

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

Teagasc Signpost Series Webinar

08th January 2021

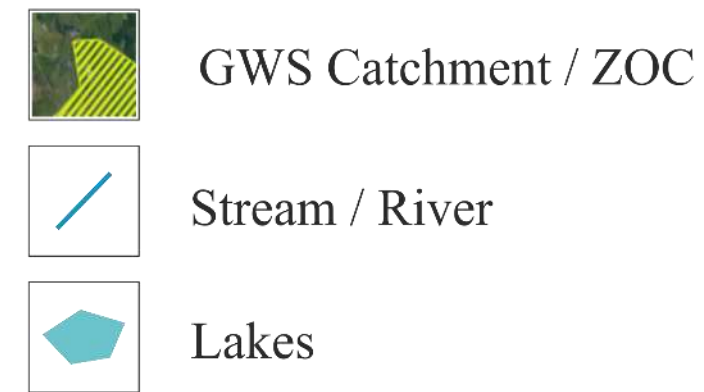
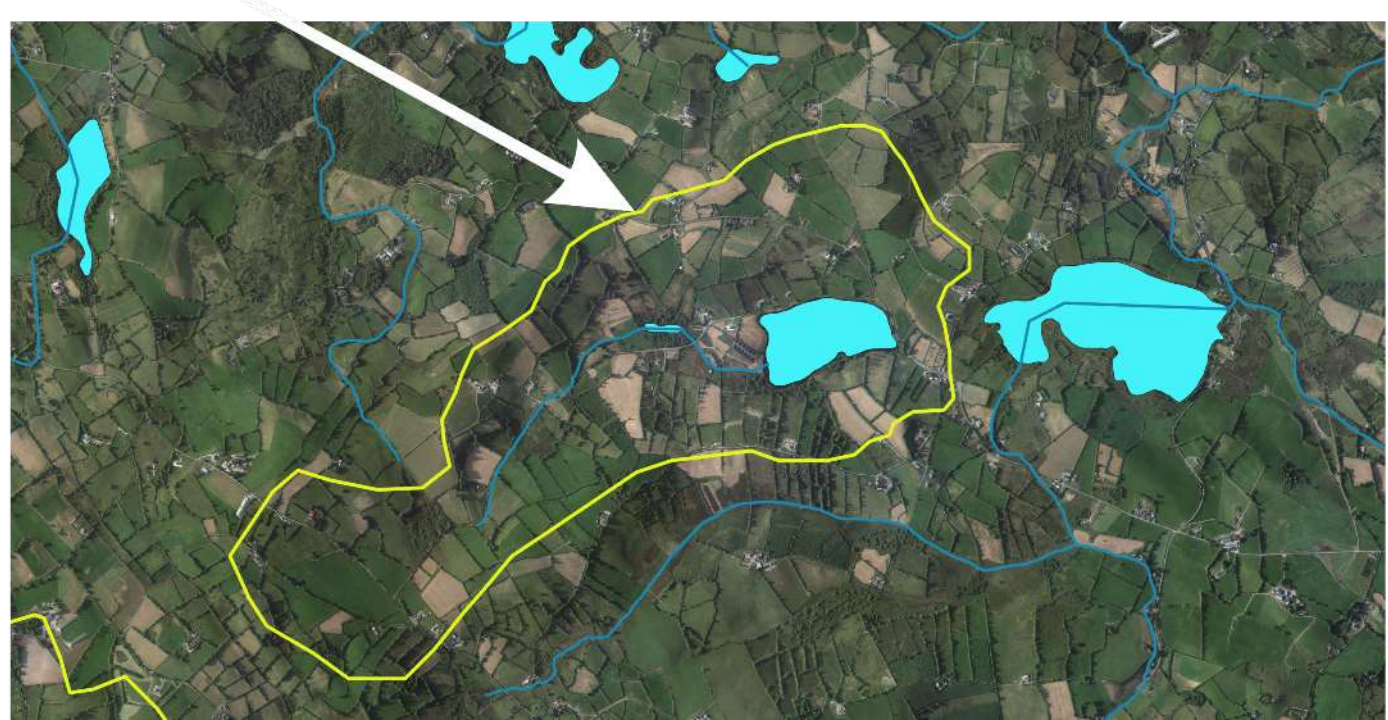
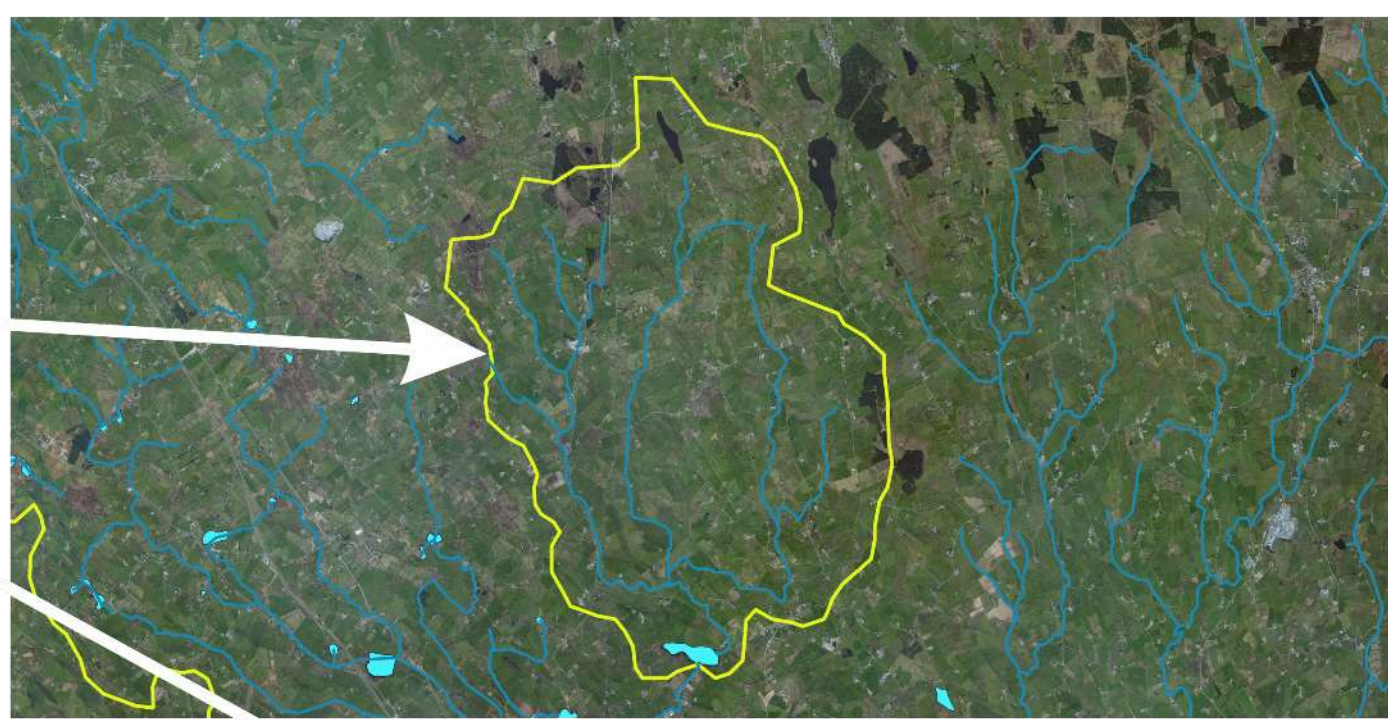
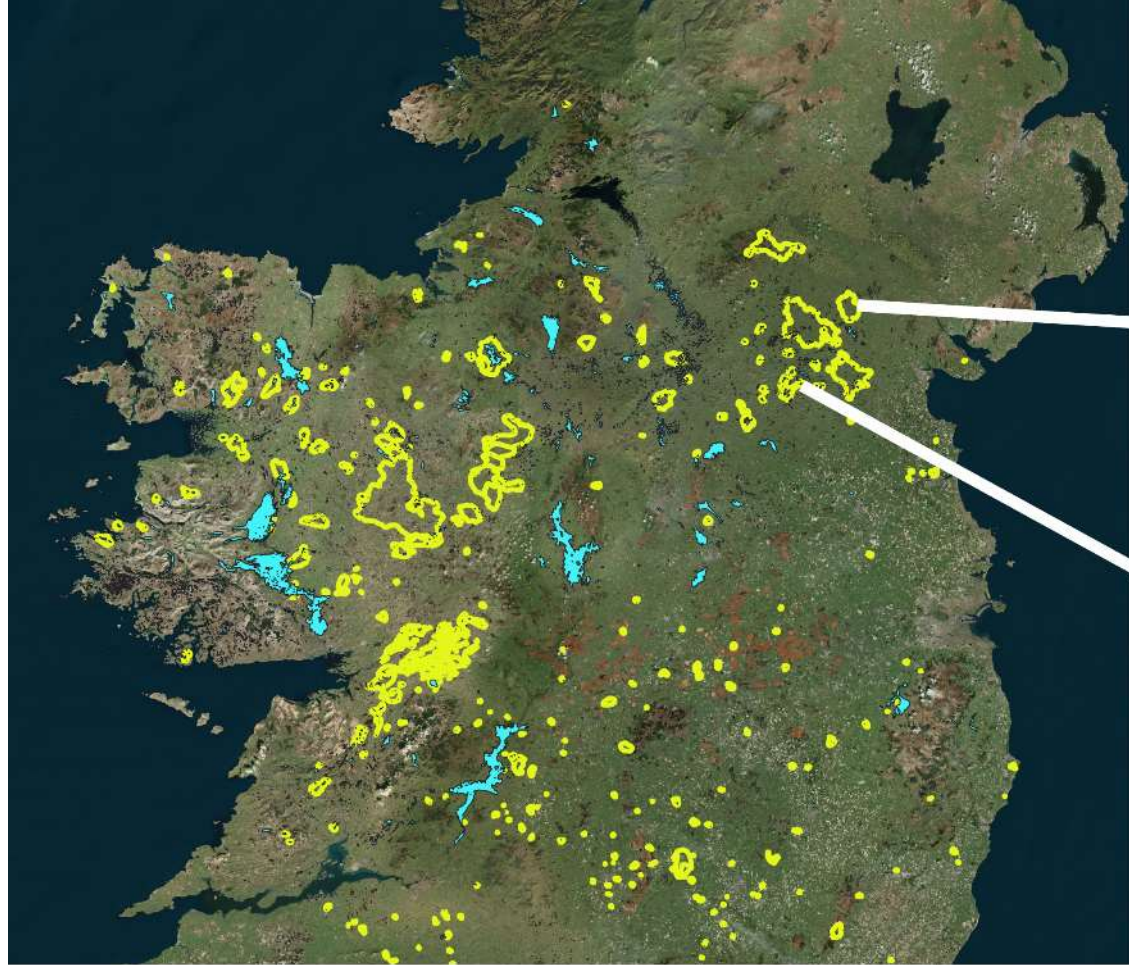
P. McCabe



