

SEGES Innovation
Water Environment Conference September 5th 2022
Noel Meehan ASSAP Manager

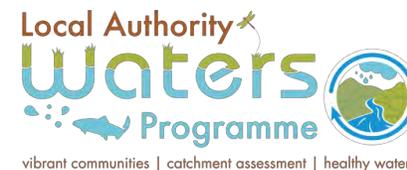


Presentation Outline

- What is the ASSAP?
- Advisor Farmer interaction
- Progress to date
- Case Study – Dysart_010 and Lough Ennell
- Look ahead to the 3rd Cycle

What is The ASSAP?

- **Agricultural Sustainability Support and Advisory Programme**
- Focus is on water quality in 190 Priority Areas for Action (PAA)
- Provides free & confidential farm advice and acceptance is voluntary
- Industry, government, farm orgs collaboration
- 36 Advisors - 20 Teagasc, 16 from Dairy Co-ops
- Work in collaboration with Local Authority Waters Programme (LAWPRO)
- LAWPRO – scientific investigation; desk study, chemical, biological, hydro morphology etc. and assess the streams
- Provide referrals to advisors to focus farm visits



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



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



ASSAP Advisor/Farmer Interaction

- Letter to all landowners followed by farmer information meeting
- Contact farmers in referral area and arrange a visit
- Farm assessment starts at the watercourse/river
- Need to build up relationship quickly with farmer and understanding of farming system
- Assess farm under following:
 - Farmyard management
 - Land management
 - Nutrient management



ASSAP Farm Assessment Sheet

Catchment Information

PAA Name	Upper Erne	LAWPRO Referral Code 1	E_020 ASSAP_RA08
Waterbody Name	ERNE_020	LAWPRO Referral Code 2	
Main Issues Identified		WFD App Code 1	
P Loss (Diffuse)	Y	WFD App Code 2	
N Loss (Diffuse)		WFD App Code 3	
Sedimentation	Y	WFD App Code 4	
Point Source Losses		WFD App Code 5	
Pesticides and Toxic Substances		Catchment Region	Border
Ammonium			

Issues Description

The Erne_020 is a relatively low intensity agricultural catchment with pockets of higher intensity dairy farming. The main issues identified as impacting water quality are diffuse Phosphorus and Sediment losses. This is due to the hilly topography (Drumlins) and low permeability soils that get saturated quickly during periods of rainfall. This in turn causes water to flow over land washing plant available P and sediment into the drainage system.

Waterbody Code	IE_NW_36E010200
Signpost Farm Programme	

ASSAP Farm Visit Recommendation Sheet

PAA Name Upper Erne
Waterbody Code ERNE_020

Farmer first name & surname	John	Farmer	ASSAP Advisor Name	Ad Visor	Visits	1	31/01/2022	DATE FORMAT DD/MM/YY
Address	Ballymore, Co Cavan		Client Number/Co Op No.		2			
Eircode		Email	Agricultural Advisor Name		3			
Farm Size Ha [Value Only - No HA/ACRES]	40	Cattle Other	In AgriEnv Scheme		4			
	System	Engaged						
Code	Issue	Risk 1=High 2=Med 3=Low	Mitigation Actions	Description of Mitigation Advice	Action Agreed	Reason for Not Acting	Visit 1-4	Progress

Farmyard Issues

F1	Slurry Storage							
F2	Silage Pits and Effluent Storage							
F3	Loose Housing and FYM Storage	2	Additional storage for farm wastes required	Install effluent tank to collect seepage from straw bed shed	Agreed		1	Not Started
F4	Round Bale storage	3	Improved management of collection and storage of farm wastes	Due to seepage from bales store on concrete base and collect effluent	Not Agreed	will only make haylage in future	1	
F5	Dirty yards							
F6	Cattle &/or Sheep handling facilities							
F7	Clean & Grey Water management							
F8	Drain Connection from Yard to Water							
F9	Pesticide Storage and handling Diesel/oil tanks							
F10	Other (Specify)							

