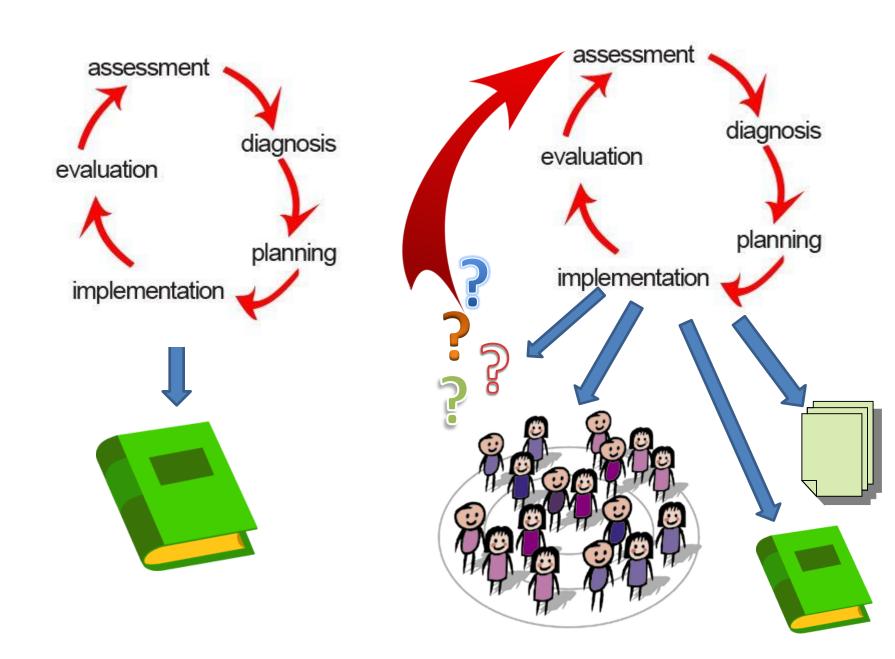
- What came up in your discussions?
- Did anything particularly surprise you?
- How did you come up with priorities for the adaptation plan?

