

Driving water quality improvements in Ireland

> Jenny Deakin j.deakin@epa.ie

## Ireland in context





Small country of 5M people. Agriculture is the dominant land use



### River water quality





Trends going in the wrong direction

High nitrate in the SW

High phosphate in S and E

Widespread problems with invertebrates

Regional water quality problems driven by land use and soils.



### Impacts to waters that are At Risk





Too much phosphorus in rivers and lakes



Too much nitrogen in estuaries and coastal waters



Morphological impacts (Land drainage, channel maintenance, urban environment)

- Main pressures come from agriculture, hydromorphology (physical habitat changes), forestry and urban waste water
- Problems are often widespread and diffuse.
- Lots of investment in measures. Some improvements in some places, but not enough overall
- Improvements are being offset by declines



New approach needed for river basin management planning!





## A changed philosophy



1. Strong evidence base

2. New collaborative approach

3. Local scale assessment and implementation



'The right measure in the right place'

# 1. Strong evidence base





## New science models and tools – to assess impacts, and target measures



140 datasets >50 person years All recorded in a central, shared WFD App





Aiming for 'The right measure in the right place'



- Source apportionment
- N risks from agriculture
- P risks from agriculture
- Hydromorphological impacts
- Sediment risks
- Nature based solutions mapping
  River restoration tool

# 2. Collaborative approach





### Stronger collaborative governance



### Public bodies working together

- EPA-Fisheries-Local Authority local meetings to jointly identify significant pressures
- Regional stakeholder meetings (>600 attendees) to set realistic objectives and select 189 priority Areas for Action
- 5 x Regional Operational Committees made up of those stakeholders now in place, to support the implementation of the plan



### Home

News

Stories

Issue 9: Winter 2018

Sciend

đ

### **Catchments Newsletter** Integrated Catchment Management: sharing science and stories



Water is a precious resource and is essential for all life on eart Looking after our rivers, lakes and coastal waters so they can m current and future needs, and also continue to support the eco that depend on them, is vital for Ireland's future.

Doing this at community level is the best way to get people acti involved.

#### Find out more

Publishing the evidence base and celebrating successes is important

Contraction and



Plans and pressures: how characterisation helps us act as custodians of our catchments

#### Inside this issue

Waters and Communities - news from around the country Understanding our catchments Water Framework Directive Characterisation Telling stories with data

The Bresloph Hiver, Jionegol - photogram instrument divors Tourt

Groundwater characterisation The River Basin Management Plan 2018-2021

The Local Authority Waters Programme Catchment Asse

ocal Catchment Assessme the next step in characterising our

Significant Pressures: selected

its

tive

# 3. Local scale implementation

Further information from Margaret and Noel



### Local scale implementation



Helping people to implement 'the right measure in the right place'









# Is this going to work?





### So far... so good!

- Good engagement and response from Public bodies, Local Authorities and communities. Everyone is working together.
- Environmental messaging is starting to align for climate, biodiversity, natural flood mitigation and water quality. We need to join up the actions.
- Water quality is getting better in the Priority Areas for Action, but still getting worse nationwide overall.
- We are continuing to evolve the approach

We have a long way to go, but so far the signs are good!

