

NTIG – ASSAP Update
March 9th 2022
Pat Murphy – ASSAP Manager



Farming For Water Quality



What is the ASSAP?

- **Agricultural Sustainability Support and Advisory Programme**
- Focus is on water quality in 190 Priority Areas for Action (PAA)
- Provides free farm advice, confidential and acceptance is voluntary
- 33 Advisors - 20 Teagasc, 13 from Dairy Co-ops
- Work in collaboration with LAWPRO (Local Authority Waters Programme)
- Under the Water Framework Directive Ireland is required to have all waters at least at 'Good Status' by 2027 ★★★★★
- LAWPRO provide the catchment science, identify pressures and locations
- ASSAP advisor contact farmers offering service

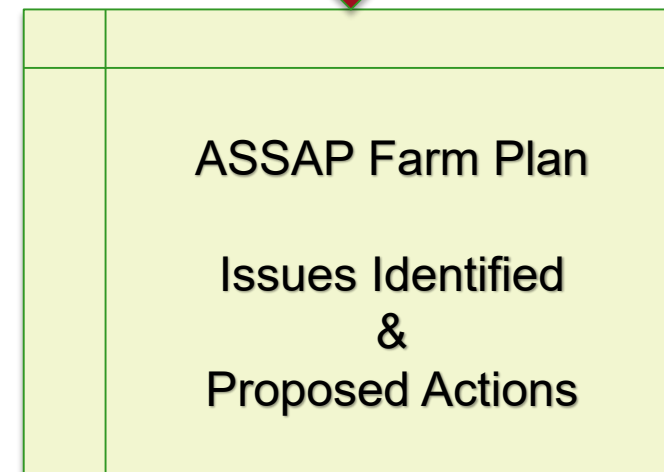
ASSAP Video

- <https://www.youtube.com/watch?v=IjAx71sSIro>



Referrals

Catchment Characterisation



Compile Data

Mitigation Actions	High Risk	High Risk Areas	Actions Implemented	Risk Reduced	Risk Remaining	Completed	Completed	Ongoing
2 Preparation and Implementation of BMP								
Precision application of nutrients at correct rate	227	207	157	57	0	34	9	57
Informing and educating farmers	140	129	121	50	1	20	15	35
Use of straight fertilisers	25	24	24	13	0	8	1	2
Avoid application at high risk times	23	23	21	8	0	16	0	7
Avoid application at high risk places (CSA's)	0	0	0	3	0	0	1	4
3 Buffers								
Adhere to buffer zones and safeguard zones	249	241	210	37	2	38	18	115
Avoid application at high risk times	62	69	64	12	0	9	15	18
Avoid application at high risk places	56	51	47	12	0	6	13	18
Informing and educating farmers	44	44	41	12	0	10	10	9
Riparian Buffers: Fenced/Unfenced	15	15	15	2	0	3	0	9
In field grass buffers	11	11	8	0	0	2	1	5
Other mitigation actions	13	13	8	3	0	1	0	1

Risk Issues Identified

Risk	Definition	% Reported
High	Issues that are highly likely to have a high impact on water quality	44%
Medium	Issues that are likely to have a moderate impact on water quality	40%
Low	Issues that are unlikely to have an impact on water quality	16 %

