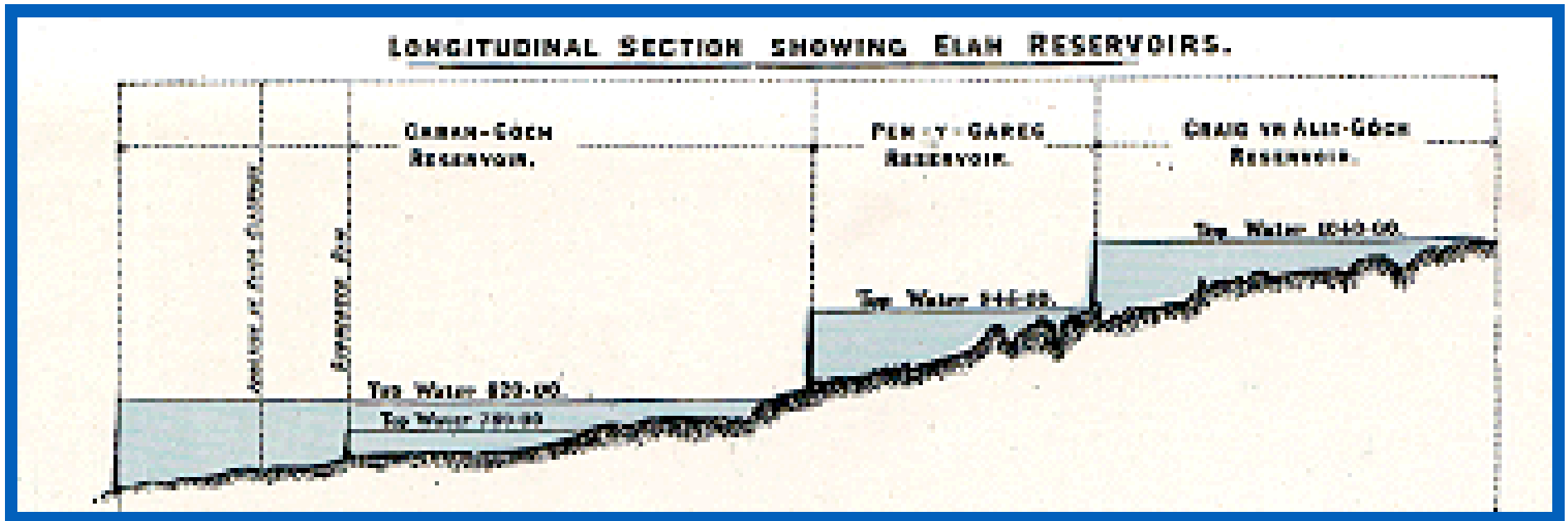


# Future Water



The Government's water strategy for England

David Wild

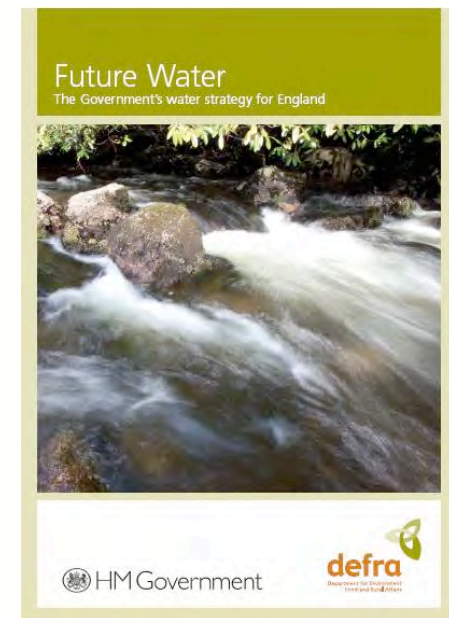
October 2008

# Time for a new water strategy...

## Future Water

– The Government's Water Strategy for England

- We've come to expect the highest quality water over last 100 years
- Consumption has been rising 1% pa since 1930 - unsustainable
- UK has less water available per person than most other EU countries



# Players

- **DEFRA** is the ministry setting strategy for England with the Devolved Administrations
- **Environment Agency** acts as operating, regulatory and licencing authority for England and Wales (SEPA in Scotland) - habitat protector and planning regulator

## Brief history- a previous solution

- Expanding industrial cities in 19<sup>th</sup> Century, especially Birmingham, Manchester, Leeds, Liverpool
- Wide use of wells polluted by sewage.
- crowded and unsanitary conditions
- epidemics of water-borne diseases such as typhoid and cholera.
- unable to meet growing demand for water from existing sources.



