

Waters of



Pilot Agri-Environmental Programme

General Actions Specifications



Version Control

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|----------|------------|---------------|---------------------|
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Contents

| | |
|---|-----------|
| INTRODUCTION: | 3 |
| 1. RUNOFF RISK ASSESSMENT | 4 |
| 2. NUTRIENT MANAGEMENT PLAN (NMP) | 7 |
| 3. NUTRIENT SURPLUS CALCULATION USING AGNAV | 9 |
| 4. PRECISION NUTRIENT MANAGEMENT | 11 |
| 5. CATCH CROPS (WINTER AND OTHER CROPPING SYSTEMS) | 14 |
| 6. MINIMUM TILLAGE | 18 |
| 7. MOB GRAZING (REGENERATIVE GRAZING) | 20 |
| APPENDIX 1: ANNUAL CATCH CROPS DECLARATION FORM | 22 |
| APPENDIX 2: ANNUAL MINIMUM TILLAGE DECLARATION FORM | 23 |
| APPENDIX 3: EXAMPLE OF PASTUREBASE IRELAND SCORECARD | 24 |

Introduction:

The Waters of LIFE pilot agri-environmental programme is designed to reward farmers for protecting and improving water quality. This document outlines the details and specifications of the general actions of the programme.

Not all water quality measures can be results-based. The programme offers payment for general actions aimed at reducing losses of nutrient and sediment to rivers.

Some of these actions are well established through other schemes. Others are being trialled by the project for the first time.

| Waters of LIFE programme – General Actions summary | | | |
|---|--------------------|--|--|
| Action | Payment | Is it required or optional? | How often does it happen? |
| Runoff risk assessment | €250 | Required for all participants | Twice – Year 1 and Year 3 of programme |
| Nutrient management planning | €400 | Required in Awbeg and Shournagh only. | Once – At start of programme |
| Nutrient surplus recording using AgNav | €250/yr | Required in Awbeg and Shournagh beef and dairy farms only. | Once – At start of programme |
| Precision nutrient application (including grass measuring and record keeping) | Up to €1,452.50/yr | Optional | Ongoing |
| Catch crop (winter cropping system) | €173/ha/yr | Optional | Ongoing |
| Catch crop (other cropping system) | €225/ha/yr | Optional | Ongoing |
| Minimum tillage | €40/ha/yr | Optional | Ongoing |
| Mob grazing (will be offered on a trial basis on suitable plots) | €750/ha | Optional | Ongoing |

How do these general measures help with water quality?

These measures are all designed to help manage the loss of too much nutrients or fine sediment to water.

Why are some measures required in the Awbeg (Kilbrin) and Shournagh?

These catchments were chosen because nutrients are a proven issue for water quality in both. The general measures required for the Awbeg and Shournagh areas are focused on nutrient management.

1. Runoff Risk Assessment

Objective

The Runoff Risk Assessment is a whole-farm assessment that identifies areas on the farm where water flows both:

- within the farmyard;
- on farm land

On farmland, the runoff risk is primarily intended to identify overland flow paths, which are typically associated with phosphorus and sediment loss to waters. The purpose of this assessment is to work with farmers to identify suitable locations for mitigation measures to manage such runoff.

Background

Water that flows across farmyards and farmland has the potential to gather and carry pollutants, such as:

- Sediment
- nutrients (e.g. phosphorus)
- pathogens (e.g. *E. coli*)
- agrichemicals (e.g. pesticides)

Therefore, it is important for farmers to consider how best to manage this water to minimise the risk of pollutant runoff to receiving streams and rivers.

Where will this action be taken?

This action will be a required general measure for all participants in the Waters of LIFE programme.

What are the requirements for this measure?

The Runoff Risk Assessment will be carried out by Waters of LIFE-approved advisors on behalf of the Project. A desk study is done before the site visit to identify potential runoff risks. The assessment covers both the farmyard and farmland.

Farmyard assessment:

- Identify if rainwater enters the yard from upslope areas and flows across the farmyard.
- Identify locations for potential interception measures and to minimise soiled water generation.
- Identify the outfall drains from the farmyard and provide advice on how to prevent contaminant losses entering the receiving drainage network
- Identify any other areas within the farmyard that may require attention.