Land Management Issues

LM1	P Loss Through Overland Flow	1	Management of Critical Source Areas (CSA's)	No outwintering of cattle in area marked A on map	Agreed		1	Ongoing
LM2	N leaching from Light Soils							
LM3	Sediment Loss	1	Riparian Buffers - Fenced/Unfenced	fence off a 3m wide riparian margin from X to Y as marked on map	Agreed		1	Not Started
LM4	Drinking Points & Stream Fencing	1	Prevent livestock access to waters	Close off drinking points 1, 2 and 3 as shown on map and provide alternative water supply	Not Agreed	no alternative water supply available	1	
LM5	River Bank Erosion							
LM6	Drain Cleaning & Maintenance							
LM7	Culverts/River Crossings							
LM8	Drinking Troughs							
LM9	Farm Roads and Gateways and underpass	2	Improved farm road/tracks design and location	Camber road away from drain at location marked B on map	Agreed		1	Commenced

Dear John

Thank you for taking the time to meet with me on my recent visit to your farm. Based on our discussion I include a list of recommendations as agreed with you on the day. Please do not hesitate to contact me about any of the issues outlined. **This is not a complete list of issues on the farm but addresses the most important actions for water quality improvement in the catchment**

Date of farm visit 31/01/2022

The Upper Erne Catchment has been characterised by the Catchments assessment team

The Erne_020 is a relatively low intensity agricultural catchment with pockets of higher intensity dairy farming. The main issues identified as impacting water quality are diffuse Phosphorus and Sediment losses. This is due to the hilly

We recommend that you undertake the following actions to reduce losses from your farm

Issue	Implementation Advice	Risk	Status	Visit	Progress
Loose Housing and FYM Storage	Install effluent tank to collect seepage from straw bed shed	2	Agreed	1	Not Started
P Loss Through Overland Flow	No overwintering of cattle in area marked A on map	1	Agreed	1	Ongoing
Sediment Loss	Fence off a 3m wide riparian margin from X to Y as marked on map	1	Agreed	1	Not Started
Farm Roads and Gateways and Underpass	Chamber road away from drain at location marked B on map	2	Agreed	1	Commenced

