Severn Trent Environmental Protection Scheme

Applications open from

1st November - 31st January

STEPS - Options list

WONDERFUL ON TAP

SEVERN TRENT

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Pesticide sprayer washdown/handling area project

What it is and how does this help my business?

Pesticide washdown and handling facilities are increasingly being viewed as the gold standard for pesticide management on farm.

Not only are they a safeguard should the worst happen, but they can also be highly beneficial to your business – providing a space to clean, store and work on your sprayer, and even incorporate your pesticide store, to improve efficiency.

As they are costly investments, 2-years' worth of STEPS funding can be secured in one application.

This funding – up to £10,000 - will be paid out to you over 2 years, to enable a complete washdown pad, roofing and a biobed/ biofilter to be constructed.

Up to £10,000 match funding for washdown areas, roofing, biobeds and biofilters

Eligibility

Only the following options qualify for the pesticide washdown handling project:

STEPS001 - Pesticide sprayer washdown/handling area

STEPS002 - Roofing for washdown area

STEPS003 - Biobed

STEPS004 - Biofilter

STEPS021 - Rainwater harvesting (only on roofed over washdown area).

All items must be specified in your application and constructed in year one of the STEPS agreement.

At least 2 options from the list above must be included on your grant application.

Advisory visit required AV

To select a washdown area, you must have an expert advisory pesticide handling visit which can be arranged through your Agricultural Advisor. This is because there are a number of important regulations (listed over the page) to follow, and so you can maximise the benefit for your business.

Pesticide sprayer washdown/area project

Guidance

Location

Pesticide washdown and handling areas can vary greatly, depending on the needs of the farm. In general, washdown areas have two main components: A washdown pad, and a biobed or biofilter, to treat the washings. Often users choose to roof over their pesticide washdown areas or place them in a dedicated building, and add rainwater harvesting equipment. An example of a typical handling area is shown below and detailed specifications for each of the components can be found on pages 7-18.

Example:

A farm applies to STEPS to construct a brand new pesticide washdown pad together with a ready-made biofilter and roofing.

The combined value of the three grants is £6760.

Under the handling area offer, work should be done at the same time. Once completed, the farmer submits a claim for the work.

The initial £5000 is paid on completion of the work. The remaining £1760 is then paid after April 5th (i.e. in the following financial year).

How the offer works

Up to £10,000 of funding is made available by spreading STEPS grants for Pesticide handling options over 2 consecutive years, but constructing them at the same time in order to create a complete pesticide washdown and treatment facility.

The offer only applies if you are constructing more than one item e.g. a pad and a biofilter. Applications for a single item from the list above are limited to £5000 as normal.

How is the grant paid?

You have until March 1st the following year to get the work done. STEPS claims for fixed price pesticide items up to £5000 may be awarded as soon as the work is completed. However any works beyond the £5000 value will be treated as an advanced grant for the following STEPS period (up to £5000). The remaining balance will be paid in the following financial year.

Because up to £10,000 STEPS funding is secured over 2 years, farms which apply for this option and use the full grant amount will be unable to apply for STEPS in the following year. Farms which do not use the full grant amount, may submit a grant application for items up to the remaining value in the next STEPS period. These applications will be subject to our scoring process.

Pesticide sprayer washdown/ handling area

How does this help the environment?

A pesticide handling and washdown area provides a dedicated space where pesticides can be safely loaded into sprayers, and acts as a safe area for housing the sprayer and for sprayer cleaning.

- 40% of pesticide detections in our catchments are from contamination when handling pesticides.
- The remaining 60% of pesticide detection comes from the field.
- Managing the washings and wastes that come from pesticide handling is one measure that can be taken to help keep pesticides out of water.

How does this help my business?

Pesticide handling areas and the associated treatment facilities are great for demonstrating that your farm is serious about chemical and pollutant management. It can also improve the efficiency of your operation and by reducing the losses of pesticide products, improves the safety for staff. It's an ideal place to park the sprayer too.

STEPS001

Grant value: £40 per m^2

Up to £10,000 of funding is available for development of washdown and treatment facilities.

See page 5 for more details.

Eligibility

This item can be applied for in conjunction with:

STEPS002 - Roofing for washdown area

STEPS003 - biobeds

STEPS004 - biofilters

This is a priority item for pesticides.

Advisory visit required AV

To select a washdown area, you must have an expert advisory pesticide handling visit which can be arranged through your Agricultural Advisor. This is because there are a number of important regulations (listed over the page) to follow and so you can maximise the benefit for your business.

STEPS001 Pesticide sprayer washdown/handling area

Guidance

Location

Pesticide handling and washdown areas cannot be constructed:

- Within 10m of a watercourse
- Within 50m of a spring, borehole, well or reservoir
- Within 250m of a borehole used to supply water for producing domestic food without prior agreement from the Environment Agency (EA)
- In a groundwater source protection zone 1 or 2
- In areas liable to flooding or influenced by a high water table
- On historic or archaeological features, areas of wildlife value identified on the Farm Environmental Record (FER), the Environmental Information Map, or Historic Environment Farm Environment Record (HEFER).
- You must obtain the necessary consents and waste exemption from the Environment Agency (EA). This can be done after you apply for a STEPS grant but must be submitted before your grant is approved
- The washdown pad should not be used as a general washdown and cleaning area for other farm equipment. Oil and grease washed into the treatment apparatus may lead to damage or inefficient function.

Washdown area construction

Install a concrete bunded loading area, holding tanks, and fixed pumps and pipes to remove washings from the tank, as follows:

- Remove topsoil and excavate an area for the washdown area and tank
- Remove or divert any field drains that cross the site
- Cover the site with 140mm to 160mm of well compacted hardcore and at least 25mm of and sand blinding
- Lay a damp-proof membrane weighing at least 1200g per square metre
- Lay a reinforced concrete slab at least 150mm thick to falls of at least 1:100
- Construct a concrete bund around the perimeter of the slab, making sure that all concrete joints are sealed with a proprietary sealant
- The bund must be at least 100 mm high and 300mm wide, so that it can contain liquids
- The concrete bunded area should be as wide as the sprayer plus 2m, and as long as the sprayer plus 1.5m. You can tailor the area of the pad to your specific requirements
- The bunded concrete slab must contain a slotted-cover type drain connected to a silt trap with a removable cover that has a nominal capacity of 250mm below the inlet
- Alternatively, lay the concrete so it is sloping 4 ways to a drain in the centre of the slab - the drain should have a silt trap within it
- Direct the drain containing the silt trap to a tank or chamber (no larger than 1500 litres) from which pesticide washings can be pumped and disposed of
- The holding tank must be made from seamless polyethylene, glass-reinforced plastic (GRP) or pre-cast concrete
- If there is no roof or cover, the holding tank should be sized according to local rainfall and the area of concrete pad
- The whole structure must be impermeable
- Inspect the concrete slab and bund regularly and repair any damage or deterioration. The pumps will also need to be checked regularly to make sure they are operating properly
- Construction of a pesticide sprayer loading or washdown area, for crop sprayers will require arrangements to be made for the disposal of washings and/or drainage water either by a specialist waste removal contractor or through treatment in a biobed, biofilter
- If coupled to a biobed or biofilter, the pesticide washings from the loading and washdown area collected in the holding tank should be pumped before the tank reaches capacity using a pump float switch.

AGREEMENT EXTENSION 10 YEARS

We reserve the right to amend the Terms and Conditions for this item to a 10-year agreement. This will be highlighted in the agreement if your grant application is successful and you decide to proceed.

Roofing for pesticide sprayer washdown area

How does this help the environment?

Roofing a pesticide washdown area minimises the amount of rainfall, which would otherwise be collected and need to be disposed of, in either a biobed, biofilter or evaporation unit.

This means that you have less liquid to run through your treatment apparatus and fill up storage tanks.

How does this help my business?

Excluding rainfall from your washdown area means more washings can be treated in the biobed/filter.

It also provides a useful shelter in which your sprayer can be stored prepared and filled. This often reduces the need for anti-freeze use during storage, and creates better working conditions for the operators.

STEPS002

Grant value: £52 per m^2

Up to £10,000 of funding is available for development of washdown and treatment facilities.

See page 5 for more details.

Eligibility

This option is available to cover either a newly constructed washdown area, or one which has already been built.

This is a priority item for pesticides.

Advisory visit required AV

If selecting this option as part of a new pesticide handling area, you must have an expert advisory pesticide handling visit which can be arranged through your Agricultural Advisor. This is because there are a number of important regulations to follow and so you can also maximise the benefit for your business.

STEPS002 Roofing for pesticide sprayer washdown area

Guidance

- Pesticide handling areas, and the treatment facilities which are to be roofed over, must be bunded and meet current Environment Agency regulatory requirements.
- The constructed roof must cover the concrete bunded area, plus a 1.5 metre overhang, on all sides. Any additional roofing required beyond this specification must be funded by the applicant.
- The work may include foundations, supporting structure, roof sheeting (must be impermeable to rainwater), guttering and the installation of clean water drains.
- Guttering and drains must direct roof water to a clean water drain or rainwater storage tank. Please see STEPS021 – Rainwater harvesting for additional options.
- Side walls and shades can also be built with your roof. This work would not be covered by the STEPS grant and would therefore be at your own expense. Any additional building must comply with any consent/permits acquired.
- Your claim will be based on the erected roofed area in m^2.
- The foundations, support structure and roof must comply with the relevant parts of BS 5502.

Example of a bunded pesticide sprayer handling area.

Image used with kind permission from D and H Group, danhgroup.co.uk

Drainage works must comply with:

BS 8000
BS 8500
BS EN 752
BS EN 206-1:2000
BS 6213:2000+A1:2010
BS EN 1610.

AGREEMENT EXTENSION 10 YEARS

We reserve the right to amend the Terms and Conditions for this item to a 10-year agreement. This will be highlighted in the agreement if your grant application is successful and you decide to proceed.

Lined biobeds
(either off-set/drive over)

How does this help the environment?

A biobed provides a simple method for on-farm treatment of dilute pesticide wastes. The biomix in the biobed allows any pesticides within the waste liquid to lock onto the organic matter. The bacteria within the soil and the biomix then slowly break down the pesticide residues.

- 40% of pesticide detections in our catchments are from contamination when handling pesticides.
- The remaining 60% of pesticide detection comes from the field.
- Managing the washings and wastes that come from pesticide handling is one measure that can be taken to help keep pesticides out of water.

How does this help my business?

Pesticide treatment facilities, such as biobeds and biofilters, are great for demonstrating that your farm is serious about chemical and pollutant management. They give peace of mind that, should the worst happen, there are extra barriers in place between contamination and the environment.

STEPS003

Grant value: £70 per m^2

Up to £10,000 of funding is available for development of washdown and treatment facilities.

See page 5 for more details.

Eligibility

This item can be applied for in conjunction with: **STEPS001 -** Pesticide sprayer washdown handling area and **STEPS002 -** Roofing for washdown area.

Biobeds are not a substitute for best practice and every effort should still be made to avoid spills or splashes of pesticide concentrates during sprayer cleaning.

This is a priority item for pesticides.

Advisory visit required AV

To select a biobed, you must have an expert advisory pesticide handling visit which can be arranged through your Agricultural Advisor. This is because there are a number of important regulations you need to follow and which will also help maximise the benefit to your business. These can be found in the guidance over the page.

STEPS003 Lined biobeds (either off-set/drive over)

Guidance

Location

Biobeds cannot be constructed:

- Within 10m of a watercourse
- Within 50m of a spring, borehole, well, or reservoir
- Within 250m of a borehole used to supply water for producing domestic food without prior agreement from the Environment Agency (EA)
- In a groundwater source protection zone 1 or 2
- In an area liable to flooding or influenced by a high water table
- On historic or archaeological features, areas of wildlife value identified on the Farm Environmental Record (FER), the Environmental Information Map, or the Historic Environment Farm Environment Record (HEFER).
- You must obtain relevant necessary consents and waste exemption from the Environment Agency (EA). This can be done after you apply for a STEPS grant but must be submitted to us before your grant is approved.

Biobed construction

Below-ground biobed:

- The surface area of a biobed needs to be big enough to handle all planned sprayer washings and any associated rain water – general recommendations are that you should allow approximately 1m^2 for every 1000 litres of water
- Excavate an area for the biobed
- Remove and block off any field drains
- Compact the sides of the earth bank to a slope of 30 to 35 degrees (about 1 in 1.5) towards the base
- Lay an impermeable synthetic liner at least 1.2mm thick (pesticide grade) on top of a geotextile membrane underlay (190g per square m) and 25mm of sand blinding
- Works must meet relevant British Standards. Go online to **BSIgroup.com** and search the standards database.

Above-ground biobed:

- Use pre-cast or reinforced concrete and a 1.2mm thick liner, or an impermeable pesticide grade container
- Follow the liner manufacturer's installation instructions
- Any necessary holding tanks, pumps and pipes must then be installed for the below or above-ground biobed.

Biobed outlet:

- Insert a drain through the liner to create a 100mm bonded outlet at the lowest point of excavation.

Or alternatively:

- Create an internal sump when digging the biobed pit
- Lay the liner to incorporate the sump
- Make sure the liner is not perforated
- Insert a central, permeable, vertical access tube (0.5m in diameter) to allow water to flow into the sump base
- Install a pump within the tube, operated by a float switch setting
- Place a ring of perforated drainage pipe into the base of the biobed on top of the liner to assist the pump flow
- Install pumps to carry the treated discharge from the biobed to a vegetated area for irrigation; or pump it to a storage tank for irrigation or re-use.

