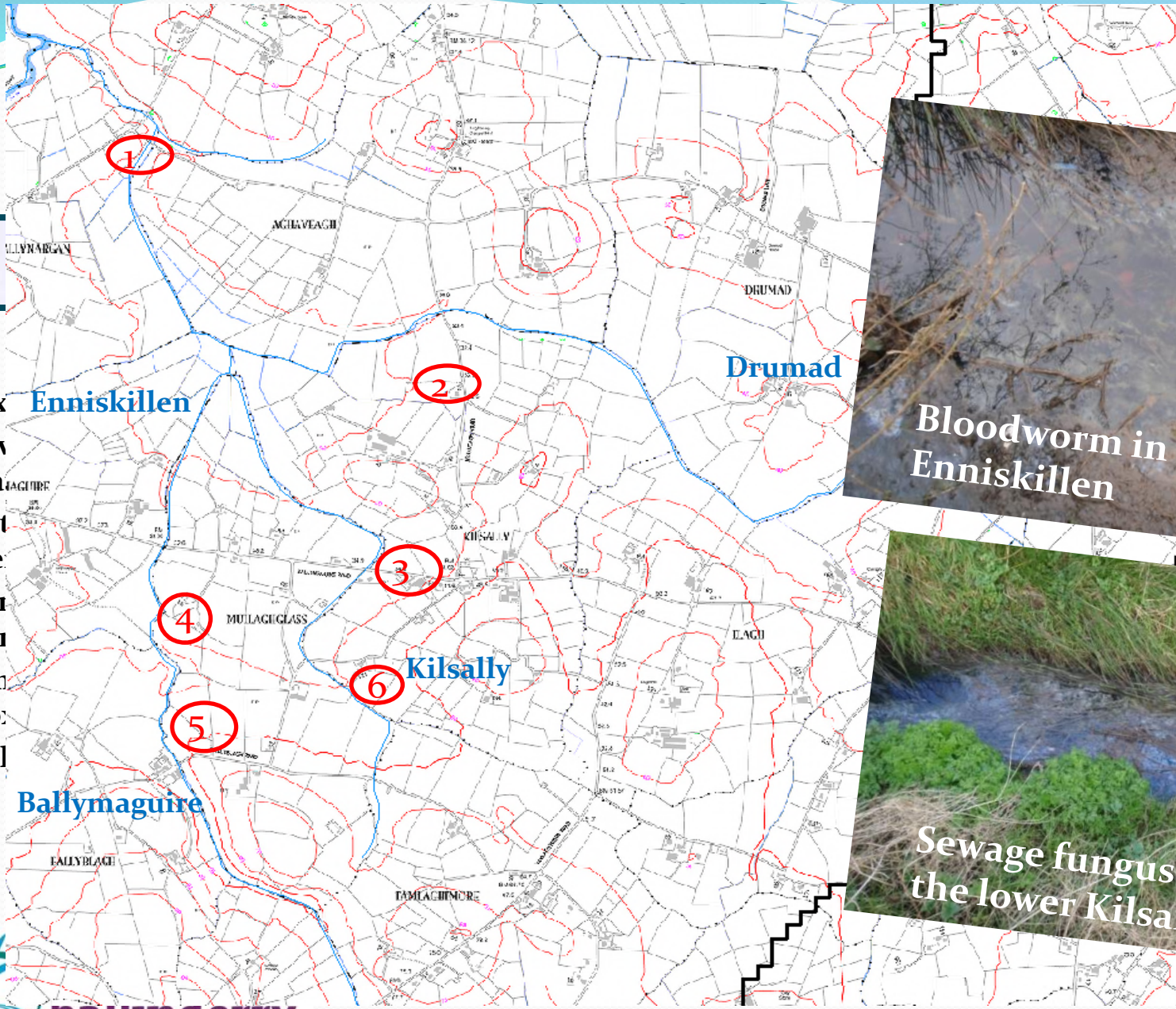


Aghaveagh Stream Water Quality Improvement Project

Alan Keys MBE

Upper Neagh Bann CSG Meeting
14th November 2013
Cohannon Inn

Setting the scene



- Six Enniskillen
- River
- Water
- Level
- Flow
- Fauna
- Fish
- Foliage



Bloodworm in the Enniskillen



Sewage fungus in the lower Kilsally

Results of River Walks

38 farm units passed during river walk

30 causing NO IMPACT

8 having MODERATE to SEVERE IMPACT

5 resolved issue following farm visit

3 reduced but ongoing impact

2 of 3 resolved issues with more help from statutory agencies

1 persistent polluter

Some examples of bad farming practice

**Pollution at Kilsally
before septic tanks
were cleaned out**





General yard run-off is washed down this lane towards the adjacent stream

**Plumes of
bloodworm in the
Enniskillen sub-
catchment**





Another overflowing dirty water tank in the Enniskillen sub-catchment



**A single block above-ground pig slurry tank.
Cracked walls allow slurry to reach the stream.**

Bloodworm Plume

**The result of
pollution in the
Enniskillen sub-
catchment.**





Flocks of teal duck where found feeding on the hoglice, leeches and snails along the Enniskillen drain.