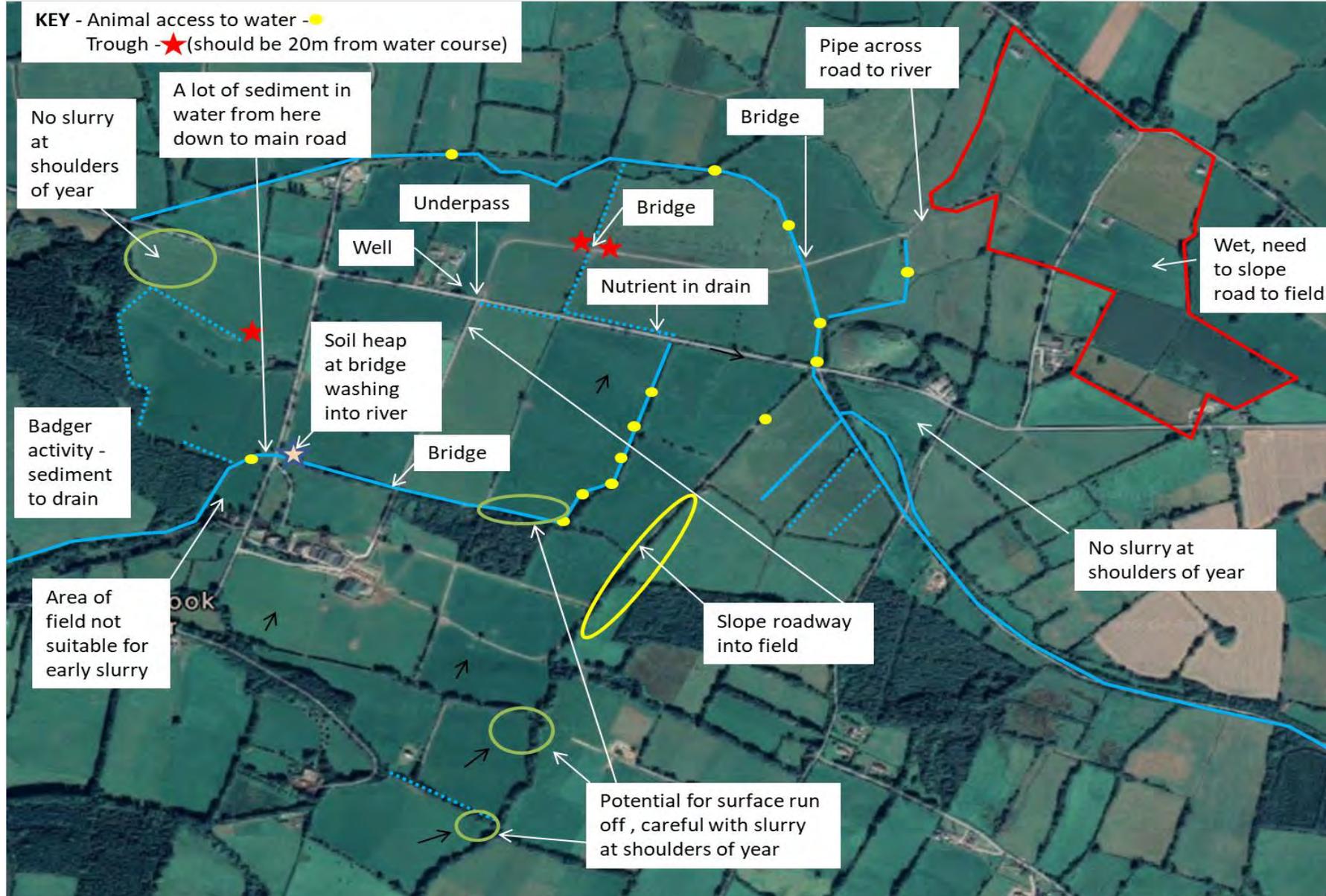
Yours sincerely

Ad Visor

email

Phone

ASSAP Farm Map - example

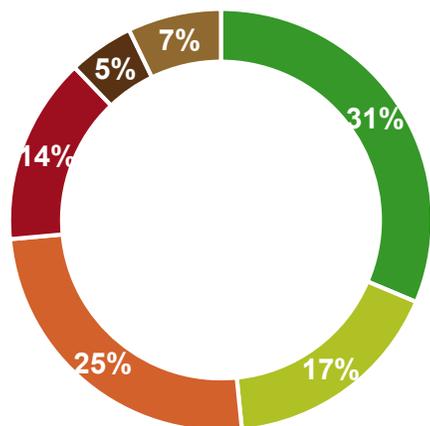


ASSAP to date...

- Total farm assessments 31 July 2022 : 3143
- Total follow up farm visits : 755
- Farmers Meetings : 142
- PAA's ASSAP active in : 124
- Farmer engagement : 96%
- Farmer agreement on proposed measures : 93%
- Average issues identified per farm : 5

