

# Lough Neagh Pressures, Impacts and Partnership Working

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(AFBI)

# Overview

- River Basin District
- Pressures
- Status and objectives
- What actions are being taken
- Partnership working
- Lough Neagh trends
- Future work and next steps

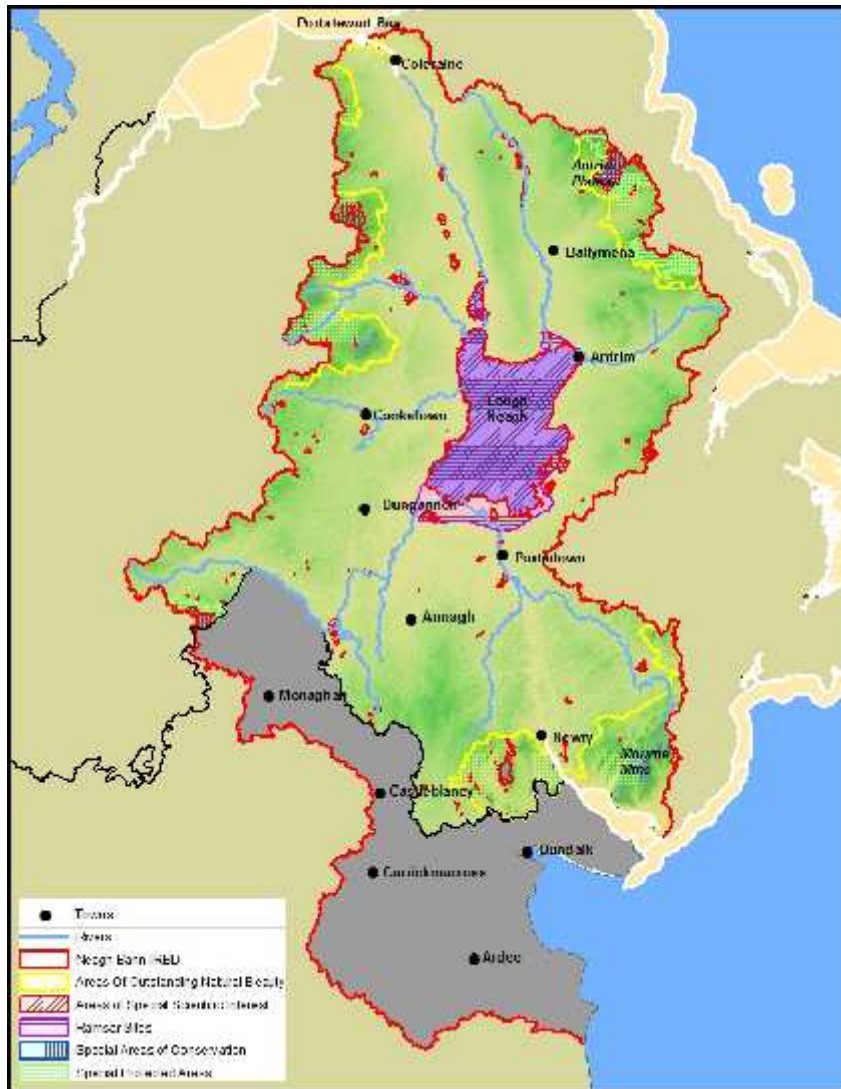


# River Basin Districts



- Main unit of management across Europe
- 8 River Basin Districts in Ireland
- Neagh Bann International River Basin District