AGREEMENT EXTENSION 10 YEARS

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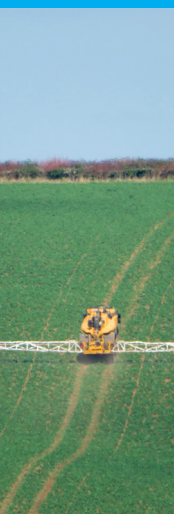


STEPS003

Grant value: £70m per m^2

Preparation of the biomix:

- Mix one part peat-free compost, one part topsoil and 2 parts straw (wheat or barley) by volume
- Allow the biomix to compost for 30 to 90 days before using it to fill the biobed to an effective depth of 1m, topping it up if there is any settlement
- Use at least $1m^3$ of biomix for every 1000 litres of liquid treated in any 12 month period
- Turf over the biomix
- Lay perforated pipes to distribute pesticide washings across the surface
- The biobed does not need a cover or roof.

Biobed operation for offset biobeds

Collect pesticide washings from an existing pesticide loading and washdown area in a storage tank then pump them for treatment in the offset biobed.

For drive-over biobeds:

- Construct a bunded drive-over grid above the biobed, with supporting foundations
- Make sure the grid and its foundations are suitable for the loading of any equipment driven over the grid.

Biobed maintenance:

- Add fresh, pre-composted biomix to the biobed every year to maintain 1m depth. Replace the biomix every 5 years
- Hazardous waste, fertilisers or fuel and oils must not be treated in the biobed.

Environment agency exemptions for biobeds and biofilters

- The Environment Agency should be contacted regarding site specific advice and regulatory matters on their customer enquiries line: **03708 506 506.**
- Biobeds/biofilters require an Environment Agency T32 waste exemption to legally treat dilute pesticide washings. These may be applied for free online.
  Go online and search: **gov.uk/guidance/waste-exemption-t32-treatment-of-waste-in-a-biobed-or-biofilter**
- A U10 allows waste biomix from the biobed (when it has come to the end of its working life) to be composted for a year and then spread to land.

  For spreading exemptions, go online and search: **gov.uk/guidance/waste-exemption-u10-spreading-waste-to-benefit-agricultural-land**

  or

  gov.uk/guidance/wasteexemption-u11-spreading-wastetobenefit-non-agricultural-land
- It is acceptable to apply for a STEPS grant without exemptions in place but you should ensure they have been obtained prior to the work being completed.


Chemical
store
keep out
STOR

Pesticide biofilter

Biofilters are not a substitute for best practice and every effort should still be made to avoid spills or splashes of pesticide concentrates during sprayer cleaning.

How does this help the environment?

A biofilter provides a simple low-cost method for on-farm treatment of dilute pesticide wastes. The biomix inside allows any pesticides within the waste liquid to lock onto the organic matter. The bacteria within the soil and the biomix then slowly break down the pesticide residues.

- 40% of pesticide detections in our catchments are from contamination when handling pesticides.
- The remaining 60% of pesticide detection comes from the field.
- Managing the washings and wastes that come from pesticide handling is one measure that can be taken to help keep pesticides out of water.

How does this help my business?

Pesticide treatment facilities, such as biobeds and biofilters, are great for demonstrating that your farm is serious about chemical and pollutant management. They give peace of mind that should the worst happen, there are extra barriers in place between contamination and the environment. Biofilters have a small footprint and can be easily accommodated in the corner of a shed or yard.

STEPS004

Grant value:
See over the page

Up to £10,000 of funding is available for development of washdown and treatment facilities.

See page 5 for more details.

Eligibility

This item can be applied for in conjunction with:

STEPS001 Pesticide sprayer washdown/handling area and

STEPS002 roofing for washdown area.

This is a priority item for pesticides.

Advisory visit required AV

To select a biofilter, you must have an expert advisory pesticide handling visit which can be arranged through your Agricultural Advisor. This is because there are a number of important regulations (listed in the guidance overleaf) to follow and so you can also maximise the benefit for your business.

STEPS004 Pesticide biofilter

Guidance

Location

- Biofilters cannot be constructed within 10m of a watercourse.
- Biofilters cannot be constructed within 50m of a spring, borehole, well, or reservoir.
- They cannot be constructed within 250m of a borehole used to supply water for producing domestic food without prior agreement from the Environment Agency (EA).
- They cannot be constructed in a groundwater source protection zone 1 or 2.
- The site must not be liable to flooding or influenced by a high water table.
- They cannot be constructed on historic or archaeological features areas of wildlife value identified on the Farm Environmental Record (FER), the Environmental Information Map, or the Historic Environment Farm Environment Record (HEFER).
- You must obtain relevant advice from an expert, together with the necessary consents and waste exemption from the Environment Agency (EA). This can be done after you apply for a STEPS grant but must be submitted to before your grant is approved.

Biofilter grant options

- There are now numerous companies specialising in biofilters, with many offering ready-made examples that simply require assembly on farm. Alternatively biofilter kits for use with IBCs are also available at a lower cost but require more time and maintenance. The difference in the cost of these options is reflected in the grant value shown.
- If choosing the ready-made biofilter, an invoice for the item must be submitted with your claim form.

Environment Agency exemptions for biobeds/biofilters

- The Environment Agency should be contacted regarding site specific advice and regulatory matters on their customer enquiries line: **03708 506 506.**
- Biobeds/biofilters require an Environment Agency T32 waste exemption to legally treat dilute pesticide washings. These may be applied for free online. Go online and search: **gov.uk/guidance/waste-exemption-t32-treatment-of-waste-in-a-biobed-or-biofilter**
- A U10 or U11 allows waste biomix from the biobed (when it has come to the end of its working life) to be composted for a year and then spread to land. For spreading exemptions, Go online and search: **gov.uk/guidance/waste-exemption-u10-spreading-waste-to-benefit-agricultural-land** or **gov.uk/guidance/wasteexemption-u11-spreading-wastetobenefit-non-agricultural-land**
- It is acceptable to apply for a STEPS grant without exemptions in place but you should ensure they have been obtained prior to work being completed.

Getting further design advice

- Talk to your local Agricultural Advisor who will be able to arrange for an industry expert to conduct a free pesticide handling advice visit.
- Further design advice is available on how to size the pesticide handling facilities and on pesticide washing volume calculations, from Catchment Sensitive Farming - Go online to **gov.uk and search for guidance/catchment-sensitive-farmingreduce-agricultural-water-pollution** or go to the biobed manual at **voluntaryinitiative.org.uk/en/water/biobeds**

STEPS004 Fixed costs for biofilters		
STEPS codes	**Item**	**Fixed grant amount**
STEPS004a	DIY biofilter	£950/unit
STEPS004b	Ready made biofilter	£1200/unit

STEPS004

Grant value: see opposite

Constructing a DIY biofilter

- Use three new, chemical-resistant impermeable containers - these will typically be 1000 litre IBCs stacked vertically.
- Store pesticide washings in additional containers next to the IBCs, either before or after treatment.
- Alternatively, pump the washings directly from an underground storage tank that collects washings from a pesticide handling area.
- Cut the tops off the IBCs, leaving the corners intact.
- Insert wire mesh lining in the base of each one.
- Cover the lining with a permeable membrane.
- Install a layer (at least 10cm) of pea gravel over the membrane so that the drainage outlet to the container below is not blocked.
- Make a biomix by mixing 1 part peat-free compost, 1 part topsoil and 2 parts straw (wheat or barley) by volume.
- Allow the biomix to compost for 30 to 90 days before filling the IBCs.
- Fill the IBCs with biomix, leaving a 10cm gap at the top for piping.
- Allow the biomix to settle, then top up to a volume of at least 0.5 cubic metres of biomix in each one.
- Stack the 3 IBCs vertically into a tower on a flat concrete base.
- If the biofilter is not covered, replace the top of the uppermost container to prevent rainfall from getting in.
- Install pumps, pipes and a hose to pump washings from the initial storage tank to the top biofilter container and on to the biomix through a piped ring distribution system.
- Allow the washings to flow by gravity through the pipes to the containers below.
- Pump discharge from the bottom container to a storage tank, or for direct irrigation through a perforated hose on a vegetated area.
- Build a concrete bund at least 100mm high around the biofilter.
- The biofilter must comply with relevant British Standards. Go online to **BSIgroup.com** and search the standards database.
- The biofilter can only treat up to 15,000 litres of pesticide washings (excluding rainfall) in any 12 month period.

Maintaining the biofilter

- Biofilters require moisture to work and benefit from periodically recirculating washings through them, particularly if kept under cover.
- Fresh, pre-composted biomix should be added to the biofilter to maintain its depth. The biomix should remain moist, using irrigation if necessary. Care must be taken not to allow the container to overflow.
- The biomix should be replaced every 5 years. The biofilter should not be used to treat hazardous waste, fuels, oils or fertilisers.

AGREEMENT EXTENSION 10 YEARS

We reserve the right to amend the Terms and Conditions for this item to a 10-year agreement. This will be highlighted in the agreement if your grant application is successful and you decide to proceed.

Arable grass margins: 6m + buffer

How does this help the environment?

Grass margins in arable fields provide a habitat for all manner of flora and fauna, especially when enhanced with wild flower seed mixes. Buffer strips also capture run-off and nutrients from fields, preventing these from reaching watercourses.

What it is and how does this help my business?

Buffer strips can provide a refuge for a range of beneficial insects which may benefit your farm. As they intercept run-off pathways, they help to keep soil and nutrients on your farm, which helps you to meet the Farming Rules for Water regulations (2018). Go online and search: **gov.uk/guidance/rules-for-farmers-and-land-managers-to-prevent-water-pollution**

They can also be used to maintain margins from expired stewardship agreements.

STEPS005

Grant value: £250 per hectare per year (£1250 per hectare for a 5 year agreement)

Eligibility

Applicants who apply for this option will be committing to maintaining a grass margin buffer zone for a 5-year period from the beginning of the agreement.

Upon entering into this 5 year agreement you will receive a single payment in year 1 of the agreement.

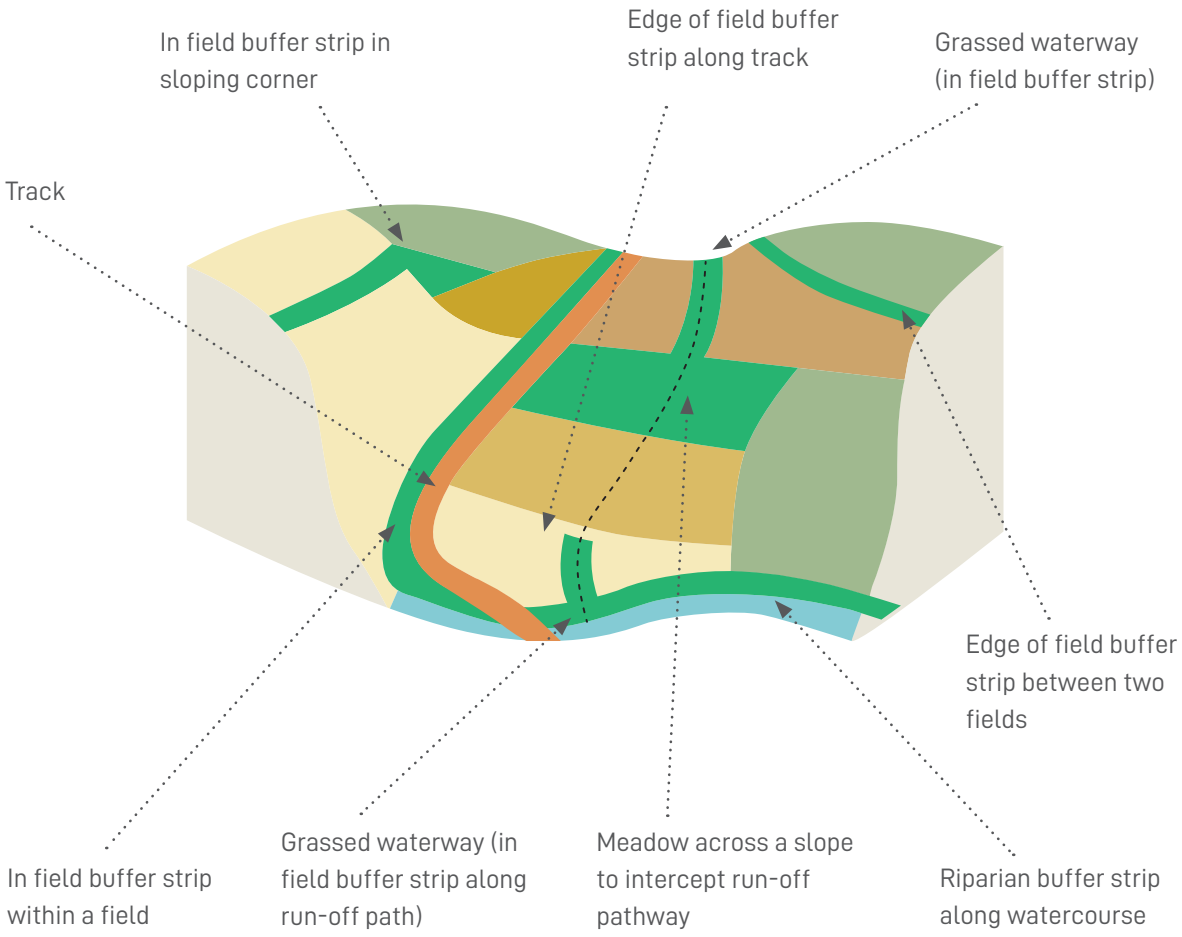
This single payment is expected to cover any maintenance for the 5 year period. Payments will be based on the area of land designated to the buffer zone.