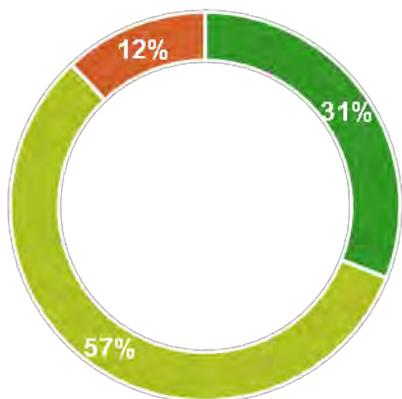
ASSAP – 31 July 2022

PAA Pressures



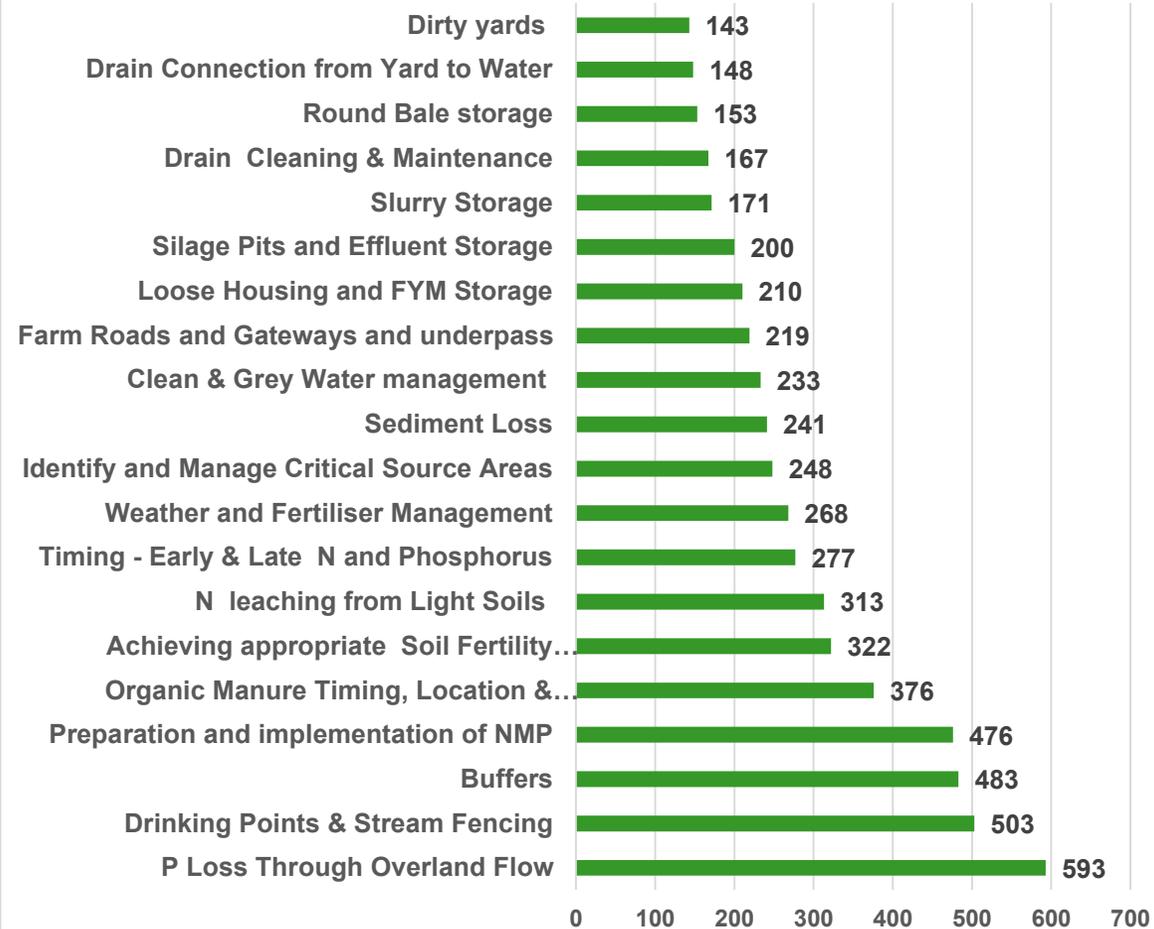
- P Loss (Diffuse)
- N Loss (Diffuse)
- Sedimentation
- Point Source Losses
- Toxicity & Pesticides
- Ammonium