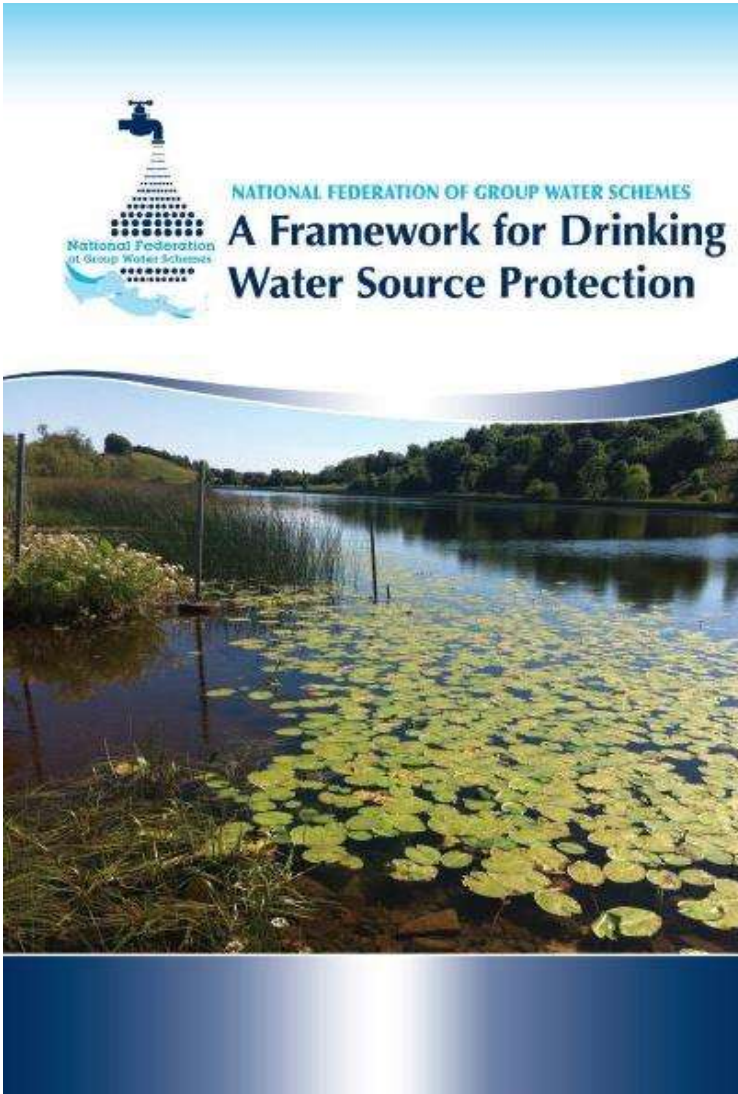


NFGWS – Background

- 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



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



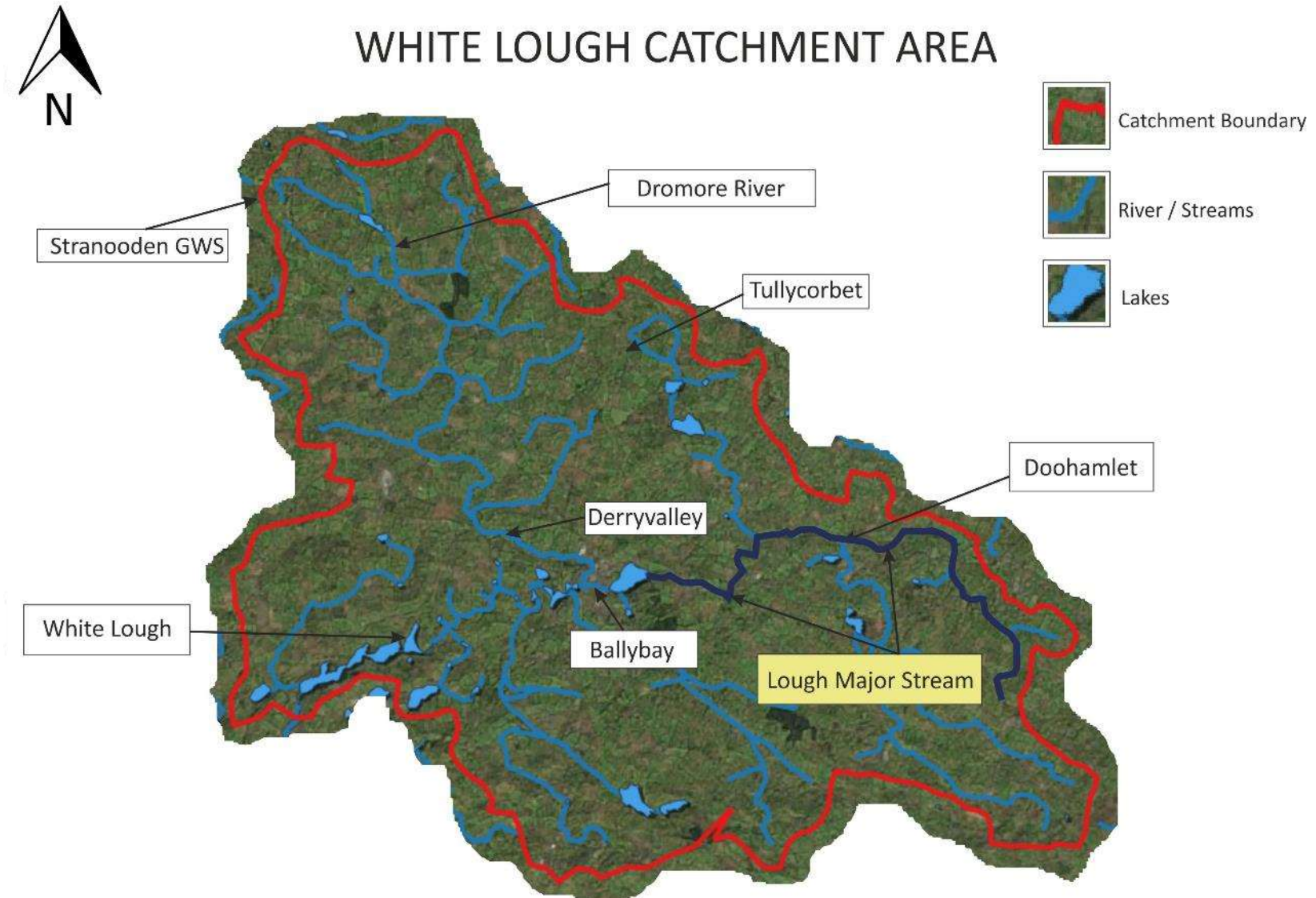
Evaluation of untreated water source quality

| 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) |
| MCPA | 0.075 ug/l | 1.2 µg/l | Stranooden GWS Data (2018) |

