FARMING for WATER

Water European Innovation Partnership - AGRI

A €60M FARMER AND ADVISORY LED PROJECT TO PROTECT AND RESTORE WATER QUALITY

FIVE YEAR PROGRAMME FROM 2023-2027

MEASURES HANDBOOK

Rialtas na hÉireann
Government of Ireland

Co-funded by the European Union

eip-agri

Local Authority Waters Programme

Dairy Industry Ireland

Ibec

teagasc
Agriculture and Food Development Authority


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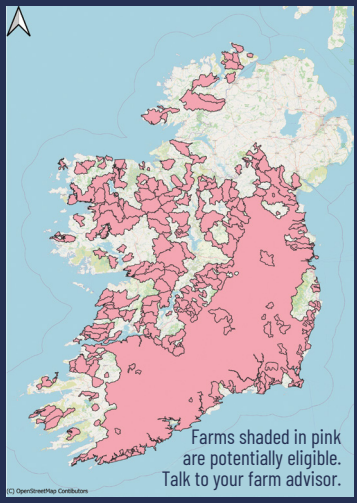
WHAT IS THE FARMING FOR WATER EIP?

The Farming for Water EIP is a €60million agri-environmental programme designed to improve water quality throughout the country. The programme is open to farmers with land in priority catchments where targeted water quality improvements are needed. Farmers located in these priority catchments are potentially eligible for Farming for Water EIP funding and the catchments are identified in the accompanying map.



You can also view national water quality maps at www.gis.epa.ie/EPAMaps/agriculture

HOW DOES IT WORK?

Funding is provided to the farmer to implement measures which go beyond regulatory requirements and which will help maintain and improve water quality.

FARM VISIT
Farmer receives a free advisory visit from a Teagasc or Dairy ASSAP advisor.

→

FARM ACTION PLAN
Advisor completes a rainwater management plan to identify and target areas where actions are required to reduce sediment, nutrient and/or pesticide loss to water.

↓

APPLICATION
Advisor submits application for funding of actions.

←

ACTIONS IMPLEMENTED & PAYMENT MADE
Once the application for funding is approved, farmer implements the actions identified in plan.

WHAT IS FUNDING AVAILABLE FOR?

Funding is provided for measures that are over and above regulatory requirements, i.e. supplementary measures like sediment traps, riparian areas, catch crops, etc.

WHAT DO FARMERS NEED TO DO?

Each applicant receives a farm visit and submits a Rainwater Management Plan on application The rainwater management plan is a simple map drawn by the advisor with the famer, showing where rainwater moves across the farm during wet weather. This helps identify direction of waterflow across the farm to highlight areas at risk of nutrient, sediment or pesticide loss. This informs where measures like riparian buffers or hedgerows, to intercept phosphorus, are placed. These measures, on agreement are then added to the plan.

CAN FARMERS PARTICIPATE IN OTHER SCHEMES AND EU FUNDED PROJECTS?

Yes. Participation in ACRES and other EU funded schemes where they apply, is encouraged to maximise environmental benefits. Note, double funding is not allowed – i.e., measures such as riparian buffers, can only be paid for once, irrespective of schemes. Talk to your advisor for more information.

SOURCE CONTROL MEASURES

1. RAINWATER MANAGEMENT PLAN

This plan is a whole farm assessment identifying areas on the farm where water flows both within the farmyard and the land area. The plan examines water movement (rainwater, surface water and ground water) across the farm and identifies where nutrients, pesticides and sediment can be diverted away and retained so that they remain on land and not end up in our watercourses. Planning for heavy rainfall events such as cloud bursts, is also be taken into consideration. A Rainwater Management Plan must accompany each application and €250 is paid to the farmer upon completion.

Notes:
Mark out the preferential flow pathways that rainwater will take during wet weather, including very heavy weather such as cloud bursts.

Slope:
Water outlet from yard:
Clean Water Drain
M28 – Willow Bed
M29 – Farmyard Settlement
Tank

2. FARMER TRAINING COURSE

Farmers will be given the option to attend a training course as part of the Farming for Water EIP. The course will provide farmers with information on water quality; how water pollution occurs; actions to mitigate pressures on water; and examples of mitigation actions.

