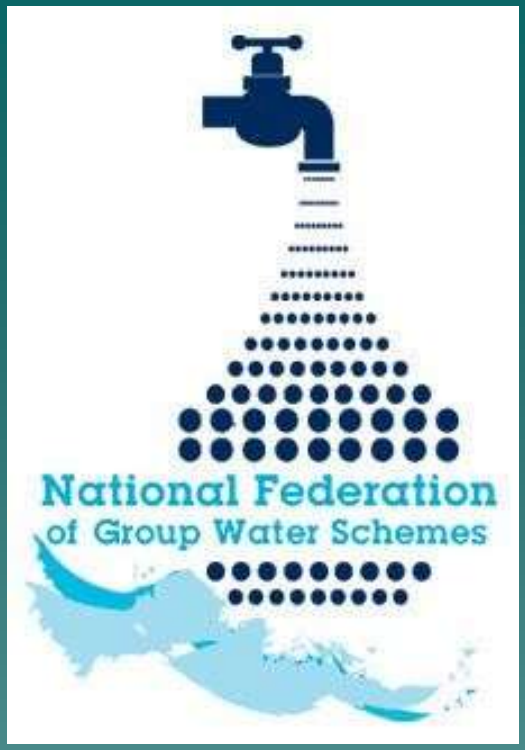


People power: community-owned drinking water supplies in rural Ireland

June 2014

Before the group water scheme movement

- Rural/urban divide
- Class divide
- Gender divide

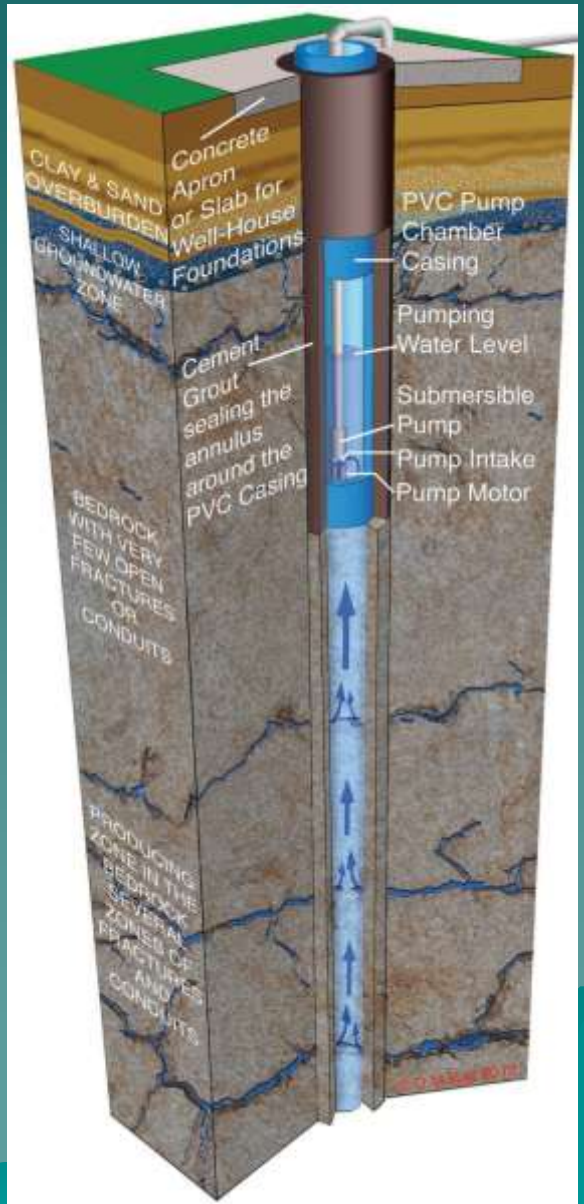
First communal supplies

Ireland's first Group Water Scheme

Oldcourt, County Wicklow, 1958-9

Role of Electricity Supply Board

- Expansion of rural electrification in the 1950s presented market opportunities
- Encouraged the early development of borewell schemes reliant on submersible pumps



Mobilising community support

Two GWS categories

- Privately sourced group water schemes
  - Responsible for sourcing, treating and distributing a water supply
- Publicly sourced group water schemes
  - Get treated water supply from public (local authority) network
  - Responsible for distribution only

A ‘typical’ GWS

Penetration of the lakeland zones

Characteristics of the 375 privately sourced schemes

- Size:
  - Range from 2 to 1,963 households
  - More than half have 100 households or less
- Source type
  - Predominantly groundwater sources
    - 202 borewell
    - 91 spring
    - 59 lake
    - 16 river or stream
- Population density
  - Average of 154 kilometres of distribution main per 1,000 households

Dispersed rural households

Low population density

Impact of source deterioration

Reality hits home

- State support ended once a GWS was constructed (minimal oversight).
- Original committees had been established to fund-raise, not manage.
- Over reliance on voluntarism
- The vast majority of schemes had little or no treatment and no training was available for those that had.