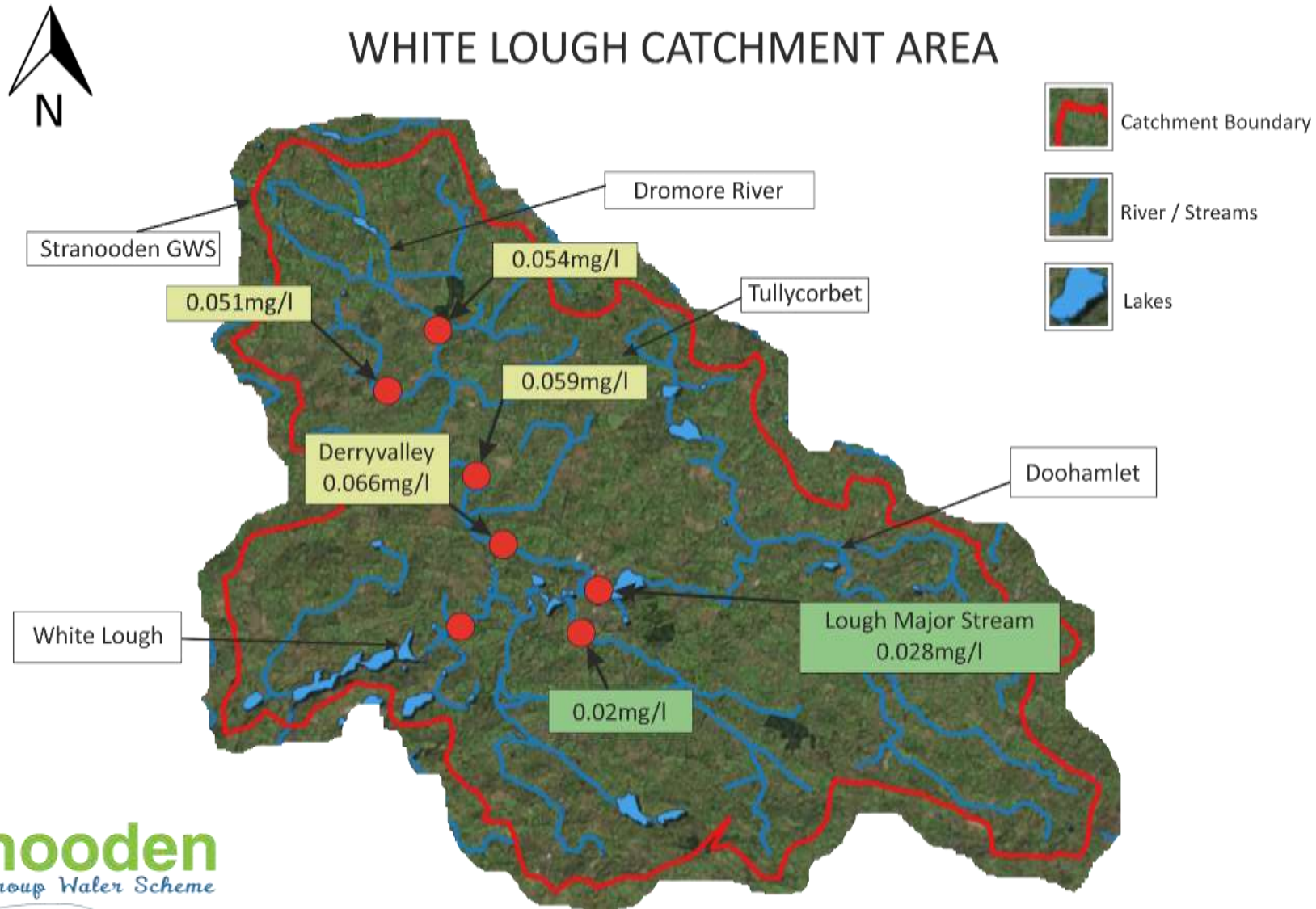


Stranooden
Group Water Scheme

2. Delineation of catchment area



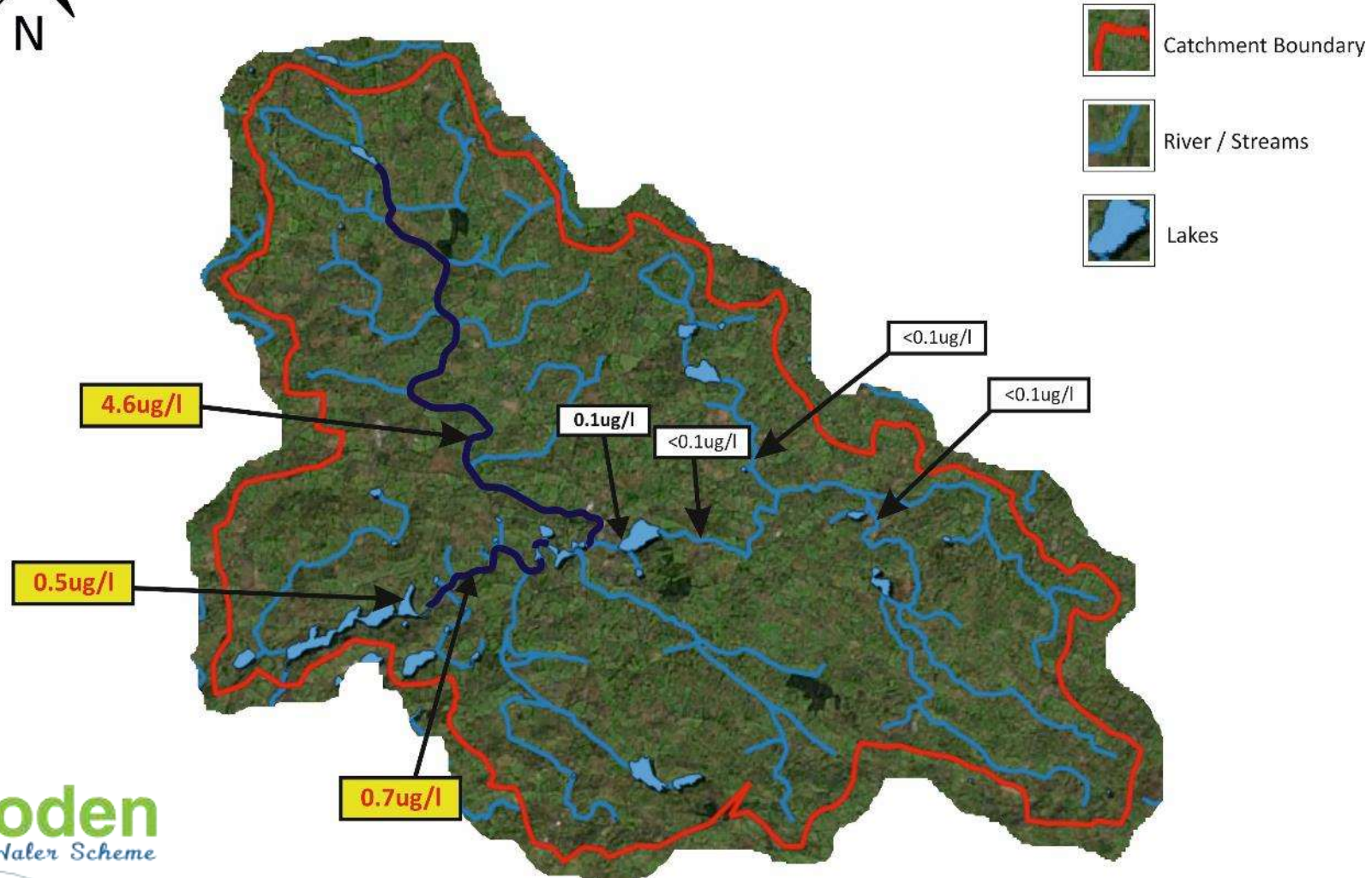
