

# Water Efficiency Forum

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# Presentation Overview

- **What is the water situation: *past, present, future***
- **Why are droughts a problem?**
- **How droughts are managed**
- **How much water have we got? (*levels of supply & demand*)**
- **What are the drivers & incentives for water efficiency?**
- **What is the regulatory landscape like?**

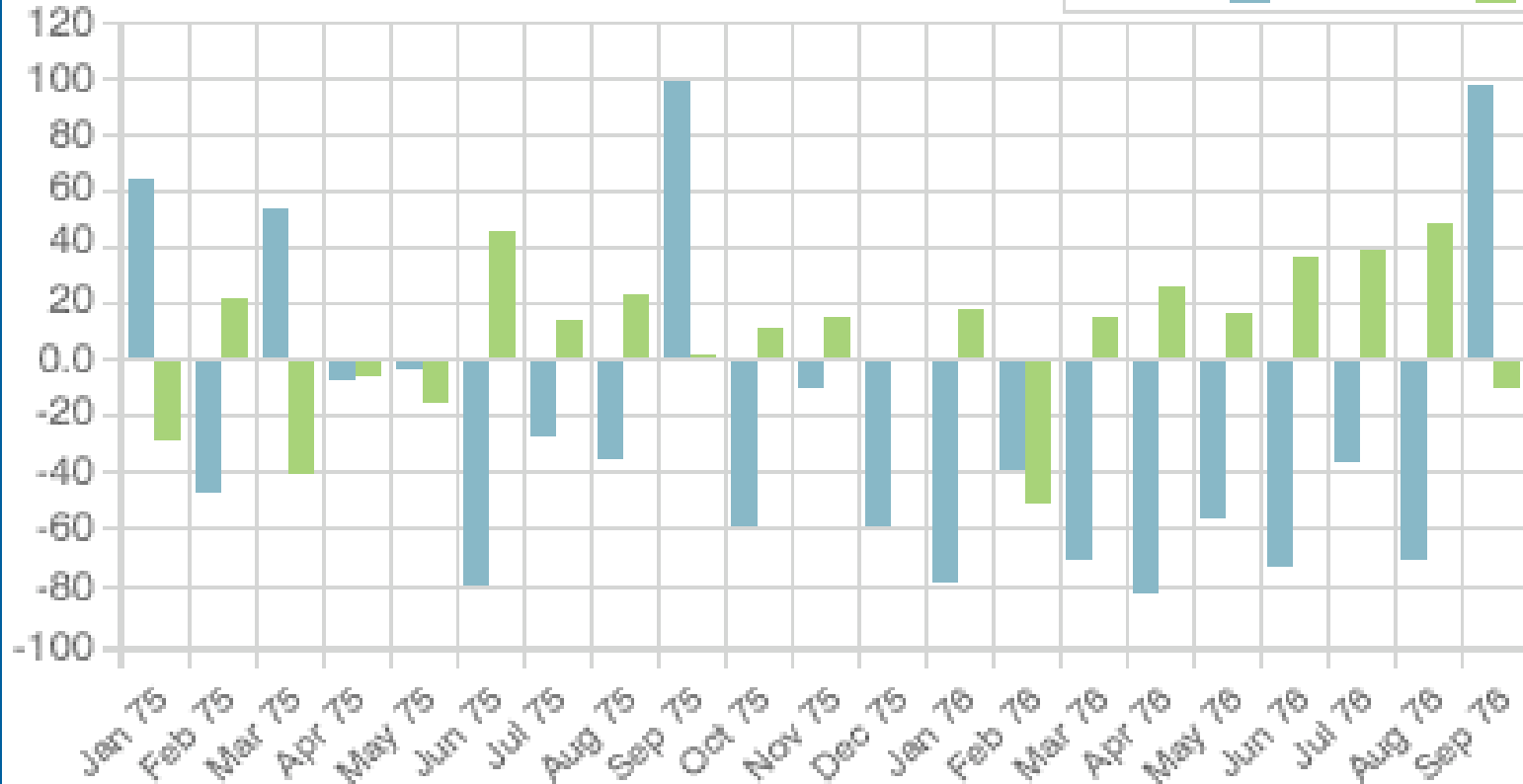
# Water situation - 70s Flashback!