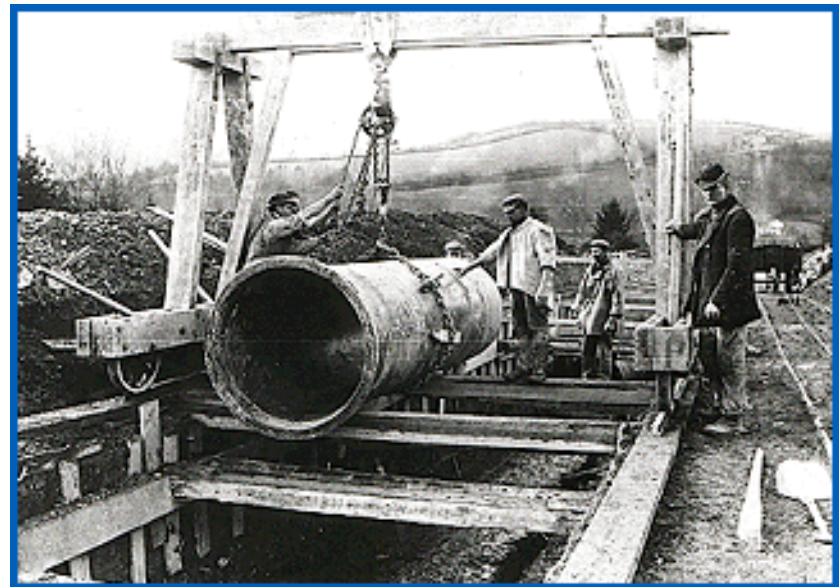
## Birmingham's solution

- Flooding valleys in Wales, some 75 miles west
- *“the moorland waste is only tenanted by a few sheep farmers and their flocks”*
- Act of Parliament for compulsory land purchase of 70 sq miles



# Edwardian engineering challenge

- Moving enormous quantities of water by gravity alone, across very hilly country and over many river valleys, to a new reservoir on the outskirts of Birmingham
- 73 mile long aqueduct
- water travels at less than 2 miles per hour, taking one and a half days to get to Birmingham



## Political opposition

- By 1950s, Liverpool, Manchester and Birmingham seek powers to build more reservoirs
- By 1960s, opposition to flooding more valleys is strong
- Still a live issue today as water useage increases



# WATER



THE GREAT

# SELL OUT

## Because Major Cities In England Have Filched Water Without Payment Users In Wales Face Rocketing Charges For Their Own Water

### REMEMBER?

**TRYWERYN, Meirionnydd.**  
Flooded after compulsory purchase.  
Capel Celyn destroyed despite strong  
Plaid Cymru campaign. Now supplies  
70 million gallons daily to Liverpool  
— FOR NOTHING!!

**CLYWEDOG, Montgomery.**  
Forcibly acquired by Birmingham.  
Plaid Cymru fought sale for local  
people by selling off small portions  
of land. What does Birmingham  
pay for water?  
— NOTHING — !!!  
and **ELAN, Radnorshire.**  
A massive complex of dams recently  
leased for 999 years to the Midlands —  
for 5p A YEAR! Altogether Wales  
supplies England with 300 million  
gallons of water daily and virtually  
FREE OF CHARGE!

**WHY? BECAUSE WALES HAS NO PARLIAMENT  
OF HER OWN TO PREVENT THIS SELL OUT  
OF OUR COUNTRY.**

### WHO PAYS?

Birmingham water is SEVEN TIMES  
CHEAPER than water supplied to  
Mid-Wales.

BIRMINGHAM 2.9p in pound.  
RADNORSHIRE 20.0p in pound.  
Anglesey Knitting, Holyhead who  
face an annual water bill of £40,000,  
may move to the Midlands for  
cheaper water.

**WELSH WATER'S CHEAPER IN ENGLAND !!!**  
Plaid Cymru says this is legalised robbery. What a  
crazy situation and how typical of remote  
Westminster misrule.

JOIN **PLAID CYMRU** NOW

### DID YOU KNOW?

**FACT:** The richest water-producing area  
in Wales, the upper Severn basin has been  
given to the Midlands dominated Severn-  
Trent Water Board. The result? Birmingham  
has the cheapest water in Britain.