Catchment characterisation (Water Quality - Phosphate)



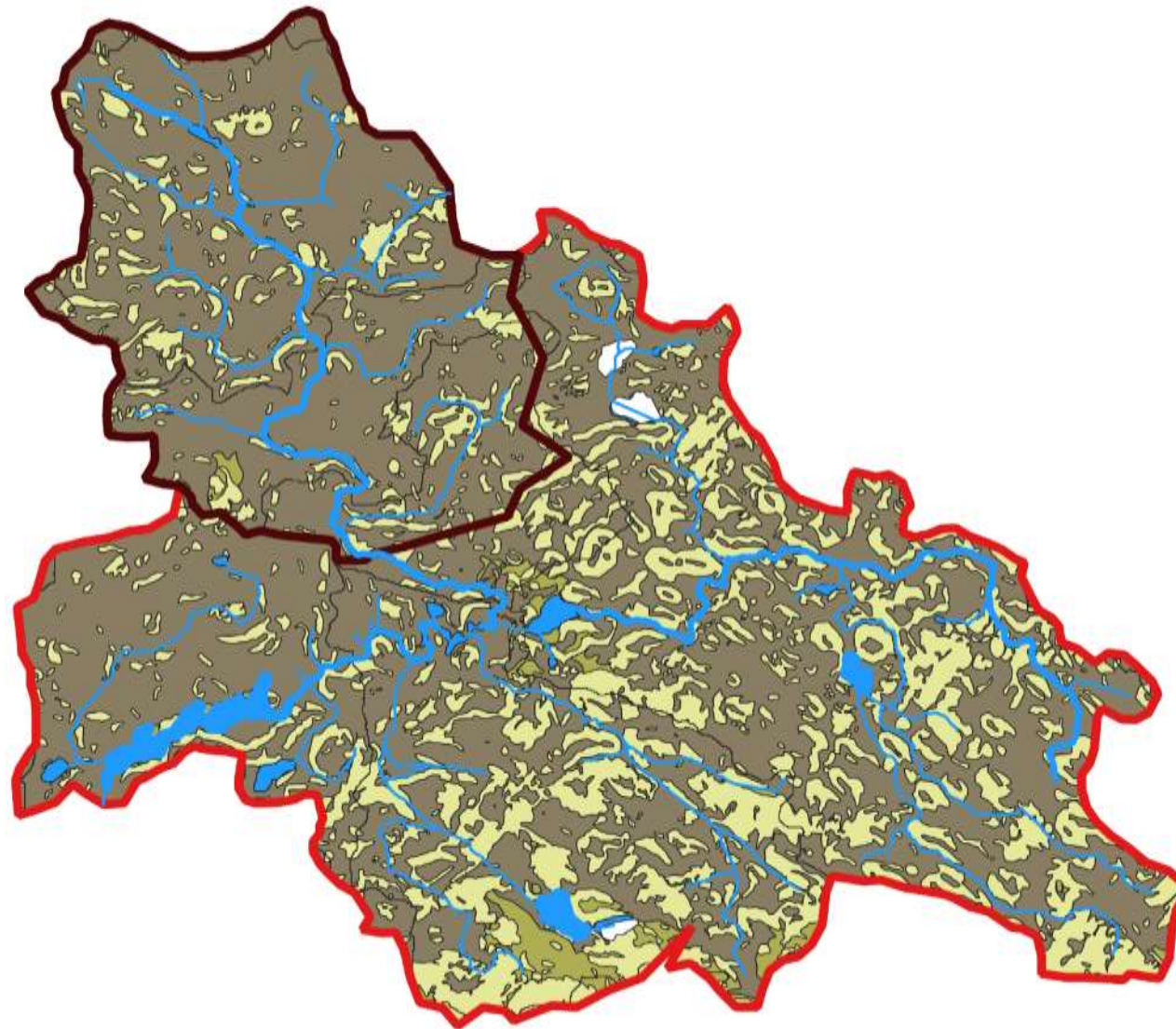
Catchment characterisation (Water Quality - MCPA)