## DROUGHT 1975-76

### Southern and SE England

Percentage variation from long term average

Rainfall ■ Sunshine ■

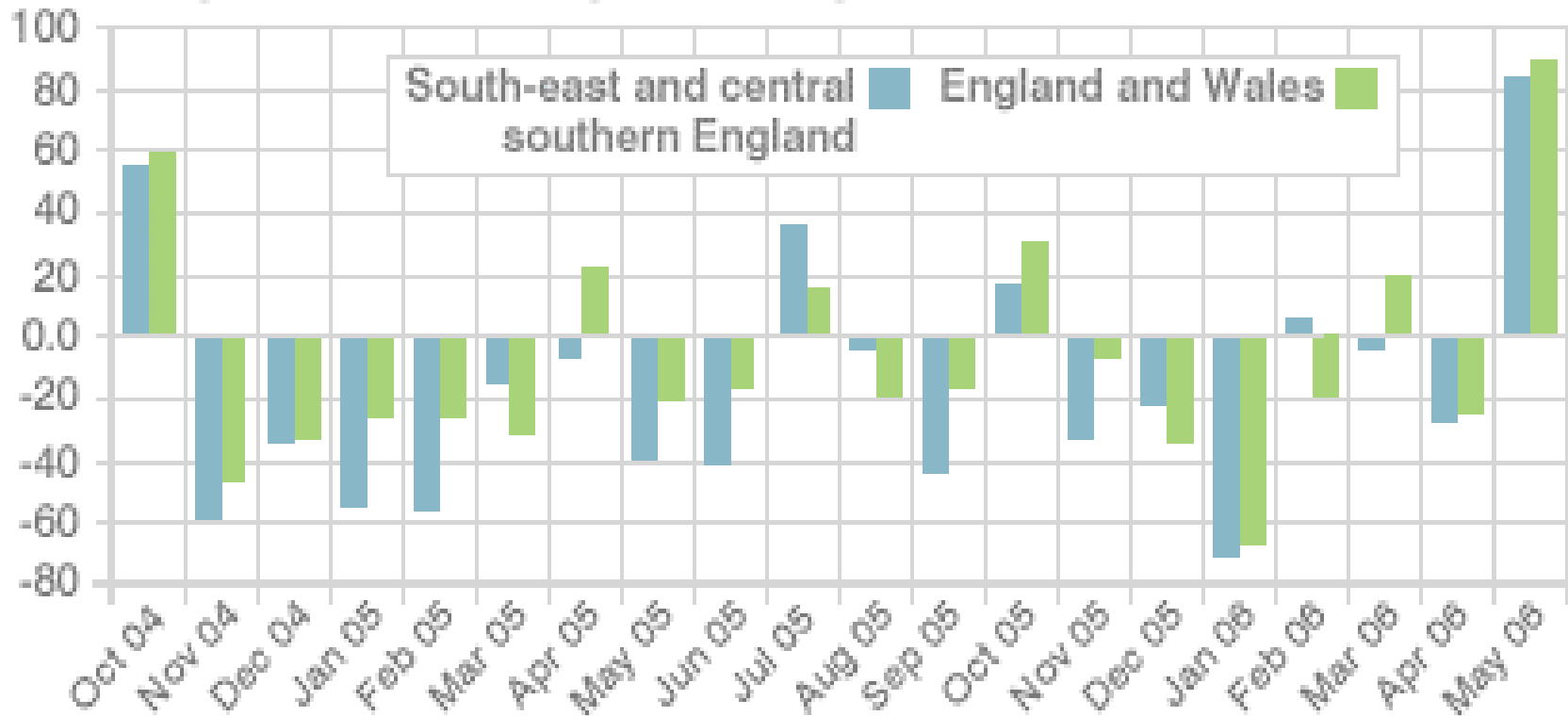




# Recent drought

## SOUTH-EAST RAINFALL

Percentage variation from regional average 1971-2000



SOURCE: Met Office

# Restrictions

- η Filling of privately owned swimming pools other than for medical treatment
- η Watering of gardens, allotments, parks or sports or recreation surfaces by sprinkler or hosepipe
- η Filling of ornamental ponds other than fishponds
- η Operation of car washes
- η Washing of vehicles or aircraft other than for safety or hygiene
- η Cleaning of building exteriors other than windows and cleaning of industrial premises
- η Cleaning of windows by hosepipes or sprinklers
- η Operation of ornamental fountains or cascades

# How is water important to your business?

- η How does your business use water?
- η Were you or businesses you rely on effected last year?
- η How would your business cope if sever water restrictions were imposed in future drought situations?

# What are the impacts of a droughts?

- η Water dependant Businesses at risk
- η Water recreation & sports affected
- η Environmental impacts:
  - *Reduced fish migration & spawning*
  - *Dead fish due to low/ no water levels & algal blooms*
  - *Dead wildfowl due to harmful bacteria*
  - *Loss of wetland habitat effects breeding*
  - *Problems for fresh water fish*
- η Limiting the effects of these