### WELSH USERS FACE SOARING BILLS

**FACT:** A moderate charge of 10p for every  
thousand gallons water exported would net  
£11 million each year for Wales. Money which  
could be used to bring down the costs of  
water in Wales.

**FACT:** Water — 'the white gold of modern  
industry' — is a vitally important natural  
resource. Wales is being robbed of its water  
because we do not control our own affairs.  
A Welsh Parliament, with full powers,  
would mean a fair return from all our  
natural resources including water.

### PLAID CYMRU SAYS —

- Amend the 1973 Water Act
- Set up a genuine Welsh Water Board with  
authority over the whole of Wales.
- Make a reasonable charge for exported  
Welsh water and use the money raised to  
reduce water charges.
- Lets get a Welsh Parliament to end  
Exploitation and ensure a fair deal.

**PLAID CYMRU BELIEVES — in a free Wales  
where economic prosperity goes hand in  
hand with social justice and the restoration  
of our own language and culture. You can  
help us help Wales by joining Plaid Cymru.**

Send to: Plaid Cymru, 8, Queen Street, Cardiff  
Please send me  
 further details about PLAID CYMRU  
 Membership forms

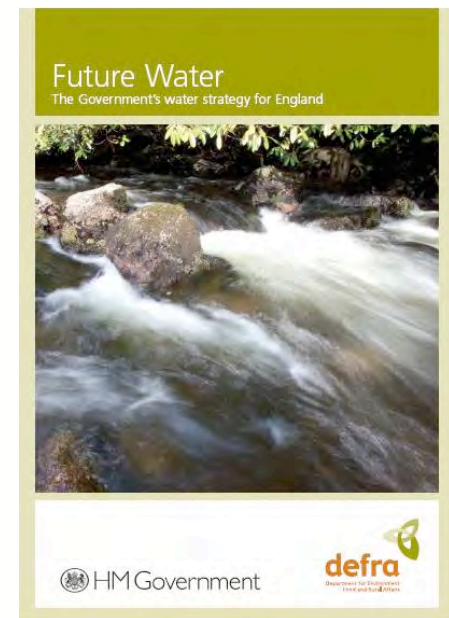
Name \_\_\_\_\_ Address \_\_\_\_\_

# Time for a new water strategy...

## Future Water

– The Government's Water Strategy for England

- Water sector for the future - Vision for 2030
- A coherent, focused policy framework which is resilient to climate change
- Outlines Government priorities



# Future Water

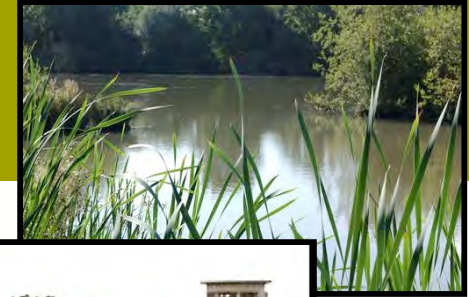
## Key messages:

- *Need for everyone to value water*
- *Everyone taking responsibility*



# Future Water – Key Areas

- Climate change mitigation and adaptation
- Water efficiency
- Supply/demand balance
- Surface water management and flooding
- Environmental water quality
- Charging for water