**Silage effluent leaking from a silo.
This problem was resolved quickly.**



Sheugh carrying silage effluent, slurry and the discharge from a septic tank to the Ballymaguire stream.

Good farming practice

A new dirty water tank which holds milk washings and yard run-off.





An underground slurry store beyond the new milking parlour, ensures there is no escapement of milk or slurry.



Grating collects any run-off from an open midden and carries it to an underground slurry store.

**Automatic scraper
removes manure,
several times a day.**



The manure is pumped to a new above-ground concrete slurry store.



Word of caution on above ground slurry stores



Enamelled metal above-ground slurry stores, are more prone to corrosion than concrete stores. The levers of both valves on this 5 year old store are showing signs of wear already.

Repeating this project elsewhere...

- Requires experience in pollution pressures and impacts identification
- Careful and sensitive negotiation with landowners is essential – experience required

The importance of cooperation between landowners and Rivers Trusts

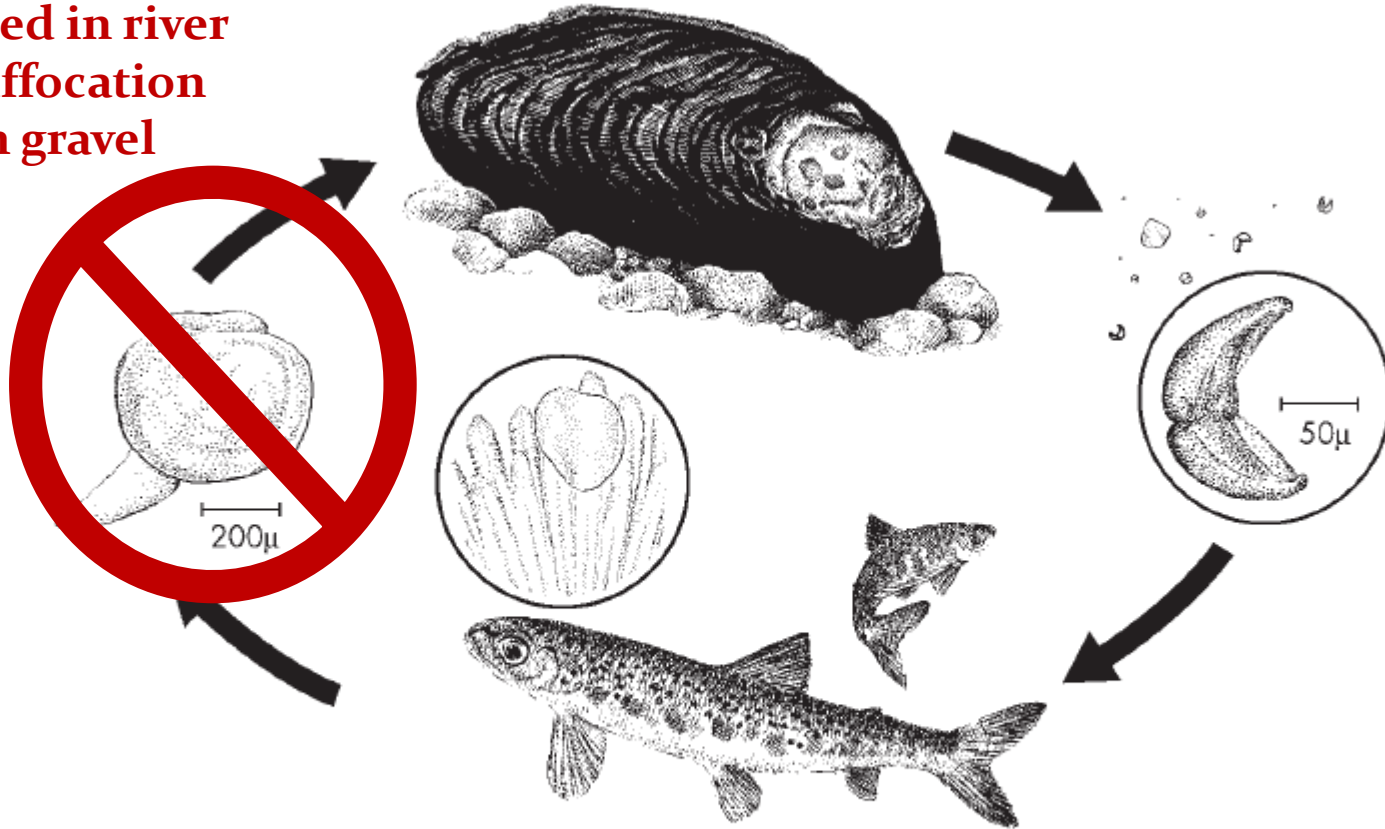
An example from the Ballinderry Freshwater Pearl Mussel Rescue Project

