



Farming for
Water Quality



Combining Catchment Science & Agricultural Advice to Improve Local Water Quality

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An Roinn Talmhaíochta,
Bia agus Mara
Department of Agriculture,
Food and the Marine

Dairy
Sustainability
Ireland

Local Authority
Waters
Programme
vibrant communities | catchment assessment | healthy waters



An Roinn Tithíochta,
Rialtais Áitiúil agus Oidhreachta
Department of Housing,
Local Government and Heritage

Collaboration & Funding



Agricultural Sustainability
Support and Advisory
Programme (ASSAP)

Farming For Water Quality



An Roinn Talmhaíochta,
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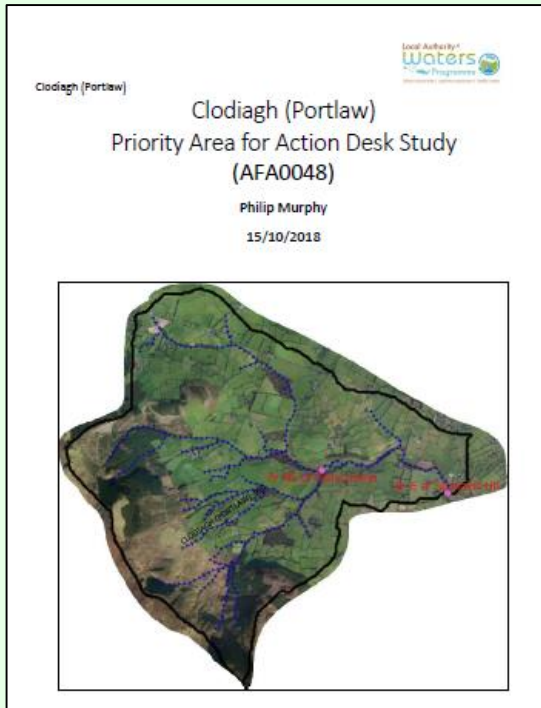


An Roinn Tithíochta,
Rialtais Áitiúil agus Oidhreacht
Department of Housing,
Local Government and Heritage



The Irish Agriculture and Food Development Authority

Collaboration with Philip (LAWPRO)



Clodiagh
PAA

| WB Name | Risk | Status obj. | Ecological Status | | | | Monitoring station | Pressure Category | Initial Characterisation |
|-----------------------|---------|-------------|-------------------|-----------|-----------|-----------|------------------------------------|-----------------------|--------------------------|
| | | | 2007-2009 | 2010-2012 | 2013-2015 | 2013-2018 | | | |
| Clodiagh (Portlaw)_10 | At Risk | Good | Moderate | Good | Moderate | High | Br E of Shanakill Ho (RS16C030100) | Agriculture (Pasture) | Nutrient pollution |
| | | | | | | | | Forestry (Forestry) | Nutrient pollution |



Farmers Meeting

Local water quality



- Learn from each other
- Support and engagement
- Farmers are very interested in meeting the lad that hangs around bridges