Farming Enterprise Assessed



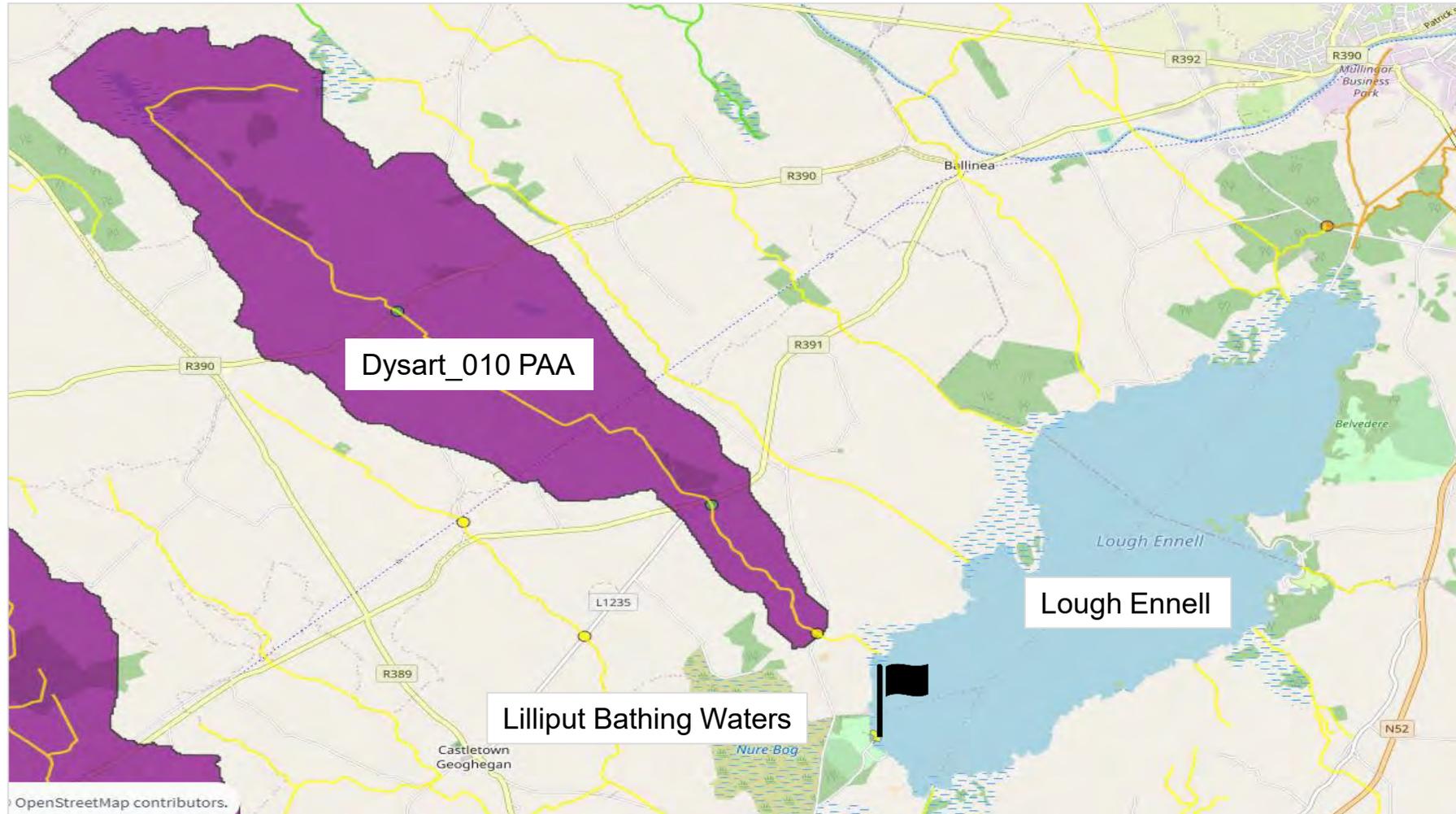
- Dairy
- Beef Production
- Sheep/Tillage/Other