ASSAP – Farm Assessment Issues

Farm Yard

Land Management

Nutrient Management

F1	Slurry Storage	LM1	P Loss Through Overland Flow	NMP1	Preparation and implementation of NMP
F2	Silage Pits and Effluent Storage	0	0	0	
F3	Loose Housing and FYM Storage	1 Improved management of collection and storage of farm wastes	1 Management of Critical Source Areas (CSA's)	1	Informing and educating farmers
F4	Round Bale storage	2 Additional storage for farm wastes required	2 Riparian Buffers - Fenced/Unfenced	2	Precision application of nutrients at correct rate
F5	Dirty yards	3 Separation of clean, grey, soiled and dirty water in farmyard	3 Establish field boundaries and hedges	3	Use of straight fertilisers
F6	Cattle &/or Sheep handling areas	4 Destock/reduce stock for winter	4 In field grass buffers	4	Avoid application at high risk times
F7	Clean & Grey Water management	5 Informing and educating farmers	5 Alleviate compacted areas in fields	5	Avoid application at high risk places (CSA's)
F8	Drain Connection from Farmhouse	F2 Silage Pits and Effluent Storage	6 Woodland planting	6	
F9	Pesticide Storage and Diesel/oil tanks	0	7 Improved farm road/tracks design and location	7	
F10	Other (Specify)	1 Improved management of collection and storage of farm wastes	8 Establish/preserve wetlands	8	
		2 Additional storage for farm wastes required	9 Constructed wetlands	NMP2	Achieving appropriate Soil Fertility (Lime P&K)
		3 Separation of clean, grey, soiled and dirty water in farmyard	10 Run off attenuation features	0	
		4 Informing and educating farmers	11 Off line bunds/instream diversion structures	1	Informing and educating farmers
		5	12 Use of silt fences	2	Implementation of Nutrient Management Plan
	F3 Loose Housing and FYM Storage		13 Sow specific grass mixtures	3	Precision application of nutrients at correct rate
	0		14 Reduce Stocking Rate (SR)	4	No P on index 4 soils
	1 Improved management of collection and storage of farm wastes		15 Additional storage for farm wastes required	5	Nutrient mining
	2 Additional storage for farm wastes required		16 No P on sensitive (CSA's) areas	6	Liming
	3 Separation of clean, grey, soiled and dirty water in farmyard		17 Attenuate drainage stone filled (to surface) field drains	7	Calibrated spreading equipment
	4 Destock/reduce stock for winter		18 Prudent P use on Peat soils	8	Avoid application at high risk times
	5 Informing and educating farmers		19 Winter – plant cover or catch crops	NMP3	Identify and Mange Critical Source Areas
	F4 Round Bale storage		20 Appropriate re-seeding management	0	
	0		21 Implementation of Nutrient Management Plan	21	1 Informing and educating farmers
	1 Improved management of collection and storage of farm wastes	LM2	N leaching from Light Soils	2	No P on sensitive (CSA's) areas
	2 Additional storage for farm wastes required		0	3	Precision application of nutrients at correct rate
	3 Separation of clean, grey, soiled and dirty water in farmyard		1 Implementation of Nutient Management Plan	4	Avoid application at high risk times
		LM22	Invasive Vegetation		
		LM23	Buffers		

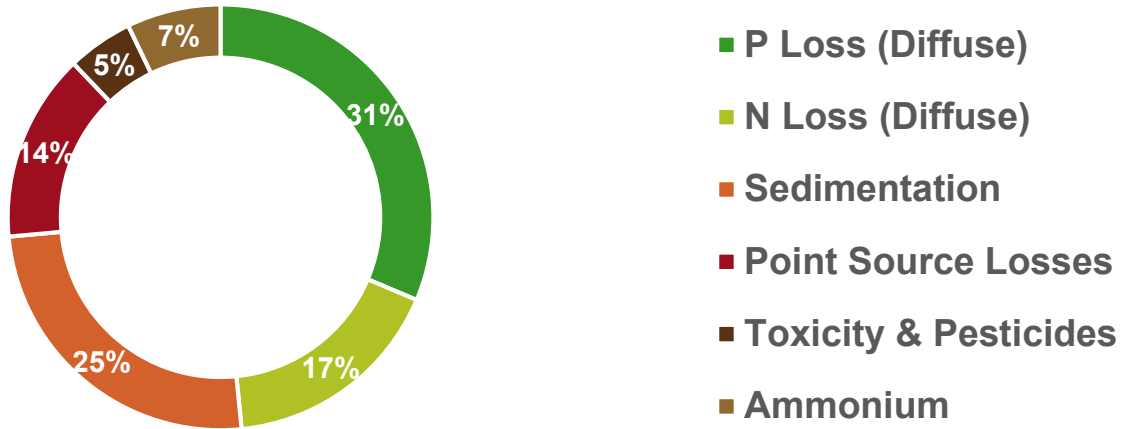
- Potential Issues = 46
- Total number of possible mitigation actions = 289

ASSAP Update

- Completed ASSAP farm assessments 31 December 2021 - 2,517
- Follow up farm visits - 553
- Farm assessments have returned to normal post Covid 19 restrictions
- ASSAP advisors also carrying out water quality assessments on the 100 Signpost Farms
- LAWPRO providing local catchment assessment reports
- Farmers meetings on-going with generally good attendances
- Farmers Meetings - 137
- PAA's ASSAP active in - 122
- Farmer engagement - 95%
- Farmer agreement on proposed measures - 93%