€156 is paid to participants upon completion of the course.

3. NUTRIENT MANAGEMENT PLAN

Nutrient management plans provide farmers with information on how to grow crops to their potential for their farming system. This information includes when to apply nutrients, where to apply nutrients, and how to apply them to achieve optimum slurry recycling and nutrient uptake by plants. This measure is applicable to those participants that do not require an NMP under current GAP regulations or other scheme requirements. €400 is provided for the drawing up of this plan.

4. NITROGEN SURPLUS

Nitrogen Surplus follows a nutrient accounting approach. Farm gate inputs of nitrogen (e.g. purchased fertiliser, feeds, livestock, imported organic manures) are calculated minus farm gate outputs of nitrogen (e.g. sales of milk, livestock, manures exported) to give a nitrogen balance per hectare figure and Nitrogen Surplus for the participating farm. €250 is provided each time this plan is created.

5. MULTIPLE SPECIES SWARDS

Multi-species swards (MSS) consist of a variety of plants from different families including clovers, grasses, brassicas and herbs. There are many benefits of multi-species swards including improving soil biodiversity, soil structure and reducing Green House Gases. In terms of water quality, they can allow fertiliser application to be reduced while maintaining a steady growth rate. The inclusion of plantain at 30% and chicory in multispecies swards can prevent losses of nitrogen on the farm through better use of N by animals and reduced farm leaching. €300/hectare paid to a maximum of 10 hectares.

6. CATCH CROPS

Catch crops utilise residual nutrients in the soil following the harvest of a cereal or oilseed crop, thus maintaining soil biology and preventing leaching of soluble nutrients. With their vigorous root systems, these crop species condition and break up the soil, making it more friable for ease of cultivation, while the residual herbage that remains, greatly enhances the organic carbon content and structure of the soil. For Winter Cropping System - €173/ha/year is paid while for Other Cropping System: €229/ha/year. Minimum area 0.5 hectares – maximum - 40 hectares.

7. LOW DRIFT NOZZLES

Low-drift nozzles are designed to produce larger spray droplets with fewer driftable fines. Larger droplets are produced with the use of a pressure-reducing chamber inside the nozzle by incorporating air into the spray droplets. Retro fitting of existing sprayer with low drift nozzles to reduce spray drift is seen as a very effective tool with €5 per nozzle funded up to a maximum of 40 nozzles.

8. MOBILE DRIP TRAY

To prevent spills while filling sprayer tanks the use of a mobile drip tray to catch any accidental spills and prevent these spills from reaching water clean drains. Minimum of 1 unit with a maximum of 2 units -€22 per unit funded.

9. WATER STORAGE TANKS

These are for outside farms (fragmented land) to prevent filling sprayers directly from streams/rivers etc. IBC tank with 1000L of storage which can be filled in the farmyard and taken to the outside block of land where it must be used for filling the sprayer. €400 per tank with a maximum of two tanks.

10. RETROFIT A CLEAN WATER TANK

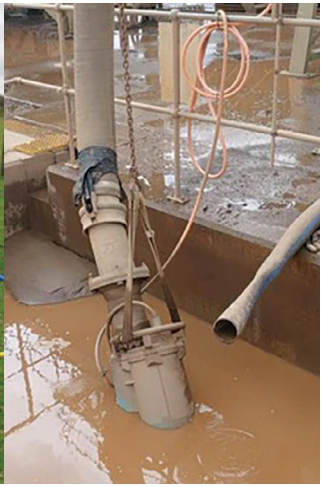
To encourage tank rinsing in the field. These are currently not present on some basic sprayers used by the grassland farmer. Retrofit the water tank onto existing sprayer with €500 being provided per farm.