# Neagh Bann River Basin District



Approx 6000km<sup>2</sup> NI  
& 2000km<sup>2</sup> Ireland

- Lough Neagh
- Ramsar Site
  - ASSI
  - SPA
  - SAC





# Established Invasive Alien Species



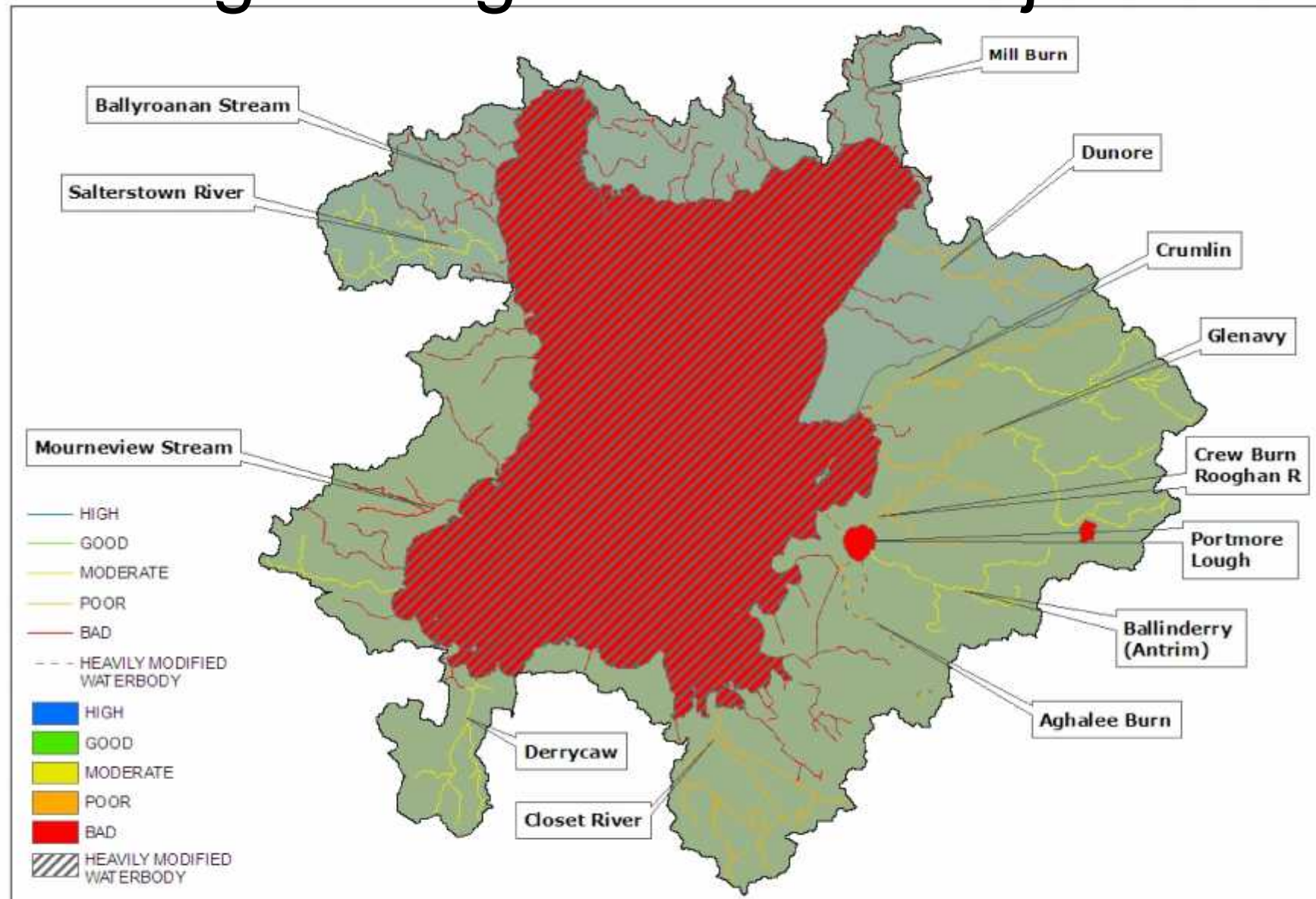
-Nuttall's pondweed (*Elodea nuttallii*) – first recorded in 1984 on Western shoreline.

-Several freshwater shrimps – *Gammarus pulex*, *Crangonyx pseudogracilis* & *Gammarus tigrinus*.