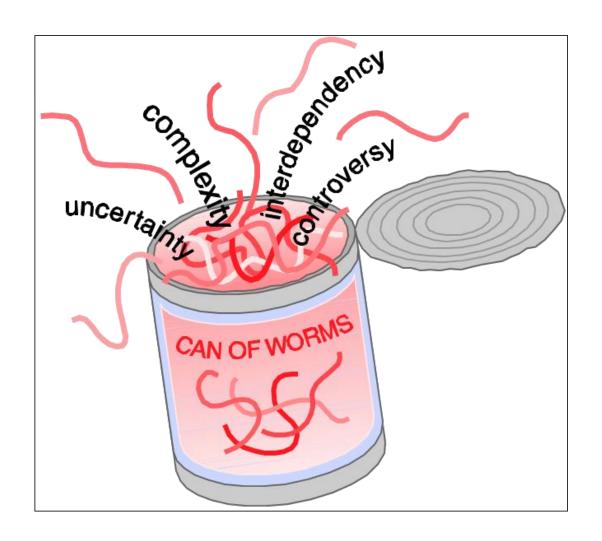


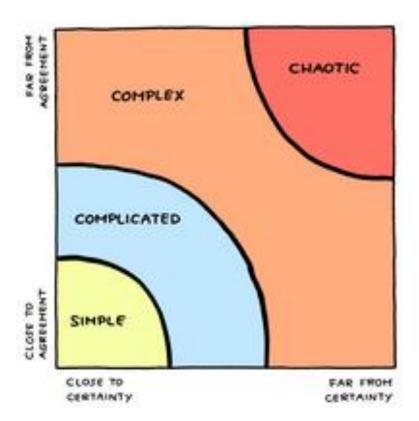
12:40 - 13:25

Lunch



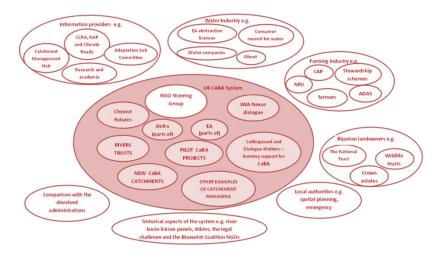


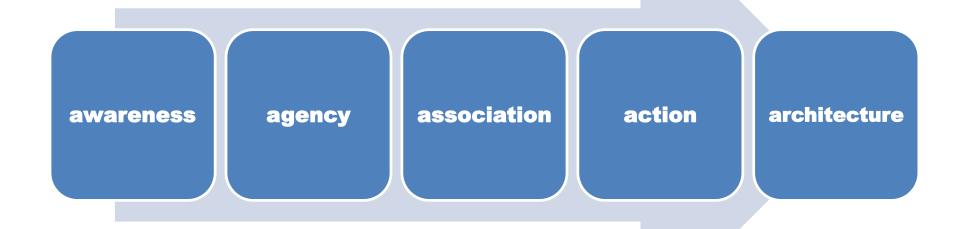


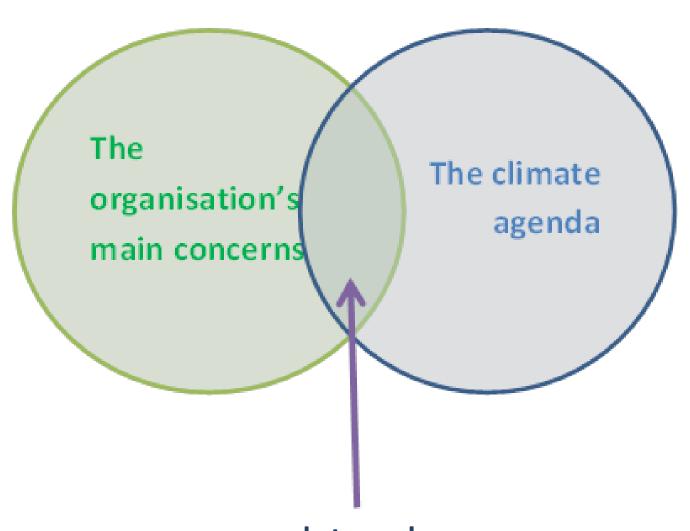








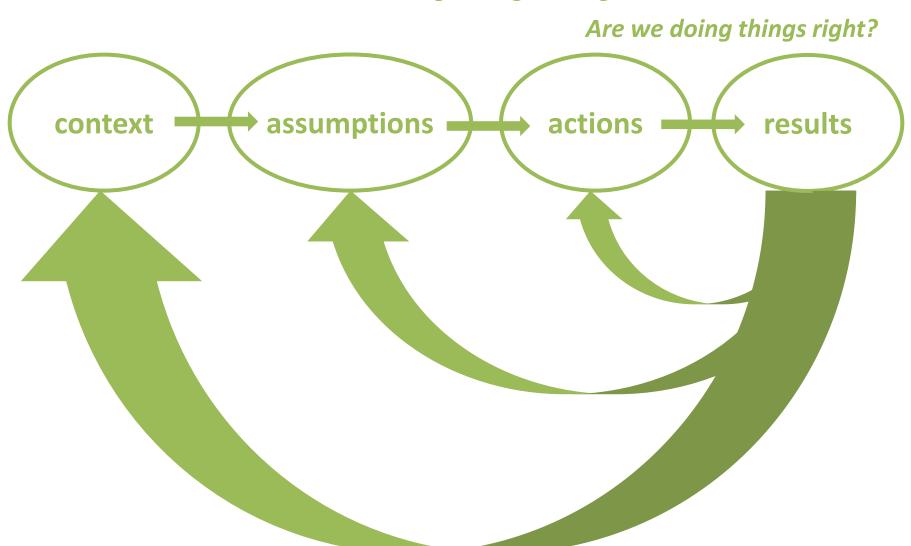




needs to make sense here

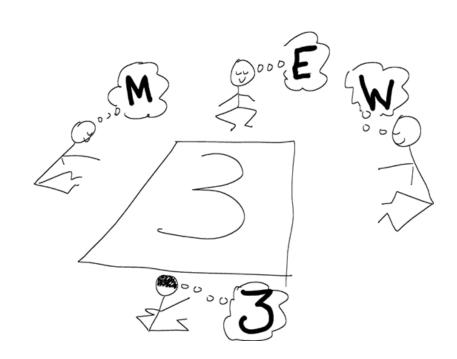
#### How do we decide what is right?