Tulnacross Stream – Upper Ballinderry River



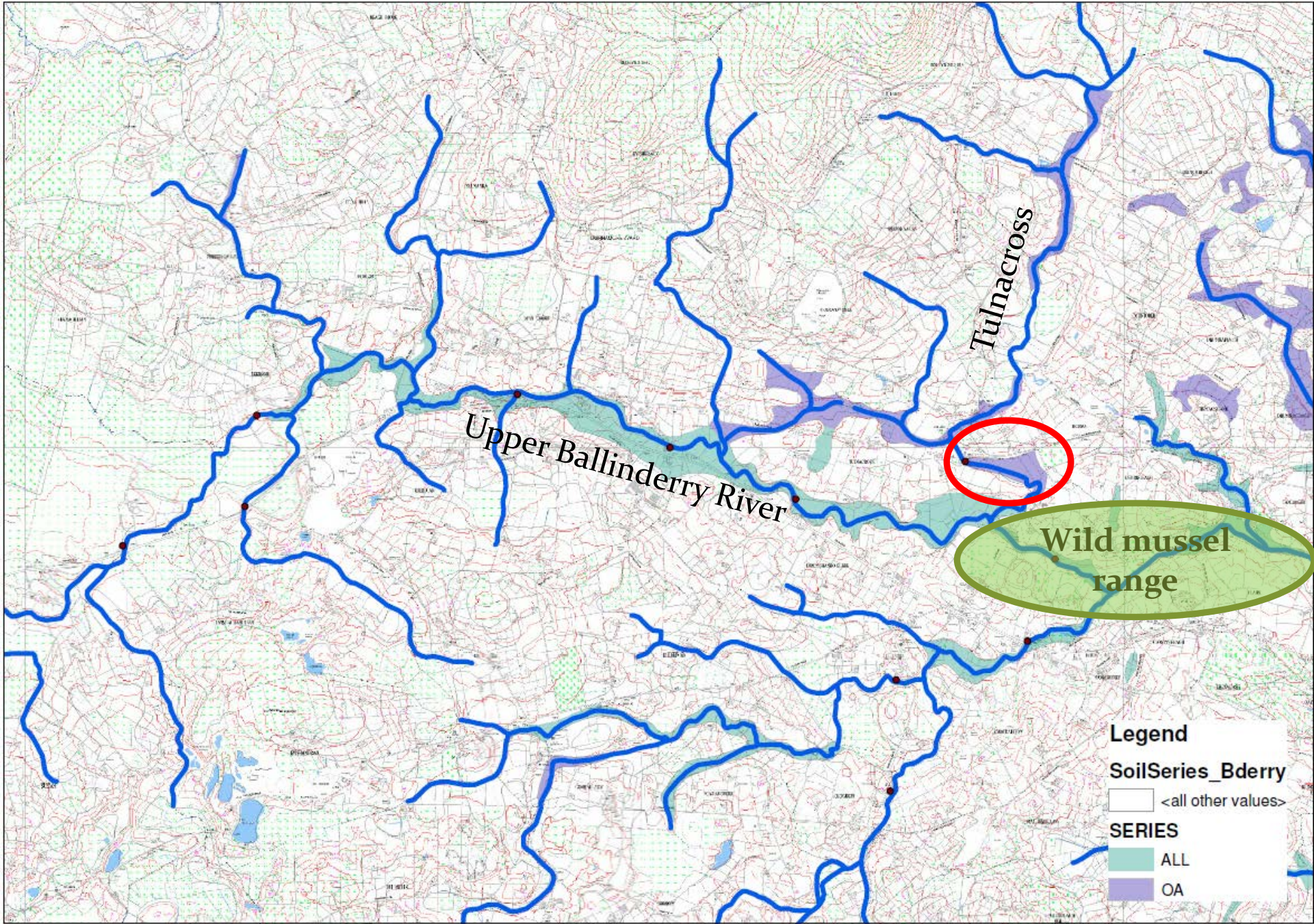
The Project – in brief

First four years of life buried in river bed – suffocation by silt in gravel



Sarah Wroot

Mussel larvae, known as glochidia, are released in summer and attach themselves to the gill filaments of a juvenile salmonid. Here they encyst and grow until the following spring, when they drop off on to clean gravel and begin maturing. This association does not seem to harm the host fish, and facilitates mussel dispersal.





Three landowners supplied over 500 tonnes of rock – free of charge

Estimated value of rock £8,000

Estimated value of time £2,160

Total in-kind contribution + £10,160



~3m







BIG PANIC !!
Floods on the
way 24th Oct
2013







Farmers even happy to give us a lift to the river – a win win for everyone