Science, Advice and the Farmer



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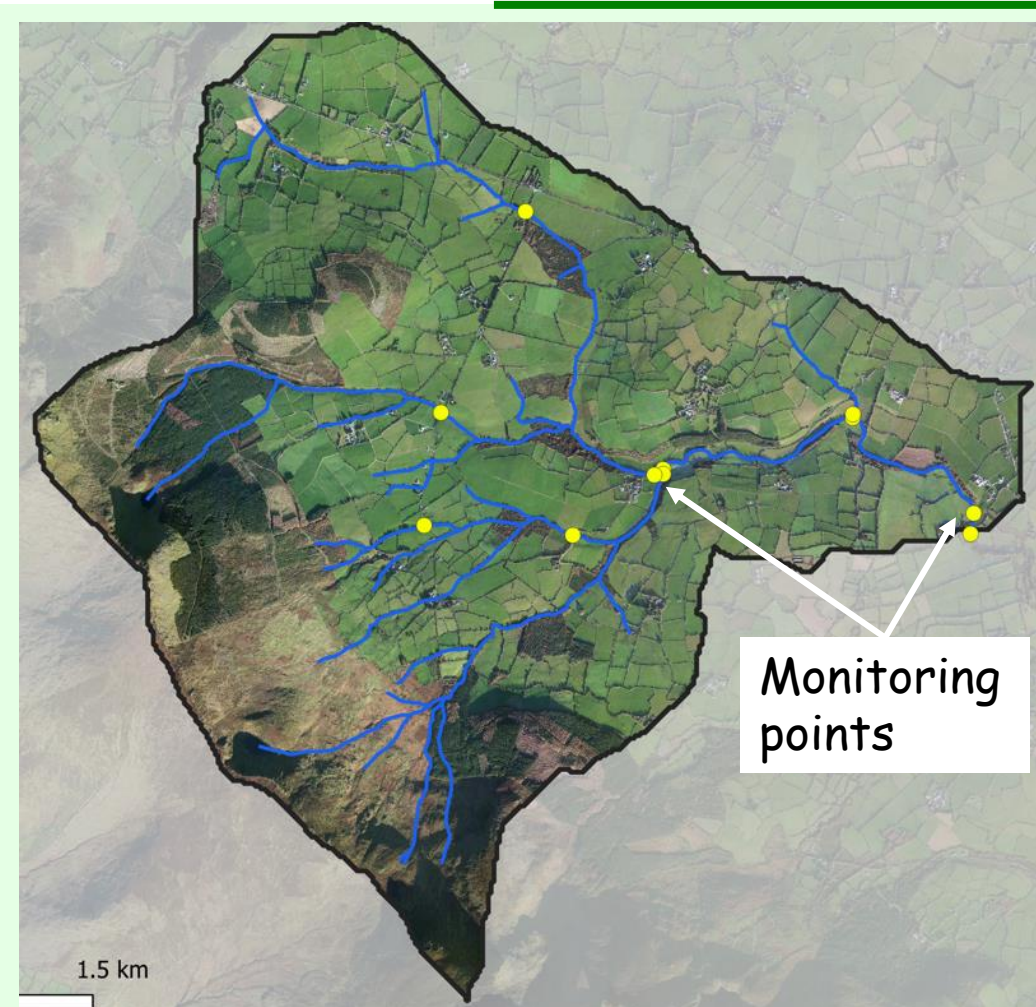
Andrew Geraghty, Glanbia (086 0364499)



- Trust & build relationship
- Feedback loop (LAWPRO)
- Targeted approach
- Box clever - limited resources



Referrals from LAWPRO



| Observations | Recommended actions |
|--|---|
| Slightly elevated DO in summer sample – indicating presence of macroalgae growth upstream | Referral for this location is connected to Site 002 and 003 |
| Presence of macroalgal growth and low DO observed in winter season | Referral to ASSAP to look for evidence of nutrient pollution nearby, farmyards or cattle access |
| Presence of macroalgal growth and considerable low DO observed in winter season | Referral to ASSAP, cattle access and drinking points were observed here and are possible sources of nutrient pollution which may have led to the algal growth. Investigate if these pressures can be addressed. |
| Considerably low DO, and some macroalgal growth upstream | Referral to ASSAP, predominantly agricultural land use in surrounding area, investigate if there is a nutrient pollutant source upstream of this tributary |
| - | - |
| Road drains and sediment run off from farm roadway | Referral to ASSAP, investigate farm roadway for sediment runoff |
| Sediment | Referral to ASSAP, rule out sediment from farms along this tributary |
| - | - |
| - | - |
| Fish Barrier | Submit information for IFI about fish barrier and risk to FPM |
| - | - |

