Preparing for the future of flood management with a focus on intense rainfall Issues relating to stakeholders and capacity building

"Risk is the effect of uncertainty on objectives"
ISO 31000 (2009)

We are managing certainties as well as uncertainties.

People respond differently to certainties than they do to uncertainties. Therefore we need to distinguish between the two.

This project has received European Regional Development Funding through INTERREG IV B.
INTERREG IVB

A reminder of the KISS principle

Keep It Simple Stupid

- Uncertainty thrives on complexity
- We can manage it in complex ways using decision trees, probability distributions, scenarios etc.
- Or we can think about what needs to be done and about who should do what.
- We can also think about how we can build in capacity without cost

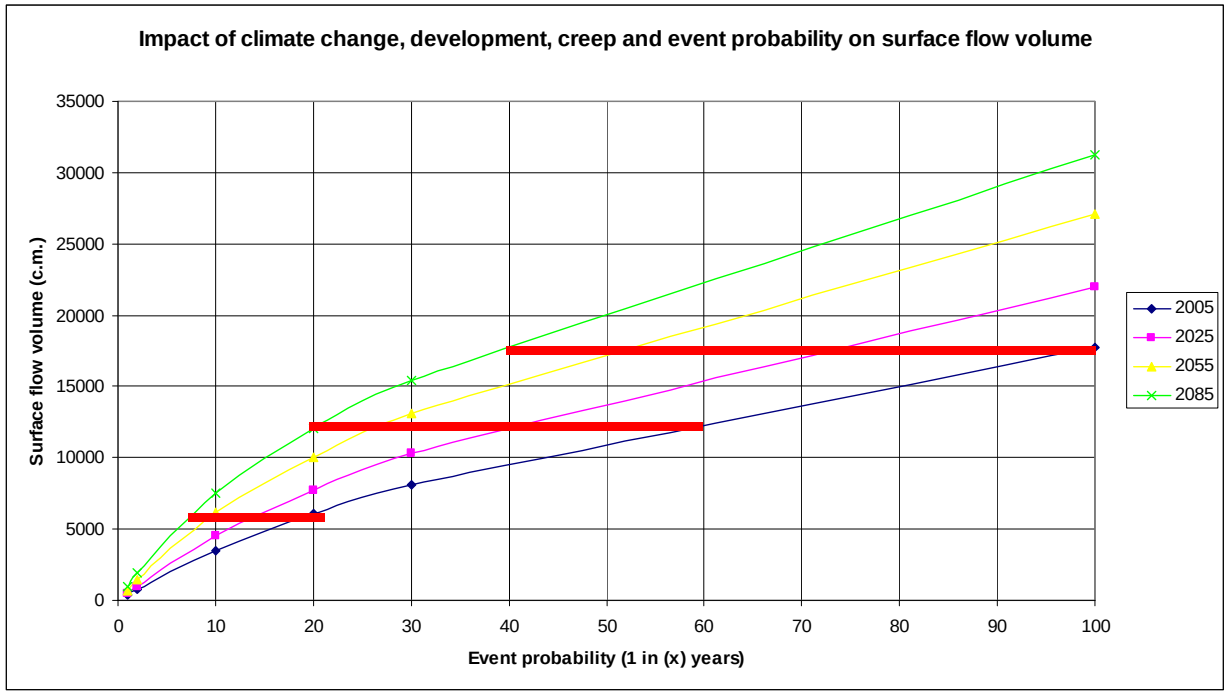
Context

- Over the years in many countries, the water sector has withdrawn from its municipal roots.
- It had differentiated itself creating silos
- It has different income streams and it has different objectives
- It has a different culture
- This continues to happen now and realistically will continue to happen in the future
- That's fine when the task is defined and unchanging
- But that's not the case any more.