11. DECOMMISSION SHEEP DIP TUB

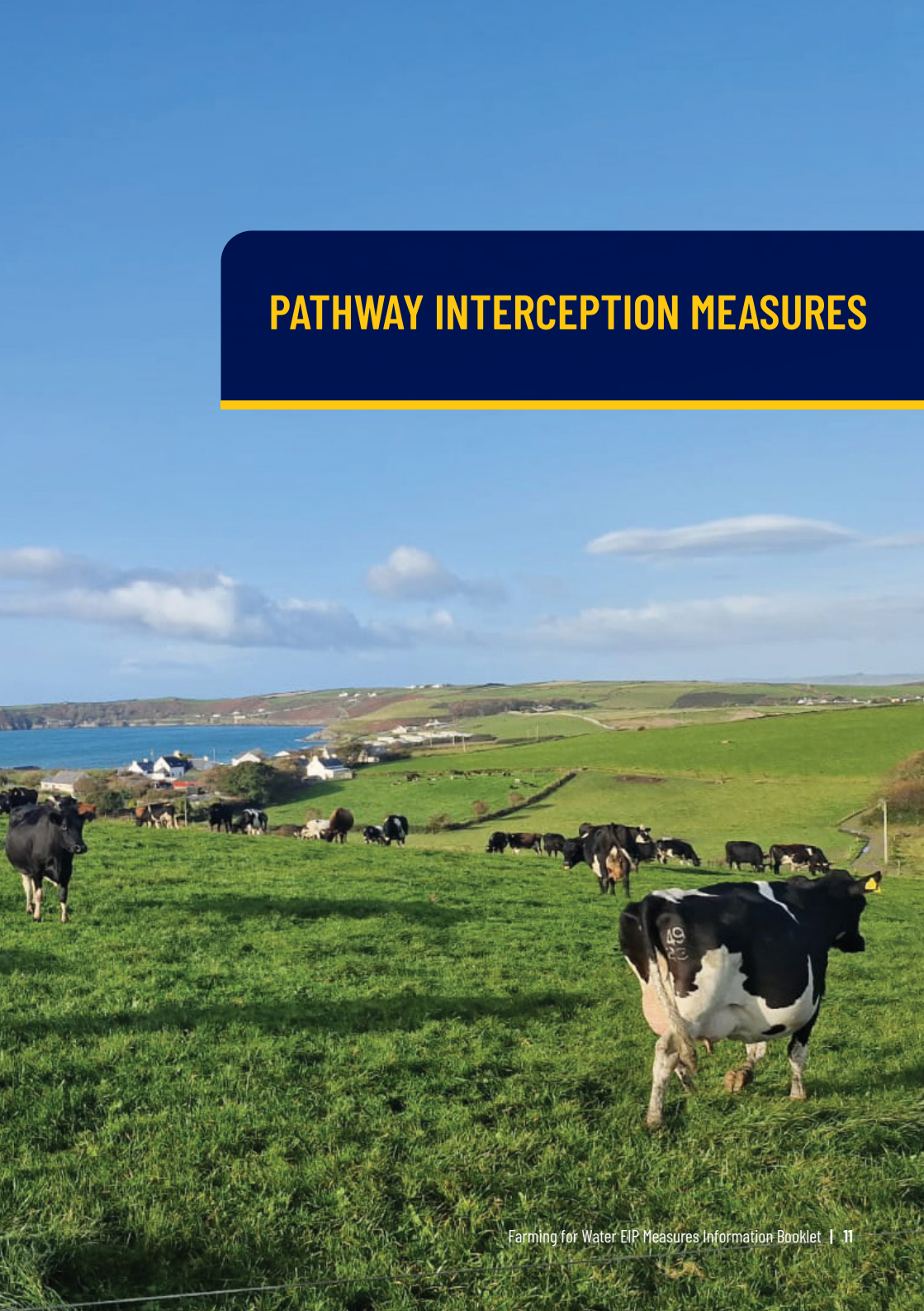
Dipping sheep is required to control certain parasites. However, the chemicals used are toxic and pose a considerable risk to water courses and to aquatic organisms. Under this measure the dipping station must be permanently decommissioned. This requires the tank to be filled in and capped with concrete. The dipping station can continue to be used as a pen provided there is no pathway to watercourses. €284 fund per farm.

12. SUBMERSIBLE PUMP

A submersible pump can only be applied for in conjunction with water storage tank. Submersible pump is used to empty a dipping tub of spent sheep dip into a water storage tank such as an IBC. This tank is then removed with the contents disposed of in accordance with best practice for disposal of spent sheep dip (i.e. into a slurry storage tank). €175 grant provided for this measure.