MCPA Catchment Monitoring (12th June 2018)



Catchment characterisation (Susceptibility maps - Pathway)



LEGEND

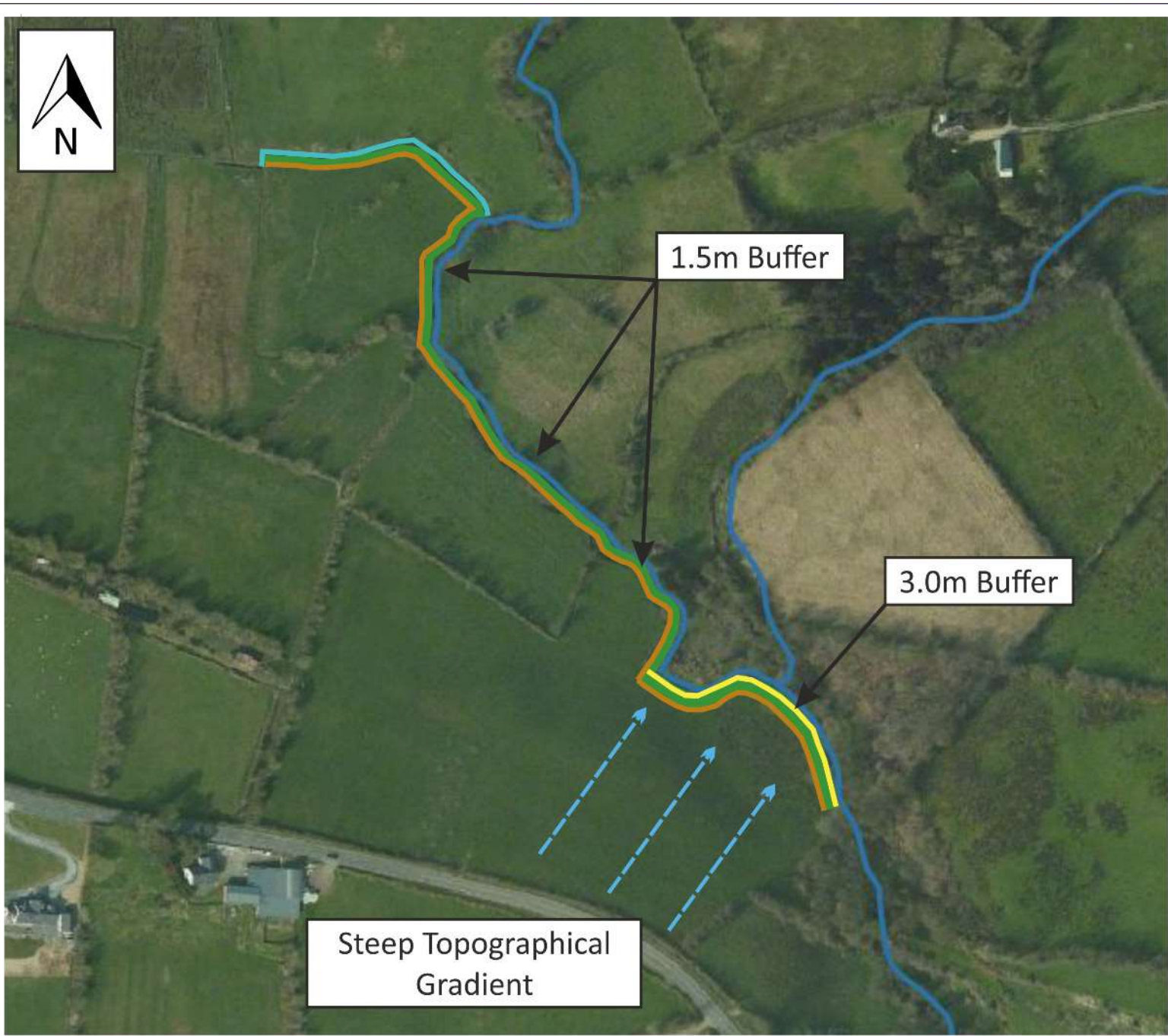
-  White Lough Catchment
-  Stream / River
-  Lake
-  Derryvalley Sub-catchment
-  Rank 2 - High Susceptibility
-  Rank 3 - Moderate Susceptibility
-  Rank 4 - Low Susceptibility

Catchment characterisation (Pesticide - Pathway)