Sector in crisis by mid 1990s

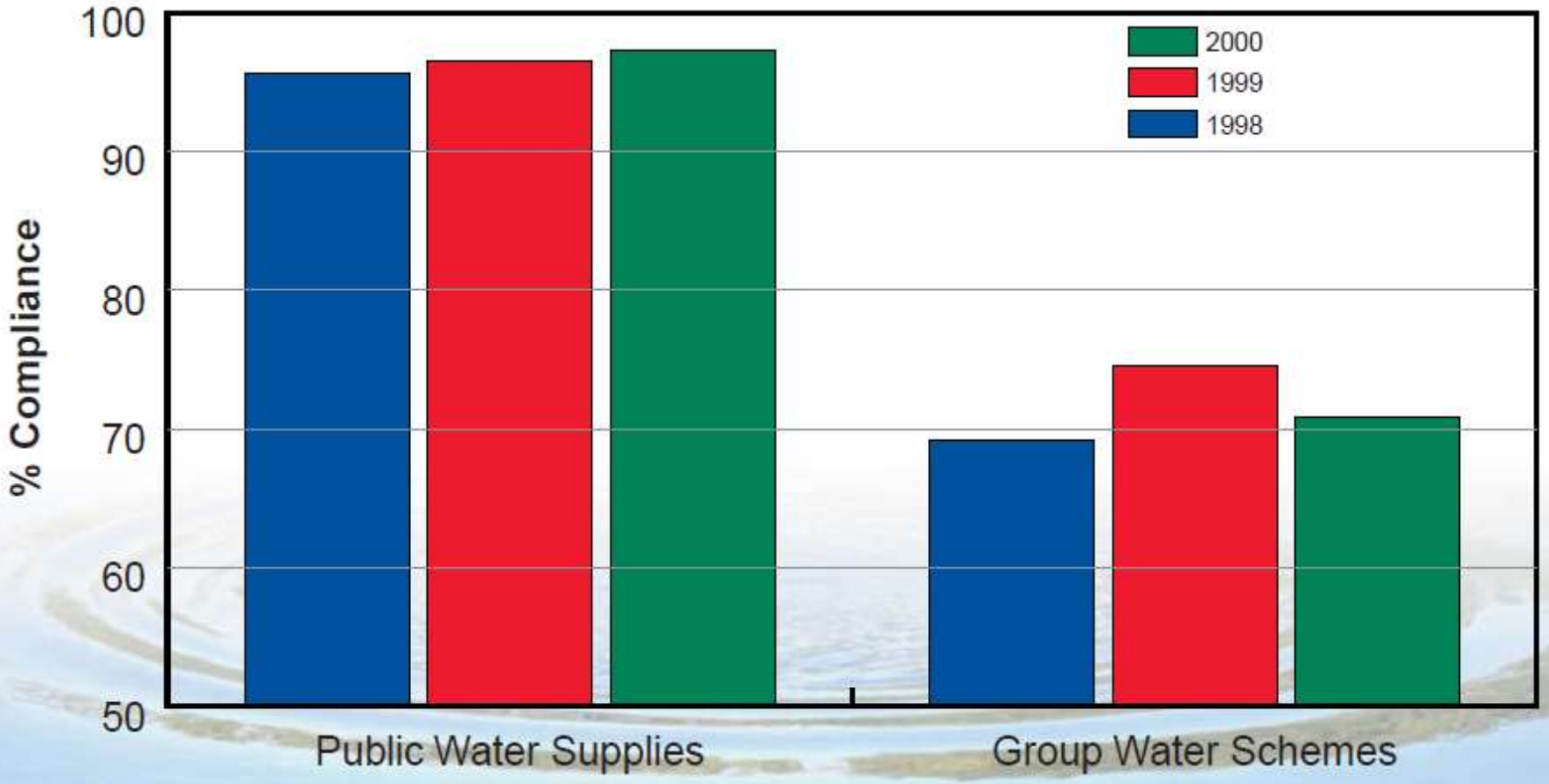
The consequences …

- In the 1990s the rural population abandoned tap water
- Group schemes were named and shamed in the national parliament
- The issue of Ireland's quality-deficient rural water supplies was brought to the European Court of Justice