PATHWAY INTERCEPTION MEASURES



13. HEDGEROW ESTABLISHMENT

Hedgerows are very effective in reducing the risk of land-spread material moving over sloped ground during heavy weather or cloud bursts, if planted across the slope in an overland flow pathway. The aim is to construct a low earthen mound and plant a hedge on or beside the mound to slow water flow, to increase water interception and storage at the base of the hedge. 250 metres of hedging will be funded at between €21.17 and €24.37 per metre depending on whether a low earthen mound is being utilised.

14. SPATIALLY TARGETED RIPARIAN BUFFER ZONES

A spatially targeted riparian buffer zone is an area left uncultivated adjoining rivers/streams/drains/ponds/lakes/turloughs etc. that will help to intercept sediment and nutrients from soil surfaces after they have been mobilised. Correctly designed, located and managed, these will work to intercept and retain water and pollutants transferred from adjacent fields by surface and subsurface pathways, diversify terrestrial habitats and provide other services to benefit communities and wildlife. Payment will be made on a per hectare basis and ranges from between:
0.01ha - 0.04ha. €400/unit; 0.05ha - 0.1ha. €600/unit; 0.11ha - 0.2ha. €800/unit
For linear Riparian Buffer Zones the payment rates differ from tillage to grassland and depend on the extent of the margin.

15. 16. LINEAR RIPARIAN BUFFER ZONES

A linear riparian buffer zone is an uncultivated area located adjacent to rivers, streams, drains, ponds, lakes, turloughs, and similar waterbodies. It helps intercept sediment and nutrients that have been mobilised from soil surfaces. When properly designed, located, and managed, riparian buffers effectively intercept and retain water and pollutants transported from adjacent fields through surface and subsurface pathways. They also enhance terrestrial habitats and provide various services that benefit wildlife. The maximum length per farm is 500 metres.

17. TREE PLANTING

A wooded buffer along one or both banks of the river is very beneficial to the river. Trees will absorb excess nutrients, such as ortho-phosphorus and prevent sediment getting to the river while also increases soil infiltration rates and slows over land flow of water. Trees also stabilise the riverbank, preventing erosion and provide a terrestrial habitat for many animal species. The planting of trees under this measure does not contribute to the planting of trees as part of an Eco scheme for Pillar 1 payments. One off payment of €16/tree. Max 100 trees.

18. SMALL SCALE WETLAND POND

Wetlands are diverse habitats for plants, insects, birds, mammals and amphibians while also filtering water by slowing the flow, depositing particles and promoting microbial degradation of pollutants in high organic matter environments. This measure is for the creation of new wetlands to capture diffuse sediment, Phosphorus and Nitrogen losses along flow pathways to waters.

Small scale wetland establishment: €800/unit (10m X 6m X .5m).

19. EARTHEN BUND

An earthen bund (bank), correctly positioned, can provide temporary ponding of field runoff water and sediments, targeting surface runoff pathways and/or to divert clean rainwater away from farmyards. Earthen bund: €300/unit. Min. 1, Max. 5.

20. SWALES

A swale is a linear, mostly dry, vegetated channel laid with a shallow fall on its base designed to collect and transfer runoff during rainfall events. The vegetated surface of a swale helps to filter coarse sediments and pollutants from runoff allowing them to settle out and be retained within the swale which helps to slow down the rate of surface water runoff and increases opportunities for infiltration into soils. Grants are: €680/unit. Max 3 units Min length 20m. Max length 50m.

21. MANAGEMENT OF CRITICAL SOURCE AREAS

Critical source areas (CSAs) are areas that have high connectivity to the drainage network and are at high risk of impacting a water body. These are often low-lying parts of farms where runoff accumulates in high concentration. EPA PIP maps should be used to help determine where best to situate this measure along with slope of field etc. Funded is €500/ha/yr. Min area: 0.2ha. Max of 3ha.

23. WATER BARS

Run-off from impermeable surfaces such as farm roadways must be managed to prevent flows into rivers and streams. Retrofitting water bars on existing farm roadways can mitigate runoff pathways by diverting water into areas of higher permeability such as fields and verges or into runoff storage areas. Funding is €213 per unit with a maximum of six units.

