National Federation of Group Water Schemes Phase II Source Protection Pilot Project

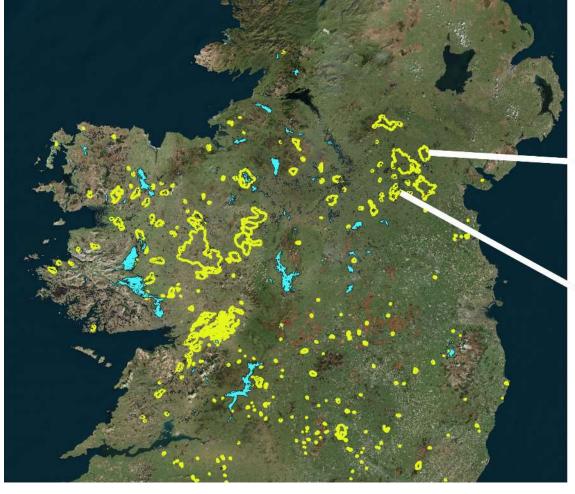
Teagasc Signpost Series Webinar

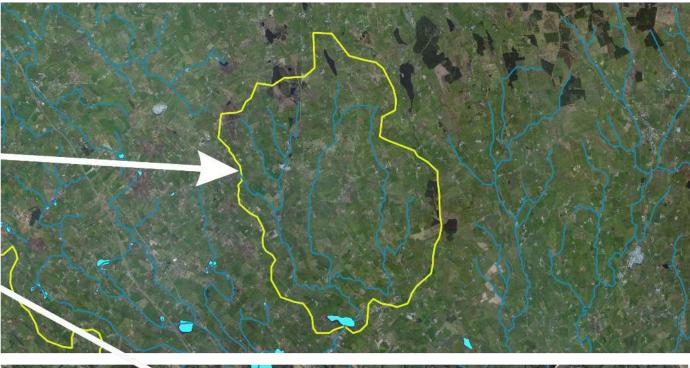




NFGWS - Background

- Community owned rural water sector;
- Formation of NFGWS in 1997;
- Rural Water Programme agreed in 1998;
- Stand alone GWS's & DBO Bundles;
- Guidance & support to the GWS sector









GWS Catchment / ZOC



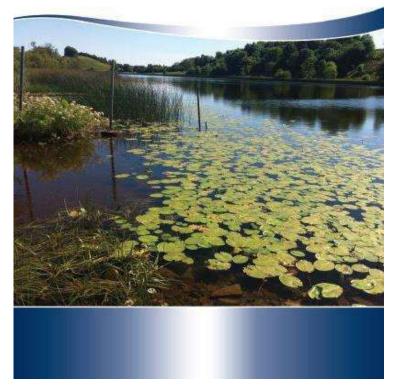
Stream / River



Lakes

NFGWS – Framework Document





- Developed as output from Source Protection Pilot Project in
 2019
- Collaborative approach
 - ➤ Including ASSAP
- Connect with other characterisation approaches
 - **≻** EPA
 - ➤ Local Authority Waters Programme (LAWPRO)
- Targeting of the main issues and pressures
 - Protect objective
 - > Improve objective
- Provide an easy to follow narrative