Source Protection / Mitigation Measures





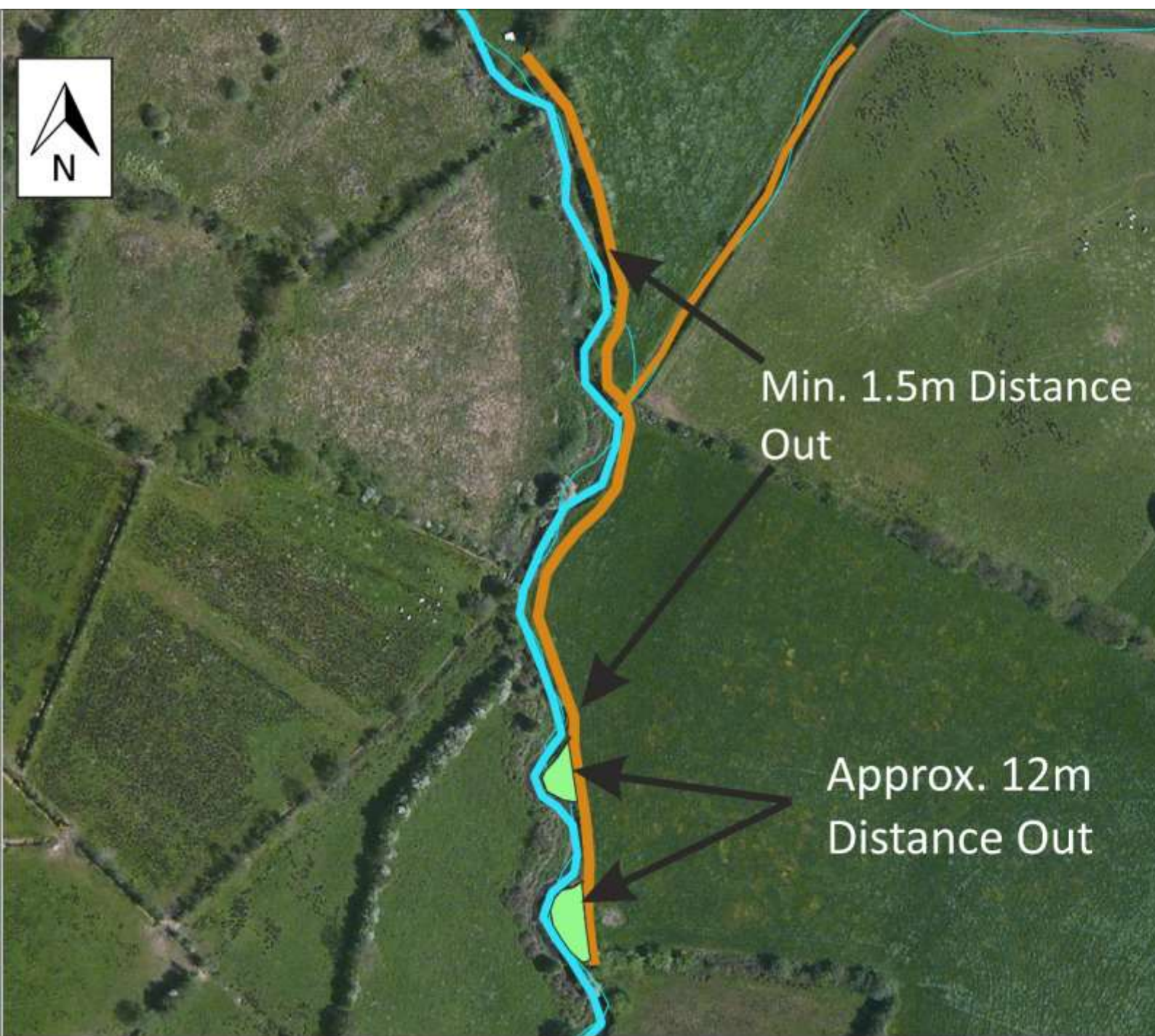
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-  Watercourse
-  Drain
-  Sheep Proof Fence
-  Hedgerow
-  Mixed Grass / Flower