High Risk – 20 most frequent issues



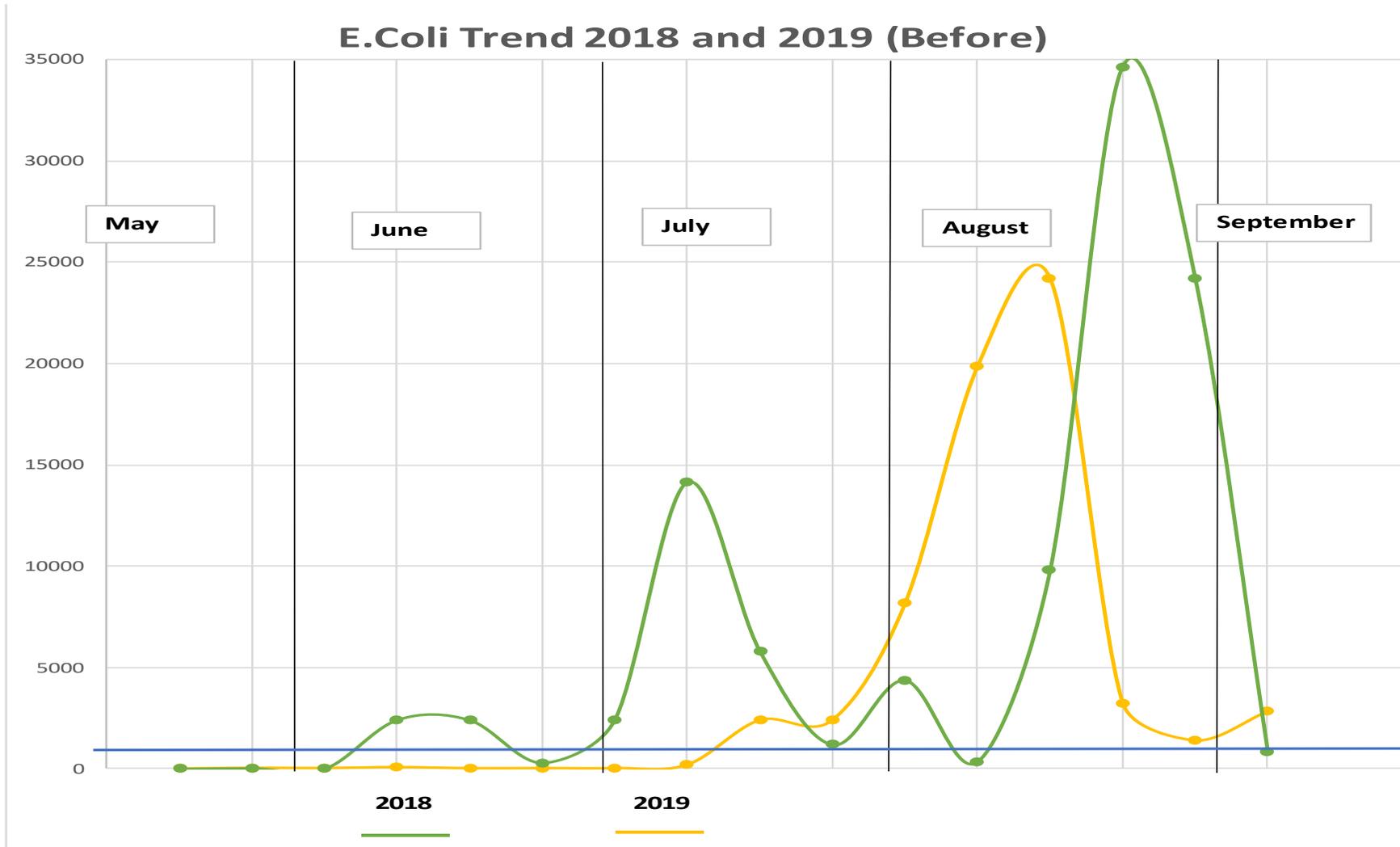
Case Study: Dysart_010 & Lough Ennell

- Pathogen losses from agriculture in Dysart_010 impacting on Lough Ennell bathing waters
- Diffuse phosphorus and sediment losses also impacting



Case Study: Dysart_010 & Lough Ennell

- Lilliput E.coli trend in 2018 and 2019



Blue line indicates 'Sufficient'
water quality.