STEPS005 Arable grass margins 6m + buffer

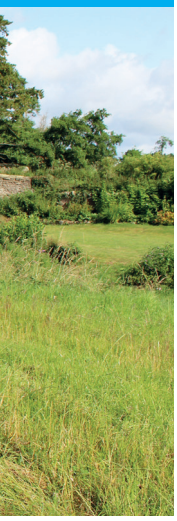
Guidance

The diagram below demonstrates the areas acceptable as buffer zones:

- Establish of a minimum 6m grass margin along arable field boundaries
- Existing margins established in expired stewardship schemes may be included
- Grass margins can also be placed in-field, depending on the topography
- Grass seed labels and receipts should be kept for the duration of the agreement
- Soil cultivation cannot be carried out once the margin is established
- Pesticides, fertiliser or lime cannot be applied to the grass margin
- Grazing is not permitted on the grass margin
- Margins must not be used as access ways for machinery or stock
- Fertiliser may be used for crop establishment only
- The margin may be topped annually and should be maintained in order to preserve a healthy sward
- Any buffer zone created for Ecological focus Area (EFA, CAP greening criteria) cannot be claimed under STEPS. EFA is a regulatory requirement which cannot be funded by STEPS.
  For guidance to the Basic Payment Scheme, go online and search for:
  BPS 2019. (gov.uk/guidance/bps-2019)
- Unproductive field corners may be included in the area claimed at the discretion of your Agricultural Advisor
- The location of grass margins must be placed in arable fields and clearly marked on the submitted maps. The grass margin cannot be relocated to another field.



Riverside margins in grass fields



How does this help the environment?

Livestock grazing in the riverside areas can lead to harmful pathogens entering the water. Riverside margins will stabilise riverbanks and reduce soil erosion. Riverside margins also intercept run-off, reducing the risk of nutrients, pathogens and sediments entering water. Undisturbed margins can also boost biodiversity.

How does this help my business?

Buffer strips can provide a refuge for a range of beneficial insects which may benefit your farm. They can also be used to maintain margins from expired stewardship agreements.

STEPS006

Grant value: See rates over the page

Eligibility

Grass fields only.

STEPS006 Riverside margin in grass fields

Guidance

- Applicants who apply for this option will be committing to maintaining grass margin buffer zone for a period of 5 years.
- Margin width is measured from the top of the bank.
- STEPS grants are based on the area of riverside margin using either a 15m or 30m wide buffer.
- Pesticides, fertiliser or lime cannot be applied to the margin.
- Livestock are not allowed to graze the margin from its date of establishment until the end of your STEPS contract.
- The margin may be mown, but not between March 1st and August 16th.
- Pre-existing margins established during expired stewardship schemes may be included.
- The location of the riparian margin must be clearly marked on the map submitted with your STEPS application. Note, in order to maintain claims on your single farm payment scheme, a gate or moveable rail should be installed.
- Riverside margin width and length is used in the STEPS grant calculation.

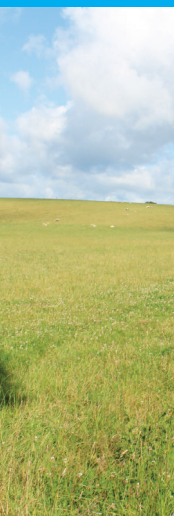
STEPS006 Payment rates for riverside margins		
STEPS codes	**Item**	**Fixed grant amount**
STEPS006a	Riverside margins – 15m	**£200 per hectare per year** (£1000 for a 5 year agreement)
STEPS006b	Riverside margins – 30m	**£180 per hectare per year** (£900 per hectare for a 5 year agreement)

Example:

A farmer chooses to install 15m buffers along a watercourse. 500m of watercourse are protected by the buffer. Therefore their STEPS grant is:

500m x 15m margin
= 0.75 ha
= £750 for 5 years

Arable reversion into low input grassland



How does this help the environment?

This option will reduce nutrient losses and help stabilise the soil. This option is designed for highly targeted locations to help slow or reverse nutrient levels in groundwater.

STEPS007

Grant value: £310 per hectare per year (£1550 per hectare for a 5 year agreement)

Eligibility

This option is only available in targeted areas. The targeting is restricted to specific Severn Trent Water borehole sites that are at risk to nitrates.

This option is only applicable to land that is currently used for arable production.

Your local Agricultural Advisor will determine if this is a suitable option for your farm.

STEPS007 Arable reversion into low input grassland

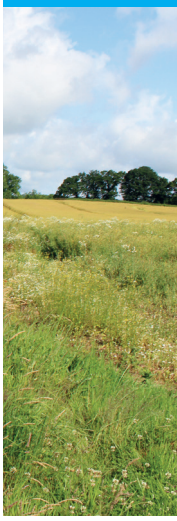
Guidance

This is a 5 year agreement where you will receive a single payment in year 1 of your agreement.

- Applicants must submit evidence with their application that demonstrates a recommended fertiliser management system or evidence to support low intensity farming.
- All records of all management activity undertaken on the parcel of land under this option, are to be kept on farm.
- Applicants must establish a grass sward by October 1st of year 1 of the agreement.
- Applicants cannot store farm yard manure in field.

* All livestock must be excluded from the land between October 1st to March 15th each year.

- Supplementary feeding spots are not permitted, except for mineral blocks.
- Livestock manure may be applied to supply up to 100kg of total nitrogen per ha per year. If livestock manures are not being applied, artificial nitrogen fertiliser can be applied at a total of 50kg/ha per year.
- You must not apply manure within 50m of the boundary of any borehole, spring, reservoir or water course.
- Applicants cannot use pesticides (herbicides, insecticides, fungicides, etc.), with the exception of herbicides to weed wipe or spot treat invasive non-native species.
- Applicants cannot apply manure or fertiliser between August 15th and February 1st.



Cover crops

STEPS008

Grant value: £60 per hectare per year (this is an annual payment)

How does this help the environment?

Establishing a cover crop during fallow periods reduces nutrient leaching during the autumn/winter and provides soil protection from wind and rain erosion.

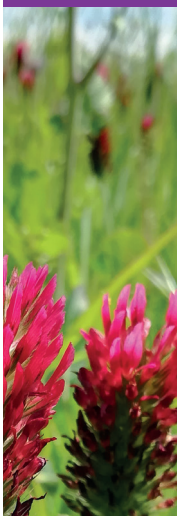
How does this help my business?

Cover crops are a vital tool in developing healthy soils on the farm. From nitrogen fixing to biofumigation, organic matter build-up, and soil decompaction, cover crops can beneficial in a multitude of ways for both your business and the environment.

Eligibility

The land chosen must be next to a water body or have a known direct influence on a water body in close proximity.

STEPS008 Cover crops



Guidance

- The crop must be established by September 15th, to ensure good ground cover.
- Cover crops sown after maize may be applied for at a rate of £30 per hectare. However, they must be established by October 15th. If considering this option, you should first consult your Agricultural Advisor.
- Under-sowing or sowing grass crops is not permitted except where following early harvested maize, in order to establish overwinter ground cover.
- The selected crop must give good ground cover; maize or miscanthus is not accepted.
- Fertiliser should not be applied to the crop.
- Advice should be sought from your Agricultural Advisor to deem if field is suitable.
- The crop must remain in situ from the date of sowing until the following January 31st.
- Grazing of cover crops in surface water catchments is permitted but not until after January 31st.
- Ploughing is not permitted, however the use of light cultivation techniques is recommended.
- It is recommended you discuss this option with an agronomist or your Agricultural Advisor.
- Any crop sown created for Ecological Focus Area (EFA, CAP greening criteria) cannot be claimed under STEPS. EFA is a regulatory requirement which cannot be funded by STEPS. For guidance to the Basic Payment Scheme, go online and search for: **BPS 2019. (gov.uk/guidance/bps-2019)**

Please take into account crops rotations when sowing cover crops. Cover crops can potentially lead to an increase in slug populations depending on weather and soil conditions.

- The location of the area selected must be clearly marked on the map submitted with your STEPS application. The table below gives examples of crops which will be funded through this STEPS measure. This is not an exhaustive list.
- It is suggested that farmers sow as early as possible for good establishment and maximum nutrient capture. Direct drilling into cereal stubble is an effective method of planting.

If you would like to apply for cover crops but don't know the area just yet:

- At the time of submitting your STEPS application, you may not be clear on the area/location of cover crops you will be planting later in the year
- Therefore, it is acceptable to state the approximate area and location you think you may plant on your application form, and submit by January 31st
- When you know the exact area later in the year, inform your Agricultural Advisor before August 15th who will supply you with a form to mark the area and location
- You must supply maps and photos of crop locations at the time of confirmation.

Note: The total value of the STEPS grant is capped at £5000 including any crops confirmed during summer. STW will be unable to fund the value of crops above £5000.

Cover crop species	Minimum seed rate Kg/Ha
Mustard	10 - 15
Oil radish	15-20
Winter turnip rape	10-15
Radish/Phacelia/Oat mix	22-25
Mustard/Oat/Phacelia mix	20-23
Forage Rye/Vetch mix	40-45

Manage overwinter tramlines

STEPS009

Grant value: £10 per hectare

How does this help the environment?

Tramlines are hotspots for soil compaction and can lead to run-off transporting pollution into watercourses. The use of tines or more specialist equipment to disrupt tramlines and improve water infiltration can help to reduce the risk of run-off occurring.

How does this help my business?

Soil compaction and erosion along tramlines can be a significant problem in some fields. Managing the tramlines over winter can reduce compaction and the negative effects this can have on your soil health. Minimising run-off can help to keep soil, nutrients and pesticides where they are needed – in the field.

Eligibility

This item is available for fields close to, or with known links to watercourses.

STEPS009 Manage overwinter tramlines

Guidance

- This option can be used to help prevent surface flow and sediment movement along compacted tramlines.
- A simple tine should be used to disrupt the tramline between October and February. This breaks up the soil compaction and encourages water to infiltrate into the soil.
- Specialist equipment designed to disrupt a tramline, such as a Wonderwheel, may also be used.
- Land must be adjacent to watercourse or have direct influence on a watercourse.
- Applicable to winter cereal land. Not recommended on winter oilseed rape sown land.
- Photographic evidence must be taken.
- Invoices must be kept if contractors are used or machinery is rented.

Bioreactors

STEPS010

Grant value: £2000 per unit

How does this help the environment?

Bioreactors are a new method to reduce the amount of nitrate in field drainage before it outflows into watercourses. Microorganisms break down nitrates in the drainage water, thereby improving water quality.

How does this help my business?

A bioreactor can easily be installed under a field margin or in a field corner, and so does not take any land out of production and requires very little maintenance.

Eligibility

Bioreactors cannot be used on historic or archaeological features or areas of existing wildlife interest identified on the Farm Environment Record (FER), the Environmental Information Map, or the Historic Environment Farm Environment Record (HEFER).

STEPS010
Bioreactors

Guidance

- Bioreactors are subsurface chambers which are located to intercept field drains before they enter a watercourse.
- Placement and sizing of a bioreactor should be discussed with a professional.
- The installation site should be approximately 3.5m in width and 30m in length.
- The bioreactor chamber should be lined with an impermeable membrane, with reception/inspection pits at the inlet and outfall.
- The bioreactor should be filled with woodchips in the ¼ inch to 1 inch (0.6 to 2.5cm) size range and must not be derived from treated or preserved wood.
- Over the course of its lifetime the woodchips in the bioreactor will need to be renewed.
- Once filled the bioreactor should be turfed over.

Getting further guidance

There are a number of companies in the UK which offer bioreactors. Further general information can be found through the Nuffield Scholarship below. Go to: **nuffieldinternational.org** and search Nuffield Scholar reports for Land Drainage

Livestock removal from high risk fields

This is a 5 year agreement where you will receive a single payment in year one of the agreement.

How does this help the environment?

Livestock fields in groundwater catchments which are located close to our boreholes, may pose a greater level of risk to water quality.

In special circumstances it may be appropriate to move livestock elsewhere in order to reduce the risk of contamination from bacteria.

STEPS011

Grant value: £100 per hectare per year (£500 per hectare for a 5 year agreement)

Eligibility

Groundwater catchments surrounding a Severn Trent borehole only.

Must be discussed with your Agricultural Advisor.

STEPS011 Livestock removal from high risk fields

Guidance

- A high risk field is determined by its topography, soil type and its proximity to a borehole. Your local Agricultural Advisor will determine if this is a suitable option for your farm.
- Livestock must be part of the farming enterprise.
- Livestock must be removed from field all year round.
- Maximum chemical nitrogen usage is 40kg N per year.
- No slurry or Farm Yard Manure (FYM) can be applied to the land/field.
- Field must not be put into an arable crop.
- Grazing cannot take place but the making of hay, haylage and silage is permitted.
- The location of the high-risk fields must be clearly marked on the map submitted with your STEPS application. Your Agricultural Advisor will assist in identifying potentially high risk fields. They will be determined on a case by case basis depending on the associated risks.