# All dried up!

*Caker Stream 2006*



# Good public response

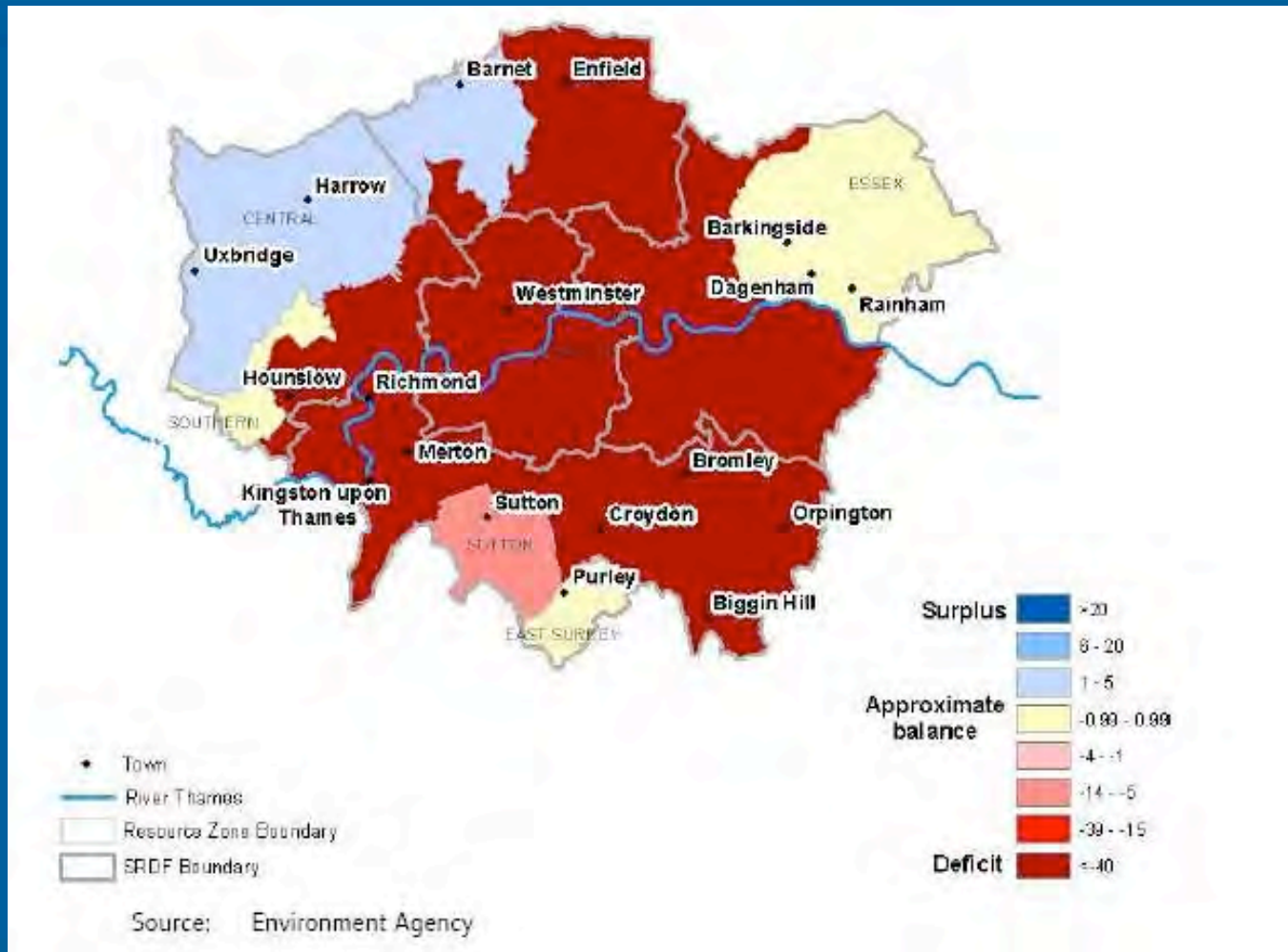


## More of the same in the future?

- η Warm & dry April - *reduced river levels & raised concern*
- η Wet weather May - *returned most river flows to normal*
- η Most groundwater & reservoir levels - *have now returned to close to normal for the time of year*
- η Hosepipe ban - *unlikely but a hot, dry summer may cause problems, especially if demand increases*
- η We need **sensible water use** through the summer

# Water supply situation in the UK

# Water supply availability 05/06 (est)



# Is there enough water in London?

## Demand

- η about 200 MI/d greater than available supplies, in a dry year (*equivalent to approx 1.2 million people's daily demand!*)
- η Average Londoner uses 156 L/day (*compared to Berlin's 120 L/day*)
- η **Population Growth**- forecast to grow by 800,000 by 2016 (*eq Leeds!*)

## Leakage

- η 60% of our water mains over 100 yrs old - over 850 miles are being replaced over the next 5 years

## Security of Supply

- η May need more reservoirs, desalination plants .. *problem of where to site these & the extra energy use ...*

**Efficiency** - Waterwise: *London more prone to restrictions in a drought*

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