Farmland assessment:

The key areas on the farmland for advisors to assess in terms of potential runoff risk and suitability for mitigation measures can be broken down into two main categories:

- Mapped flow paths and flow delivery points

These are identified using EPA's Pollution Impact Potential (PIP) maps. PIP maps must be verified on the ground in consultation with the landowner.

- Unmapped (or periodic) critical source areas (CSAs)

CSA are areas or features such as farm roadways; drainage ditches; cattle access/stream crossing points; tramlines; bridges; culverts.

Advisors and landowners use their experience and local knowledge to identify areas that may pose runoff risk, that not on the EPA PIP maps.

Mitigation Measures:

- Advisors recommend measures from the Waters of LIFE list of supporting actions, also known as Non Productive Investments (NPI) or Landscape Actions
- Bespoke measures can also be considered
- Advisors engage with participants on the proposed mitigation measures (in terms of location and type of measure)

- The results of the runoff risk assessment, along with the proposed mitigation measures are submitted to Waters of LIFE via the project app and/or web portal

How much is the farmer paid?

Farmers are paid €250 for their time in participating and informing the runoff risk assessment. The advisor’s work is paid for directly by Waters of LIFE. It is a required action.

Why is it a required action?

Walking the farm to look at the potential for pollutant runoff is important aspect for raising awareness about water quality. It also helps with knowledge transfer across the wider sub-catchment.

When does it take place?

The run off risk assessment will be carried out in years 1 and 3 of the programme. Payment will be made to the farmer on submission of the runoff risk assessment report by the advisor to the project team and review by the team.

How do we confirm the action has been taken?

Results of the runoff risk assessment are submitted via the project app/web portal, including proposed supporting actions. The results are review by Waters of LIFE.

Further information on Runoff Risk available at:

| | |
|---|---|
| Guide to farmyard management for water quality - Teagasc | https://www.teagasc.ie/environment/water-quality/farming-for-water-quality-assap/improving-my-water-quality/farmyard-management/ |
| Guide to pollution impact potential (PIP) maps – EPA | https://www.catchments.ie/water-quality-agriculture-pollution-impact-potential-maps-tool-guide-resources-areas-investigation/ |
| Agricultural measures mapping tool - EPA | https://www.teagasc.ie/media/website/environment/The-EPA-Targeting-Agricultural-Measures-Mapping-Tool.pdf |

2. Nutrient Management Plan (NMP)

Objective

Nutrient management plans provide farmers with valuable information on the nutrient status of their farm/farming system. The aim is to inform farmers about when & where to apply nutrients. This can help achieve optimum slurry recycling and nutrient uptake by plants and prevent over-application of nutrients.

Background

Nutrient management planning is a process that aims to match nutrient inputs (fertilisers and organic manures) to crop demand relative to the farm enterprise. The EU's European Green Deal 2030 has a target of reducing nutrient losses by 50%, while ensuring no deterioration in soil fertility. The objective of the Green Deal is to reduce fertiliser use by at least 20%. An NMP follows the principle of the right amount of the right product in the right place at the right time.

Where will this action be taken?

Nutrient management planning is a required action in the Awbeg and Shournagh sub-catchments. Elsewhere, the action will be optional.

Requirements

- This measure is applicable to those participants **that do not require** a Nutrient Management Plan under current GAP regulations or other schemes.
- A new nutrient management plan must be prepared by an approved agricultural advisor along with farm maps based on soil sampling results.
- The only plans acceptable to Waters of LIFE are:
 - Teagasc Online Nutrient Management Plan programme
 - Farm Eye Nutrient Management Plan
 - Grassland Agro Nutrient Management Plan programme
- Soil Samples must be from a DAFM approved laboratory (ISO/IEC 17025:2000 accredited).
- Soil samples must have been taken within 2 years of date of submission of NMP to Waters of LIFE.
- Soil samples must be taken in line with DAFM best practice i.e. 1 soil sample every 2-4ha.
- Soil tests should include as a minimum pH, soil phosphorous (P) and soil potassium (K)
- Existing soil samples that meet the above requirements may be used.