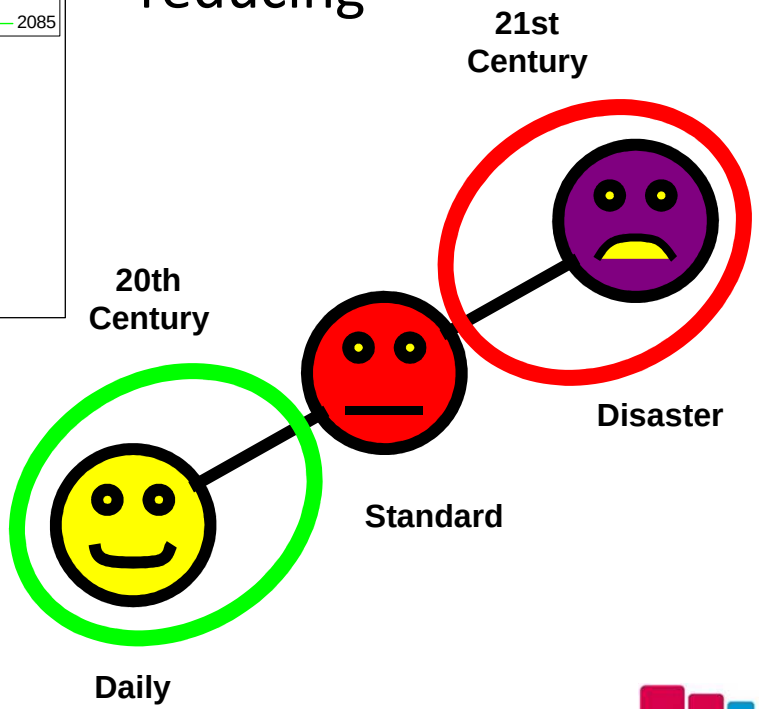
The new paradigm

- Climate change and other change drivers have created a situation where flood waters are increasingly out of the historic water management silo which lies below point 2 on the three point approach.
- Flood management is about the management of extreme events and the multidisciplinary nature of local authorities, even small ones, make them central to the efforts to develop integrated actions when the capacity of formal drainage systems exceeded and rivers flow out of banks.
- From a customer perspective, effectiveness (doing right things through complex interactions) takes precedence over efficiency (doing things right in little boxes) as there is no point in being super efficient at doing wrong things. It's a waste of money.

The 20th and 21st Century Paradigms



The amenity value of our formal drainage systems looks as if it's reducing



With a 20% increase in intensities a 20 year event in 2005 is likely to become a 7 year event by 2085 (Defra - River Aire Study TR 344)

From and organisational perspective

- We need to address:
  - How the divisions of complex organisations can work together in an integrated way
  - How stakeholder organisations with different objectives can work in an aligned way through supportive relationships.
- Achieving this requires the different divisions and organisations to understand each other's needs and each other's strengths and weaknesses. They then need to work together to serve their common customers and communities.
- ***If this is important*** it needs the commitment of senior managers and other decision makers and needs to be set out in corporate policy
- This is an essential prerequisite. Without this forget the rest!

Some elements of a way forward

- Adopt a 21st Century approach to flood management.
  - Understand the context (Flood management is not just about extreme showers and it's not just about flood and water managers)
  - Define our objectives.
  - Get better all round value by being effective
- Stakeholder perspectives
  - Does flooding take precedence over water quality?
  - Does water quality take precedence over flooding
  - Do they take equal precedence?
  - Does something else take precedence
- Stakeholders need to share their objectives with other stakeholders and stakeholder organisations.
- They need to be open about it and thrash their objectives out.
- Then they need to do their best to satisfy them all.
- Again, this needs the commitment of senior management

Flood vs Pollution Management

- Flood management is about the management of extreme events, and if it is important there is no point in using measures for normal events that don't work in extreme circumstances.
- By filling our urban landscape with measures that don't work, we use up the space for measures that do work.
- Pollution management is about everyday events.
- We need measures including formal drainage systems and a built environment that work well in all conditions and that are beneficial for flood and pollution management and the management of the built environment as a whole .

The Flood directive directs us towards this

- The purpose of this Directive is to establish a framework for the assessment and management of flood risks, aiming at the reduction of the adverse consequences for human health, the environment, cultural heritage and economic activity associated with floods.
- Member States shall take appropriate steps to coordinate the application of this Directive and that of Directive 2000/60/EC focusing on opportunities for improving efficiency, information exchange and for achieving common synergies and benefits having regard to the environmental objectives laid down in Article 4 of Directive 2000/60/EC.
- We need to work with the communities involved in the above to get reciprocity and to reduce the relevance of uncertainty by improving communication and generating synergies.

This largely lies in the domain of local authorities.

If the water sector is really bothered about the communities that it serves then it will support its local authorities to reduce the relevance of uncertainty.

But local authorities need to take their role seriously and start to be more effective

Welcome to the MART

The MART provides a vehicle for local authorities and other organisation to improve their effectiveness. The aim is to do this by creating frameworks that describe what they do. Each area of activity (street maintenance) has a framework that describes what it is through a series of subjects (street lighting, street sweeping, gulley maintenance etc.) and the topics that describe each subject.

Once defined the frameworks can be used to benchmark what is currently done as a result of: legislation, public demand etc., and what is not done. It can then be used to identify what should and can be done given organisational constraints. It can then be used to identify current capacity within the organisation and the capacity building requirements.

The frameworks can also be used to identify where there can be real beneficts in more closely aligning or ven integrating some of the subjects and/or topics in diferent areas of activity to save costs or improve benefits.

For a local authority to do this for all activities is no mean task. So MART aims to start small and then to grow.

This site works on the basis that a problem shared is a problem halved and provides a means for different local authorities to do this together to share their perspectives and make the task of defining the frameworks less onerous.

Glossary of Terms

view all »

Stream

A watercourse which is not large enough and does not have sufficient time of concentration to make flood warning a viable flood... read more »

Large stream