The turning point …

- The Rural Water Programme agreed in 1998. This introduced:
  - New partnership structures
  - Co-ordination
  - Capital and operational supports
  - Focus on treatment and on training

EPA Reports 1998 - 2000



DBO Treatment

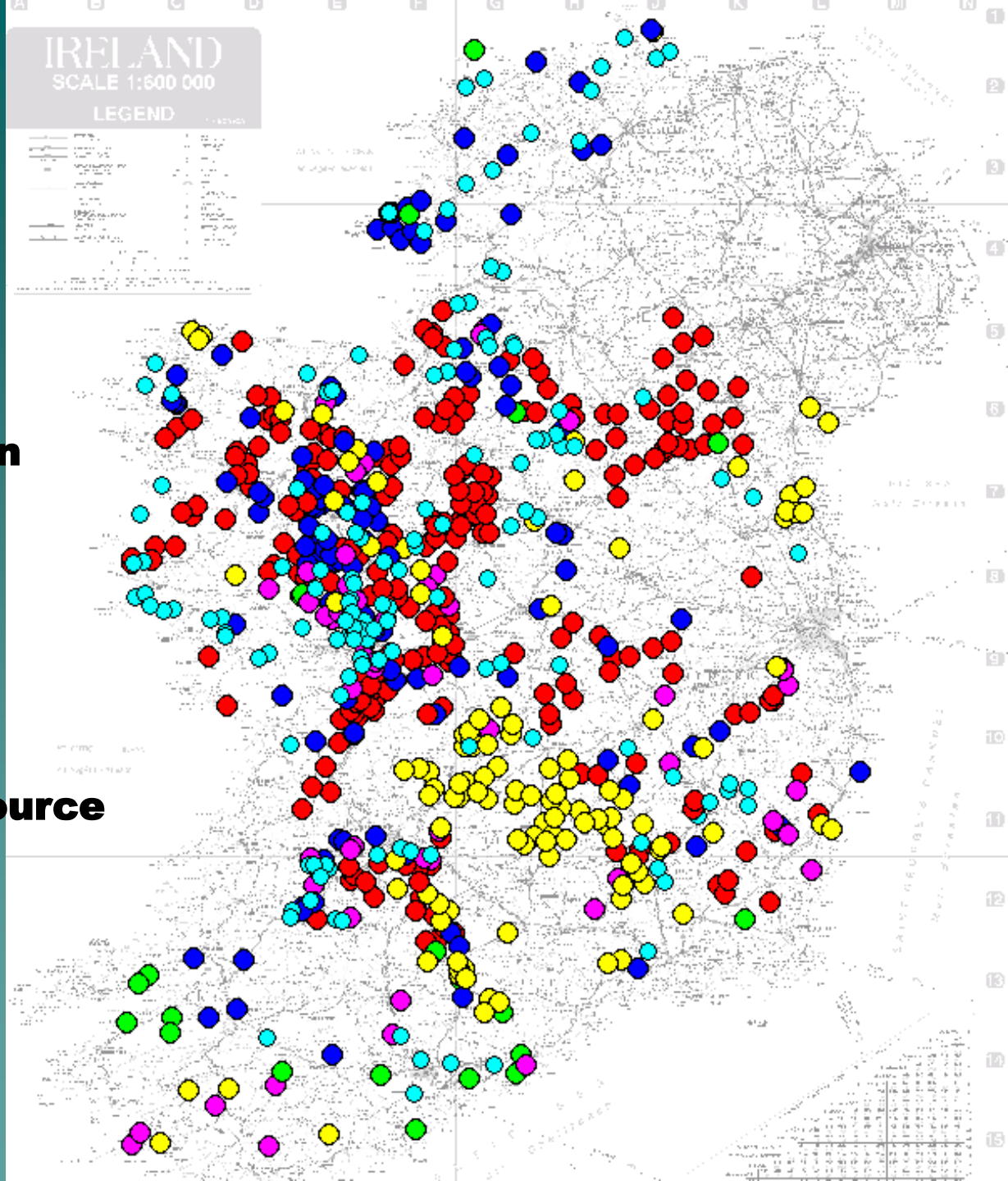
Non DBO Treatment

Connect to Public Main

Takeover by LA

Disinfection

Scheme with Public Source



Design Build and Operate

Amalgamations

- Neighbouring schemes joining together to share one treatment plant
- Spreading costs & sharing resources – sustainability for the future
- The NFGWS was centrally involved in the amalgamation process
- 122 GWS → 41 new GWS
- 220 wtw → 141 wtw