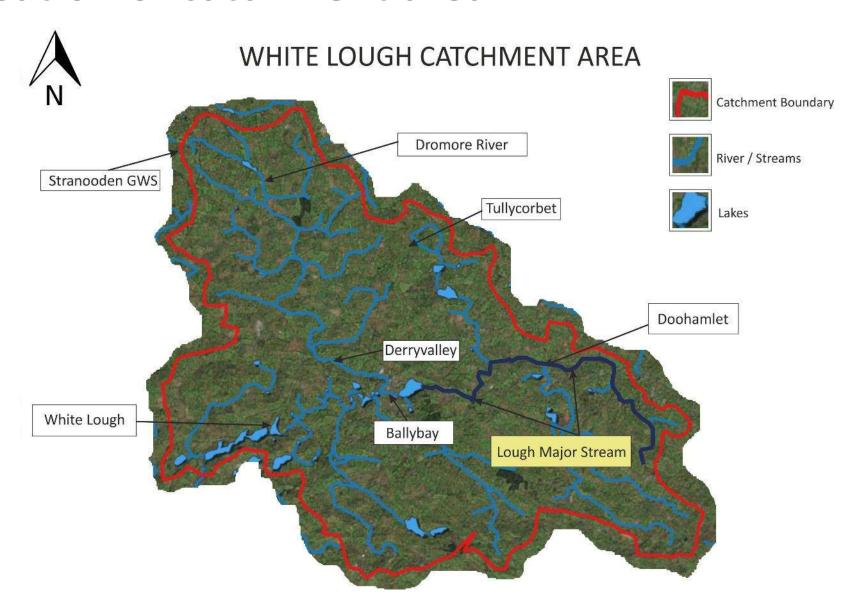


Evaluation of untreated water source quality

Parameter	Guide Value	Stranooden Untreated Water (White Lough, Co. Monaghan)	Source of Data
Nitrate	28 mg/l	1 mg/l	Stranooden GWS, Veolia & EPA Data (2018)
Ammonium	0.175 mg/l N	0.035 mg/l	Stranooden GWS, Veolia & EPA Data (2018)
Total Phosphorus	0.025 mg/l	0.069 mg/l	EPA Surveillance Monitoring 2018
Trihalomethanes (THMs)	100 ug/l	110 μg/l	Stranooden GWS Data (2019)
МСРА	0.075 ug/l	1.2 μg/l	Stranooden GWS Data (2018)