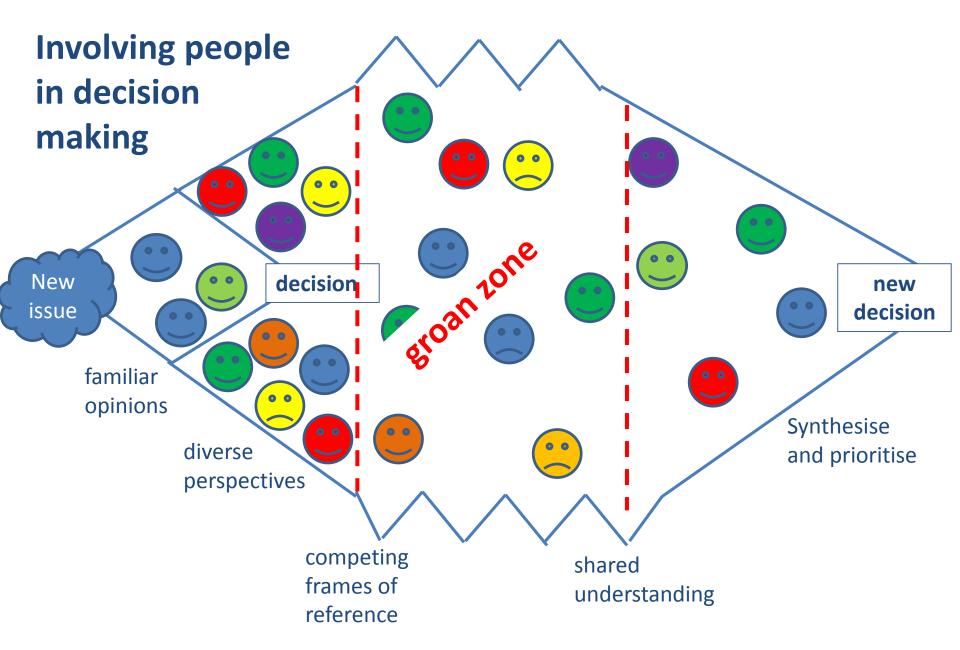
Are we doing the right things?



# 'moving from knowledge transfer to knowledge discovery'





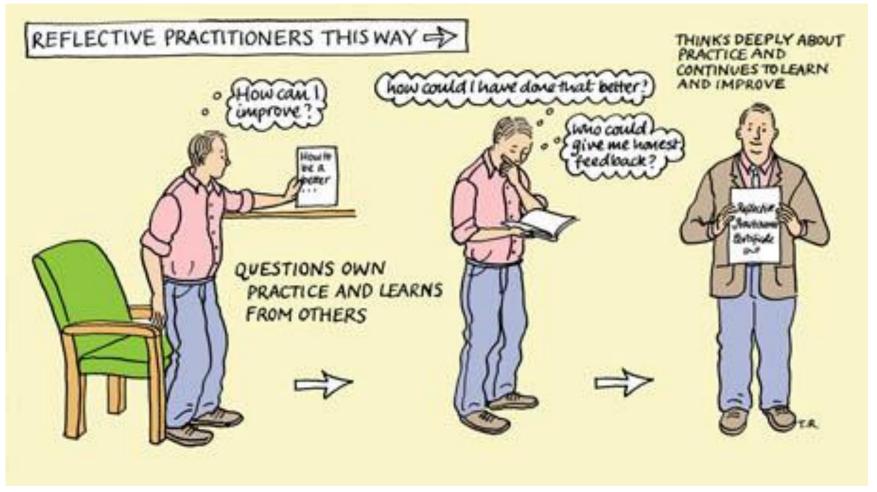


Kaner, S. (2007) Facilitator's Guide to Participatory
Decision Making, Jossey Bass

# What kind of learning?

- Climate trends including how they influence existing priorities and other stressors
- Roles and responsibilities
- Collaborations and networks
- How to intervene
- How successful those interventions were
- How the wider system acts
- How effective your learning processes are

# Reflecting on practice



Teresa Robertson, publication for the British Council on Reflective Practitioners.