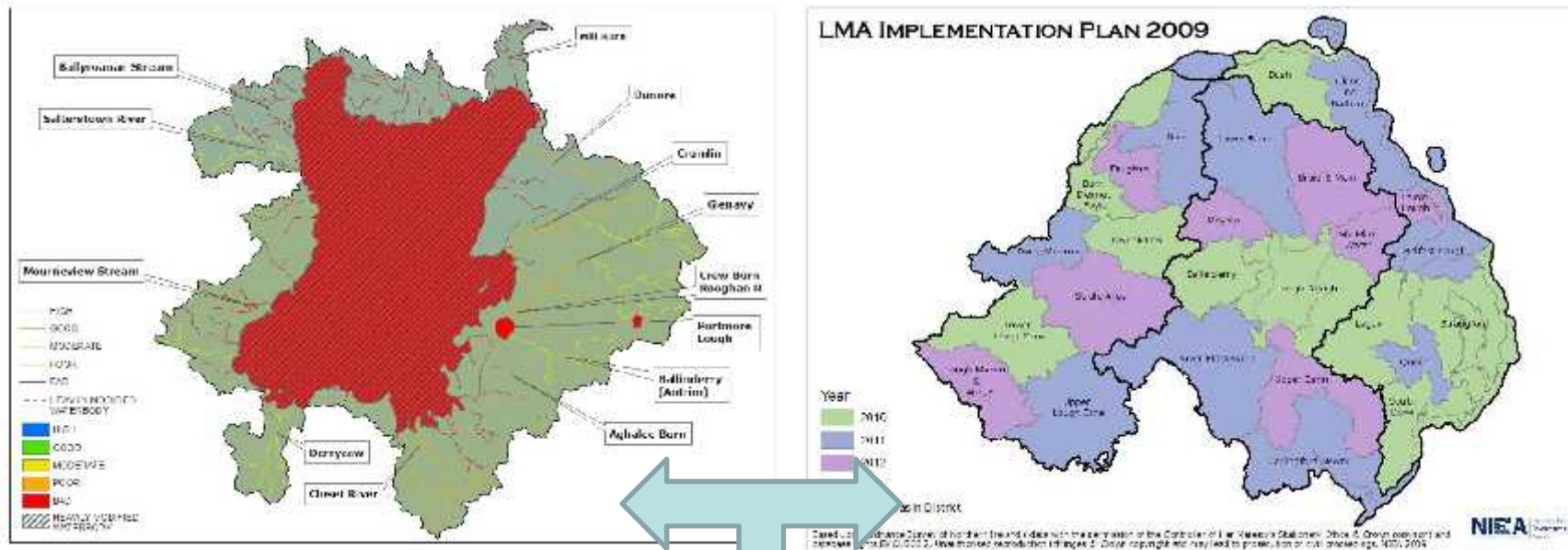


-Zebra mussels (*Dreissena polymorpha*) – first recorded in 2005 at Kinnego Marina.

# Lough Neagh Status & Objective



# Lough Neagh Action Plan



NATIONAL MEASURES

LOCAL MEASURES

Action to be taken

Action to be taken by

Work with and support local Stakeholders in raising awareness of environmental issues and project