# Current Position

**Since privatisation, £60 billion has been invested in:**

- Drinking water quality
- Environmental improvements
- Infrastructure

**But still more to do...**

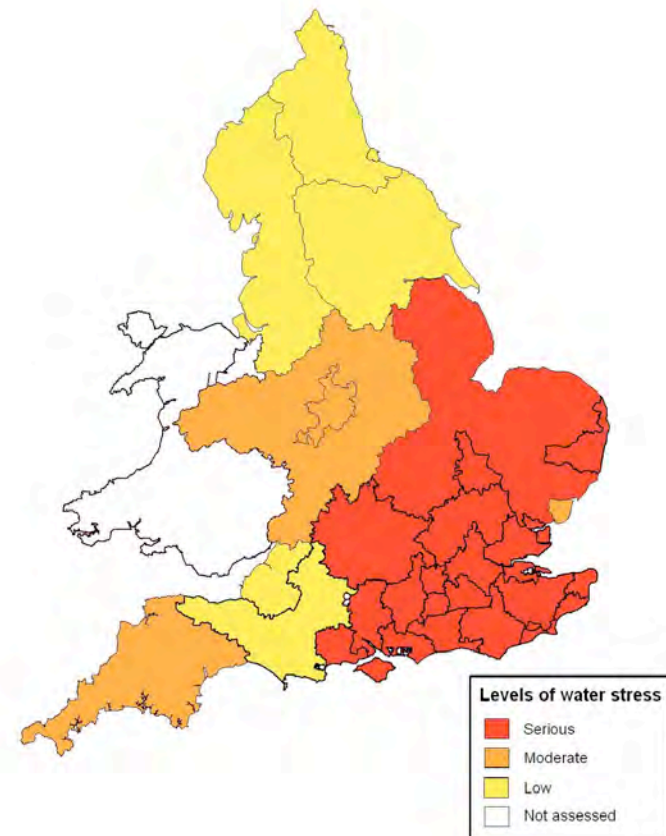
# The Challenge: Climate Change

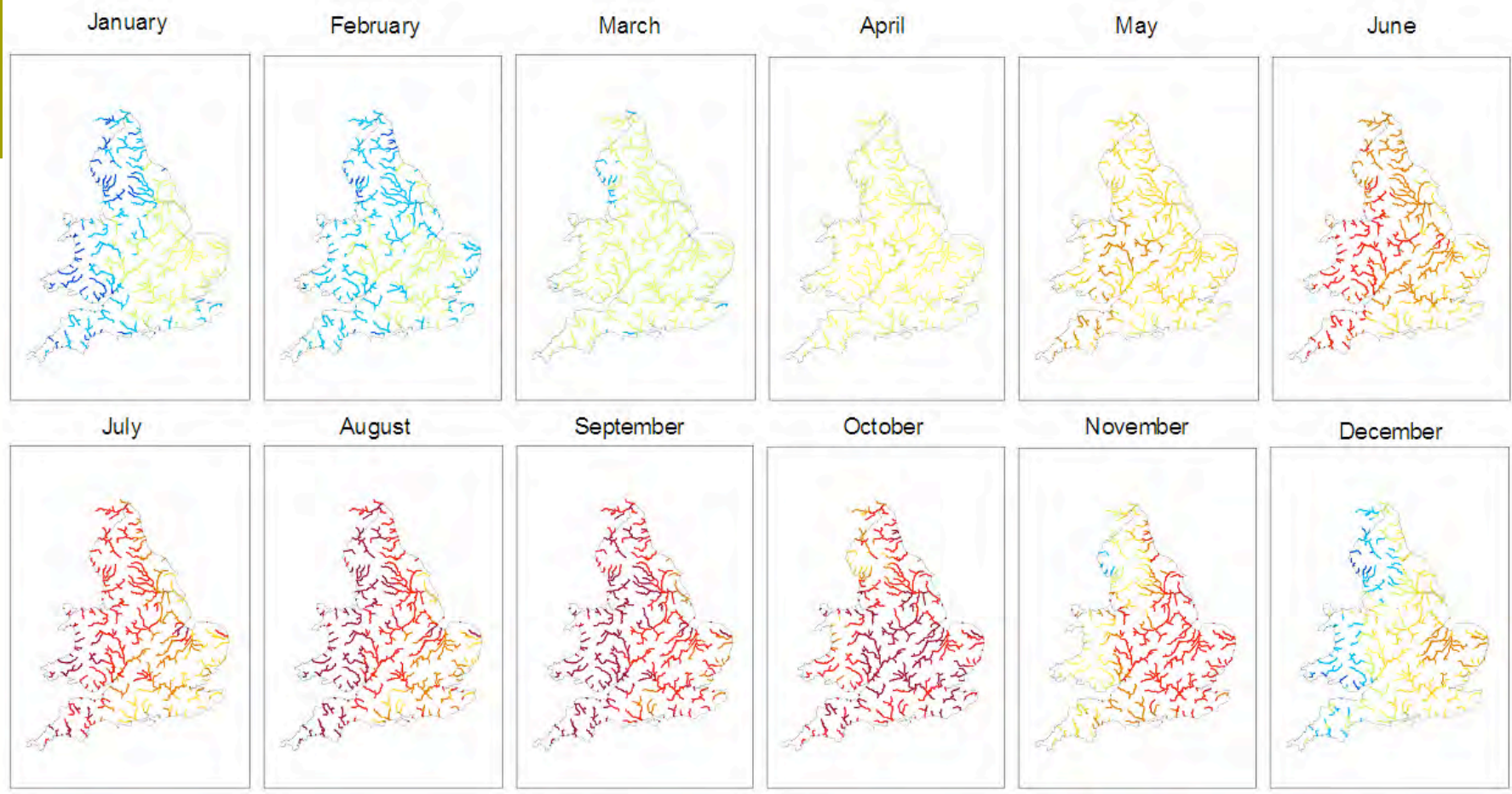
## Wetter winters and drier, hotter summers