ASSAP – 31 December 2021

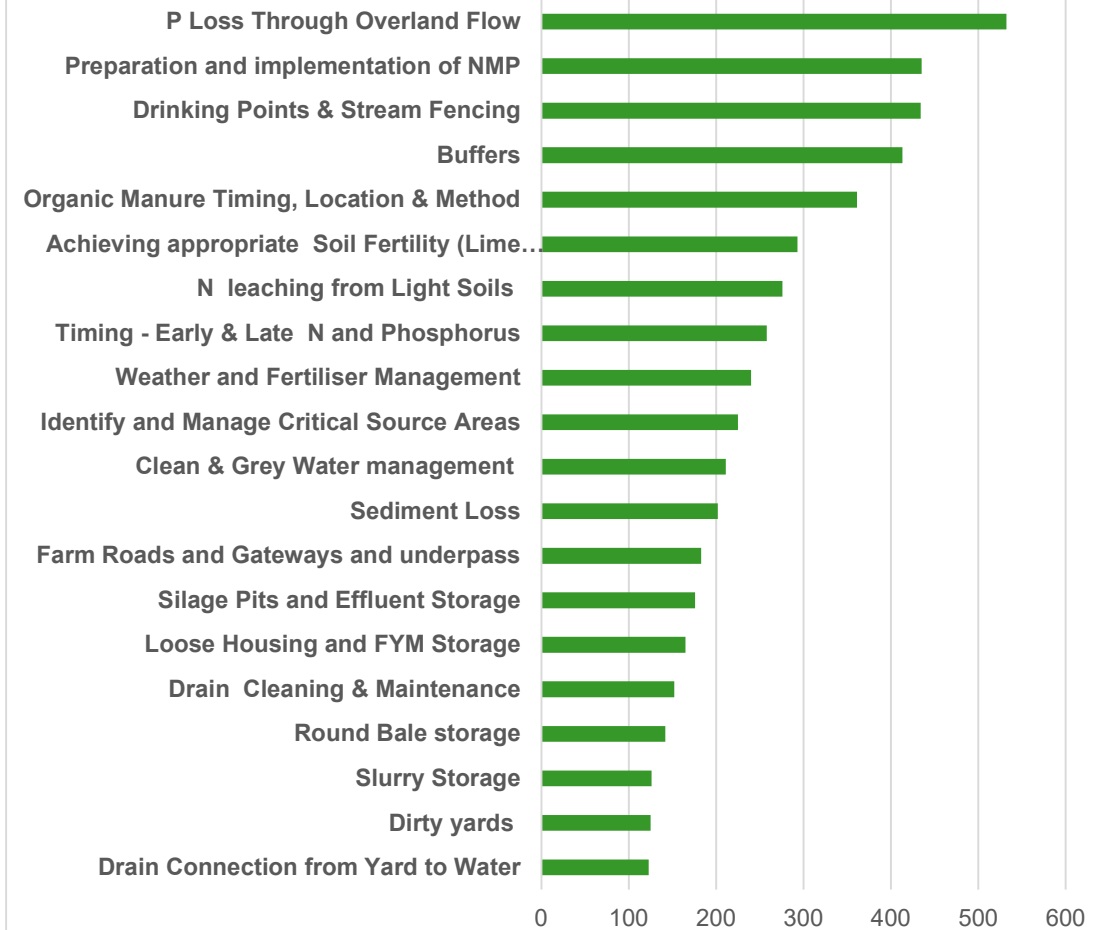
PAA Pressures



Farming Enterprise Assessed



High Risk - 20 most frequent issues



ASSAP – Mitigation Actions



Jan. 25



Feb. 12

ASSAP – Mitigation Actions



6 weeks post reseed



ASSAP – Mitigation Actions



ASSAP – Implementation of Mitigation Actions

Actions Reviewed	The total number of actions reviewed by the advisor
Not Started	The farmer has not started to implement the agreed mitigation action. E.g. fencing off a riparian margin
Not Proceeding	The farmer is not proceeding with implementing the agreed mitigation action
Commenced	The farmer has commenced implementation of the agreed mitigation action. E.g. has commenced fencing off a riparian margin but it is not finished
Complete	The farmer has completed the implementation of the agreed mitigation action. E.g. has finished fencing off a riparian margin
On-going	The implementation of the mitigation action is on-going meaning that it needs to be implemented on a year round basis. E.g. management of critical source areas (CSA's)

High Risk Issues - Implementation of Actions Agreed	Not started or not proceeding	Commenced Complete or On-going
P Loss Through Overland Flow	21%	53%
Preparation and implementation of NMP	34%	51%
Buffers	18%	68%
Drinking Points & Stream Fencing	69%	31%
Organic Manure Timing, Location & Method	33%	51%
Achieving appropriate Soil Fertility (Lime P&K)	23%	67%
Clean & Grey Water management	41%	44%
Weather and Fertiliser Management	5%	84%
N leaching from Light Soils	27%	71%
Round Bale storage	52%	31%
Loose Housing and FYM Storage	70%	34%
Identify and Mange Critical Source Areas	21%	70%
Timing - Early & Late N and Phosphorus	22%	66%
Drain Cleaning & Maintenance	31%	59%
Farm Roads and Gateways and underpass	60%	22%
Fertiliser Type	69%	29%
Silage Pits and Effluent Storage	56%	28%
Herbicide / Pesticide and Sheep dip Use	16%	69%
Sediment Loss	51%	32%
Sloped Fields	22%	68%