- Critical source areas (areas at high risk of nutrient losses) must be identified through discussions with the applicant and appropriate nutrient advice given.
- Peat soils should be identified and appropriate recommendations made.
- The farmer is given the NMP, along with relevant colour coded maps, liming plan and fertiliser allowances.
- The farmer engages with their farm advisor or Waters of LIFE scientist in a one-to-one session, to ensure the plan is fully understood and opportunities to reduce nutrient surplus are identified.

How much is the farmer paid?

The farmer is paid €400 for the production of a nutrient management plan. Only one plan is required. This payment is made to the farmer to compensate for the cost of the NMP service and soil testing.

How do we confirm the action has been taken?

A completed Nutrient Management Plan (including farm maps) is submitted along with a copy of relevant soil sample results.

Further information on Nutrient Management Planning

| | |
|---|--|
| <p>Guide to nutrient and fertiliser management for water quality - Teagasc</p> | <p>https://www.teagasc.ie/environment/water-quality/farming-for-water-quality-assap/improving-my-water-quality/nutrient-and-fertiliser-management/</p> |
| <p>Article on NMP as an essential tool for sustainability – Teagasc</p> | <p>https://www.teagasc.ie/news--events/daily/crops/nutrient-management-planning-an-essential-for-sustainable-farming.php</p> |

3. Nutrient Surplus Calculation using AgNav

Objective

Nutrient surplus is an indicator of potential risk of loss of nutrients to the environment including to our waterways. Careful record keeping allow nutrient surpluses to be calculated. This helps farmers and their advisors discuss how best to reduce excess nitrogen and phosphorus in the farming system. Options include taking on measures to reduce nutrient inputs and improved utilisation of existing nutrient inputs.

Background

Nutrient surplus calculation follows a nutrient accounting approach. Farm gate inputs of nitrogen and phosphorus are calculated minus farm gate outputs of nitrogen and phosphorus. This gives a nitrogen and phosphorus balance per hectare and nitrogen and phosphorus surpluses for the participating farm.

Examples of outputs include sales of milk, livestock and manures. Examples of inputs include purchased fertiliser, feeds, livestock and imported organic manures.

Nutrient surplus reduction is a key tool to address nitrate loss, particularly in high pollution potential impact for Nitrogen areas (PIP- N ranks 1-4).

Currently the nitrogen surplus, calculated by AgNav, does not take account of clover levels in the grassland swards. Clover adjusted nitrogen surplus, which includes an estimate of the amount of nitrogen fixed by clover, would be a more accurate reflection of risk of leaching to waters. Waters of LIFE intend to develop a methodology for assessing this.

Where will this action be taken?

Nutrient surplus calculation using AgNav is a required general action on beef and dairy farms in the Awbeg and Shournagh sub-catchments. AgNav services are not available for sheep and tillage enterprises.

Requirements

- Use Teagasc's AgNav app to calculate nitrogen and phosphorus surpluses for the farm - this depends on having completed at least one Bord Bia Audit.
- Prepare a farm plan on AgNav listing measures that will be taken to reduce the nutrient surplus over time.

- Nutrient surplus assessments are carried out on an annual basis to track progress over time. These include an update to Bord Bia assessment to ensure all figures used are correct along with associated statements for all fertiliser & feed purchased.
- Participants avail of a contribution towards the use of AgriTxt or similar service that provides support and guidance in preparation for Bord Bia Sustainability Audits.
- Records of all fertiliser applications are retained and available for inspection on request.
- Nutrient surplus assessment requires data from Bord Bia Sustainability Audit, ICBF, co-op milk sales, BISS application etc. Dockets are kept and used for data input.
- To access AgNav, farmers sign up for Teagasc's Sign Post Advisory Service. This is a free service available to all farmers.

How much is the farmer paid?

Participants receive €250 per year for their time in nutrient surplus assessment and preparing a farm plan.

Additionally, where a participant uses AgriTxt or equivalent in relation to the Bord Bia Audit Preparation Service, they will be reimbursed at 50% of the costs incurred (up to a maximum of €200).