Other infrastructural upgrades

Stand-alone GWS upgrades

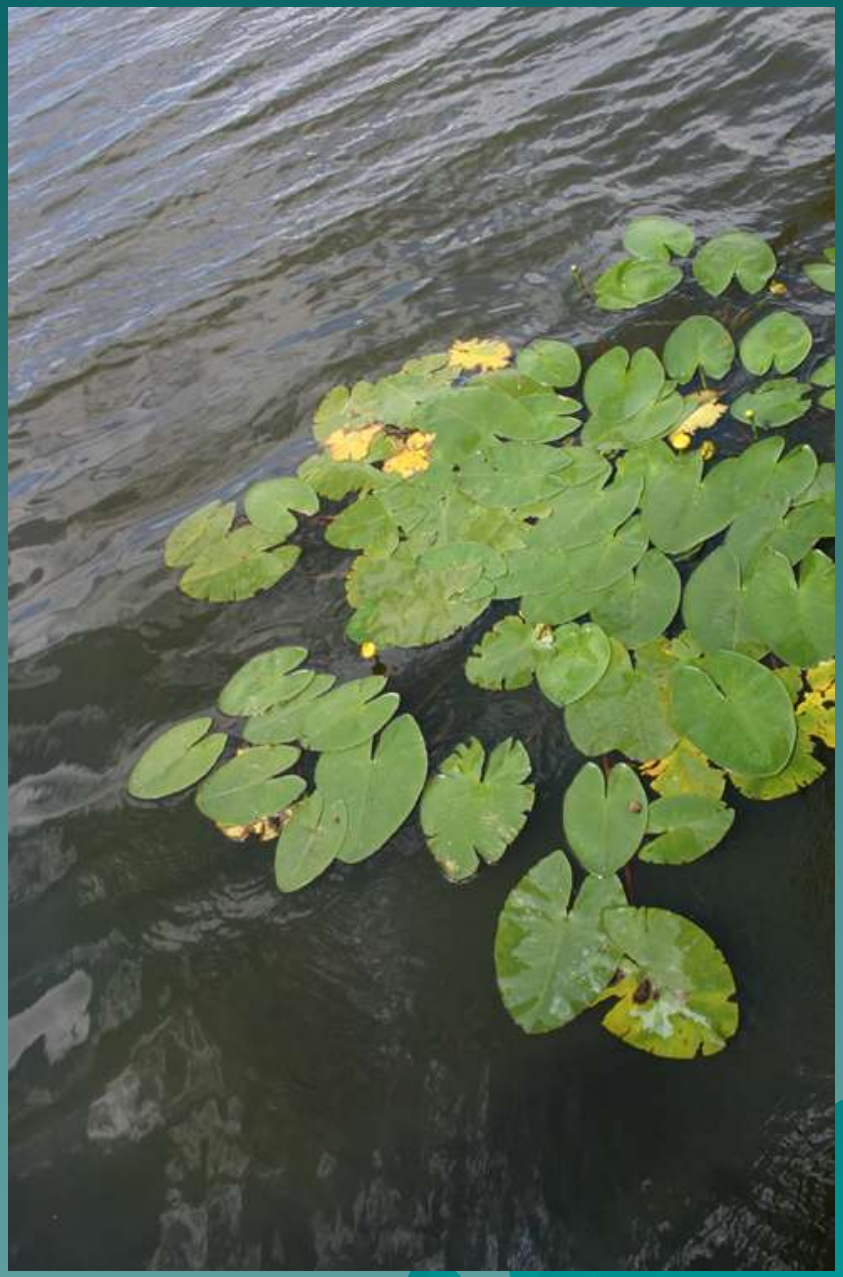
Compliance with E.coli standard (% of total tested)

Year	Public Water Supplies	Group Water Supplies
1999	96.2	74.1
2000	96.7	70.8
2001	97.2	74.1
2002	98.4	80.9
2003	98.7	83.2
2004	98.9	85.5
2005	98.9	77.5
2006	99.1	82.3
2007	99.5	85.2
2008	99.7	89.6
2009	99.7	93.5
2010	99.8	95.5
2011	99.9	96.7
2012	99.9	98.2

Source: EPA in CSO Environmental Indicators Ireland - March 2012

Criteria for a successful group water scheme

- Community support
- active volunteers
- a viable source
- appropriate treatment
- democratic structures
- a professional approach
- long-term commitment



