Phosphorus Reduction Scheme

Establish new watercourse buffer strips on arable land

Funding is offered for establishing new or wider mixed sward buffer strips to a width of 6 metres next to watercourses and ditches to intercept runoff of nutrients, pesticides, and sediments from arable land. Widths after the first 6 metres are eligible as buffer strips but will be subject to the payment rate for arable reversion to zero input. (For example, for an 8m buffer, 6m will be funded at the buffer strip payment rate with the additional 2m funded at the arable reversion to no-input grass payment rate). This option can also be used on field margins adjacent to roads or tracks which may channel runoff into a watercourse.

Key requirements summary: Do not graze or apply any fertiliser or manure. Cut once per year when established to provide dense and tall vegetation through the late autumn and winter period.

Length of agreement available

2½ to 3 ½ year agreements available starting in Spring or Autumn 2025. *Longer agreements up to 2030 may also be available – please contact the project team for further information.*

Requirements

- Where this measure can be used:
    - To create new or wider edge-of-field watercourse buffer strips to a width of 6 metres (widths over the first 6m will be funded at the arable reversion to zero-input grass payment rate). This measure may be used strategically across slopes, in field corners and at the bottom of slopes to slow the flow of water and encourage water infiltration. The first 2 metres from the centre of a watercourse or field ditch (or for larger watercourses the first 1 metre from the top of the bank into the field) is **not** eligible for this measure.
    - On cultivated land that is growing an arable crop (including maize).
    - Fields which are in grass/arable rotations and which are in arable cropping for two or more years out of five **are** eligible but payment will only be made in the years when the field is arable cropped.
    - On land that is adjacent to a watercourse (including ditches) which flow for six months of the year or more, or has high connectivity to a watercourse via a road, track, or any other flow pathway.
- Establish and manage strips according to the specification set out in the project agreement relevant to each plot. This specification will be specific to each farm and location but will be based on the following:

Establishment

- Assess whether there are any issues of soil compaction and, if necessary, plan appropriate timely cultivations such as subsoiling to resolve these before establishing the new sward.

- If there is a heavy weed burden, spray with herbicide such as glyphosate before cultivation.
- Sow a mix of tussocky grasses either:
    - Between 15th March and 31st May 2025, or
    - Between 15th July and 30th September 2025.
- Early autumn (August/September) is a suitable time to establish grass. If you need to establish in spring, then use a higher seed rate.
- Broadcast or drill seed into a firm, consolidated and clean seedbed and then roll or harrow to help ensure good seed to soil contact, retain moisture, and reduce movement of slugs within the soil profile.
- Sow the species mix and seed rate specified in the project agreement relevant to each plot. General requirements will be:
    - **Establish a mixed sward of tussocky grass species** including at least **three** of the species below (variation in species mix may be permitted but **must be discussed with an advisor** prior to sowing)**:**
        - Cocksfoot
        - Timothy
        - Common Bent
        - Meadowsweet or sweet vernal
        - One fescue species
    - Wildflowers and herbs such as yarrow and plantain may also be included. Do not include any Italian ryegrass or Westerwolds in the seed mix, or a high proportion of perennial ryegrass.

Cutting and topping

- To control weeds and ensure that a dense sward that reduces runoff is established, in the first 12 months after establishment, strips should be cut regularly during the growing season.
- After the first 12 months and once established, the buffer strip can be cut once each year between May and September. If ground-nesting birds are present, cutting should be delayed until 1st August onwards. Agreement holders are encouraged, but not required, to leave the 2-3m of the buffer strip nearest to the watercourse uncut to provide overwintering habitat for invertebrates. Cutting should not be left too late in the autumn as it is important that there is a dense amount of vegetation during the late autumn and winter period to intercept runoff.
- Top or spot-spray any undesirable plants, such as nettles, bracken, injurious weeds, or invasive non-native species as soon as practically possible to avoid them becoming established.

Inputs and management

- Applications of organic manures, lime and inorganic fertilisers (N, P, K) are not permitted.
- Grazing by livestock is not permitted.
- Pesticide applications are not permitted except for spot-spraying of injurious weeds.
- Maintain the leading edge of buffer strips and do not drive on buffers (except for hedgecutting). The leading (upslope) edge of the buffer strip is crucial to the performance of the buffer strip in intercepting runoff and every time a tractor tyre touches this leading edge when turning at headlands reduces its effectiveness.

Returning the land to agricultural production at the end of the agreement

- Terminate and cultivate the grass sward at a time of year when nutrient loss via leaching and/or surface runoff from the bare soil will be minimised (i.e. in spring / summer / early autumn, and when ground conditions are suitable).
- Establish the following crop as early in the autumn as possible. This is to:
    - ensure that the maximum amount of nutrient released by the grass sward is taken up by the following crop/s. This could involve using cover crops to retain nutrients in following winters.
    - provide maximum over-winter ground cover to reduce surface runoff.