Source Protection / Mitigation Measures







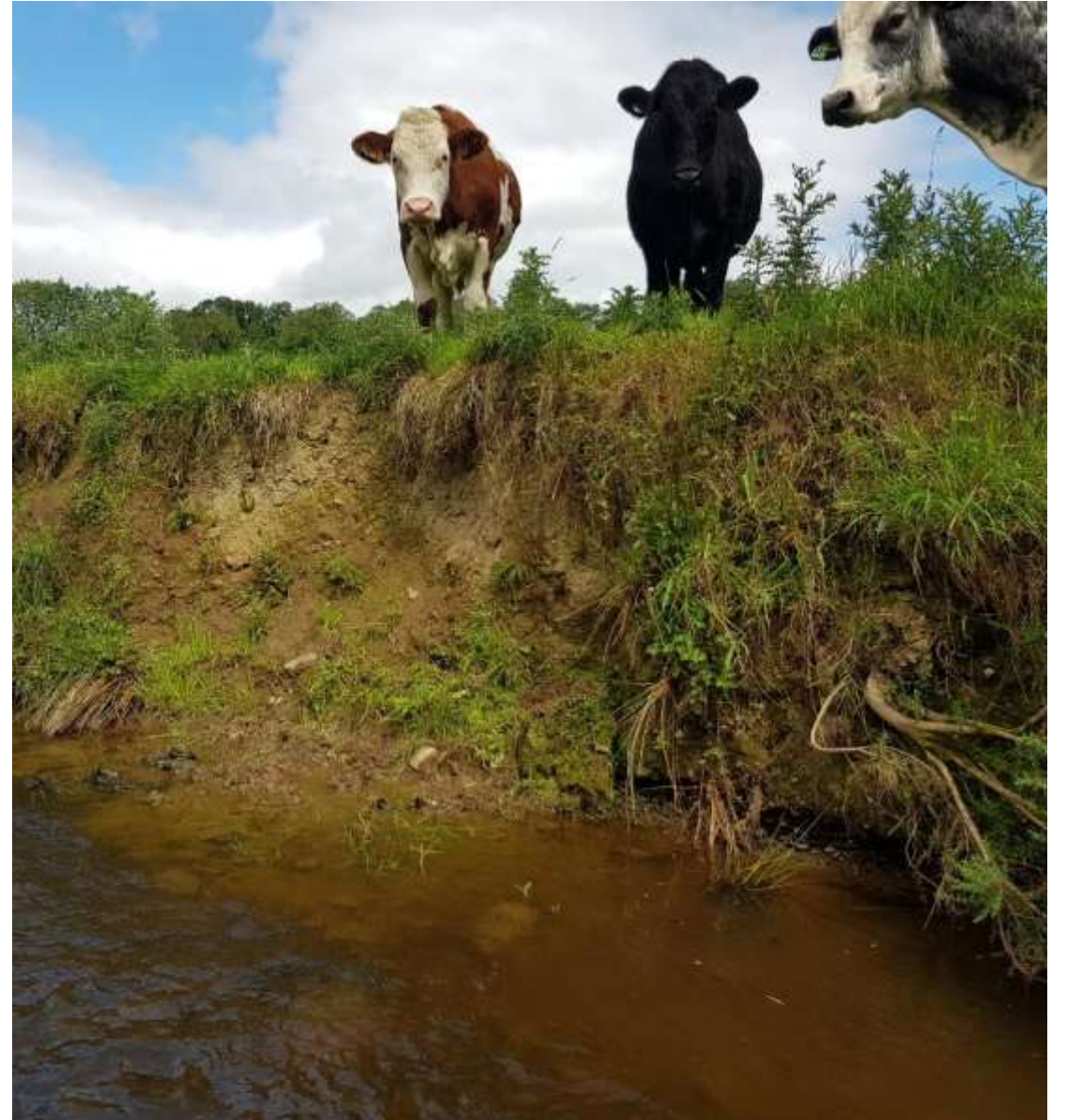
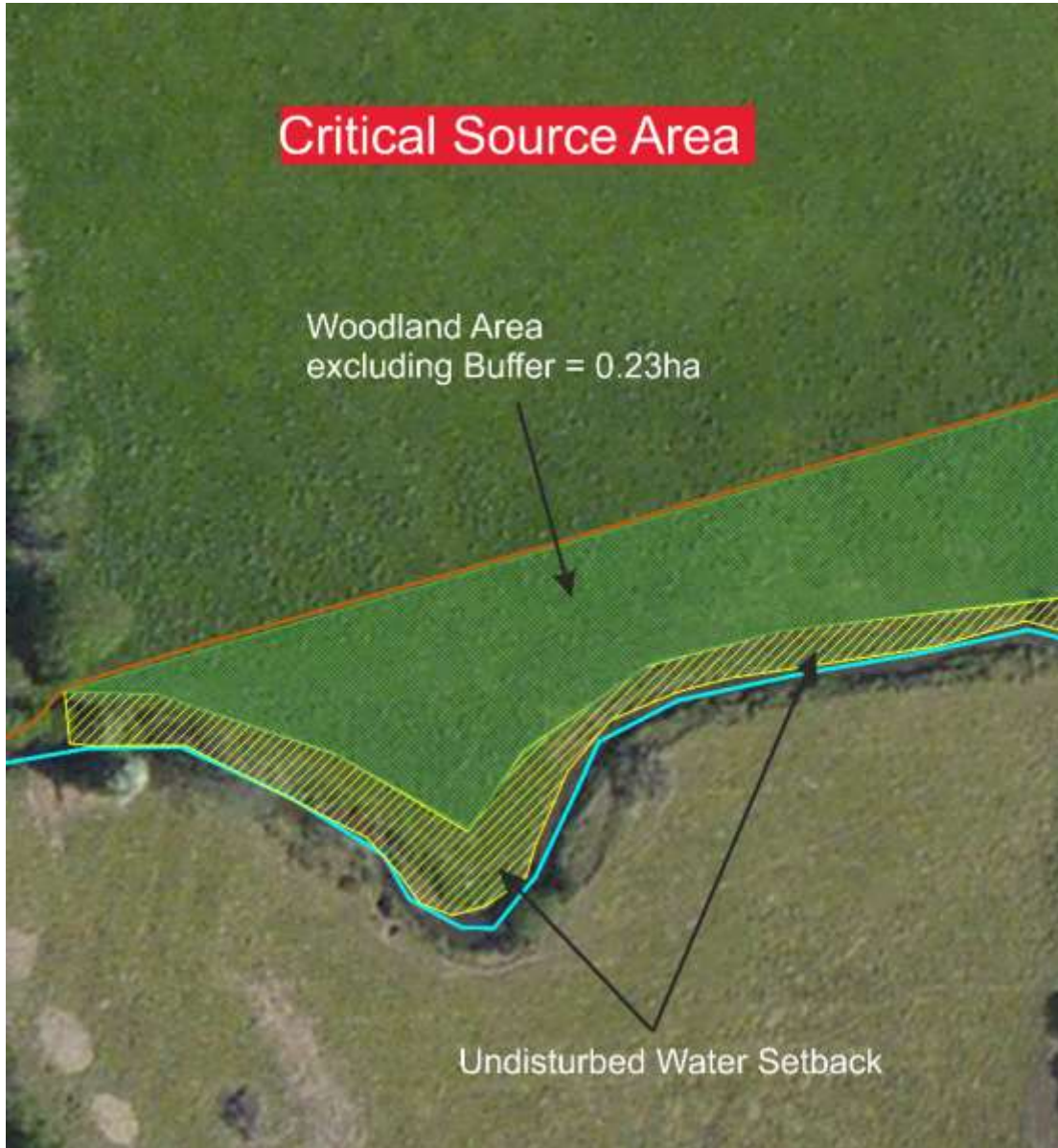
LEGEND

-  Watercourse
-  Approx. Fence Line
-  Hedgerow
-  Willow Buffer

Project:
Dromore River/White Lough
Catchment Source Protection Pilot
Project

Sketch - NTS

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 Greaghlonge Lough, Magheracloone GWS

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