<a href="http://www.teresa-robertson.co.uk/">http://www.teresa-robertson.co.uk/</a>

# Common barriers to learning in organisations (Goold, 2006)

bias for action

poorly managed meetings

urgent tasks

fear of admitting 'failure'

undiscussables

lack of attention to power relations

making it routine

taking positions

funding constraints



### To summarise...

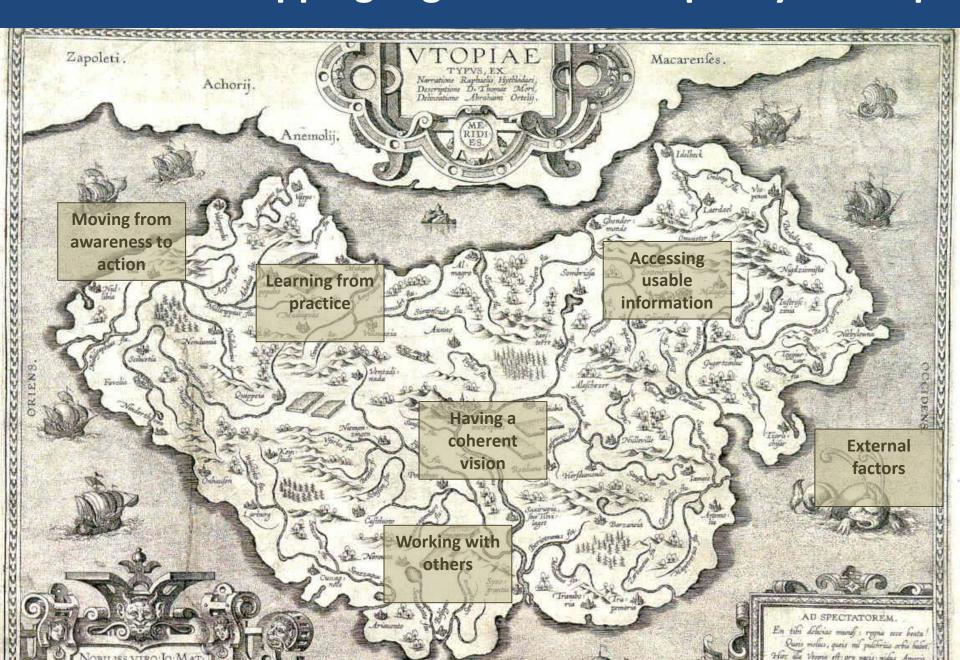
#### More than information – what else is needed?

- Translation into activity that makes sense and is worthwhile
- Attention to barriers to change individual, organisational, sectoral
- **Links to others** doing the same thing opportunities for peer-peer learning, opportunities, joint advocacy, joint working (not something you can solve as an isolated organisation)
- **Opportunities to influence the wider picture**. Funding, policy, other structural issues what mechanisms are there for this?
- 'Glue' people and processes

...we need to think in terms of challenges to be taken on in the full realization that, as soon as we appear to have met the challenge, things will have changed and the horizon will have shifted once again...