24. SEDIMENT TRAPS

A sediment trap is a shallow basin laid with a shallow fall on its base. They typically intercept run-off from farm roadways used by livestock or machinery and allow sediment or heavy material to drop out prior to discharge to grassland away from watercourses. Funded is €120/unit/year with a maximum of 6.

25. CULVERTS

The passage of animals, people and vehicles across drains damages banks and aquatic vegetation. This increases the risk of soil particles and plant nutrients entering the drain and the potential for these materials to be transported to a stream or river. These are for field drains only i.e. those not identified as a blue line on the OSI 1:5000 maps. Funded is: €800/unit with a maximum of 5 units.

26. WATERCOURSE CROSSING/BRIDGES

River crossings by animals and farm vehicles can deliver sediment and pollutants to the river, particularly where the crossing is part of a farm roadway. Replacing a river crossing with an appropriately designed bridge will have a positive impact on the river. The use of clear-span bridges is preferable as they eliminate any potential interference with the riverbed. Funded is 50% of cost of bridge installation up to a max of €5000 per applicant.

27. GATEWAY MEASURES

Gateways located close to rivers or streams can deliver sediment and pollutants to the river, particularly frequently used gateways. Redesigning the paddock and relocating the gateway can have a positive impact on water quality. Funded is:

Gateway Remediation (closing of gap) & Relocation - €360
New Gateway (per gateway, includes gate & posts) -€360

Total = €720

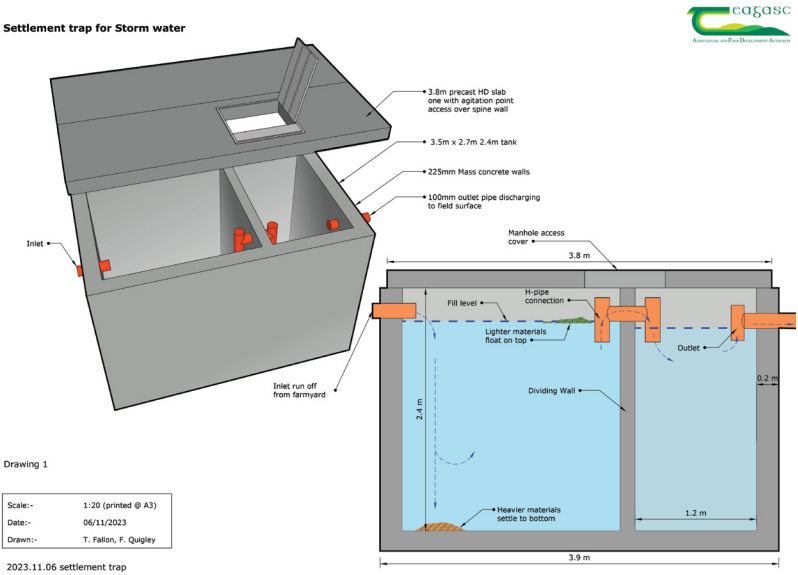
Gateway resurfacing is available for an existing gateway that is contributing to nutrient or sediment loss to the drainage network – funded is €118.

28. WILLOW FILTER BED

Willow beds are areas of densely planted willow trees. They help to slow the flow of water, allow sediment to settle out and any traces of dissolved nutrients to be taken up by growing vegetation. They act as a filter and allow for polishing of water from farm roadways and clean concreted yard areas. This is area-based unit payment with minimum of 30m up to a maximum of 200m. €34/metre.

29. FARMYARD SETTLEMENT TANK

Capturing water and allowing any sediment to settle out of it in a 2-chamber settlement tank will help to polish this water before it enters the drainage network.
100% of the cost of the tank up to a maximum of €6500 ex Vat will be granted.
Minimum 1 tank per farm.



RECEPTOR MEASURES

30. 31. 32. BOVINE, OVINE EXCLUSION FROM WATERBODIES

Fence off waterbodies (rivers, streams, drains, ponds, lakes etc.) to prevent bovine and ovine access to reduce impacts of nutrient and sediment enrichment and bank destabilisation. This measure is only recommended when it is expected to provide a significant benefit to water quality.

