The Water Efficiency Network
Regional Approach to Water Efficiency

Glasgow Caledonian University, Scotland
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Northern Irelands Approach to Water Efficiency

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Presentation Structure

1) NI Water, Background
2) Supply, Demand and Water Balance
3) Northern Ireland Approach
4) Conclusions
NI Water - At a Glance

- 23 Impounding reservoirs
- 25 Water treatment works
- 300 Service reservoirs
- 1,270+ Pumping stations
- 26,700 km of water mains
- 15,250 km of sewers
- 1,034 Wastewater treatment works
- 57 Sludge management centres
Total cost of delivering this plan calculated as £2.8bn - funded through £2.4bn revenue and £0.4bn borrowing.
Water Resources

Deployable Output (2014/15) = 774 Ml/Day
Distribution Input (2014/15) = 562 Ml/Day
## Water Demand

### NI Water Distribution Input

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<th>Ml/Day</th>
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<td>2014/15</td>
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### Water Demand Breakdown

- **Distribution System Operational Use**: 1%
- **Water Taken Unbilled**: 5%
- **Total Leakage**: 28%
- **Unmeasured Household - Consumption**: 44%
- **Measured Non Household - Consumption**: 19%
- **Unmeasured Non Household - Consumption**: 3%
- **Measured Household - Consumption**: 0%

### Water Usage Breakdown

- **Distribution Input**: 584 Ml/Day
- **Operational Use**: 3 Ml/Day
- **Distribution Losses**: 122 Ml/Day
- **Water Delivered**: 459 Ml/Day
- **Supply Pipe Leakage**: 46 Ml/Day
- **Water Used**: 413 Ml/Day
- **Wastewater Returned**: 319 Ml/Day
NI Executives - Long Term Water Strategy


October 2014

Priorities

Priority WS 8
Prepare and implement a Water Demand Management Strategy (WDMS) focussed on moving towards the proposed water strategy’s long-term target of 130 l/h/day.

Priority WS 9
Work with DRD and other stakeholders to develop policies in respect of water efficiency measures in homes and businesses. This includes investigating opportunities to work with other government departments, utility providers or NGOs to find mutually beneficial projects in which water efficiency can be highlighted or implemented (e.g. water efficiency and lower energy bills)
(PCC)
Per Capita Consumption

Water Per Capita Consumption (l/h/d)

- 2010 = 164 l/h/day
- 2015 = 145 l/h/day

E&W aspiration 150 reducing to 130 l/h/d

10%
Household water use

Typical water use per household (supply pipe leakage excluded)

- Toilet flushing
- Personal washing (baths and taps)
- Personal washing (showers)
- Washing up
- Outdoor
- Other

Water requiring heating

178 L/prop/day

386 L/prop/day
Education – Domestic

NI Water’s Water Education Team consists of two personnel serving schools, community and specialist groups, stakeholders and partners. Sixty percent of their time is spent promoting water efficiency.

Northern Ireland Sustainable Energy Programme,
• Shower regulators & Water saving information
• 10,000 members of the public at shopping centres around Northern Ireland
What are we doing?

Education – Non-Domestic

• Water Efficiency Day at Fofanny Water Treatment over 30 businesses attended.
• Presentation to Northern Irelands Council Energy Managers at their December meeting.
• Larger user discount scheme, dependent on the commitment of the customer to water efficiency.
• Updated website;
• Dedicated section to commercial water efficiency:
  – Why Save Water?
  – What is Normal Water Use?
  – What is a Water Balance?
  – Water Efficient Plumbing Appliances?
What are we doing?

Products
1) Cistern Displacement
2) Water Butts
3) Shower Timers
4) Gel Bags
5) Trigger Guns
6) Shower Heads
7) PR Items
Conclusions

- NI Water reasonably placed with current PCC and Supply Vs Demand
- Customers & Regulators want water efficiency, but some reluctance to finance it
- Education is NI Water’s current primary approach
- Current approach okay for now, may need expanded if further drivers warrant.
Thanks for Listening.

Any Questions?