NIEA

Carry out a Lough Neagh baseline fish survey starting in Summer 2011

AFBI

Implementation of all other LMA action plans that feed into the Lough

NIEA



# Targeted River Walks

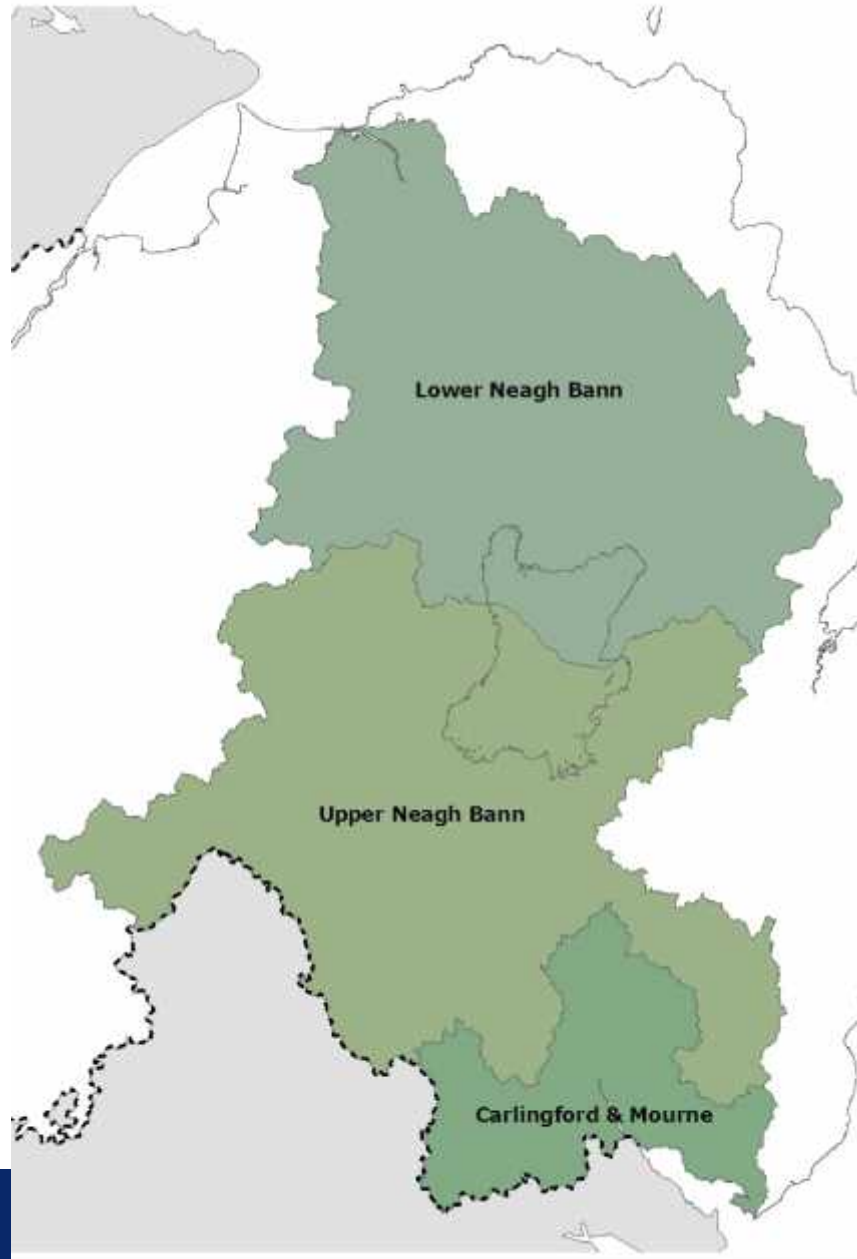


Pollution  
Hotline  
Signage

# Removal of Himalayan Balsam



# Catchment Stakeholder Groups



- Bi-annual meetings
- Informal
- Discussion topics:
  - Pollution in local area
  - Plans to improve the local environment
  - Guest speaker from the area e.g. local fishing club

# DARD Press Articles



**William Houston, beef and sheep farmer in the Burnedennet and Foyle LMA**

"Although I now use injectables and pour-ons to control sheep scab, blowfly and ticks in the flock, I have kept my sheep dipper for possible future use. To retain this flexibility I am aware that the dipper must be kept fully maintained with no cracks or holes present in the dipper".



**Brian Henry, dairy farmer in the Ballinderry LMA**

"I have excluded livestock from the naturally occurring woodland along the banks of the tributary of the Ballinderry. This provides a buffer to reduce the risk of bank material entering the water which could have a bad effect on the Freshwater Pearl Mussels present".



**Alan Coalter – Ballinamallard dairy farmer in the Lower Lough Erne LMA**

"Whilst my farm is not on the banks of the river, the network of small streams and shoughs lead straight to the Ballinamallard River, so vigilance is required at all times. In recent years I have switched from conventional pit sludge to big bale sludge. After the grass is mowed it is spread out to improve drying before being baled; as a result high dry matter sludge is achieved with little or no effluent".



**Nigel Laughlin, beef and sheep farmer in the Owenkillew LMA**

"I regularly check my storm-water outfalls for signs of contamination and consider this to be an essential part of pollution prevention on the farm. I also find it useful to have a look at the water in the burn below outfalls as I know from training that I have been involved in that a constantly clean river should contain a wide range of aquatic invertebrates".



**Samuel and Ian McClean, cereal, beef and poultry farmers in the Bush LMA**

"Increased slurry storage capacity as the result of the new tank that we constructed under the DARD Farm Nutrient Management Scheme has undoubtedly helped in planning slurry spreading. This allows us to spread to take advantage of the best growing conditions and when risk of run-off is least".



**James Brown, dairy farmer in the Strangford LMA**

"Running an intensive dairy farm, I am always conscious of the need to manage nutrients carefully to achieve maximum efficiency from the livestock manure produced on the farm and to minimise the risk of run-off to waterways".



**Trevor and Ryan Campbell, beef and sheep farmers in the Lagan LMA**

"Some of the most effective pollution control measures are the simplest. We have found that by adjusting the farmyard storage to achieve clean / dirty water separation, our slurry and effluent storage capacity has been effectively increased".



**Francis Bateson, beef farmer in the Lough Neagh LMA**

"I am told that the nutrient phosphorus is causing water quality problems in Lough Neagh. I also know that it is the most expensive component of purchased fertiliser. For both these reasons it pays to apply slurry and fertiliser according to crop need and this must be based on the results of soil analysis".