How do we confirm the action has been taken?

The following are submitted:

- Copy of AgNav action plan
- Copy of AgNav forecaster targets reports produced by AgNav
- Copies of invoices/receipts from AgriTxt or similar service.

Further information on AgNav and PIP maps

| | |
|--|---|
| Sign up for Teagasc Signpost Advisory Programme – Teagasc | https://www.teagasc.ie/environment/climate-change--air-quality/signpost-programme/signpost-advisory-programme/sign-up/ |
| Guide to AgNav - Teagasc | https://www.teagasc.ie/environment/climate-change--air-quality/signpost-programme/signpost-advisory-programme/agnav/what-is-agnav/ |
| Guide to PIP maps - EPA | https://www.catchments.ie/next-generation-pollution-impact-potential-maps-launched/ |

4. Precision Nutrient Management

Objective

The aim of this measure is to ensure that use of fertilizers on farms is optimised by using available tools, such as PastureBase Ireland (PBI), the Teagasc MoSt grass growth prediction model and local (eg Sencrop) weather stations. Use of such tools will allow a farmer to manage and record soil fertility, match nutrient applications to crop requirements, weather conditions and grass growth predictions.

Background

For grassland farmers PastureBase Ireland and the MoSt Grass Growth prediction model combined with local weather data provide useful decision support tools.

Pasture Base Ireland is primarily a grass growth management tool. However, it can benefit water quality by helping farmers optimize the timing and quantity of fertilizer applications based on grass growth data. By applying the right amount of fertilizer at the right time, farmers can reduce the risk of nutrient runoff into nearby water bodies.

The MoSt model provides a text service that informs the farmer of when nutrient applications would be best suited for grass growth and weather conditions. This gives the farmer valuable information that may improve the nutrient use efficiency of the farm.

Where farmers have maintained accurate records in PBI for at least one year (including grass measuring), they will be facilitated to join the MoSt network. This offers the farmer farm specific grass growth predictions and fertilizer recommendations.

Where will this action be taken?

- Dairy farmers in the Awbeg and Shournagh demonstration sub-catchments.
- Farmers with at least 1 year fertiliser and grass measurements can immediately avail of the MoSt grass growth predictions.

Requirements

- If not already signed up, participants must register for a PastureBase Ireland Account.
- A current nutrient management plan and in-date soil samples must be available. Relevant data from these must be input to PBI.

- In order to use PBI or equivalent, farmers or their advisors must have all fields mapped so that grass measuring and fertiliser application data can be recorded.
- Farmer must commit to keeping accurate records of all relevant data, including fertilizer applications.
- Participants with a dairy enterprise must be willing to grass measure on all fields within the milking platform, if not already doing so.
- Clover percentages per paddock must be estimated (or measured)¹
 - In some cases, clover percentages may need to be measured in-situ by Waters of LIFE
 - The measurement procedure will be based on three quadrat placements per paddock and an estimate clover cover percentage per area of quadrat. The average result for the three measurements will represent the paddock clover cover.
- Records of fertilizer application must be for all fields within the farm and not limited to the grazing platform (no grass measuring required outside the grazing platform).
- Farmers will be offered a contribution towards the cost of grass measuring over and above the statutory minimum number of covers requirement.
- Where sufficient records exist (1 years minimum), a participant will be offered farm specific grass growth predictions using the MoSt Grass Growth Prediction Model.
- Farmers must submit their PBI score card and an estimate of the nitrogen surplus.

Payment rate

Part 1

This element of the payment is intended to compensate participants for the time required to input accurate records in PBI. However, this payment will be adjusted in accordance with the PBI scorecard result obtained (excluding questions 2 to 4). The maximum payment will be €490/annum. This equates to €70 for a score of 3 on each of the 7 relevant questions on the PBI score card (excluding questions 2, 3 and 4).

No payment will be received in respect of any question which receives a score of less than 3.

A copy of the PBI scorecard is included in Appendix 3.

¹ PBI allows clover content of paddocks to be recorded. These figures will be used by the project team to estimate the amount of clover fixed nitrogen and the nitrogen surplus adjusted accordingly.

