Experiences of managing drought in 2006

Heather Chappells Will Medd Lancaster University

Defining drought in 2006

"We have had drought weather but not drought demand"

"We would say we are in a potential drought...the Environment Agency define the region as being in drought but the state of our resources we don't feel we are properly in drought yet" "We've been through a drought climate event because its been so hot for 2-3 weeks, that doesn't mean there's a water resource drought everywhere"

> "Its not the sort of drought we're used to, it's a dry winter and a wet summer drought"

"I don't think its as acute as the '76 drought but we've had the benefits of investments since then"

Expectations and uncertainties of demand

Expectations of demand...

"Once you get to 27 degrees C that seems to be the trigger point when demand takes off, it becomes uncomfortable, people go home and have an extra shower in the evening. Its hot enough to get the paddling pool out and fill it up, the plants are wilting in the garden"

What actually happened...

"For most of the year we have been wondering what the hell people are doing for water... we are basically seeing winter demands in summer"

Why this phenomena...

"It's the constant drip feed of media messages that has really had an impact on distribution input and demand"

"It's the first time the communication message has been so coordinated and so dense"

Emerging logics of drought response

1. Regional cohesiveness

- Drought as a regional problem
- Consistent communication campaign and blanket ban
- Unified response from all companies to 'share the pain' and 'work for the greater good'

2. Localised and adaptive

- Drought as a problem of localised water availability
- Need for 'softer' communication message
- Restrictions as inflexible response leading to 'normalisation' of drought and diminishing impact

Interconnectivity for future resilience

"Historically, there have always been cross-border connections but then you just opened a valve and did your neighbour a good turn, but all these are now shut off really tight and those friendly gestures have finished, its all commercial now"

"We are surrounded by other water companies and will certainly be talking to them about resource sharing options..."

Emerging issues for connectivity...

- Legacy of historical agreements defining water access options
- Scope for further connectivity to 'grab' resources during drought
- Piecemeal or regional co-ordination of connections
- Regulator role in defining resource sharing & fair apportionment

Assessing household drought responses

Household interviews show the opportunity to engaging consumers in sustainable provision e.g. rainwater harvesting or grey water recycling

But, water managers responses reveal new uncertainties and risks:

- People falling back on mains system so not predictable as a drought measure
- If you go to a bigger scale then doing what water company does anyway (i.e. effluent recycling)
- Rainwater harvesting through water butts is very, very expensive in terms of cost of saving a cubic litre
- It's a question of how far you go with trusting the customer, but we have to engage them I think

Conclusions

- Experiences of drought are highly variable, dependant on localised interpretations of pressure
- Uncertainties of demand continue to present new challenges for managers e.g. implications of diminishing demand for dry year planning, and longer-term supply capacity
- Disjuncture in how managers and regulators view the water crisis and construct an 'appropriate' scale of response
- Embedded socio-technical arrangements can define access to resources, and shape scope for connectivity and cooperation across borders
- Construction of more 'resilient' water systems can mean different things to households and managers, rights of consumers as 'co-providers'