**Robert Turner – Bryansford sheep and beef farmer in the South Down LMA**

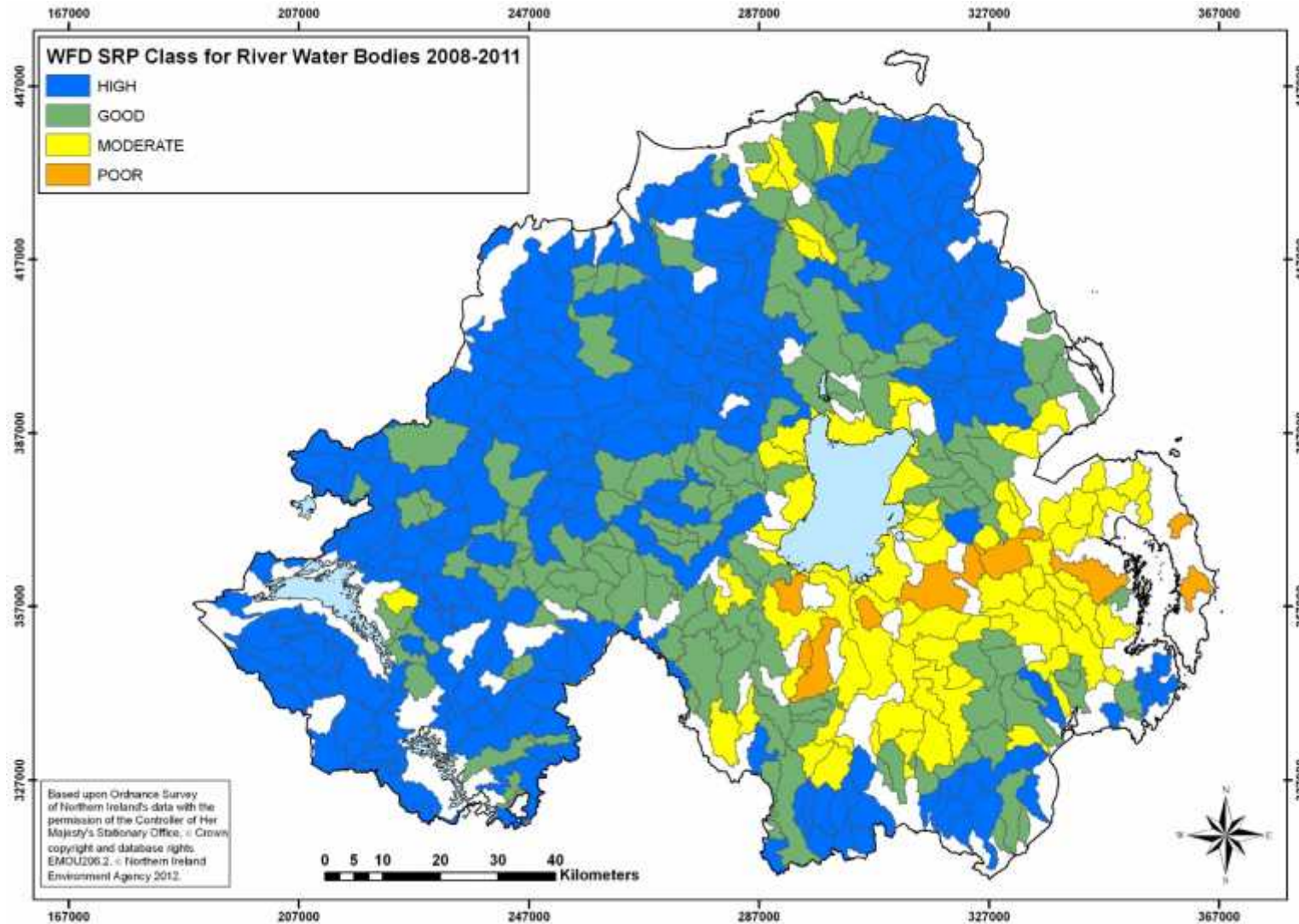
"I reduced livestock numbers to match tank capacity and I now store my sludge in bales. Both changes avoided building extra storage at significant cost. Careful application of slurry and manure enable me to maximise grass growth and reduce fertiliser use. As well as reducing costs, these measures ensure that my watercourses remain clean".