Low nitrogen input into grassland

How does this help the environment?

This option will reduce nitrate inputs into grassland in highly targeted locations, to help slow or reverse nutrient levels in groundwater catchments which are used for drinking water.

How does this help my business?

Lower inputs results in lower costs for your farm business. It also aids in disease management of your stock, as lower stock numbers results in reduced host opportunities for parasites.

STEPS012

Grant value: £240 per hectare per year (£1200 per hectare for a 5 year agreement)

Eligibility

This option is only available in targeted areas. The targeting is restricted to specific Severn Trent Water borehole sites that are at risk to nitrates.

This option is only applicable to improved grassland which currently receives at least 200kg N per ha per year.

Your local Agricultural Advisor will determine if this is a suitable option for your farm.

STEPS012 Low nitrogen input to grassland

Guidance

- This is a 5 year agreement where you will receive a single payment in year 1 of the agreement.
- Applicants must submit evidence with their application that demonstrates a recommended fertiliser management system or evidence to support low intensity farming.
- This evidence should show that the area currently receives more than 200kg of nitrogen per ha per year. All records of all management activity on the option area for each parcel to be kept on farm.
- Exclude all livestock from the land from October 1st to March 15th.
- Applicants cannot apply/store farm yard manure in field.
- Applicants cannot apply slurry to field.
- Maximum chemical nitrogen usage is 40kg N per year.

* Any fields chosen under this item must not be ploughed, cultivated or re-seeded.

* Supplementary feeding spots are not permitted, except for mineral blocks.

- Applicants are not allowed to use pesticides or herbicides, except to spot-treat or weed-wipe for the control of injurious weeds and invasive non-native species.
- Applicants must hold a monthly record of the number of livestock grazing the land, and this must not exceed more than 0.8 LU per hectare at any given time. Standard livestock units are given in the tables opposite.

Other livestock	Livestock units
Horses	0.80
Breeding female goats	0.16
Other goats	0.11

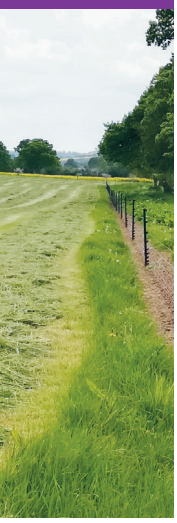
Cattle	Livestock units
Dairy cows	1.00
Beef cows	0.75
Heifers in calf (rearing)	0.80
Bulls	0.65
Other cattle (under 1 year)	0.34
Other cattle (under 1 year)	0.65
Other cattle (2 years and over)	0.80
Pigs	**Livestock units**
Boars	0.35
Breeding sows	0.44
Gilts in pig	0.20
Maiden gilts	0.18
Other pigs	0.17
Poultry	**Livestock units**
Cocks, hens, pullets in lay	0.0017
Pullets, one week to point of lay	0.003
Broilers	0.0017
Other table chicken	0.004
Turkeys	0.005
Ducks, geese, other poultry	0.003
Sheep	**Livestock units**
Rams	0.08
Lowland ewes	0.11
Upland ewes	0.08
Hill ewes	0.06
Store lambs (under 1 year)	0.04
Breeding ewe hoggs, 6 months to 1 year	0.06
Other sheep (over 1 year)	0.08

Source: (Nix, 2003)

Watercourse fencing

STEPS013

Grant value: See options over the page



How does this help the environment?

Livestock access to watercourses can cause erosion of riverbanks, resulting in the loss of soil, and contamination of water by nutrients and bacteria. Preventing livestock access to watercourses, and allowing the establishment of a buffer strip adjacent to watercourses reduces contamination and provides an area for wildlife.

How does this help my business?

Installation of robust watercourse fencing can assist with stock management and prevent the loss or injury of animals on hazardous banks. It can reduce livestock exposure to disease risk areas, and improve overall animal welfare.

Eligibility

Where fencing is to be erected along ditches, these must have a connection to a stream or river.

Existing fencing may only be replaced where it is no longer stockproof.

STEPS013 Watercourse fencing

General requirements

- Fences must be a minimum of 1.5m from the top of the bank of the watercourse.
- Fencing should prevent animal movement upstream or downstream.
- The fence should be at least 1.05m high and suitably stockproof.
- All the materials used should meet the relevant British Standards. Go online to **BSIgroup.com** and search the standards database.
- It is your responsibility to obtain permission from the Environment Agency, Natural England, or you local council, if required, before erecting any fencing.
- When erecting a fence, consider installing gates to allow management activities or husbandry operations. Applicants are entitled to apply for a gate (options STEPS013f or STEPS013g) to install with their fencing to comply with Basic Payment Scheme regulations. This option should be discussed with your Agricultural Advisor.

Guidance

Post and wire fencing

- Use softwood timber that is fully peeled, coated with wood preservative and pressure treated, or treated with an approved preservative. Untreated durable timber can be used as set out in the Forestry Commission guide to forest fencing.
- Use straining posts that are at least 125mm by 125mm square (or have a 100mm top diameter) and are at least 1.87m long.
- Set the straining posts at least 750mm into the ground and no more than 150m apart.
- Place a straining post at every change of direction (horizontal or vertical) and at each end of the fence.
- Use struts that are 75mm by 75mm square, or have a 65mm top diameter, and 1.87m long.
- Set the struts at least 450mm into the ground and mortise them into the straining post.
- Use intermediate posts that are 75mm by 75mm square (or have a 65mm top diameter) and 1.75m long.
- Intermediate posts must be placed at intervals of no more than 3.5m from the post centres.
- Use strands of galvanised 4mm mild plain steel wire or 2.5mm barbed wire, using enough strands to control the livestock.

STEPS013 Fixed costs for fencing types		
STEPS codes	**Item**	**Grant amount**
STEPS013a	Post & wire fencing	£3/m
STEPS013b	Sheep netting	£3.90/m
STEPS013c	Permanent electric fencing	£2.50/m
STEPS013d	Clipex fencing	£2.50/m
STEPS013e	Temporary electric fencing	£2.00/m
STEPS013f	Gate metal	£140/unit
STEPS013g	Gate wooden	£195/unit

STEPS013 Watercourse fencing

Guidance

Sheep netting

- Use softwood timber that is fully peeled, coated with wood preservative and pressure treated, or treated with an approved preservative. Untreated durable timber can be used as set out in the Forestry Commission guide to forest fencing.
- Use straining posts that have a top diameter of at least 125mm, or are 100 by 100mm in cross-section when sawn.
- Make sure the straining posts are 1.85m long, if set in concrete, and 2.15m long otherwise.
- Place the straining posts no more than 150m apart, if using mild steel line wire, or 300m apart for high tensile wire.
- Use a straining post at every change of direction (horizontal or vertical) and at each end of the fence.
- Use struts that have a top diameter of at least 80mm, or are 75mm by 75mm when sawn.
- Make sure the struts are 1.6m, if set in concrete, and 1.9m long otherwise. Notch struts into the straining post at an angle of no more than 45 degrees.
- Use intermediate posts that have a top diameter of at least 65mm, or are 75mm by 75mm when sawn.
- Make sure intermediate posts are 1.7m long and space them no further than 3.5m apart.

Permanent electric fencing

- Erect wire fencing at least 1.05m high, using a minimum of 4 mild steel or high tensile plain wires.
- Use straining posts with a top diameter of at least 150mm and 2.15m long, spaced according to the type of wire used.
- Use struts with a top diameter of at least 80mm and 2.1m long, notched into straining posts.
- Use intermediate posts with a top diameter of at least 63mm and 1.7m long, spaced according to the type of wire used.
- Install a mains-operated energiser in accordance with the Institute of Electrical Engineers (IEE) Regulations.

Clipex fencing

- Clipex fencing should only be used with sheep.

Temporary electric fencing

- Temporary electric fencing may be installed but only to permit livestock exclusion where the watercourse floods, or when managing stock to prevent overgrazing of fields. Discuss the suitability of this option with your Agricultural Advisor.

STEPS013 Watercourse fencing

Gates (metal and wooden)

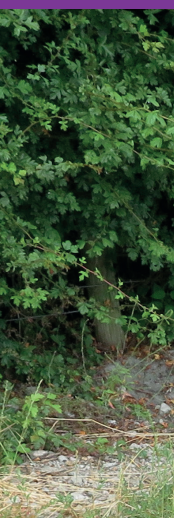
- Can only be used where livestock are being excluded from a watercourse.
- For wooden gates - construct the gate out of timber in a style that is traditional to the local area OR if there is no local gate style then construct the gate to the specifications shown below.
- Hang and clap all styles of gate separately from an adjoining fence line – do not use the hanging post as an end strainer.
- Either
  set gate posts at least 900mm into the ground and surround with concrete at least 450mm by 450mm wide, and 600mm deep, or
  erect gate posts without concrete surrounds and set at least 1.1m below the ground surface, with the soil compacted around the posts in 150mm layers. Weather cap the top of the gate posts, if wooden.
- Wooden wings should be installed, where the gate adjoins a hedge as part of the boundary.
- **Wings must:**
  - Consist of at least 3 wooden rails fixed between 2 posts
  - Do not fix the rails to the hanging post of the gate
  - Rails must be at least 38mm by 87mm
  - Posts must be at least 100mm diameter half round, 1.8m long and sunk 0.7m into the ground.

Gate section sizes		
Section	**Gates up to 3m wide**	**Gates 3m wide and over**
Top rail	100mm by 75mm	125mm by 75mm
Top rail tapered to	75mm by 75mm	75mm by 75mm
Under rails	75mm by 25mm	75mm by 25mm
Braces	75mm by 25mm	75mm by 25mm
Hanging style	100.mm by 75mm	125mm by 75mm
Shutting style	75mm by 75mm	75mm by 75mm

Livestock drinking troughs

STEPS014

Grant value: 50% of trough cost



How does this help the environment?

Livestock access to watercourses can cause erosion of riverbanks, resulting in loss of soil and the contamination of water by nutrients and bacteria.

Preventing livestock access to watercourses and providing alternative drinking points allows the establishment of a buffer strip adjacent to the watercourse, which reduces contamination and provides an area for wildlife.

How does this help my business?

Suitable alternative drinking water areas provides livestock with a safer and cleaner space to drink.

Eligibility

The field in which the trough is located must be adjacent to, or in close proximity to, a watercourse which has been fenced off to prevent livestock access.

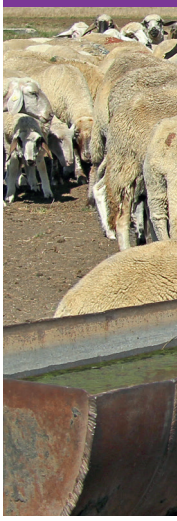
STEPS014 Livestock drinking troughs

Guidance

- The new water trough should not be located on land which is vulnerable to soil erosion, poaching or run-off.
- The new water trough cannot be located within 10m of a watercourse and not within 50m of a borehole or reservoir.
- The trough should be mounted on a suitable durable base to avoid soil poaching (see STEPS018 item Hard base for livestock drinking troughs/pasture pumps for guidance).

  The area around the drinking trough:

  - should be excavated to a minimum width of 2.5m
  - should be excavated to a minimum depth of 150mm, or down to a naturally occurring hard surface
  - should have compacted hardcore to a depth of at least 150mm, and on a geotextile liner.
- The trough should be made of one of the following; galvanised steel, concrete, spray-moulded glass reinforced cement (GRC), or polyethylene.
- The trough should be fitted with a ball valve and service box and comply with the Water Supply (Water Fittings) Regulations 1999. To find out more, go online and search: **legislation.gov.uk/uksi/1999**
- If using a water source other than mains water, the supply of water to a trough may require permission from the Environment Agency, depending on the source of the water. If water is taken from a borehole, well, or watercourse the landowner may require a licence, depending on the quantity abstracted.
- After completion, the trough should be checked on a regular basis to ensure that there is no water leakage and that it is not overflowing.



If you intend to use the public water supply, you must fit a backflow prevention device and comply with the Water Supply (Water Fittings) Regulations 1999. To find out more, go online and search: **legislation.gov.uk/uksi/1999**

For further guidance and new connections call 01332 683711

or email water.regulations@severntrent.co.uk

Livestock pasture pumps

How does this help the environment?

Livestock access to watercourses can cause erosion of riverbanks, resulting in loss of soil and contamination of water by nutrients and bacteria. Preventing livestock access to watercourses and providing alternative drinking points allows the establishment of a buffer strip adjacent to the watercourse, which reduces contamination and provides an area for wildlife.

How does this help my business?

Excluding livestock from watercourses may prevent loss or injury of animals on hazardous banks. Suitable alternative drinking water areas provide livestock with a safer and cleaner space to drink.

A pasture pump will provide water for approximately 20 cattle and doesn't require a mains water or energy supply.

STEPS015

Grant value: £180 per unit

Eligibility

The field in which the pump is located must be adjacent to, or in close proximity to, a watercourse which has been fenced off to prevent livestock access.