Part 2

The participant will be paid a contribution towards the cost of grass measuring. Participants not in derogation will receive a payment to record up to 35 grass covers.

Participants in derogation are already required to record a minimum 20 grass covers under the Good Agricultural Practice Regulations. These participants will receive a payment to record grass covers beyond the 20 required, up to a maximum of 35 covers i.e. 15 additional covers

The payment will be €27.50/cover up to 50 ha and €0.50/ha for every hectare over that. This equates to a maximum payment for a 50ha farm of €962.5.

This payment rate is approximately 50% of the cost of engaging a professional grass measuring service. However the participant is not obliged to engage a professional service and can carry out the measurements themselves. Payment is based on the number of grass covers.

This will be paid in arrears based on the number of covers recorded in PBI.

How do we confirm the action has been taken?

The participant submits a copy of their PBI scorecard and PBI reports.

Further information on PBI and MoSt

| | |
|---|---|
| Guide to PastureBase tools – Teagasc | https://www.teagasc.ie/crops/grassland/pasturebase-ireland/ |
| Article on MoSt predicted grass growth - Teagasc | https://www.teagasc.ie/news--events/daily/grassland/most-predicted-grass-growth-in-pasturebase-ireland.php |
| Update on MoSt prediction model - Teagasc | https://www.teagasc.ie/media/website/events/2023/Update-on-the-MoSt-Grass-Growth-prediction-model.pdf |

5. Catch Crops (Winter and other cropping systems)

Objective

Catch crops are an action to reduce nutrient leaching and help prevent soil erosion in the autumn/winter period.

Background

Catch crops generate a large mass of herbage to help protect the soil from exposure to heavy rainfall during the winter period. This reduces the potential of soil erosion and surface run-off while also increasing water infiltration.

Catch crops utilise residual nutrients in the soil following the harvest of a cereal or oilseed crop, thus maintaining soil biology, preventing leaching of soluble nutrients and reducing the risk to water quality.

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.

In the Waters of LIFE programme, catch crops are being used primarily to reduce nitrogen losses. Therefore, non-leguminous (non-nitrogen fixing) species only will be funded through the project. See Table 1 for the list of species available.

Where will this action be taken?

This action is only available in the Shournagh and Awbeg catchments. Also, this action is only applicable on LPIS parcels declared as tillage crop in the 2024 BISS application. If rotated in subsequent years, it must be claimed on tillage parcels.

Requirements

- Establish a catch crop using non-inversion techniques (ploughing is not allowed) where it will provide a water quality benefit.
- For Option 5A (Other Cropping Systems) the crop should be sown as early as possible, ideally by mid-August but no later than 1st September annually each year. This catch crop must remain in place until 1st January annually.

- For Option 5B (Winter Cropping Systems) the catch crop must be set by the 1st August and remain in place until 30th September.
- The minimum area to be delivered is 0.5 hectares. The maximum area for payment is 50 hectares cumulative between measures 5A & 5B. Area for payment may be increased based on scientific justification. This will be decided on a case-by-case basis in conjunction with Waters of LIFE.
- When sowing the catch crop, the under sowing or sowing of a grass crop is not permitted.
- The main cereal crop cannot be under sown with catch crop species.
- After 1 January, light grazing or incorporation is permitted. Participants should ensure grazing only takes place where soil erosion is not considered to be an issue. Intensive strip grazing/zero grazing is not permitted. Grazing of a catch crop in situ requires a 4m buffer (grass/vegetated margin) from the surface water edge (GAP Regulations). Ensure to comply with all GAP regulations when setting catch/cover crops.
- Where a watercourse is present on or adjacent to the parcel, bovines are not permitted to access the watercourse. Where no natural barrier exists, the watercourse must be fenced at least 1.5m from the top of the bank when bovines are present (drinking points are not permitted).
- Riparian buffers measures must be fenced off if livestock graze the cover crop at any stage, otherwise fencing in not required. Temporary fencing is sufficient.
- An annual declaration plus map must be submitted to Waters of LIFE containing the following
 - a. Map outlining area sown with catch crops
 - b. Completed Annual Catch Crop Declaration Form (Appendix 1).
- For catch crops, in any given year of the Waters of LIFE programme, a participant cannot have ACRES catch crop in or on same area. There must be a clear distinction between Waters of LIFE catch crop and ACRES catch crop.
- Waters of LIFE catch crops do not qualify for GAEC 7 (crop diversification rule) which is required for BISS payments.
- All Waters of LIFE dockets should be separate to ACRES.
- Seed mixture must contain at least two species from the list in Table 1.
- One species cannot make up more than 75% of the seed mixture. Full seed rates for each species are also included in the table. (Note: brassica catch crops should not be used in rotation with oil seed rape).