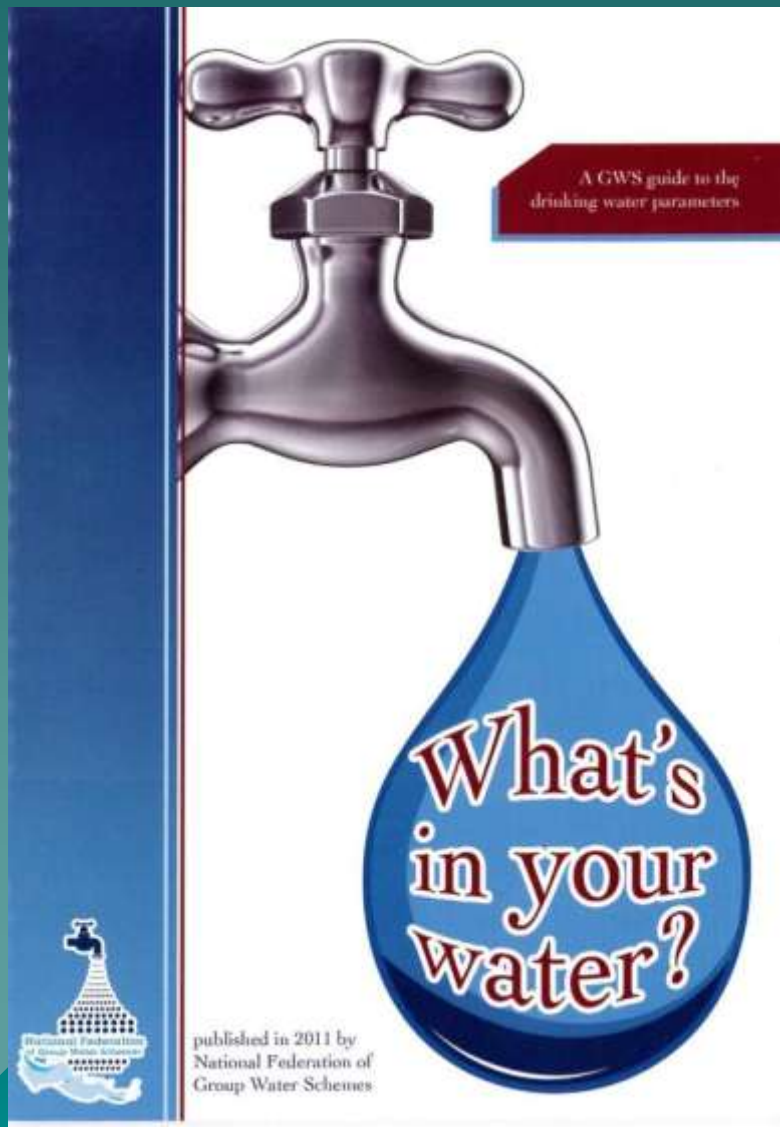
Building the capacity of GWS voluntary committees

Focus on best practice

- Encouraging
  - the appointment of dedicated management/staff
  - QA record keeping
  - Consistent chlorine monitoring
  - A source to tap approach
- Site visits