STEPS015 Livestock pasture pumps

Guidance

- The area chosen for a new pasture pump should not be vulnerable to soil erosion or within 50m of borehole or reservoir.
- The pump should be installed on a hard standing to prevent poaching and run-off, you may apply for STEPS018 - Hard base for livestock drinking troughs/pasture pumps to compliment this item.
- The excavated area around the pump should extend to a minimum width of 1m by 1m.
- Dig the hardstanding area to a depth of at least 150mm, or down to a naturally occurring hard surface.
- Compact hardcore on a geotextile liner to a depth of at least 150mm.
- The pump should be securely anchored to prevent movement.
- The pump must be designed to allow the animal to use its nose to push a lever that pumps water into a small water bowl or reservoir. A metal splash pan should be positioned under the reservoir to catch spillage.
- Not all pasture pumps are suitable for all kinds of livestock. Please refer to the pump supplier details to ensure the pump you have selected is suitable for your situation.
- Pasture pumps can't be used to replace existing equipment in the same location. The pump can be removed and stored during the winter period but must be available for inspection.
- The pasture pump should be checked on a regular basis to ensure that there is no water leakage.
- The pump should meet the relevant British Standards. Go online to **BSIgroup.com** and search the standards database.

If you intend to use the public water supply, you must fit a backflow prevention device and comply with the Water Supply (Water Fittings) Regulations 1999. To find out more, go online and search: **legislation.gov.uk/uksi/1999**

For further guidance and new connections call 01332 683711

or email water.regulations@severntrent.co.uk

Water supply pipe

STEPS016

Grant value: £2 per metre

How does this help the environment?

Livestock access to watercourses can cause erosion of riverbanks, resulting in loss of soil and the contamination of water by nutrients and bacteria. Preventing livestock access to watercourses and providing alternative drinking points allows the establishment of a buffer strip adjacent to the watercourse which reduces contamination and provides an area for wildlife.

How does this help my business?

Excluding livestock from watercourses may prevent loss or injury of animals on hazardous banks. Suitable alternative drinking water areas provides livestock with a safer and cleaner space to drink.

Eligibility

This option must be selected in conjunction with:'

STEPS014 - Livestock drinking troughs

STEPS015 - Livestock pasture pumps

STEPS017 - Water pumps.

or

in other works where livestock are being excluded from a watercourse.

STEPS016 Water supply pipe

Guidance

- Pipework should be made of medium-density blue polyethylene with an external diameter of at least 25mm.
- The water supply pipe must be laid underground at a minimum depth of 800mm.
- All joints on the water supply pipe must be water tight and made of brass or plastic.
- If the pipe crosses farm tracks, lay the pipe on a 75mm bed of sand and then cover it with a further 100mm of sand, before overlaying it with backfill.
- The pipe should meet the relevant British Standards. Go online to: **BSIgroup.com** and search the standards database.
- Troughs where water supply piping is connected, must be placed in a suitable location to minimise soil poaching and run-off.
- Any surface water generated around the trough must not directly enter a watercourse.

If you intend to use the public water supply, you must fit a backflow prevention device and comply with the Water Supply (Water Fittings) Regulations 1999. To find out more, go online and search: **legislation.gov.uk/uksi/1999**

For further guidance and new connections call 01332 683711

or email water.regulations@severntrent.co.uk

Water pump

STEPS017

Grant value: £ See options over the page

How does this help the environment?

Livestock access to watercourses can cause erosion of riverbanks, resulting in loss of soil and the contamination of water by nutrients and bacteria. Preventing livestock access to watercourses and providing alternative drinking points using solar or ram pumps, allows the establishment of a buffer strip adjacent to the watercourse, which reduces contamination and provides an area for wildlife.

How does this help my business?

Excluding livestock from watercourses may prevent loss or injury of animals on hazardous banks. Suitable alternative drinking water areas provide livestock with a safer and cleaner space to drink. Solar power and ram pumps can help to provide remote drinking points with no need for mains power or water.

Eligibility

The field in which the pump is installed must be adjacent to, or within proximity of a watercourse, which has been fenced to prevent livestock access.

This item cannot be used under animal housing or a roof structure.

STEPS017 Water pump

Guidance

- For ram pumps, install a suitable water collection facility, sediment tank (if necessary), drive pipe (supplying pump), pump chamber, pump, and delivery pipe.
- Set either solar or ram pumps on a firm base made out of a 150mm thick slab of concrete or a 150mm layer of consolidated hardcore.
- All the works must meet the relevant British Standards. Go online to: **BSIgroup.com** and search the standards database.
- The pumping capacity of solar panel and ram pumps may vary with weather and stream flow conditions. It is suggested that additional water storage tanks be provided to ensure sufficient supply is maintained during peak demand.
- Check with suppliers that pumps will be able to raise water a sufficient height to the selected watering point.
- Where water may need to be moved over longer distances, ram pumps are more suitable and work on water pressure alone.
- The water trough and pump should be checked on a regular basis to ensure that there is no water leakage.
- Pump systems can be easily moved from trough to trough.
- The connecting water trough should not be located on land vulnerable to soil erosion, poaching or run-off, not located within 10m of a water course and cannot be located within 50m of a borehole or reservoir.
- The connecting water trough should be mounted on a suitable durable base to avoid soil poaching (see STEPS018 for more guidance).

Pump options		
STEPS code	**Item**	**Fixed grant amount**
STEPS017a	Solar panel pump	£450/unit
STEPS017b	Ram pump	£750/unit

If you intend to use the public water supply, you must fit a backflow prevention device and comply with the Water Supply (Water Fittings) Regulations 1999. To find out more, go online and search: **legislation.gov.uk/uksi/1999**

For further guidance and new connections call 01332 683711

or email water.regulations@severntrent.co.uk

Hard base for livestock drinking troughs/resurface gateways

How does this help the environment?

Installing hard bases around troughs and resurfacing gateways, aims to reduce poaching, soil erosion and sediment run-off which may contaminate nearby watercourses or groundwater.

How does this help my business?

Hard standing for troughs and pumps provides a level and stable base. This reduces the chance of damage from livestock, improves stock movement, and helps to reduce stock lameness.

Resurfacing and strengthening gateways can improve ease of access for stock, machinery and farm workers.

STEPS018

Grant value: £110 per base

Eligibility

STEPS018a - Hard base for livestock drinking troughs can be selected in conjunction with:

STEPS014 - Livestock drinking troughs

STEPS015 - Pasture pumps

STEPS017 - Water pumps.

Or they can be applied to livestock drinking troughs or feeders already in place.

STEPS018b - Resurface gateways may be selected where erosion in field gateways is impacting on a nearby watercourse. This should be discussed with your Agricultural Advisor.

STEPS018 Hard base for livestock drinking troughs/ resurface gateways

Guidance

Hard base for troughs

- The excavated area around the drinking trough should extend to a minimum width of 2.5m, or 1m for a pasture pump.
- The soil on site should be excavated to a minimum depth of 150mm or down to a naturally occurring hard surface, the depth of which will vary according to the type of ground.
- The excavated area should be overlaid with a geotextile membrane and the hardcore well compacted by rolling to a minimum depth of 150mm.
- Edge the hard base with timber boards.
- If there is a requirement for a thicker depth of hardcore, successive layers (each 150mm thick) should be applied and be well compacted.
- The base should meet relevant British Standards. Go online to: **BSIgroup.com** and search the standards database.
- Hard bases cannot be constructed within 10m of watercourse or ditches and cannot be located within 50m of a borehole or reservoir.
- Hard bases cannot be constructed under roofs or livestock handling facilities that are not associated with feeding or drinking.
- Bases constructed within SSSIs must adhere to the Natural England SSSI designation documents.

Resurface gateways

- Excavate the full width of the gateway by the full length which the gate opens into the field when it is at 90 degrees.
- Excavate to a minimum depth of 150mm or until there is a naturally occurring hard surface.
- Remove the excavated soil from the gateway area and spread it on the verges of the field track, allowing for drainage.
- Overlay the excavated area with a geotextile membrane, then fill with aggregate (hard core) to a minimum consolidated depth of 150mm.
- Works must meet the relevant British Standards. Go online to: **BSIgroup.com** and search the standards database.

STEPS018 Costs for Hard base for livestock drinking troughs/Resurface gateways		
STEPS codes	**Item**	**Fixed grant amount**
STEPS018a	Hard base for livestock drinking troughs	£110/base
STEPS018b	Resurface gateways	£92/gateway

Installation of piped culverts in ditches

STEPS019

Grant value: £70 per m^2

How does this help the environment?

Installing a watercourse crossing allows the passage of stock and machinery without disturbing the watercourse or banks, reducing erosion and water contamination.

How does this help my business?

Culverting a watercourse allows better access for stock and machinery, and enabling easier movement around the farm, and reducing the risks created when stock move around watercourses.

Eligibility

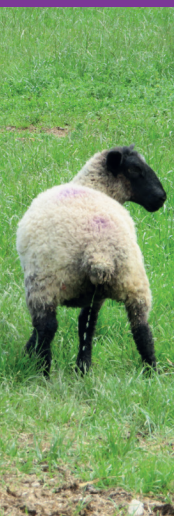
Culverts may not be used to replace an existing structure or where it may damage an environmental, historical or archaeological feature identified on the Farm Environment Record (FER), the Environmental Information Map, or the Historic Environment Farm Environment (HEFER).

STEPS019 Installation of piped culverts in ditches

Guidance

- The Environment Agency must be consulted prior to any installation ('Land Drainage' consent may be required).
- Culverts are short sections of pipe designed to carry anticipated flows and have a diameter suited to the likely flows, with a minimum diameter of 450mm.
- A minimum 4m length is required for culverts which will be crossed by heavy traffic wheeled vehicles. A shorter length is acceptable for livestock paths and bridleways.
- Culvert manufacturer specifications and health and safety protocols must be followed. For heavy duty vehicles, manufacturer specifications must be checked.
- The pipe gradient should be approximately equal to that of the ditch bed.
- The pipe invert at the upstream end should be slightly below the bottom of the true ditch bed.
- Pipes must have a positive joint to preserve alignment.
- It may be necessary to take preventative action to reduce the risk of erosion at the downstream end of the culvert. If necessary insert stones or slabs as protection measures on either side of ditch.
- Pack a stone-free filling tightly at the sides of the pipe and at least 300mm above it.
- Build up the filling in layers up to 150mm thick, making sure it is consolidated before adding the next layer.
- Leave the finished backfill surface so it is crowned above the surrounding ground.
- An optional overlying concrete pad of at least 150mm thick may be added to stabilise the culvert.
- Culverts cannot be applied for if managed under another agri-environmental scheme.
- This measure cannot be implemented where a culvert could potentially drain protected and sensitive habitats, such as SSSIs or Sites of Nature Conservation Interest.
- Culverts cannot restrict the movement of migratory fish or eels.
- Where possible, a culvert should have a 'mammal shelf' installed, to allow the passage of small mammals across the watercourse, thereby minimizing habitat fragmentation.

Roofing of existing manure & livestock holding areas



How does this help the environment?

The risk of pathogens and nutrients entering watercourses increases when manure is spread at inappropriate times. Preventing rain from falling on farmyard manure storage heaps can reduce the volume of storage required, and therefore reduce the likelihood of spreading at inappropriate times.

How does this help my business?

Excluding rainfall from your manure store allows you to be more flexible with your slurry management, by keeping your product stackable, and reducing the potential of creating slurry that requires storage. Roofing livestock holding yards can benefit animal handling and welfare, and reduce dirty surface run-off.

STEPS020

Grant value: £52 per m^2

Eligibility

Structures without a concrete base to enable cleaning are not eligible for funding.

Existing areas only.

STEPS020 Roofing of existing manure and livestock holding areas

Guidance

- The applicant must stipulate if the option applies to either farm manure storage or livestock handling facilities.
- Temporary field heaps are not eligible for funding.
- The covering of the site may require planning permission. You should check with your local planning authority and Environment Agency officer.
- Works must meet relevant British Standards. Go online to: **BSIgroup.com** and search the standards database.
- Roof must be impermeable to rainwater and water must be directed away from site into a clean water drain.
- Any run-off of FYM effluent is deemed as slurry and must be collected via a holding tank which is compliant with SSAFO regulations, go online and search: **gov.uk/guidance/storing-silage-slurry-and-agricultural-fuel-oil**
- FYM store cannot also be used to house feed, livestock or machinery during the winter period. If inspection determines that your manure store is being used for feed, livestock or machinery it will be a breach of your agreement.
- Livestock handling area cannot also be used as animal housing. If inspection determines that your livestock handling area is used for animal housing, it will be a breach of your agreement.
- Your claim will based on the erected roofed area in m^2.

Rainwater harvesting (RWH)

How does this help the environment?

Rainwater harvesting helps to reduce the quantity of water entering your slurry store, running across fouled yards, or entering your dirty water tank. This reduces pollution and saves holding capacity.

How does this help my business?

Rainwater harvesting can be a valuable way to increase the resilience of your farm to water shortages, firefighting or simply provide an additional source of water for filling the sprayer.

STEPS021

Grant value: £ See list over the page

Eligibility

Rainwater harvesting should only be constructed on existing buildings, the exception being when roofing over a sprayer washdown area.

STEPS021 Rainwater harvesting (RWH)

Guidance

Location

- Rainwater is collected from roofed sheds which is then filtered. This filtered water is either pumped or gravity fed into a storage tank.
- Harvested rainwater can be used for irrigation of specified crops and the washing of farmyards and machinery. Harvested rainwater can be supplied as livestock drinking water but must be subjected to further treatment first (e.g. UV treatment).
- Where mains water supply is used to top up tanks, fittings must comply with the Water Supply (Water Fittings) Regulations 1999. To find out more, go online and search: **legislation.gov.uk/uksi/1999**
- The works should meet the relevant British Standards. Go online to: **BSIgroup.com** and search the standards database.
- Both above ground and below ground storage tanks are available. The grant offered takes the following into account:
  - Installing the tank and pump
  - Site excavation
  - Creating a reinforced base for the tank
  - Installing connecting pipe-work.