Table 1: Approved Catch Crop Species

| Catch Crop Species | Monoculture seed rate kg/ha |
|-------------------------------|-----------------------------|
| Buckwheat | 50kg/ha |
| Forage/Fodder Rape | 8kg/ha |
| Mustard (Brown) | 15kg/ha |
| Mustard (White) | 7kg/ha |
| Oats | 100kg/ha |
| Black Oats | 60kg/ha |
| Phaceila | 8kg/ha |
| Sunflower | 20kg/ha |
| Rye | 150kg/ha |
| Tillage Raddish | 10kg/ha |
| Leafy Turnip | 8kg/ha |
| Linseed | 30kg/ha |
| Fodder Radish | 10kg/ha |
| Kale/Rape hybrid ² | 8kg/ha |

How much is the farmer paid?

5A: Other Cropping System: €229/ha/yr

5B: Winter Cropping System: €173/ha/yr.

The minimum area to be delivered is 0.5 hectares.

The maximum area for payment is 50 hectares cumulative between Measures 5A & 5B (subject to point 4 above)

² The kale/rape hybrid is classed as one species. Another species will be require to meet the minimum requirement of at least 2 species in the mix.

How do we confirm the action has been taken?

Option 5A:

- Annual declaration submitted by 1st October of that year.
- Geotagged photos (using apps such as GPS Map Camera) taken annually. The photos will clearly show:
 - The measure that has been applied for
 - Proof of seed purchased - showing type of seed purchased plus kgs i.e. seed bag labels.

Option 5B:

- An annual declaration submitted by 1st September of that year.
- Geotagged photo (using apps such as GPS Map Camera) taken annual. The photos will clearly show:
 - The measure that has been applied for
 - Proof of seed purchased - showing type of seed purchased plus kgs i.e. seed bag labels.

This measure may also be subject to a site inspection by Waters of LIFE.

Further information on Catch Crops

| | |
|---|---|
| Article: The Soil is Alive and Willing to Help – Teagasc | https://www.teagasc.ie/media/website/environment/climate-change/signpost-programme/TheSoil-is-Alive--Willing-to-Help.pdf |
| Article: Catch Crops Yield Multiple Benefits - Teagasc | https://www.teagasc.ie/media/website/publications/2023/Catch-crops-yield-multiple-benefits-if-you-get-them-in-early.pdf |
| Quick Facts: Cover Crops Teagasc | https://www.teagasc.ie/crops/crops/cover-crop/ |

6. Minimum Tillage

Objective

Minimum tillage can protect water quality from nutrient and sediment run-off. It can also reduce carbon emissions and help to improve soil structure.

Background

Minimum tillage means sowing a crop without inverting the soil i.e. the soil cannot be ploughed.

Minimum tillage has many advantages for both the farmer and the land. It can save fuel and time for the farmer. It reduces damage done to the soil by rain, helps prevent the breakdown of soil structure and reduces the formation of a hard pan in the soil.

This measure also protects archaeological monuments within the topsoil and subsurface of the soil. The use of min-till techniques including direct drilling offer significant climate benefits by reducing the carbon emissions that are associated with conventional ploughing operations.

Where will this action be taken?

This action is only available in the Shournagh and Awbeg catchments. Also, this action is only applicable on LPIS parcels declared as tillage crop in the 2024 BISS application.

If rotated in subsequent years, it must be claimed on tillage parcels. Not applicable to grassland conversion. May be applicable to grassland reseeded.