ASSAP

- **5 most frequent high risk issues**
- Issue identified, mitigation actions recommended and implementation of measures

	Mitigation Actions	Risk High	Risk High Agreed	Actions Reviewed	Not Started	Not Proceeding	Commenced	Complete	Ongoing
1	P Loss Through Overland Flow								
	Management of Critical Source Areas (CSA's)	200	190	145	44	2	36	9	54
	Riparian Buffers - Fenced/Unfenced	120	115	91	21	1	12	4	53
	In field grass buffers	76	72	52	7	0	10	3	32
	Establish field boundaries and hedges	28	27	18	5	0	1	3	9
	Implementation of Nutrient Management Plan	27	27	21	4	0	4	4	9
	Improved farm road/tracks design and location	22	21	11	6	0	2	1	2
	Prudent P use on Peat soils	8	7	5	0	0	0	0	5
	Alleviate compacted areas in fields	7	6	6	2	1	3	0	0
	No P on sensitive (CSA's) areas	5	4	4	2	0	0	0	2
	Additional storage for farm wastes required	4	4	4	1	0	0	0	3
	Other mitigation actions	25	24	14	6	1	1	0	2

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	Mitigation Actions	Risk High	Risk High Agreed	Actions Reviewed	Not Started	Not Proceeding	Commenced	Complete	Ongoing
4	Drinking Points & Stream Fencing								
	Prevent livestock access to waters	270	208	202	123	14	25	21	19
	Informing and educating farmers	81	56	69	45	7	10	3	4
	Other mitigation actions	6	6	2	0	0	0	1	1
5	Organic Manure Timing, Location & Method								
	Avoid application at high risk times	170	162	134	46	0	19	11	58
	Avoid Application at high risk places	114	111	86	28	0	12	9	37
	Informing and educating farmers	85	81	80	40	2	20	12	6
	Adopt latest manure application techniques	65	56	49	23	2	16	3	5
	Precision application of nutrients at correct rate	48	45	29	7	1	7	4	10
	Other mitigation actions	32	30	28	10	0	12	2	4

Summary on ASSAP

- Covid 19 impacted ASSAP farm visits in 2020 (and first quarter of 2021)
- Very strong engagement by farmers
- Pressures and Issues are consistent
- Mitigation actions need to be implemented and maintained to improve water quality
- Positive implementation but greater levels required