Above ground storage tanks

- You must check with the local planning authority in case planning consent is needed.
- Construction of rainwater storage tanks should follow manufacturer's instructions.
- Second-hand tanks are not eligible for funds.
- Storage tanks should be situated on hard standing concrete.
- Storage tanks cannot be used for collecting dirty water, effluents and slurries.

Below ground storage tanks

- You must check with the local planning authority in case planning consent is needed.
- Construction of rainwater storage tanks should follow manufacturer's instructions.
- Second-hand tanks are not eligible for funds.
- Underground tanks should not be installed in ground with a high water table unless further structural work is undertaken to avoid tanks from floating. In such cases you must seek advice from the manufacturer.
- Underground storage tanks should be made up of glass-reinforced plastic and pre-cast concrete.
- The grant includes the tank, pump, site excavation, a concrete bed, and backfilling with concrete to cover the tank.
- Storage tanks cannot be used for collecting dirty water, effluents and/or slurries.

STEPS021 Rainwater harvesting RWH		
STEPS codes	**Item**	**Fixed grant amount**
STEPS021a	Underground tank	£350/m3
STEPS021b	Aboveground tank	£110/m3
STEPS021c	Flush rainwater diverters & filters	£125/unit
STEPS021d	Downpipes & gutters	£12/m

Flush rainwater diverters and downpipe filters

- You must check with the local planning authority in case planning consent is needed.
- Item diverts and filters potentially contaminated roof water to keep leaves, debris and other contaminants out of water storage tanks.
- Contaminated water is diverted from tanks, reducing tank maintenance and protecting pumps.
- You must send dated photographs of the existing site with your application for this item.
- Item is only available in conjunction with a rainwater harvesting system.

Replacement of downpipes and gutters

- You must send dated photographs of the existing sheds with your application for this item.
- Item is only available in conjunction with rainwater harvesting system or diversion into a clean water drainage system.
- Cannot be used on guttering and downpipes on proposed new buildings.
- Applicants must write a justification for using the item, explaining why it's necessary and how it meets the eligibility criteria.
- Successful applicants will need to keep the following records and supply them on request:
  - Any consents or permissions connected with the work
  - Receipted invoices or bank statements where a receipted invoice is unavailable
  - Photographs of the completed work.


ENDURAMAXX
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WARNING
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WARNING

Constructed farm wetlands

How does this help the environment?

Constructed farm wetlands are intended to receive and treat lightly contaminated water from around farmyards and fields, and are able to trap pollutants before reaching the main watercourse. Wetlands provide habitat for a range of wildlife and can be the hub of biodiversity on your farm.

How does this help my business?

Constructed farm wetlands can be used to treat lightly contaminated run-off from the yard. They also form a useful retention area for water on your farm and may help to prevent flooding in downstream areas.

AV Advisory visit required

A specialist water management advisory visit must be conducted in order to access this STEPS item and can be arranged through your Agricultural Advisor.

STEPS022

Grant value: 50% up to the value of £5000, incl. VAT

Eligibility

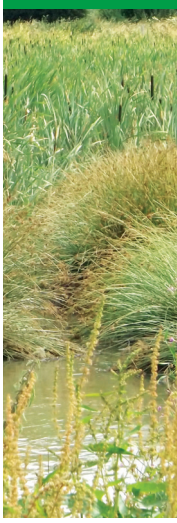
Constructed wetlands should not be designed to intentionally capture dirty water, strong effluents, slurries or pesticide washings.

Constructed wetlands cannot be used on historic or archaeological features or areas of existing wildlife interest identified on the Farm Environment Record (FER), the Environmental Information Map, or the Historic Environment Farm Environment Record (HEFER).

Or where it will restrict the movement of migratory fish or eels

Or without relevant advice or consents from the Environment Agency (EA), local planning authority or flood consenting authority.

STEPS022
Constructed farm wetlands



Guidance

- The size and type of wetland to be constructed will depend on the flow and strength of effluent from the source.
- Constructed farm wetlands provide specific solutions for specific circumstances.
- Wetlands designed to trap sediment may be of a simpler design that may even be dry through part of the year.
- Wetlands can also be built into ditches in some situations.
- Work should be carried out in a dry period to avoid unnecessary soil damage.
- Excavated topsoil should be spread on top of embankments.
- An outflow pipe should be installed at a suitable location 750mm below the top of the embankment to provide a freeboard.
- Several small wetlands may be more effective than a single large wetland.
- Advice and assistance from the Environment Agency will be required for this item. To find your local Environment Agency office go online and search: **gov.uk/government/organisations/environment-agency**

  or you can contact them via email at **mailto:enquiries@environment-agency.gov.uk enquiries@environment-agency.gov.uk**, you can also call them on **03708 506 506**

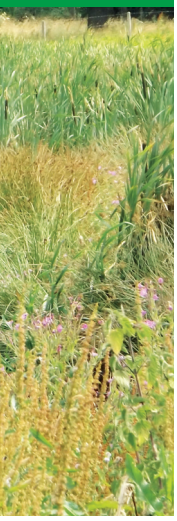
For more information on the specific construction details for a constructed wetland, go online and search the Wildfowl and Wetlands Trust - **wwt.org.uk**

Additionally the Environment Agency rural SUDS manuals also contains useful information: **gov.uk/government/organisations/environment-agency**

AGREEMENT EXTENSION 10 YEARS

We reserve the right to amend the Terms and Conditions for this item to a 10-year agreement. This will be highlighted in the agreement if your grant application is successful and you decide to proceed.

Grass swales



How does this help the environment?

Grassed swales are shallow excavated areas covered with grass, which are designed to allow surface run-off to collect and soak away. This traps any sediment before it reaches a watercourse.

How does this help my business?

Clean and dry yards or tracks are easier to work on than when stood in water. Using swales to capture and divert lightly contaminated or clean water away from trafficked areas can improve working conditions and avoid damage from waterlogging, particularly during wet conditions.

AV Advisory visit required

A specialist water management advisory visit must be conducted in order to access this item and can be arranged through your Agricultural Advisor.

STEPS023

Grant: £8 per m^2

Eligibility

Swales are to be used to collect clean or lightly contaminated water only. They must not be used to collect run-off classified as slurry or pesticide washings.

Swales cannot be used on historic or archaeological features or areas of existing wildlife interest identified on the Farm Environment Record (FER), the Environmental Information Map, or the Historic Environment Farm Environment Record (HEFER).

Or where it will restrict the movement of migratory fish or eels.

Or without relevant advice or consents from the Environment Agency (EA), or Local Planning Authority, or Internal Drainage Board.

STEPS023 Grass swales

Guidance

- The option consists of site preparation and excavation of the swale.
- When calculating the area of the swale for the application form, measurement should start at the inside edge of the created bank. A long swale allows additional time for water to soak away and for sediment to settle.
- The swale should be constructed on the contour or at a longitudinal slope of normally no greater than 2 degrees.
- The layout of the swale should be marked on the ground and excavated to a depth of 750mm.
- Topsoil should be stockpiled separately and used in the bottom of the swale and on the graded slopes.
- Side slopes should have a gradient of no more than 1:3.
- The floor of the swale should be excavated for a further 150-250mm and replaced with topsoil.
- A dense grass sward should be established on the sides and floor of the swale.
- A good sward may be achieved by sowing a rate of 25g per square metre.
- The formation of a swale could be considered to be an engineering operation and may require planning permission. The Local Authority should be consulted before any work commences.
- This item can ideally be used in conjunction with check dams STEPS024a to slow the flow of water and allow time for infiltration.

Getting further guidance

For more information on construction of swales ask your Agricultural Advisor about arranging a specialist water management advisory visit.

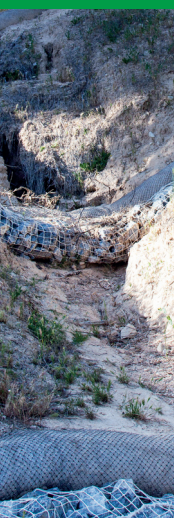
For more information on the specific construction details for a swale, go online and search the Wildfowl and Wetlands Trust - **wwt.org.uk**

Additionally the Environment Agency rural SUDS manuals also contains useful information: **gov.uk/government/organisations/environment-agency**

In ditch barriers

STEPS024

Grant value: £150 per barrier



How does this help the environment?

In ditch barriers slow down the flow of water in a swale or ditch, and help any sediment to be deposited behind them. Using several of these items in series increases their effectiveness in reducing polluted run-off.

How does this help my business?

Slowing the flow of water in a swale or ditch can improve their effectiveness in controlling water on the farm, and reduce the impact of localised flooding. They provide a collection point for trapped sediment which will help when they need to be cleaned out.

Eligibility

Check dams and seepage barriers can be constructed in swales or in ditches only.

The migratory movement of fish or eels must not be restricted.

Advice and consents from your Internal Drainage Board or Environment Agency must be sought.

Seepage barriers cannot be used on historic or archaeological features or areas of existing wildlife interest identified on the Farm Environment Record (FER), the Environmental Information, Map, or the Historic Environment Farm Environment Record (HEFER).

STEPS024 In ditch barriers

Guidance

Check dams

- Check dams should be located at regular intervals along a swale; the steeper the slope, the shorter the distance should be between each check dam.
- Check dams should be constructed of graded broken stone, local soils with a high clay content, or timber.
- A trench of 200mm depth should be excavated across the width of a swale.
- The dam should then be built up to a height of 500-750mm above the bed of the swale. However, this figure should be taken in conjunction of the actual size of the field trench.
- The dam must be built into the sides of the swale to avoid water bypassing the structure. An overflow in the centre of the dam should also be installed.
- The dam must be checked and de-silted regularly to prevent it collecting a large amount of silt, which could potentially block the trench.
- Depending on the size of field trench, multiple check dams may be necessary (your Agricultural Advisor will be able to advise you on this).
- Build the check dam at the down slope end of the grass swale, leave the upslope end of the trench empty.
- Side slopes of the check dam should be at a maximum gradient of 1:2.

Seepage barriers

- In-ditch seepage barriers should be located within man-made field ditches where land on either side is owned by the applicant.
- They are best placed where the ditch system carries a fast flow of water during intensive rain events.
- The purpose of the barrier is to slow and filter water rather than dam the ditch.
- The number of barriers in any one ditch would depend on the gradient, with steep gradients benefiting from more structures.
- In ditch barriers must not be constructed on natural watercourses, or where there is a high risk to land or property if the structure was to cause local flooding.
- The in-ditch barrier should be no more than 4m wide and 1m high.
- Barriers may be constructed from wooden piling or horizontal planks (with gaps), stone filled gabions, willow stakes/woven branches or recycled drainage material.
- Wooden slats should be formed either vertically or horizontally (if less than 2m wide) leaving 1-2mm gap between each barrier. The wood must not be treated with a chemical wood preservative product as these are toxic to aquatic life.
- Galvanised steel girders may be used as holding posts for the slats. The slats must be of sufficient strength to resist the force of fast flowing water and be durable.
- Seepage barriers are likely to require repair over the course of their lifetime
- Trapped silt should be periodically removed. Checking after heavy rain is advisable.

Farmer innovation

How does this help the environment?

No-one knows your farm and land like you do. Your knowledge and insight can often find innovative ideas and ways to tackle the issues of diffuse pollution from your farm.

These ideas if implemented will protect the local waterbodies and bring benefits to the wider environment, but aren't covered by any of the other STEPS options.

Here's your chance to harness a great opportunity for creative thinking and could be something that other farms could adopt in future years.

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Here's your chance to harness a great opportunity for creative thinking and could be something that other farms could adopt in future years.

How does this help my business?

Every farm enterprise is different. If the list of options available in STEPS doesn't suit your farm, or your circumstances or budgets, using this option to suggest an alternative or innovative way to help protect water quality and the environment, in a way that suits the commercial capability of your farm enterprise, can bring business benefits tailored for you.

STEPS025

Grant value: 50% up to the value of £5000, incl. VAT

Eligibility

Your application will be subject to the same scoring system as all STEPS applications, so it is advisable to contact your Agricultural Advisor to discuss any potential plans for your farm prior to making an application.

If the catchment team deem your application to be of benefit to the environment, we will fund up to 50% of the cost (ex. VAT) with a maximum contribution of £5000.

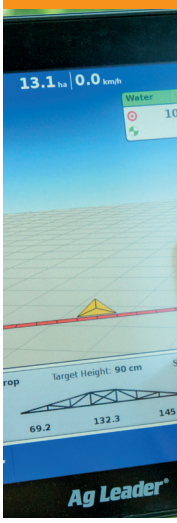
We cannot fund any infrastructure directly linked to meeting regulatory requirements.

- All farmer innovation applications must be accompanied with quotes or costings for the proposed works/items, maps and timings. Where this includes your own time, an estimate must be provided.
- All supporting information must be submitted at the time of application. Applications without necessary information will not be considered until this is received.
- Specific requirements for the respective categories of farmer innovation are detailed in the following sections.
- The water quality or biodiversity benefit of the work must be explained in the application form. Applications without this will not be considered.