Requirements

- Establish a tillage crop using minimum tillage or direct drilling equipment i.e. the crop must be sown without inverting the soil (the soil cannot be ploughed).
- This action can only be selected on a full LPIS parcel(s) in year 1. However, the entire area of the parcel does not have to be entered for the action. The LPIS selected must be marked on the map submitted. If you do not wish to deliver this action on the entire parcel, then you must enter the area to be delivered for each LPIS chosen.
- The minimum area to be delivered is 0.5 hectares. The maximum area for payment is 50 hectares.
- This action must be delivered on the next crop establishment following approval into the programme and for all subsequent years of the contract.

- This measure can be rotated, if necessary, once the area(s) delivered is at least equal in size to the contract area(s) established in year one. The LPIS parcel and area for this action must be declared to the project each year of the contract before the annual establishment deadline.
- An Annual Declaration plus map must be submitted to Waters of LIFE containing the following:
 - Map outlining area sown subject to min till
 - Completed Annual Min Till declaration form (Appendix 2).
- For min till, in any given year of the Waters of LIFE programme, a participant cannot have ACRES min till in or on same area. There must be a clear distinction between Waters of LIFE min till and Acres min till.

Payment Rate

The payment rate for minimum tillage is €40/ha/yr.

How do we confirm the action has been taken?

On the spot control: this measure will be verified with a site inspection by Waters of LIFE during crop establishment.

Further information on Catch Crops

| | |
|---|---|
| Top Ten Tip for Minimum Tillage – Farming for Nature | https://www.farmingfornature.ie/your-farm/resources/groundtips/min-till/ |
| Guide to Conservation Tillage - Teagasc | https://www.teagasc.ie/crops/crops/grass-weeds/conservation-tillage/ |
| Benefits of Minimum Tillage – Kelly Tillage | https://kellytillage.com/eu/what-are-the-benefits-of-minimum-tillage-system/ |

7. Mob Grazing (Regenerative Grazing)

Objective:

Mob grazing aims to:

- Improve water infiltration/storage in the soil
- Reduce sediment and nutrient runoff to water courses & improve climate change adaptation
- Promote healthy soils
- Building soil organic matter
- Improve above and below-ground biodiversity.

Background:

Mob Grazing works on the principle of high-density grazing for short periods of time with long rest periods between grazing. This creates a dense layer of trampled, un-grazed material to building soil organic matter and regenerate soil health and structure.

Grasslands managed to promote healthy soils can help moderate the volume and speed in which water reaches watercourses from grasslands.

Well-managed grasslands with high organic matter are also better at absorbing and retaining water, which in turn reduce the risk of flooding and drought, prevent soil erosion and pollutant runoff.

Where will this action be taken?

- Waters of LIFE will suggest plots suitable to trial mob grazing.
- Suggest plots are likely to be riverside plots under old permanent grass-dominated pastures.

Requirements:

- Stocking rate to match the land's capacity.
- No livestock access to water courses.
- Fencing & water drinking facility to support grazing regime (possible NPI).
- Training/education on management of mob grazing plot.
- The ability to implement mob grazing also depends on having sufficient time available to implement the required frequent movement of animals.

Payment Rate:

The payment for mob grazing is €750/ha

How do we confirm the action has been taken?

Validation will be geo-tagged, date-stamped photo taken by the farmer at intervals to be agreed with the project team. On the spot inspections may also be carried out.

Further information on Catch Crops

| | |
|---|---|
| Managing Healthy Grasslands – Farming For Nature | https://www.farmingfornature.ie/your-farm/resources/groundtips/grasslands-grazing/ |
| What is Mob Grazing? – The Soil Association (UK) | https://www.soilassociation.org/our-work-in-scotland/scotland-farming-programmes/mob-grazing/what-is-mob-grazing/ |



Appendix 1: Annual Catch Crops Declaration Form

This form must be completed after catch crops are sown and must be accompanied by a map(s) of the areas sown

Applicant Name: _____

Applicant Herd Number: _____

I am applying to the Waters of LIFE programme for:

Measure 5A Catch Crop (Other Cropping Systems) on ____ha (total area sown)

Insert numbers of relevant LPIS parcels and species sown below:

Measure 5B Catch Crop (Winter Cropping Systems) ____ha

Insert numbers of relevant LPIS parcels and species sown below:

Please tick the relevant year that this form applies to below.