Anything above this line is
'Poor'

Dysart_010 ASSAP Farmer Engagement & Mitigation Actions

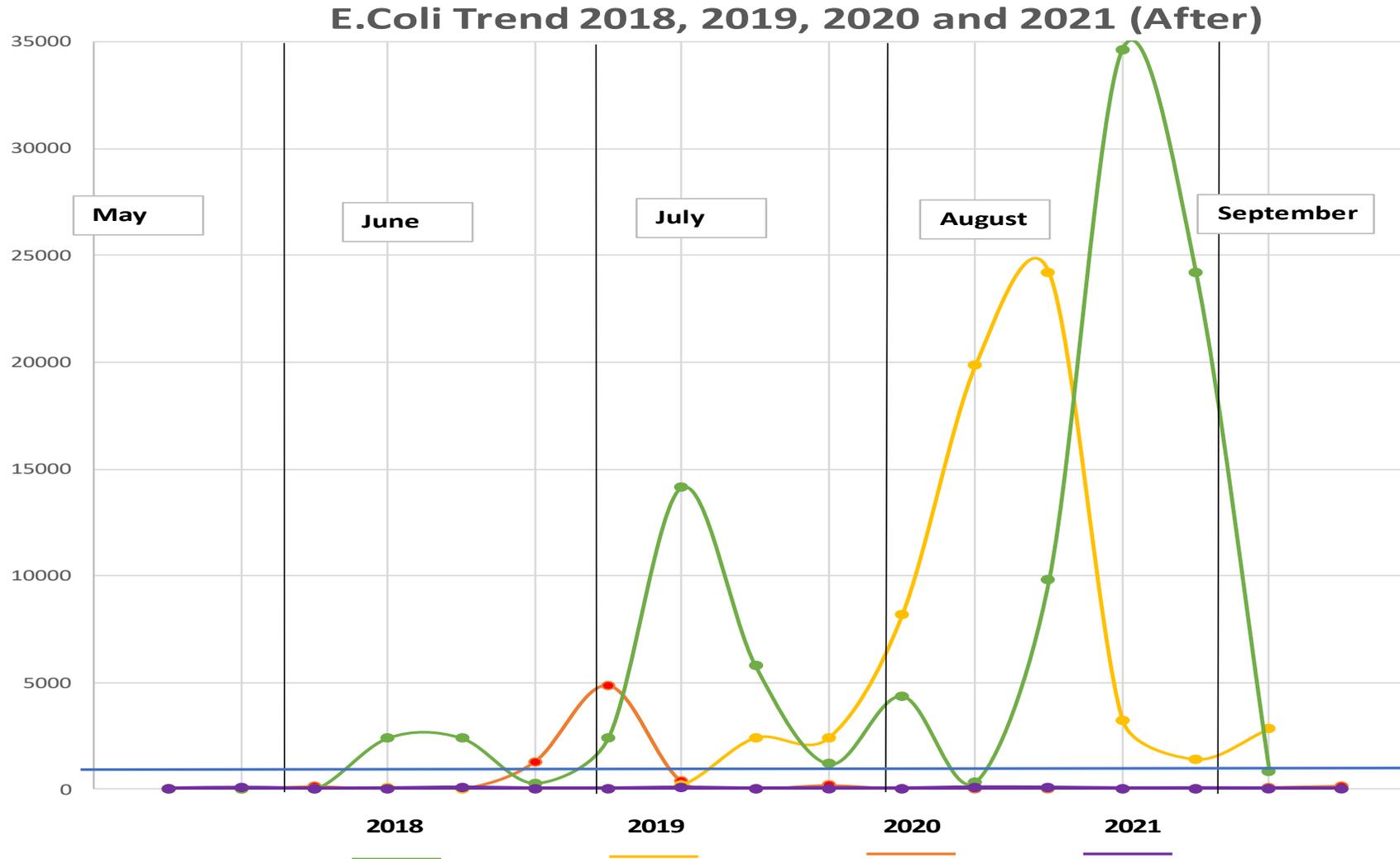
- ASSAP advisors visited 23 farms based on LAWPRO referrals
 - 19 Beef farms
 - 4 dairy farms
- Issues identified - diffuse P and sediment losses
 - Surface runoff leading to P and sediment losses on poorly draining land
 - Cattle access to watercourse for drinking
 - Drainage maintenance
- Mitigation advice – regulatory compliance
 - Adherence to buffer zones
 - Compliance with fertiliser limits
 - Compliance with organic manure storage and closed periods
- Mitigation advice – voluntary actions
 - Riparian margins and management of critical source areas
 - Prevention of cattle access to waters and alternative drinking supplies
 - Farmer education and information on drainage maintenance