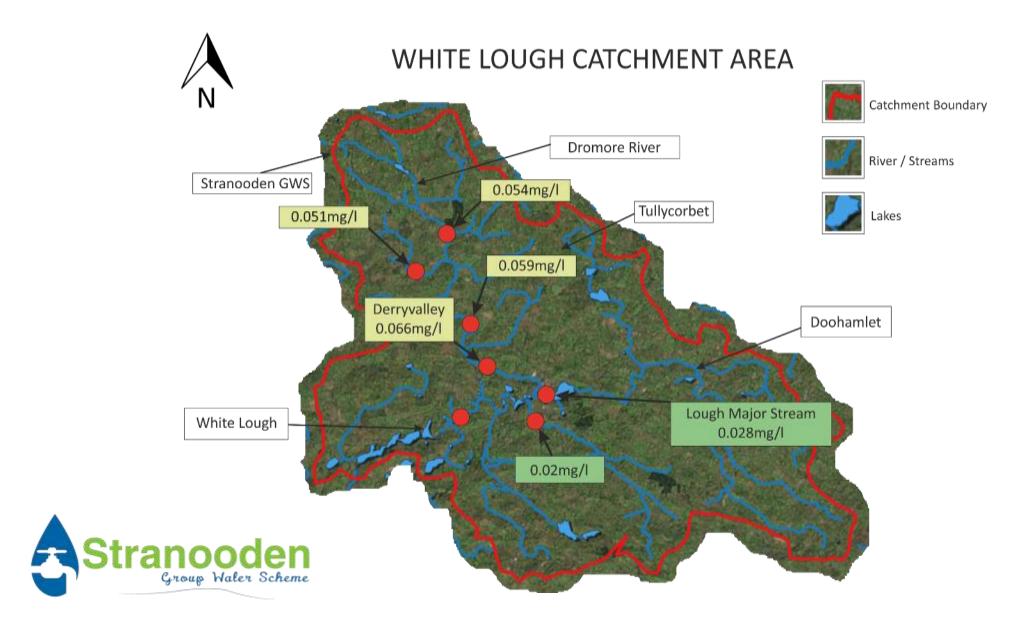
2. Delineation of catchment area





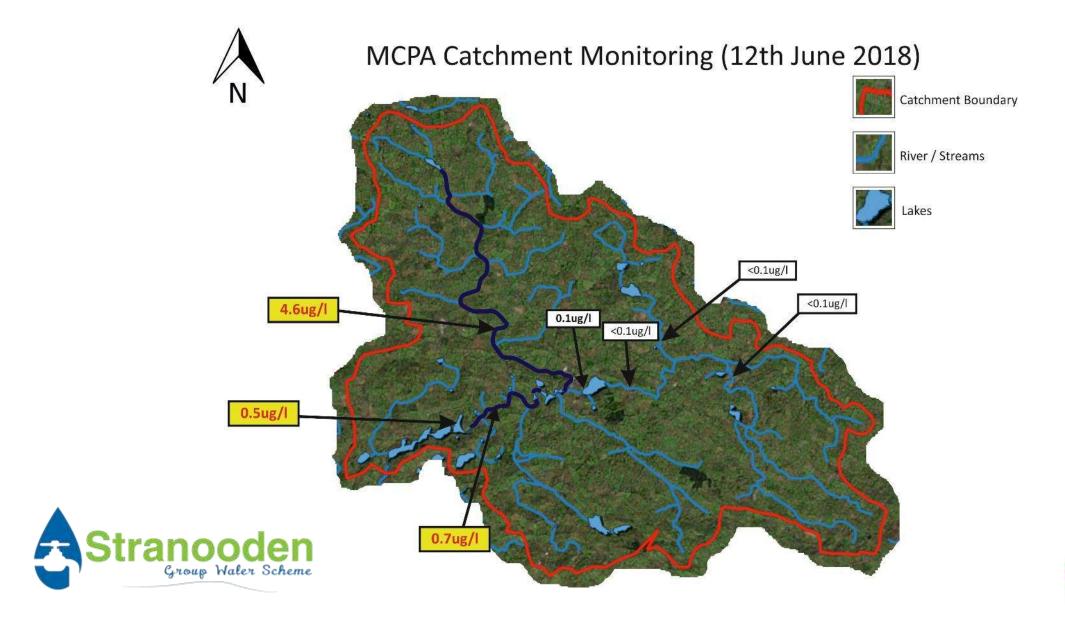


Catchment characterisation (Water Quality - Phosphate)



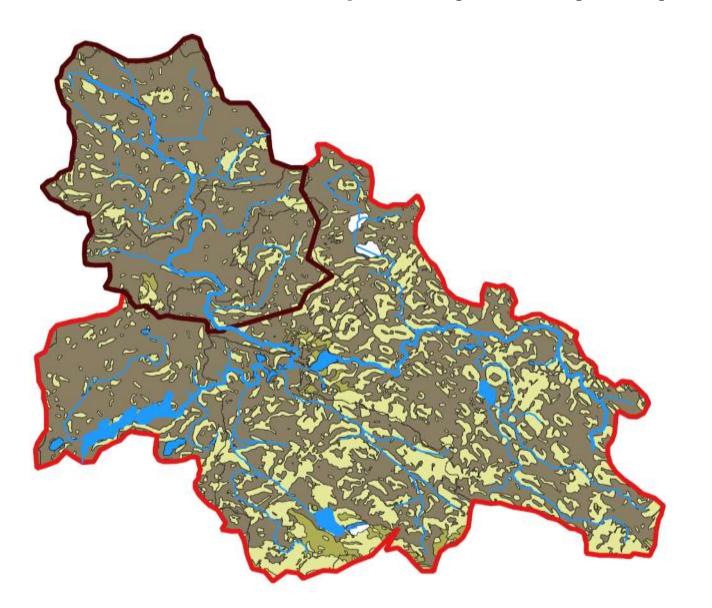


Catchment characterisation (Water Quality - MCPA)





Catchment characterisation (Susceptibility maps - Pathway)







White Lough Catchment



Stream / River



Lake



Derryvalley Sub-catchment



Rank 2 - High Susceptibility



Rank 3 - Moderate Susceptibility



Rank 4 - Low Susceptibility





Catchment characterisation (Pesticide - Pathway)