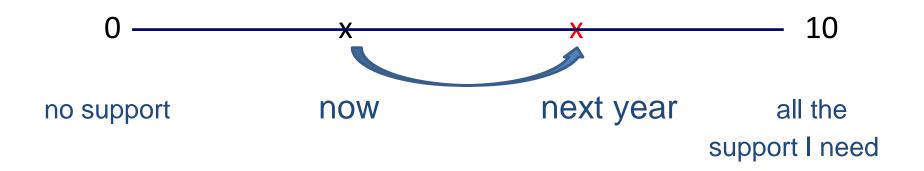
Arjen Wals, Wageningen University

### **Exercise 2: Mapping organisational capacity to adapt**

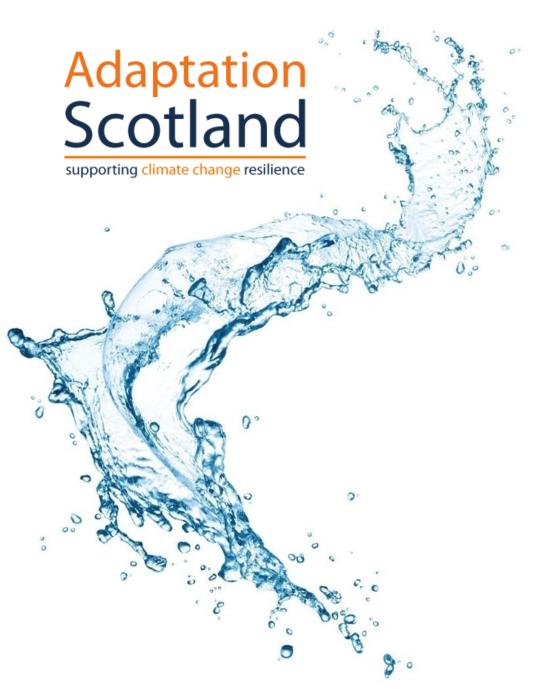


# Identifying next steps

I have all/none of the support I need to make progress on this aspect

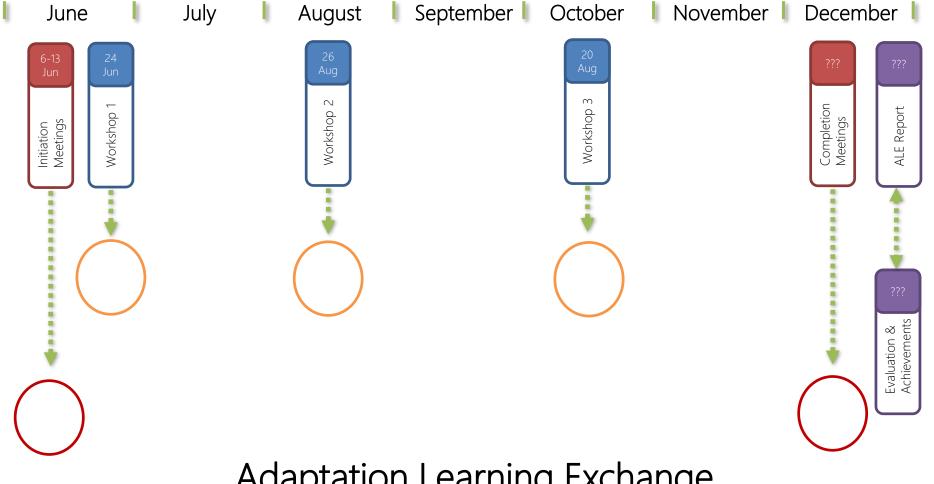


Where would I like to be (next year, five years?)
What would it take to get there?



15:00

Next steps







### The ALE workshops

Workshop 1: Setting aims and objectives and building the business case

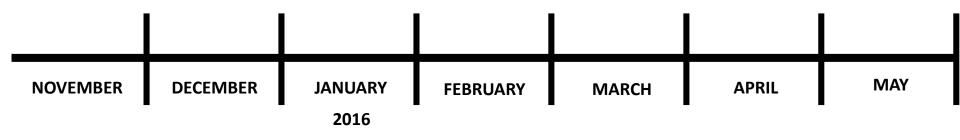
Workshop 2: Communications and values

**Workshop 3:** The consequences of weather and climate.





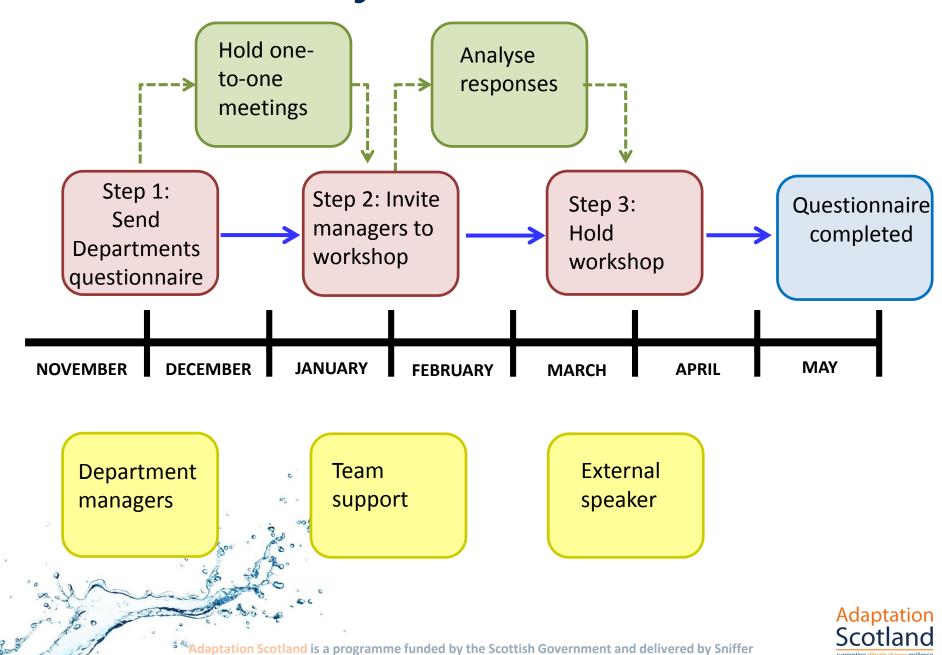
### What are you want to achieve by May 2016?