2024 2025 2026 2027

I have sown and will establish and grow the catch crop in line with the Waters of LIFE General Actions Specifications. I have included a map outlining the areas sown as detailed above. Please note that funding under the Waters of LIFE Programme cannot overlap with any other relevant DAFM funded scheme.

Signature: _____ Date: _____

Appendix 2: Annual Minimum Tillage Declaration Form

Applicant Name: _____

Applicant Herd Number: _____

I am applying to the Waters of LIFE programme for:

Measure on 6, Minimum Tillage on ____ha (total area)

Insert numbers of relevant LPIS parcels below:


Please tick the relevant year that this form applies to below.

2024 2025 2026 2027

These areas will be subject to minimum tillage cultivation in line with the Waters of LIFE General Actions Specifications. I have included a map outlining the areas subject to this measures as detailed above. Please note that funding under the Waters of LIFE Programme cannot overlap with any other relevant DAFM funded scheme.


Signature: _____ Date: _____

Appendix 3: Example of PastureBase Ireland Scorecard



My 2022 PastureBase Ireland Scorecard

Farmer Name:



To complete this scorecard, you will need to make yourself familiar with the Annual Tonnage Report, Farm Cover Report and Farm Summary Report on PastureBase Ireland for your farm.

There are 10 questions to answer in this scorecard, give yourself a score of either 0,1,2 or 3 for each question. At the end total your score out of 30 points & identify 3 areas for improvement in 2023!

1. **How many grass measurements did you complete on your farm in 2022? (Farm Cover Report)**
<20 measurements = 1 point, 20-30 measurements = 2 points, 30+ measurements = 3 points
2. **How many paddocks were grazed 10 times on your farm in 2022? (Annual Tonnage Report)**
<2 paddocks = 1 point, 2-5 paddocks= 2 points, 5 + paddocks= 3 points
3. **What Tonnage of Grass (T DM/Ha) did you grow in 2022? (Annual Tonnage Report)**
<10 T DM/Ha = 1 point, 10-12 T DM/Ha = 2 points, 12 T DM/Ha + = 3 points
4. **What was your average Pre – Grazing Yield (PRG) during summer 2022? (Farm Summary Report)**
>1600 Kg DM/Ha = 1 point, <1300 Kg DM/Ha = 2 points, 1300 –1600 Kg DM/Ha = 3 points
5. **Did you complete a Spring Rotation Planner (SRP), Autumn Rotation Planner (ARP) or a Spring & Autumn Feed Budget in 2022 on PastureBase Ireland?**
None = 0 points, SRP & ARP = 1 point, SRP,ARP + 1 Budget = 2 points, SRP,ARP + 2 Budgets= 3 points
7. **Did you record all organic & chemical fertiliser on PastureBase Ireland that was applied in 2022?**
Little or no recording = 0 points, some recorded= 1 point, all recorded= 3 points
7. **Did you record all reseeding events and/or clover over-sowing events completed in 2022?**
Not recorded = 0 points, events recorded= 2 points, events & grass—clover varieties recorded= 3 points
8. **Have you up to date soil samples for your farm entered on PastureBase Ireland?**
Soil samples not entered on PastureBase = 0 points, Soil samples entered on PastureBase = 3 points
9. **Have you recorded the levels of clover on each paddock on your farm on PastureBase Ireland?**
Clover levels not recorded = 0 points, clover levels recorded = 3 points
10. **Have you completed a Nitrogen Plan & reviewed your NUE % (Nutrient Use Efficiency %) for 2022 on PastureBase Ireland? (Fertiliser/Slurry tab)**
No plan or NUE% completed= 0 points, Plan & NUE% completed = 3 points

Total Score out of 30= /30

The 3 areas on PastureBase Ireland I have identified for improvement in 2023 are:-

1.

2.

3.