STEPS025 Farmer innovation

The following are not considered innovative options and will not be funded

- Clearing/re-digging of ditches.
- Storage of waste effluent or liquor (regulatory requirement).
- Replacement or maintenance of items/ infrastructure.
- Machinery and farm activity with no direct improvement of water quality.
- Pesticide storage facilities (including shipping containers).
- Applications for improvements in biosecurity.
- Items otherwise covered by fixed price grants.
- Payment for plant hire for use in installing fixed cost items.

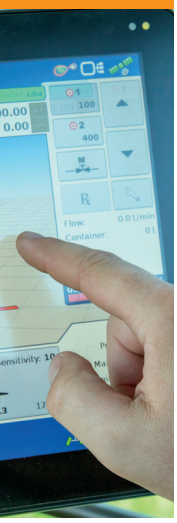


STEPS codes	Item	Fixed grant amount (inc VAT)
STEPS025a	Precision farming equipment	50% cost up to £5000
STEPS025b	Clean and dirty water separation	50% cost up to £5000
STEPS025c	Other innovation item	50% cost up to £5000
STEPS025d	Biodiversity	50% cost up to £5000

Farmer innovation precision farming equipment

STEPS025a

Grant value: Up to £5000



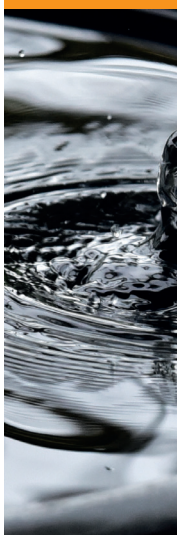
How does this help the environment?

Precision farming equipment can improve the accuracy and efficiency of nutrient and fertiliser usage beyond that possible with standard apparatus. Best practice and responsible pesticide and nutrient management should be used before this option is considered.

How does this help my business?

Introducing precision equipment to your farm can not only save you money through reducing the quantity of products used in the field, but also greatly improve efficiencies across your enterprise. Improved speed of field operations, reduced fuel usage and improvements to crop health are among the numerous benefits precision equipment can bring.

STEPS025a Farmer innovation - precision farming equipment



Guidance

General

- You must discuss this option with your Agricultural Advisor before applying.
- Apparatus applied for must directly benefit water quality.
- Applications must outline the water quality benefit of the apparatus in order to be considered.
- A range of precision equipment or tools may be considered for funding.
- All applications are subject to scoring. Funding of an item in a single STEPS funding period does not guarantee funding in subsequent years.
- If successful, the STEPS grant may contribute 50% of the cost of the item up to £5000.
- If successful in your application, you may be asked for feedback as to how the equipment has impacted on your business e.g. any reductions in product use.
- Applicants must already be following best practice when handling and using pesticides.

Pesticide application equipment

- If successful in applying for an item, further applications to fund another example of that item in subsequent years will not be considered e.g. applications to fit GPS to multiple machines.
- GPS software upgrades may also be considered.
- Additions to upgrade existing equipment may be considered.
- Applications demonstrating that enhanced pesticide handling/management are already in practice on the farm e.g. use of dedicated washdown pads and biofilters, may be viewed more favourably.

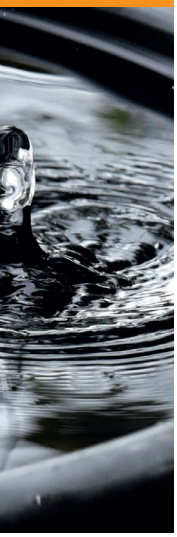
Nutrient management equipment

- Fertiliser application equipment will only be considered in catchments where nutrients area a priority. Discuss this with your Agricultural Advisor.
- Although not necessary during your application, you must be able to provide evidence of nutrient management planning on your farm if requested by your Agricultural Advisor.

AGREEMENT EXTENSION 10 YEARS

We reserve the right to amend the Terms and Conditions for this item to a 10-year agreement. This will be highlighted in the agreement if your grant application is successful and you decide to proceed.

Farmer innovation
clean and dirty water separation



How does this help the environment?

To prevent the mixing of clean and dirty water or improvement of livestock/yard areas/ access ways.

AV Advisory visit required

If using this STEPS option to apply for concreting of yard areas, a Farm Infrastructure Audit is required and can be arranged through your Agricultural Advisor.

STEPS025b

Grant value: 50% up to the value of £5000, incl. VAT

Eligibility

You should discuss this option with your Agricultural Advisor before applying.

This option may not be used to resurface manure, silage or slurry stores, areas housing livestock, or on environmental, historic or archaeological features identified on the Farm Environment Record (FER), the Environmental Information Map, or the Historic Environment Farm Environment Record (HEFER).

Grants cannot be used to collect and store effluent or dirty water otherwise controlled by SSAFO regulations.

Works must address areas of your farm that are impacting on a watercourse or contributing to excessive wastewater entering a dirty water tank.

STEPS025b Farmer innovation - clean and dirty water separation

Guidance

General

- Proposals to concrete yard areas must be supplied with the area to be covered in m^2 and a quote from your concrete supplier. If doing the work yourself, approximate costings are permitted.
- Concreting must be conform to relevant British Standards.
  Go online to: **BSIgroup.com** and search the standards database.
- All items under this option must be accompanied with a drainage plan indicating the separation of clean and dirty water and where this will be stored/ diverted to.
- As a minimum concrete must be a minimum of 150mm thick on compacted and blinded hardcore that is at least 150mm thick.
- Concrete should have a reinforced base to minimise cracking and distribute the loads exerted by livestock or farm vehicles
- All joints should be treated with a sealant.

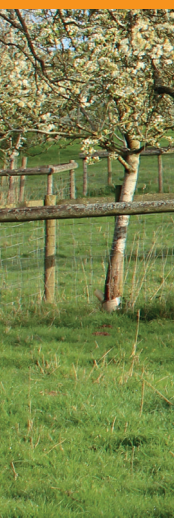
Examples of where this grant may be used

- Cross drains on access/livestock tracks.
- Improvement of cattle tracks which are causing pollution.
- Improvements to hard standings to enable cleaning of livestock yard areas.

AGREEMENT EXTENSION 10 YEARS

We reserve the right to amend the Terms and Conditions for this item to a 10-year agreement. This will be highlighted in the agreement if your grant application is successful and you decide to proceed.

Farmer innovation other innovation items



How does this help the environment?

This option helps any farm enterprise to improve habitats that will help to provide us with food to eat (through sustaining pollination) and helps to clean the water we drink (such as wetland filtration), and helps provide the oxygen we breathe. Improved habitats also bring wider benefits for wildlife. All of this can provide environmental, social and economic benefits too.

Biodiversity is all about protecting and enhancing the amazing variety of life on Earth.

How does this help my business?

Every farm enterprise is different. If the list of options available in STEPS doesn't suit your farm, or your circumstances or budgets, using this option to suggest an alternative or innovative way to help protect water quality and the environment, in a way that suits the commercial capability of your farm enterprise, can bring business benefits tailored for you.

STEPS025c

Grant value: 50% up to the value of £5000, incl. VAT

Eligibility

You should discuss this option with your Agricultural Advisor before applying

This option may not be used on environmental, historic or archaeological features identified on the Farm Environment Record (FER), the Environmental Information Map, or the Historic Environment Farm Environment Record (HEFER).

STEPS025c Farmer innovation – other innovation items

Guidance

General

- To access this grant item you should first discuss your plans with your Agricultural Advisor who will be best placed to recommend a course of action.
- Ideas involving on farm water management may require specialist advice and/or consultation with the Environment Agency.
- There must be a direct water quality benefit from the work you propose.
- The benefits of your idea to water quality must be sufficiently explained in your application.
- Applications must include costings/quotes for proposed work.

Farmer innovation
Biodiversity

STEPS025d

Grant value: 50% up to the value of £5000, incl. VAT

How does this help the environment?

This option helps any farm enterprise to improve habitats that will help to provide us with food to eat (through sustaining pollination), helps to clean the water we drink (such as wetland filtration), and helps provide the oxygen we breathe. Improved habitats also bring wider benefits for wildlife. All of this can provide environmental, social and economic benefits too.

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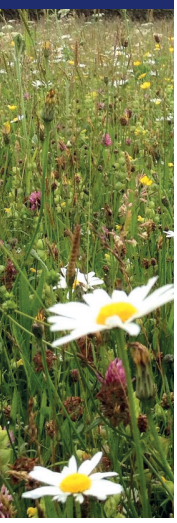
Biodiversity monitoring service
We are offering a monitoring service to measure the biodiversity improvements created by this item. Speak to your Agricultural Advisor if you're interested in this.

Eligibility

To apply for this item, you must be applying for a priority STEPS for Water item, or have applied for one in a previous STEPS round.

Annual pollinator mix



Brightly coloured and very attractive, this option is quick and easy to establish with no management requirements after annual establishment.

How does this help the environment?

Once considered weeds, some cornfield annual species are now among the rarest flowers in the UK and uncommon to see in the farmed landscape. This option provides areas of flowering plants to boost essential food sources for beneficial pollinators as well as invertebrates that will help to feed farmland bird chicks in the summer.

How does this help my business?

Flower mixes can attract and support natural predators of crop pests, benefitting the farms crops. These areas also support native pollinators, essential for oilseed rape and beans. A well-managed annual flower mixture can look great on your farm – consider planting where they are visible to the public.

Biodiversity monitoring service
We are offering a monitoring service to measure the biodiversity improvements created by this item. Speak to your Agricultural Advisor if you're interested in this.

STEPS026

Grant value: £500/ha per year (claimed annually for 5 years)

Eligibility

Each farm can claim up to 2 Ha per year of annual pollinator mix per application.

The option must be re-established each year. It can be kept in the same location if working well, or moved around the farm, but the same area must be retained.

Only available on arable land.

Mixture diversity must be maintained.

Do not use where evidence or records exist for important arable plants or adjacent to Sites of Special Scientific Interest (see **Magic.gov.uk)**

Speak to your Agricultural Advisor about eligibility.

STEPS026 Annual pollinator mix

Guidance

- Establish a mix containing at least 4 of the following; Crimson clover, Red clover, Berseem clover, Persian clover, Phacelia, Native corn flower, Native corn marigold and Native corn chamomile, Borage, Common vetch, Field poppy, Corn cockle.
- The type of mix can be established on all soil types and in most locations but it works best in south or south-southwest areas with a sunny aspect. Some cornfield annuals are best suited to medium and light soils. Check with your seed merchant for the best mix for your soil type and situation.
- Establish by October 31st following the guidance of your chosen seed merchant. Some annuals, if sown in the autumn, will flower early in the following spring. This can help to make up for the lack of flowering species at that critical time.
- Retain the mix until September 1st the following year.
- Plots must be at least 6m wide. Many pollinator species have a limited foraging range, so spreading smaller areas of this habitat around the farm will have significant benefits.
- You should not drive on the annual pollinator mix area, but limited turning is allowed if sward damage is prevented.
- Do not use pesticides or fertilisers. Herbicides are only permitted to spot treat or weed wipe injurious weeds, invasive non-native species, Stinging nettles and bracken.

Evidence

Ensure that the following records are retained and can be provided with the annual claim:

- Invoices for seed mix used
- Maps showing location of mix areas
- Photos showing locations and condition (take photos when these areas are flowering) of established plots.

Arthropod banks

Provides benefits to a variety of farm wildlife and aids water protection too.

How does this help the environment?

This option provides raised grass areas which mimic the dense tussocky grass cover of traditional hedgerows, providing a habitat for invertebrates and farmland birds to forage and nest in. Small mammals, bumblebees, spiders, insects and farmland birds which prefer to nest in open areas can be found on successful arthropod banks.

How does this help my business?

Beneficial predatory insects and spiders overwinter in dense grass cover and will move in to the crop in spring, acting as natural predators of crop pests. As many of these beneficial species do not travel more than 250m, arthropod banks located in the middle of a field can be a valuable resource to control crop pests. They can also help to slow surface water flow and reduce the risk of diffuse pollution.

Biodiversity monitoring service
We are offering a monitoring service to measure the biodiversity improvements created by this item. Speak to your Agricultural Advisor if you're interested in this.

STEPS027

Grant value: £2875/Ha
(One off payment, item to be retained for 5 years)

Eligibility

Only eligible on arable land or temporary grassland.

Suitable for larger fields (20 ha and above) or in areas where soil erosion is a risk.

Can be located in the centre of fields or on the edges.

The applicant must ensure that the hedge is not being planted on a site that will damage existing habitats (see **Magic.gov.uk**), archaeology or infrastructure.

Arthropod banks must remain in situ for a minimum of 5 years.

STEPS027
Arthropod Banks

Guidance

- Create or maintain a free-draining earth ridge, measuring between 2m to 5m wide and about 0.4m high.
- Leave gaps at each end of the ridge to allow access for machinery.
- Establish or maintain a native grass mixture in year 1 of the agreement, with suggested species including fine leaved grasses and tussock-forming varieties such as Fescues, Cock's-foot and Timothy.
- Cut the established mixture several times as required in the first summer to control woody growth and annual weeds. In subsequent years cut after August 31st to protect nesting birds and invertebrates, when the bank is dry but before insects look to find shelter over winter.
- Do not use pesticides or fertilisers. Herbicides are permitted only to spot treat or weed wipe injurious weeds or invasive non-native species, Stinging nettles and bracken.
- You should avoid application of insecticides within at least 6 meters of the bank as these will be particularly harmful to beneficial predatory insects.
- Speak to your local Agricultural Advisor for further advice.