# Public Participation

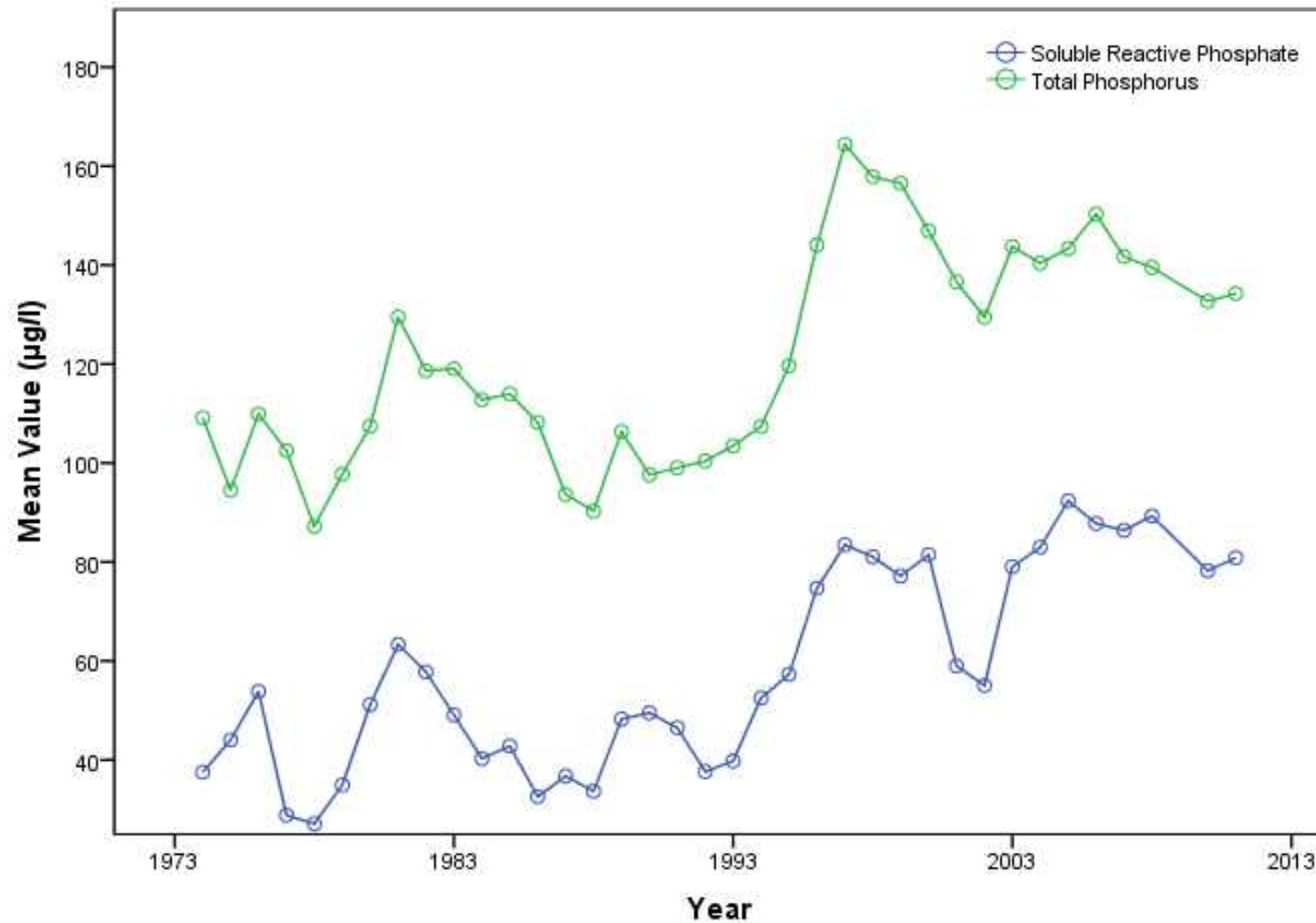


# Trophic Status 2008 – 2011

(based on SRP, macrophytes and diatoms)



# Long term lake trends



Graph provided courtesy of AFBI

# European funded project (INTERREG IVA) – DOLMANT

Development of Lake Management Tools

2011 - 2014

- Aims to link catchments with lake ecology
- Study of lake biology, chemistry and catchment characteristics
- Lough Neagh included as one of the study lakes





# Conclusions & Next Steps



- Lough Neagh is important natural habitat
- Fragile resource managed as ecosystem
- Lake restoration scheme to manage internal and external nutrient sources
- Need for ongoing research
- Achieving **Good Ecological Potential** considerable challenge

Our aim is to protect, conserve  
and promote our natural and built  
environment for the benefit of  
present and future generations.