Farmers addressing issues in referral areas



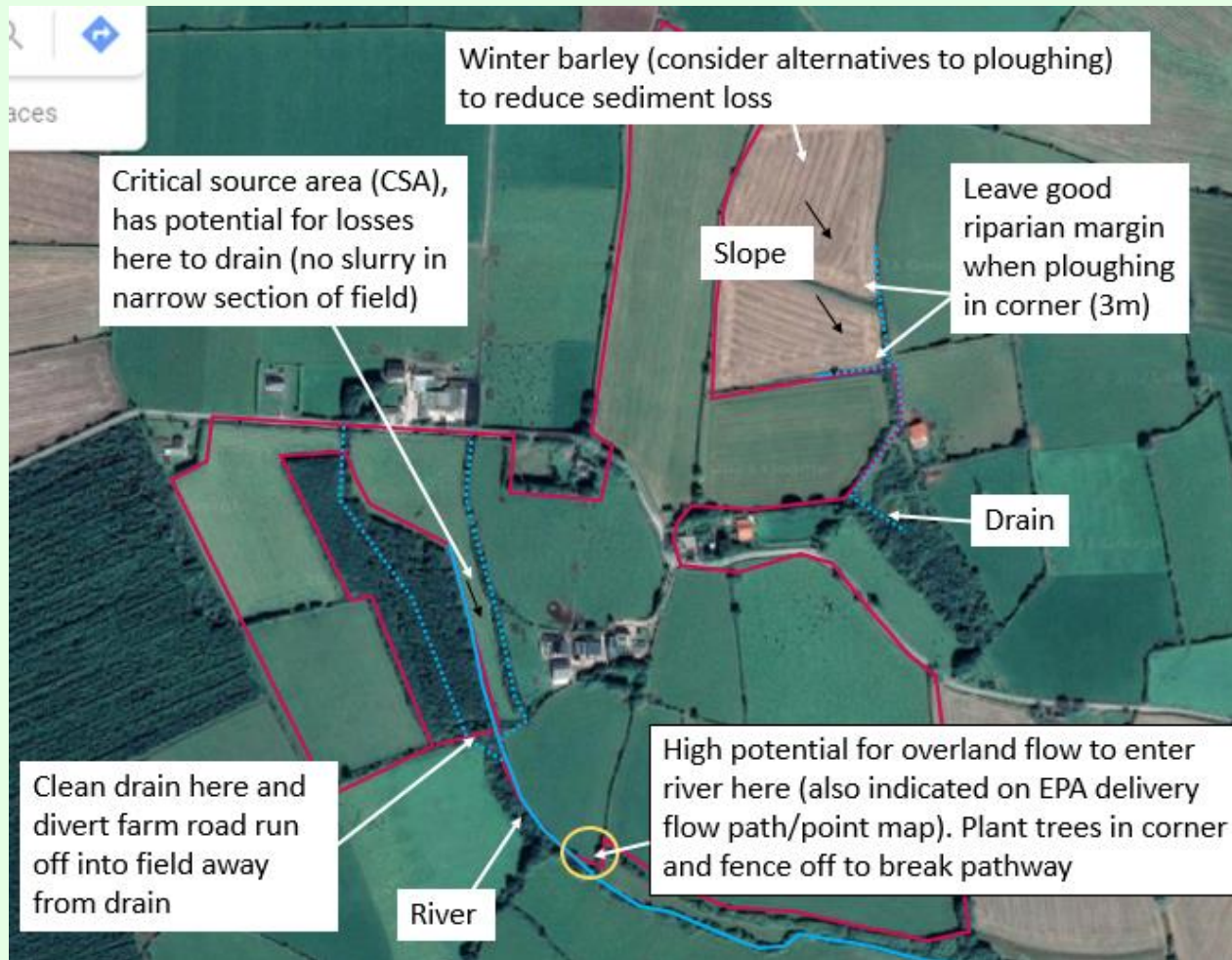
Farmers Finding Solutions



Break the Pathway



Plan for Each Farmer



Please note this is an example
(not in Clodiagh PAA)

The advice & implementation

- Up to 45 farm assessments carried out in the Clodiagh PAA
- Each farmer has advice and a plan
- All issues found relating to referrals addressed
- 93% engagement
- Total number of risks identified - 330

| Issues Assessment | | Average number of Issues per farm | | | 8.25 |
|-------------------|-------------------------------|-----------------------------------|-----|--|------|
| | Total No of Issues identified | 330 | | | |
| | Risk Category 1 (High) | 227 | 69% | | |
| | Risk Category 2 (Moderate) | 44 | 13% | | |
| | Risk Category 3 (Low) | 59 | 18% | | |
| | | | | | |
| | Action Agreed | 300 | 91% | | |
| | Action Not Agreed | 32 | 10% | | |
| | Unassigned | -2 | -1% | | |

Good work in the Area



What Actions are Recommended in the Area?

- Soil test every 3-4 years, based on results apply lime, phosphorus (P) and potassium (K). Aim for index 3 for P & K to improve nitrogen efficiency, however on lower stocked farms index 2 is sufficient
- Adequate buffer margins to be maintained along all surface water drains when spreading organic manures (5m minimum increased to 10m if spreading in January or October). Grassed buffer margins are even more effective and will also improve biodiversity on the farm
- Ensure farmyard leachate is collected and does not enter open drains or river
- Avoid spreading at high risk areas and times – poor grass growth, soil temperatures below 5.5 degrees, heavy rain forecast or wet waterlogged ground
- Use of clover can contribute up to 100kg nitrogen/ha, resulting in reduced chemical nitrogen application
- Prevent access by livestock into drains/creeks and provide alternative drinking water source for

The Clodiagh_010 Catchment



All farmers inside the Clodiagh_010 catchment boundary (red line) can avail of the free and confidential ASSAP service. The blue line represents the river Clodiagh and the blue markers are the EPA monitoring points in the catchment.

The EPA monitoring point in the west of the catchment was at moderate water quality status in 2019, however in the most recent update from the EPA has returned to the required good status. By following the mitigation advice above, you will be playing your part in maintaining the **Good** water quality status.

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River Suir project to investigate threatened species – call for Citizen Scientists

- Friends of Clodiagh (Ann Phelan, Community Water Officer)
- Paul Carroll – local Pearl Mussel project (Waterford CoCo)

Thankyou



**Working together
towards a common goal**

**The scientist, the advisor &
most importantly the Farmer**