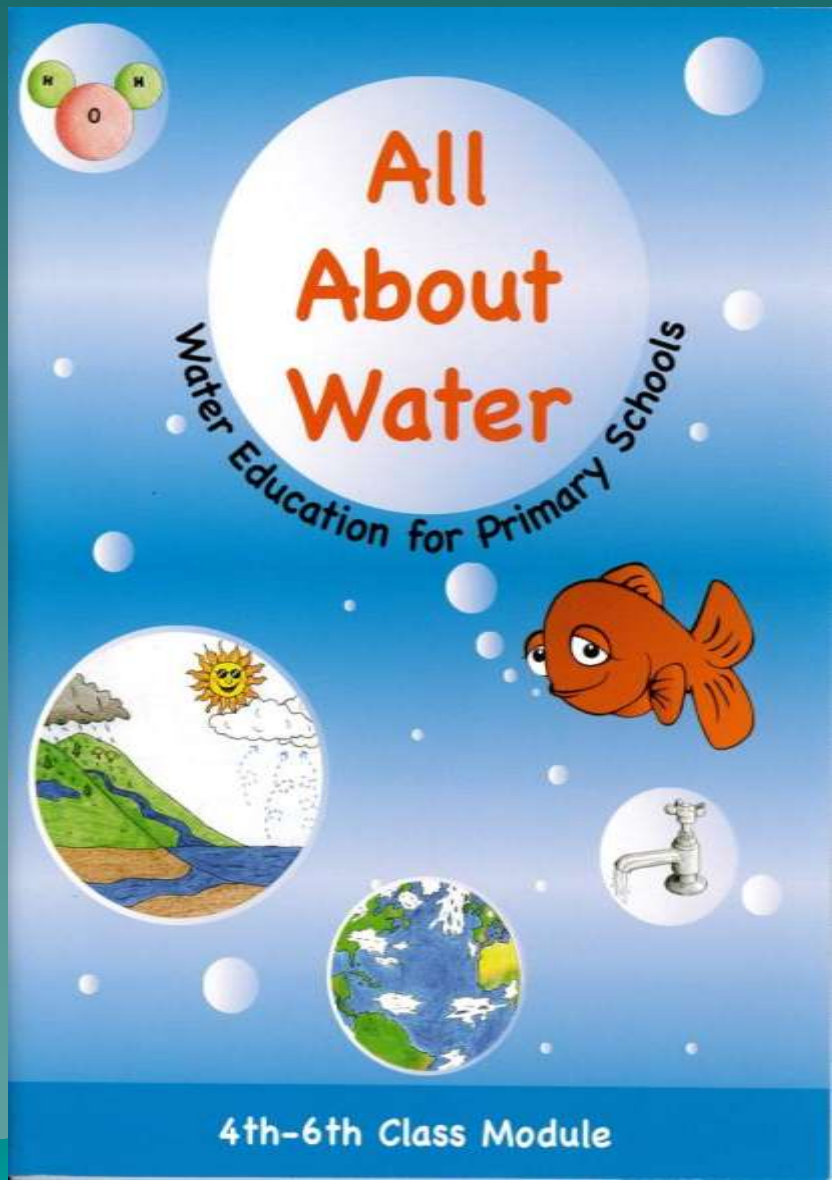
Providing practical resources

- **Guidance documents**
- Educational material
- Discussion forums
- Rural Water News



Providing practical resources

- Guidance documents
- **Educational material**
- Discussion forums
- Rural Water News



Providing practical resources

- Guidance documents
- Educational material
- **Discussion forums**
- Rural Water News

Providing practical resources

- Guidance documents
- Educational material
- Discussion forums
- **Rural Water News**

RURAL WATER NEWS

Magazine of the Group Water Scheme Sector

Autumn 2013 Volume 15 Issue3

Integrated Catchment Management

a collaborative process to protecting water

There have been growing calls in recent months for an integrated approach to protecting water bodies, if the objectives of the Water Framework Directive (WFD) are ever to be realised.

The active role that group schemes can play as part of a new collaborative approach with statutory agencies, academics and other voluntary groups in tackling pollution is now widely acknowledged.

Indeed, speaking at the recent Rural Water Conference, EPA Director, Michael Ó Cinnéide acknowledged that the GWS sector is 'ahead of the curve' on key issues of water protection, including metering.

Praising the Department's announcement of funding towards delineating the zone of contribution to GWS drinking water sources as a positive development, An tUas Ó Cinnéide said that there has to be an integrated 'catchment based approach' to the delivery of local measures to protect water.

This view is supported by evidence of the benefits of such an approach across the border and in Britain, where the government has thrown its considerable weight behind the ICM approach to protecting rivers, lakes and groundwaters.

Field study

A field study conducted on the Lough Bawn catchment in County Monaghan on 20 September underlined the fact that a 'one-size-fits-all' strategy simple won't work.

Led by Dónal Daly of the EPA, this study underlined the complexity of water catchments and the need for an approach that can be explained and defended locally.

Continued on page 3

In this issue:

More than two dozen experts from a range of disciplines participated in a field trip to the Lough Bawn catchment in Co. Monaghan, looking at all of the elements that might feed into an Integrated Catchment Management approach to protecting water bodies. This catchment includes drinking water sources for a GWS and a major public supply.

N.F.G.W.S.

So is the transformation completed yet?

- The Irish GWS sector has proven that with appropriate oversight and support (including mentoring), community-owned and community-run water services can deliver on EU quality standards … but is that enough?

Putting the horse before the cart … focus on the source

Build now for the future … challenging the culture of bottled water … winning consumer confidence

Get the message across

Building community support for a sustainable water supply

Potential for renewable energy

… particularly for remote communities

Electricity use on a GWS

- Submersible pumps
- Pressure vessels
- High rise pumps
- Disinfection systems
  - UV
  - Chlorination units
- Monitoring points

Sin é