33. SOLAR POWERED ELECTRIC FENCER

Where no mains powered electric fence supply is available, a farmer may apply for a solar powered electric fence. To be eligible these must be applied for in association with Bovine Exclusion from Waterbodies; Ovine Exclusion from Waterbodies; Spatially Targeted Riparian Buffer Zone; or Linear Riparian Buffer Zone Grassland.

Applicant will receive up to €634 for a solar powered electric fence - Maximum of 2.

34. 35. 36. 37. ALTERNATIVE WATER SUPPLY (M34 & M35), WATER TROUGHS (M36), PIPING AND FITTINGS (M37)

Pasture pumps and solar powered pumps with water troughs are a sustainable way to provide drinking water to livestock. Implementing this measure on farms will prevent livestock access to river channels thereby preventing damage to channel banks, reduce hydro-morphology impacts and help to improve water quality. This measure is only applicable to those with a Grassland Stocking Rate <170kgs/ha.

Alternative water supply – Pasture pump: up to €400/unit; Max. 4
Alternative water supply – Solar pump: €2,500/unit; Max. 2
Alternative water supply – Water trough: up to €300/unit; Max. 5
Alternative water supply – Piping and fittings: €150/unit: min 1,
Max: correspond with what is applied for in troughs.

38. VEGETATED BUNDED DRAIN

Bunded drains help to maximise the retention of sediments and plant nutrients within ditches/drains and to create opportunities for infiltration of water into soils. There are opportunities to reduce the effectiveness of pathways by increasing sedimentation settlement processes and encouraging the growth of plants within the ditch/drain. €1000 per bunded drain. Max of 3 per farm. Min length: 20m. Max length: 50m.

OTHER MEASURES

39. HOST FARMER PAYMENT

In order to facilitate outdoor farmer training courses, advisors will be required to identify suitable farms to host farmer training events and these will be approved by the EIP Project team. A farmer who hosts a Water EIP course or event will be paid €180 for the use of his/her premises for the course or the event. Host farmer can receive this payment up to a max of 5 times during the lifetime of the EIP.

40. CONTRACTOR MOBILISATION FEE – EXCAVATOR

This is a fee payable to facilitate the use of an excavator on a farm for putting in place the following measures:

- Hedgerow Establishment cross slope on low earthen mound
- Small Scale Wetland Pond
- Earthen Bund
- Swale
- Water Bars
- Sediment Traps
- Culverts
- Watercourse Crossing/Bridges
- Gateway Relocation
- Willow Beds
- Farmyard Settlement Tank
- Bunded Drain

The fee is to cover the transport of the excavator to the farm.
This is a one-off payment (€200).

41. BESPOKE MEASURES

Farmers can apply for funding for Bespoke Measures on a case-by-case basis.
To receive funding the measure must demonstrate that:

- It will provide a water quality benefit within the catchment area based on the relevant referral.
- Have detailed costings of the proposed measure.
- Provide guideline specifications as to how the measure will be installed & implemented.
- Proof of compliance with legal obligations.
- To be prepared by the farmers own advisor/consultant.
- Bespoke Measures must be identified as part of the Rainwater Management Plan to be considered for funding by the Project Team.

42. FARMYARD BUCKET AND BRUSH

Using a farmyard bucket and brush is a labour-efficient method for keeping clean yards within the farmyard complex tidy. This helps reduce the potential for contamination of clean water exiting through the clean water outlet. Applicants can apply to the EIP for 1 new farmyard bucket & brush to be used on a regular basis to maintain the farmyard clean and tidy - cannot be second-hand. Yards that are poorly managed and require more fundamental work will not be considered. This can be 50% of the cost up to a max funding of €2000 (ex VAT).

43. SLURRY TESTING

Knowing the nutrient content of the slurry and soiled water in the various tanks on the farm is crucial for both the economic and environmental sustainability of the farm. This information enables more targeted nutrient application, in line with a tailored Nutrient Management Plan, and may help reduce the need for inorganic fertilisers. Applicants can apply for a max of 4 slurry samples @ €70/sample.

FOR MORE INFORMATION

Email the EIP office: info@watereip.ie
Contact your local Teagasc / Co-Op Adviser

Scan the QR code or visit
www.farmingforwater.ie