- Less water available for supply
- Lower river flows
- More intense rainfall



Areas of relative water stress





- 10 to 15 per cent increase
- 5 to 10 per cent increase
- 5 per cent increase to 5 per cent decrease
- 5 to 10 per cent decrease
- 10 to 20 per cent decrease
- 20 to 30 per cent decrease
- 30 to 50 per cent decrease
- 50 to 80 per cent decrease

**Percentage change in mean monthly flow between now and the 2050s using the medium-high UKCIP02 scenario**

# The Challenge: Carbon

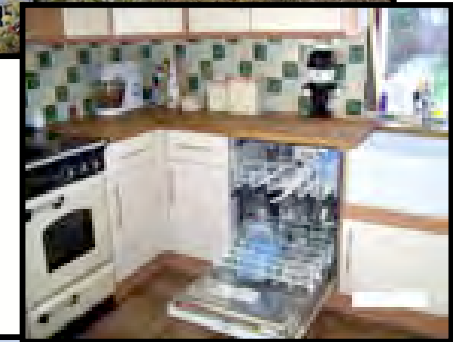
## More water = more carbon emissions

- Supplying water and treating sewage produces 5 million tonnes of greenhouse gas emissions per year
- Domestic hot water use produces about 35 million tonnes of greenhouse gases (CO<sub>2</sub>e) per year



## The Challenge: Social and Demographic Change

- Population growth and demographic change – more households
- Land-use patterns are changing
- Customers' attitudes and demands are changing
- Average water consumption in England: 150 litres/person/day
- Ambition is to reduce to 130 litres/person/day or lower by 2030



# Future Water: Climate Change Mitigation & Adaptation

Mitigation and adaptation must be taken forward in parallel

Water Industry footprint + Energy from domestic hot water use = 6% of total UK greenhouse gas emission

- Carbon Reduction Commitment (CRC)
- Water Industry voluntary commitments:
  - At least 20% of energy used for water to come from renewable sources by 2020
  - Research to understand, measure and manage non-CO2 greenhouse gases



# Future Water: Supply/Demand Balance

Sustainable use of water resources, with no interruptions to essential supply during drought.

Continued high levels of drinking water from our tap.



## **25 year water resources management plans**

- Level of service
- Company activity to manage demand
- Identify need for new resources

## **Changes to abstraction licensing system**

- Need to time limit all licences ?

# Future Water: Surface Water Management and Flooding

- End of November - Government will respond to Sir Michael Pitt's recommendations from the report on the summer floods in 2007.
- This will incorporate the Government's thinking on:
  - Establishing surface water management plans
  - Clarifying responsibilities for sustainable drainage systems
  - Reviewing the right to connect surface water to the public sewer



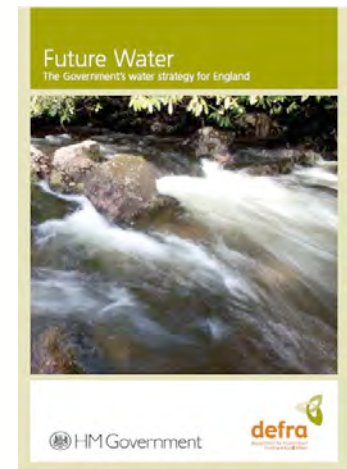
Green roofs

# Future Water: Implementation

The Government is committed to delivering the actions from Future Water

## Taking this forward including through:

- Social and Environmental Guidance to Ofwat
- River Basin Management Plans – under WFD
- Draft Floods and Water Bill
- Independent reviews



Government cannot deliver alone – Delivery partners are identifying what part they can play, leading on some areas and contributing to others.

## Contact details

- **Water Strategy Team –**  
waterstrategy@defra.gsi.gov.uk
- **Draft Floods and Water Bill -**  
FloodsandWaterBill@defra.gsi.gov.uk
- **Independent review of competition and innovation - Martin Cave**  
cave.review@defra.gsi.gov.uk
- **Independent charging review – Anna Walker**  
charging.review@defra.gsi.gov.uk