**Set your goal:** On the large **BLUE** post-it note down the overall goal you want to reach by May 2016



### **Critical Path Analysis**



### **Critical Path Analysis**

- 1. Set your goal: On the BLUE post-it, note down the overall goal you want to reach by May 2016
- 2. Lay out the critical path: On the PINK post-its, note down the essential steps which must be completed to reach your goal and stick them on the timeline in order. It may help to work backwards from your overall goal. It is okay to have multiple essential steps happening at the same time.
- **3.** Lay out non-essential steps: On the GREEN post-its, note down any actions which would help to achieve the overall goal, but are not essential to it. Place these Green post-its above the timeline.



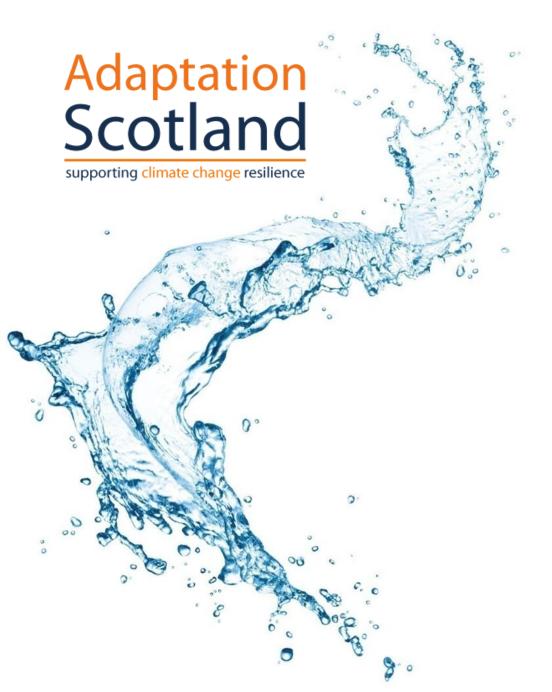


### **Critical Path Analysis**

- 4. Identify the key stakeholders: On the YELLOW post-its, note down the individuals, teams or organisations you will need to work with to achieve each of the steps on your critical path (Pink post-its). Place these in corresponding positions underneath the timeline.
- 5. Identify the support required: On the ORANGE post-its, note down the individuals, teams or organisations you will need to work with to achieve each of the steps on your critical path (Pink post-its). Place these in corresponding positions underneath the timeline.







15:50

### Reflections

### Reflections

"What was new?"

"What was challenging?"

"What will you take away?'

"What was the most important point to you?"





# Please contact us if you have any questions

**Sophie Turner** 

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Joseph Hagg

Joseph@sniffer.org.uk

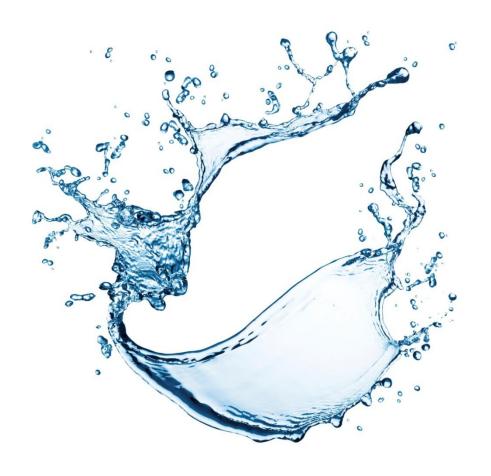






# Adaptation Scotland is a programme funded by the Scottish Government and delivered by Sniffer





# Adaptation Scotland supporting climate change resilience

www.adaptationscotland.org.uk

- please contact us -



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