ASSAP – Developments

Renewal for 3rd River Basin
Catchments Plan

Nitrate Referral for N Risky
PAA's & Waterbodies

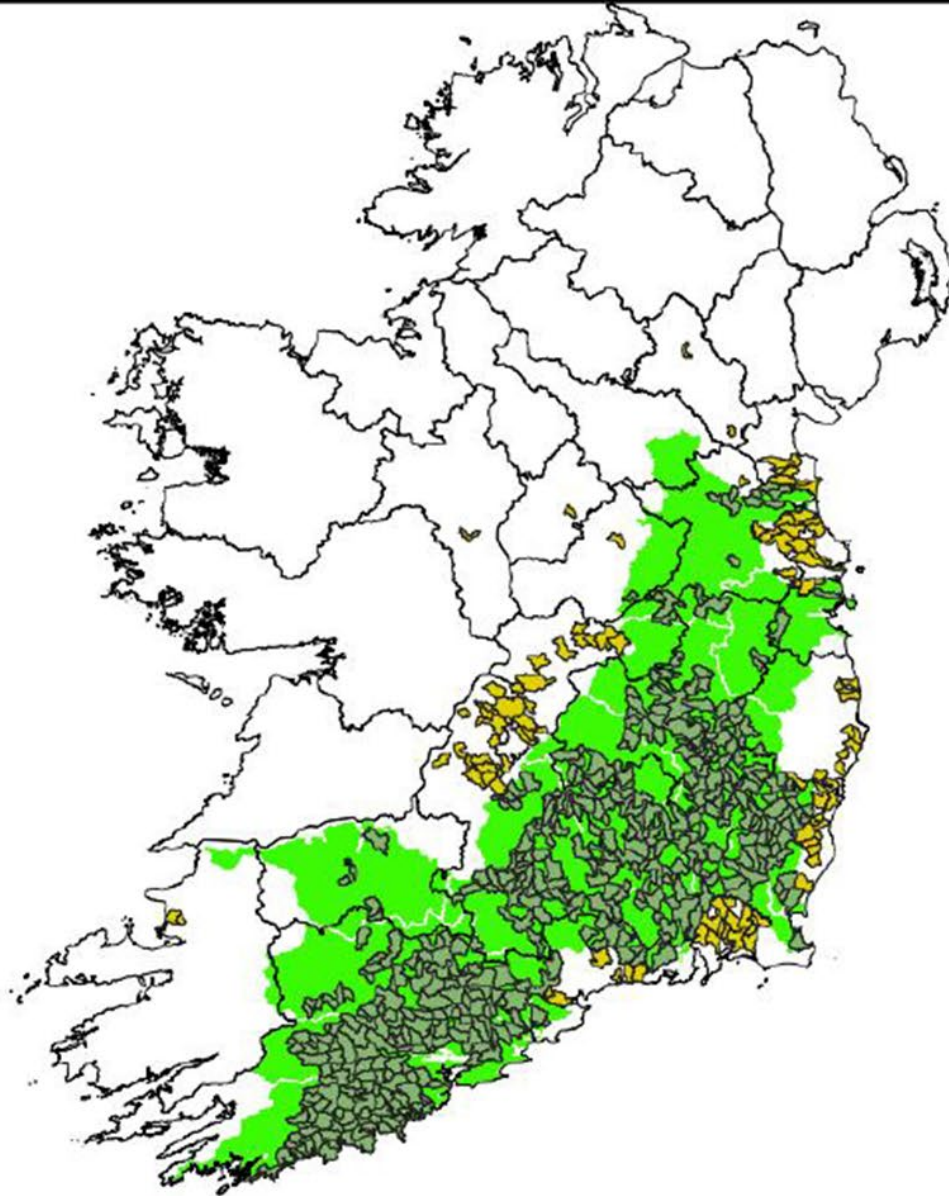
Water Quality EIP?

Nitrate Referral for N Risky PAA's & Waterbodies

- Dairy Co-op advisory team to increase in 2022 to 18 advisors
- Necessity to provide referrals to these additional advisors – LAWPRO staff at same level
- Novel referral for Nitrate prepared by LAWPRO. This will allow the ASSAP advisors to visit farms in PAA's and in selected waterbodies with elevated Nitrate levels and provide mitigation advice on nitrate losses
- Catchment Referrals for Nitrogen have been developed for 1,231 waterbodies
- PAA referrals are priority, these will allow for work to continue where referrals have been completed

Table 1 Priority categories for Catchment Referrals for Nitrogen

Priority category description	No. of water bodies
1. Water bodies contributing high N within catchments of concern	404
2. High PIP N areas in catchments of concern (not included above)	733
3. Water bodies with elevated N (outside catchments of concern)	94
4. 20% reduction in use everywhere	All other water bodies



Legend

- Priority 1 Water Bodies
- Priority 2 Water Bodies
- Priority 3 Water Bodies

Catchment Referrals for Nitrogen

Water Quality EIP

- DAFM and DHLGH have announced funding for a Water Quality EIP - €60 million over 5 years. Submitted to the EU as part of the CAP strategic plan and awaiting approval
- This EIP will provide funding to farmers to implement measures to mitigate the impacts of agriculture on water quality
- At very early stages of development with initial discussions on-going between stakeholders
- Agreeing Principles
 - On-going application process
 - Priority access to Water Quality Projects

Ireland's bathing waters continue to improve - EPA




Good news for swimmers as EPA says 97% of bathing waters met or exceeded minimum standard

The report highlights significant improvements in bathing water quality at Lilliput on Lough Ennell in Co Westmeath, which had been designated as poor quality for the previous three years.

It says that actions taken by farmers in the surrounding area over the past two years have rescued the situation at Lilliput. This was driven by evidence and science generated by Westmeath County Council, the Local Authority Waters Programme and the Agricultural Sustainability, Support and Advisory Programme all working together. As a result of these improvements, the restriction on swimming which had been in place there has been removed.



*L-R: Minister Simon Coveney,
Prince Charles, Shane Fitzgerald
and Teagasc advisor Cathal
Somers*

A scenic rural landscape featuring a lush green field with several black and white cows grazing. In the foreground, a small pond is surrounded by tall reeds and grass, with a single white swan swimming in the water. The background shows a line of trees and a distant building under a clear sky.

Thank you
Questions?