ASSAP – Mitigation Actions



Case Study: Dysart_010 & Lough Ennell

- Lilliput E.coli Trend from 2018 to 2021 – 2021 data below threshold

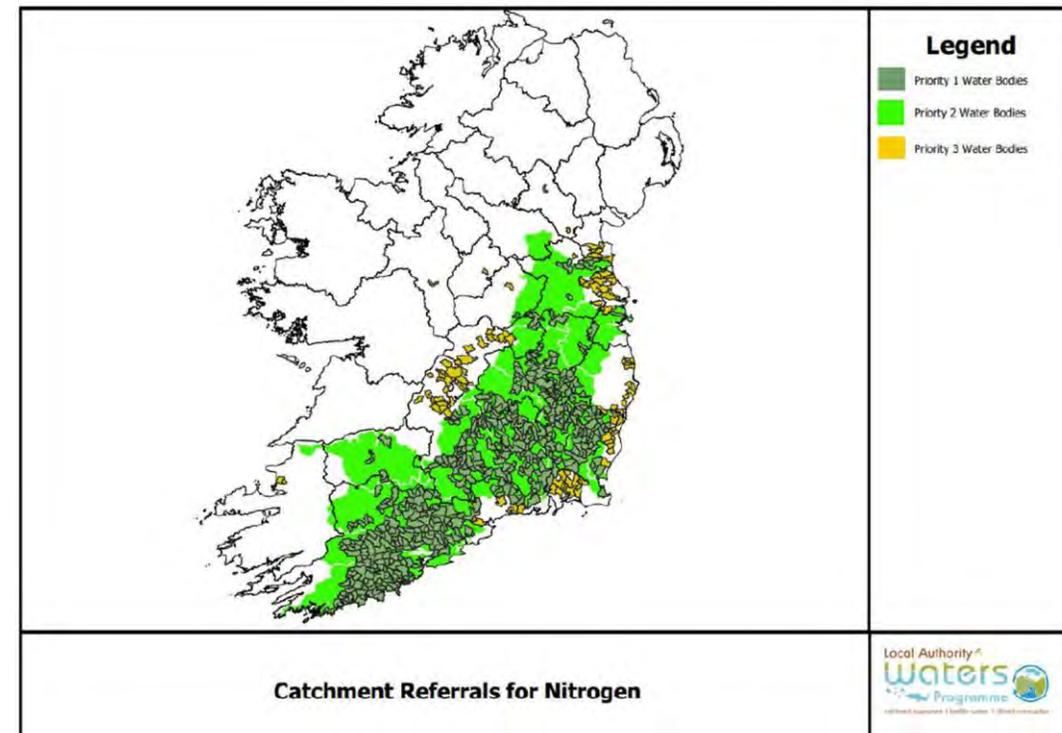


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ASSAP – RBMP 3rd Cycle

- Implementation of mitigation actions key to realising WQ improvements
- Government have announced funding for a Water Quality EIP - €60 million over 5 years
- This EIP will provide funding to farmers to implement measures to mitigate the impacts of agriculture on water quality
- Catchment referrals for nitrogen – innovative new approach to tackling diffuse N loss problem
- Catchment referrals for phosphorus?
- Strengthened GAP Regulations
- Expand use of EPA PIP maps - ACRES
- Development of advisory tools – Farm Sustainability Planner
- National Agricultural Inspections Programme



Thank you