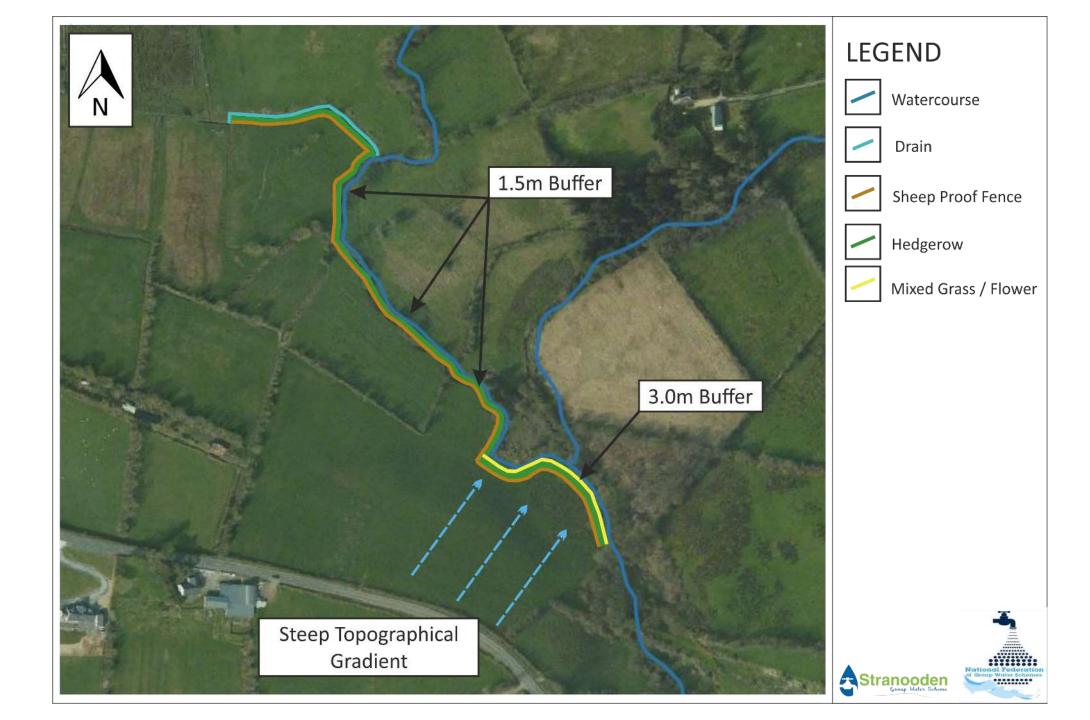
Source Protection / Mitigation Measures











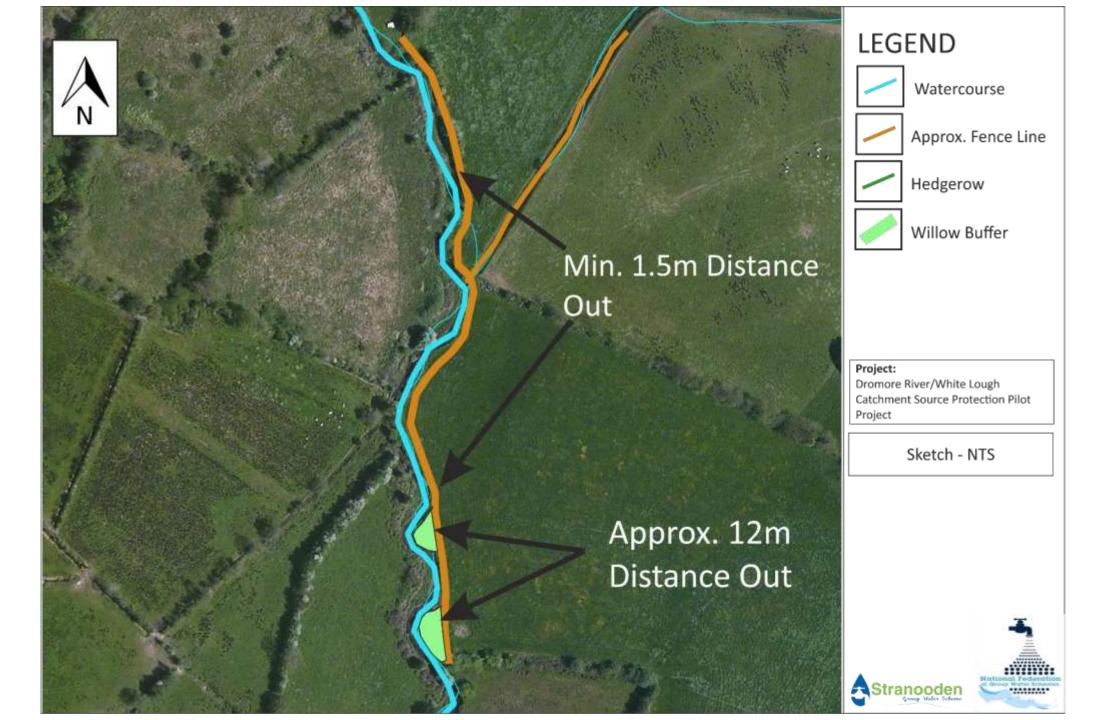
Source Protection / Mitigation Measures



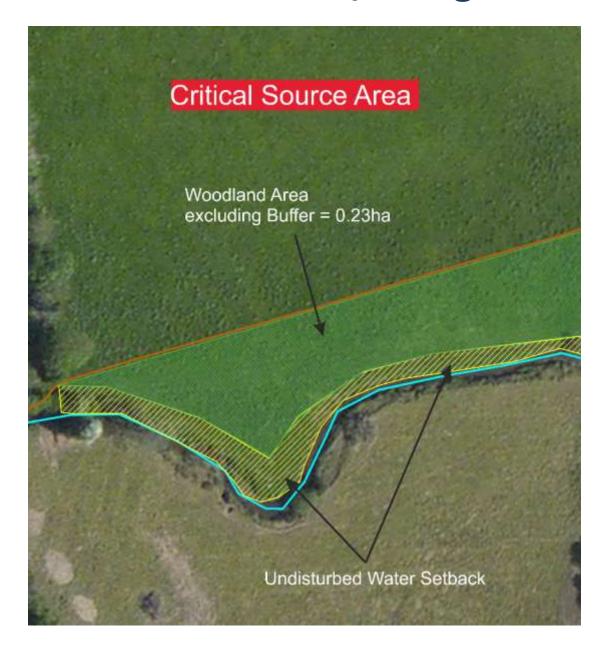


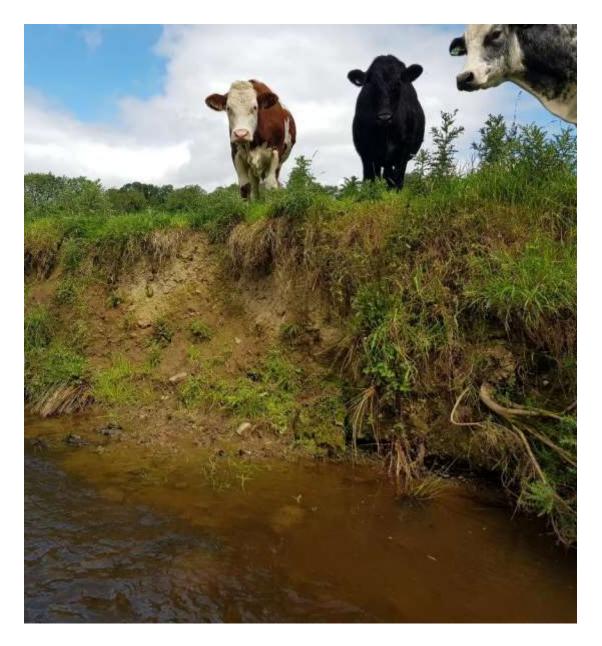






Source Protection / Mitigation Measures





Monitoring Progress







'A Handbook of Source Protection & Mitigation Actions for Farming'



National Federation of Group Water Schemes

A Handbook of Source Protection and Mitigation Actions for Farming





Buffer zone left to establish along watercourse feeding into Greaghlone Lough, Magheracloone GWS

https://nfgws.ie/wp-content/uploads/2019/06/Handbook-mitigation-actions-November-2020.pdf