Restrictions

- Existing buffer strips including those already funded by any other scheme (such as Countryside Stewardship, Sustainable Farming Incentive, Biodiversity Net Gain or nutrient neutrality) are **not** eligible.
- **Do not** use this measure where evidence exists for rare arable plants / weeds.
- Do **not** include any Italian or Westerwold ryegrass in the seed mix, or a high proportion of perennial ryegrass – for further details of suitable grass mixes please contact the project team.
- Do **not** use strips for vehicular access to other fields. Other than hedgecutting, strips should not be driven on for access, turning at headlands or any other purpose. Do not allow tractor tyres to damage leading edge of buffer strip when turning at headlands during field work.
- Do **not** apply any organic manures or inorganic fertilisers to the reverted area, or prior to its establishment.
- Do **not** use pesticides, except for herbicides to spot-treat or weed-wipe to control nettles, bracken, injurious weeds, or invasive non-native species.
- Do **not** allow pesticides and fertiliser to drift into the margins and grassed down areas.
- Do **not** allow the soil P index to rise during the duration of the agreement.
- Do **not** graze at any time with any type of livestock.
- Avoid cutting buffer strips when soil is wet to reduce soil damage and avoid disturbing ground nesting birds and their nests in the breeding season
- Once established, do **not** plough, cultivate or re-seed until the end of the term of the agreement.

Record keeping and payment terms

Agreement holders will need to keep the following records and supply them with *the payment claim* each year. Payment will only be made upon satisfactory receipt of all of the following records:

- Photographs of the strips before establishment (only required for first payment claim).
- Photographs of each reverted area.
- Invoices showing the seed mix used to establish the sward (only required for first payment claim).
- Soil analysis results (pH, P and K as a minimum) for the relevant fields dated within the past 3 years (only required for first payment claim).

- Farm and field information needed to run a phosphorus loss tool for the farm and calculate the reduction in phosphorus loss to water arising from this work. This will include farm data relating to livestock numbers, crop areas and fertiliser and manure inputs.
- Self-declaration that the terms of the project agreement have been adhered to *(*submit annually - *key terms are listed above).*
- Successful applicants are required to sign a declaration confirming that:
    - reasonable precautions are taken to prevent nutrients and soil from the relevant field entering watercourses or from being leached to groundwater to an extent that could cause pollution.
    - the relevant fields have not been (i) the source of a recorded pollution incident which could have been prevented by the farmer taking reasonable precautions to prevent that pollution and/or (ii) the subject of a warning, fine, prosecution or BPS deduction issued to the farmer by the Environment Agency or RPA for a breach of NVZ rules or Farming Rules for Water in the past 5 years.
- It is expected that to support and inform the above declaration, successful applicants will complete the Environment Agency's Agricultural Compliance Tool (ACT) by 31st December in each year of the agreement and submit it when completed to Wessex Water (who will hold it in confidence) and address any actions identified by the ACT. For agreements involving annual payments of more than 5 years duration and/or with a value in excess of £5,000 of annual payments, this is a requirement.
- Agreement holders are required to complete a Wessex Water supplier application form in order to receive their first payment. A copy of this is available on the scheme website.
- Agreement holders will need to keep the following records and supply them *on request*:
    - Field operations at the field parcel level, including associated invoices

Additional Information

Campaign for the Farmed Environment:
https://www.cfeonline.org.uk/archive?treeid=35352

Environment Agency: 3D buffer strip guidance
https://www.gov.uk/government/publications/3d-buffer-strips-designed-to-deliver-more-for-the-environment

Networks of grass buffer strips next to watercourses play an important role in protecting them from soil, nutrient and pesticide run-off. *Photo credit: P. Thompson (GWCT)*

General advice on establishing buffer strips

The buffer strip width table below provides guidelines only as width will be dependent on site conditions such as the nature and topography of the surrounding land. Wet, poorly drained soils and steep slopes (>10°) will require a wider buffer strip.

Width of watercourse	Width of buffer strip
Less than 1m	6m buffer
1-5m	6-12m
5-15m	12-20m
15m+	20m+

Adapted from:

http://publications.aberdeenshire.gov.uk/dataset/0ceb7c55-b43d-45c4-a311-798f4bc9fa75/resource/aba46138-84ea-41c3-864d-77685bff53d4/download/pa2023-16---planning-advice---buffer-strips.pdf

Recommended watercourse buffer strip species choice for different slopes:

- Gentle (up to 3 degrees) - consider flower-rich margins if the soil phosphorus index is less than 2
- Moderate (3 to 7 degrees) - if there is any evidence of soil erosion and run-off, create a tussocky grass margin to intercept these; otherwise create a more diverse margin as described above for gentle slopes.
- Steep (more than 7 degrees) - create a tussocky grass margin with 10% cocksfoot or timothy grass and 90% other grasses.

Source:https://www.cfeonline.org.uk/advice-training/grass-buffer-strips-next-to-a-watercourse-or-pond/