Evidence

Ensure that the following records are retained and can be provided with the claim:

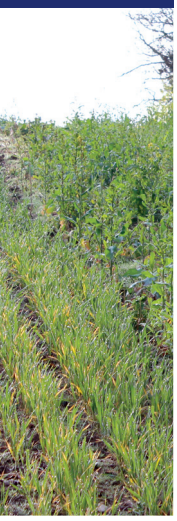
- Invoices for seed mix used (if applicable)
- Maps showing location of banks
- Photos showing location and condition of established banks.

Feeding farmland birds

STEPS028

Grant value: £650/tonne per year (claimed annually for 5 years)

A quick and easy way to provide food for farmland birds throughout the winter.



How does this help the environment?

This option helps feed seed-eating birds during the "hungry gap" (Winter months and early Spring) before natural food resources become available.

How does this help my business?

A diverse farmland bird population is a sign of a healthy food chain at work on the farm.

Look out for target seed-eating farmland birds such as; Linnet, Corn bunting, Grey partridge, Yellowhammer and Tree sparrow using the sites.

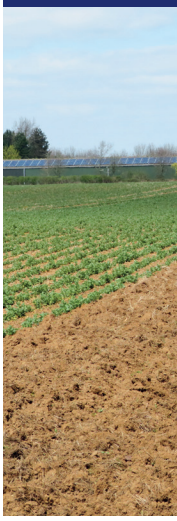
Eligibility

This option is not permitted to be used on commercial game farms – subject to change.

Biodiversity monitoring service

We are offering a monitoring service to measure the biodiversity improvements created by this item. Speak to your Agricultural Advisor if you're interested in this.

STEPS028 Feeding farmland birds



Guidance

- Spread the supplementary feed mixture on the ground at least weekly between December 1st and April 30th. Use at least two separate locations at an average rate of 25kg per location per tonne.
- Select feeding areas that are firm and free-draining, e.g. farm tracks or hard standing and in close proximity to existing favourable habitat (e.g. hedgerows, game covers/winter bird food plots, woodland).
- The mix should be a maximum of 70% cereal (Wheat, Barley, Triticale) and 4 of White millet, Red millet, Linseed, Oilseed rape, Canary seed, Nyger seed, Sunflower hearts.
- Do not use hoppers for feeding.
- Tailings should not be used as supplementary feed.
- To ensure that clean and healthy feeding areas are maintained, you should move feeding sites within a suitable distance for birds to locate.
- If registered as organic, the feeding mix should comply with organic standards .
- Agreement holders must take part in the **'Big Farmland Bird Count'** annually (see **bfbc.org.uk/**).

Evidence

- Ensure that the following records are retained and can be provided with the annual claim:
  - Details of mixture used
  - Invoice for components of the mixture bought in and records of own seed used
  - Dates of feeding (consider keeping a diary of feeding)
  - Amount of feed
  - Mapped location of feeding areas
  - Photographic evidence of supplementary feeding in progress on farm and mixture used
  - A copy of the **'Big Farmland Bird Count'** results (see **bfbc.org.uk/**).

Diverse herbal leys

Provides multiple benefits to the farm business and environment.

STEPS029

Grant value: £1500/Ha
(One off payment, item to be retained for 5 years)

How does this help the environment?

Diverse herb rich swards, with a mixture of grasses, herbs and legumes, provides habitat and food for pollinators and other invertebrates, which in turn provide food for farmland birds and mammals. Herbal leys can be highly beneficial to soil health, increasing biological activity and organic matter content. Improved water permeability through the action of the deep rooting plants can reduce surface run-off.

How does this help my business?

As part of a sustainable and diverse rotation herbal leys can provide multiple benefits to the farm. They provide valuable protein and mineral rich fodder for livestock, nitrogen-fixing legumes enhance soil fertility reducing the need for artificial fertiliser and deep rooting plants improve soil structure and organic matter content. They can greatly increase the resilience of the soil, such that it is better able to hold moisture in a dry period, cope with heavy rains without leading to surface runoff and allow a wider window for field work.

Biodiversity monitoring service
We are offering a monitoring service to measure the biodiversity improvements created by this item. Speak to your Agricultural Advisor if you're interested in this.

Eligibility

Each farm can claim up to 3 Ha of herbal leys per application (agreements last for 5 years).

The total area must be retained for the duration of the 5 year agreement but the location may change if your Agricultural Advisor is notified.

This option should be used on arable land or temporary grassland.

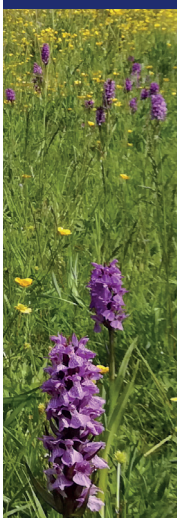
Sward diversity must be maintained.

In specific cases it might be used on permanent pasture. It is the responsibility of the applicant to ensure that Environmental Impact Assessment guidance is followed.

Do not use where evidence or records exist for important arable plants or adjacent to Sites of Special Scientific Interest (see **Magic.gov.uk**)

Speak to your Agricultural Advisor about eligibility.

STEPS029 Diverse herbal leys



Guidance

- Establish a mix of at least 5 grasses, 3 legumes (include Bird's-foot trefoil) and 5 herbs and wild flowers in the first year of the agreement.
- The sward should aim to achieve a 10% cover of Red clover and an additional 10% cover of other legumes, herbs or wildflowers.
- Please consult your chosen seed merchant for advice on establishment of this option.
- The sward should be managed by cutting and/or grazing, but if grazing only from the second year onwards.
- Some livestock will preferentially graze species such as Red clover and Chicory, diversity must be maintained through a sensitive grazing and cutting regime.
- Highly beneficial plants like Red clover and Chicory can decline over the five years, whilst the grasses can become too dominant. The sward needs to contain all the species sown to deliver the full range of benefits this option can provide. It might be necessary to re-establish the sward during the 5 years, on the same site or moved to a new location.
- The ley must not be grazed or cut for a 5 week period between May 1st and July 31st to allow the flowering species to flower and set seed. Flowering can continue into late summer and plants such as Chicory and Plantain provide some useful seeds for early winter.
- Do not use pesticides or fertilisers. Herbicides are only permitted to spot treat or weed wipe injurious weeds, invasive non-native species, soft and hard rush, Stinging nettles and bracken.

Evidence

Ensure that the following records are retained and can be provided with your claim:

- Invoices for seed mix used
- Maps showing location of herbal leys
- Photos showing locations and conditions of established areas.

Wild flower margins and mini-meadows

Once established this option will provide a lasting habitat of benefit to a wide variety of pollinators and other invertebrates.

How does this help the environment?

This option mimics our traditional native wild flower meadows, 97% of which have been lost in the UK since World War II. It creates areas of flowering plants which provide essential food sources for beneficial pollinators and habitat for invertebrates that will feed farmland bird chicks in the summer. If managed correctly this option will provide a more lasting and natural habitat than the annual pollinator mix. These native flower margins and mini-meadows can get better year after year and should not need re-establishing.

How does this help my business?

Flower mixes can attract and support natural predators of crop pests, benefitting the adjacent crop. Wild flower margins and mini-meadows will benefit from sympathetic grazing and hay cuts, potentially adding value to the farm business.

Biodiversity monitoring service
We are offering a monitoring service to measure the biodiversity improvements created by this item. Speak to your Agricultural Advisor if you're interested in this.

STEPS030

Grant value: £2500/Ha (One off payment, item to be retained for 5 years)

Eligibility

Each farm can claim up to 2 Ha per year of wild flower mix per application.

The option must be established in the first year and managed in the same location for the remainder of the 5 year agreement.

This option should be used on arable or temporary grassland.

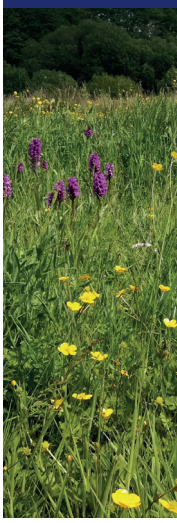
In specific cases it might be used on permanent pasture; it is the responsibility of the applicant to ensure that Environmental Impact Assessment guidance is followed.

Sward diversity must be maintained.

Do not use where evidence or records exist of important arable plants or adjacent to Sites of Special Scientific Interest (see **Magic.gov.uk**).

Speak to your Agricultural Advisor about eligibility.

STEPS030 Margins and mini meadows



Guidance

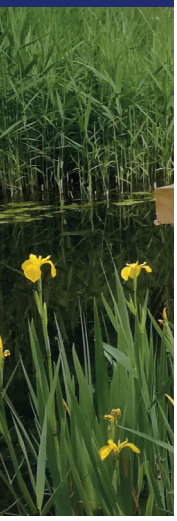
- Establish a mix containing both native perennial flowering plants (20%) and native grasses (80%). Species should include but are not limited to; Bird's-foot trefoil, Common sorrel, Ribwort plantain, Smaller cat's-tail, Self-heal, Yarrow, Wild carrot, Ox-eye daisy, Black knapweed, Lady's bedstraw, Slender red fescue, Sweet vernal grass, Common bent, Crested dog's-tail, Sheep's fescue, Smooth-stalked Meadow grass. Yellow rattle can be added in to the mix or after the mix has established in the 2nd year if grass species are dominating the sward.
- The mix can be established on all soil types and in most locations but it works best in south or south-southwest areas with a sunny aspect. Speak to your seed merchant about soil types and fertility.
- The mix can be sown either in spring or late summer, depending on ground and weather conditions. Options for weed control are limited once established, so aim for as clean a seedbed as possible.
- Seeds need to be broadcast or surface drilled, any deeper than even 1cm can adversely affect establishment. Best results can be achieved by rolling before and after sowing.
- In the first year of establishment be prepared to cut the area multiple times, to a height of 5cm when the area reaches 15cm in height. If practical, grazing with sheep in the autumn may aid establishment on meadow sites.
- In the second year set out to replicate the simple traditional late season hay cutting that has maintained wild flower meadows for centuries.
- Do not cut before July 15th and leave until August 15th one year in 3. Cuttings must be removed otherwise rank grasses, docks and thistles will out compete the flowering plants.
- 90% of the area must be cut and removed every year, leaving 10% uncut will leave some wild flowers and long grass to act as a refuge for overwintering invertebrates.
- Aftermath grazing in the autumn, if practical, will reduce grass vigour and create small areas of bare ground allowing new seedlings to establish. If grazing is not practical, a light scarification in the autumn can work almost as well.
- The area should come into spring as a short turf, allowing wild flowers to emerge ahead of the main grass growing period. If the area is not grazed, this is best done with a late winter mow (before March 15th) however it is important to ensure that any ground-nesting birds are not disturbed.
- Margins must be at least 6m wide. Mini-meadows can be located in field corners, used to straighten tramlines in awkward fields and alongside watercourses.
- You should not drive on the wild flower mix area apart from essential management.
- Do not use pesticides or fertilisers. Herbicides are only permitted to spot treat or weed wipe injurious weeds or invasive non-native species, Stinging nettles and bracken.
- Speak to your local Agricultural Advisor for further advice.

Evidence

Ensure that the following records are retained and can be provided with the claim:

- Invoices for seed mix used
- Maps showing location of mix areas
- Photos showing locations and condition of established plots.

Pond management plans



A great opportunity to make sure that the work that you are planning for your farm ponds will protect the wildlife already using it.

How does this help the environment?

Many ponds in the farmed environment go unmanaged which results in them following natural stages of succession. Sometimes intervention to slow the progress of succession can improve the biodiversity of these features. Consider having your ponds surveyed to provide advice and guidance as to whether or not management of your pond habitats would be of benefit to farm wildlife.

How does this help my business?

Ponds provide a source of predatory insects that will feed on crop pests and these features can also provide a source of water in years of serious drought.

STEPS031

Grant value:
100% Cost of Plan

Eligibility

Applicants must submit maps of proposed pond areas with their application.

This option must be discussed with your local Agricultural Advisor.

Ponds used for fishing are not eligible

Ponds must be no more than 1 ha in size.

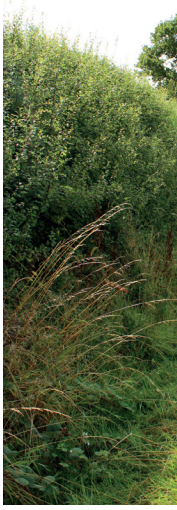
Ponds in fields with livestock must be fenced.

Ponds situated in arable fields must have a 6 metre margin.

STEPS031 Pond management plans

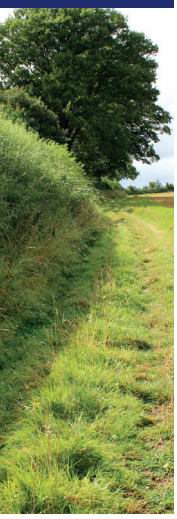
Guidance

- Speak to your local Agricultural Advisor to request a visit.
- Submit a map of the proposed pond areas with your application.
- A management plan will be funded and completed through Severn Trent by a third party.
- Recommended works, such as scrub clearance, coppicing, re-profiling, rotational dredging etc., will be paid at 50% of cost and can be applied for through the STEPS Innovation item.



Planting new hedgerows

An easy and practical way to link habitats on the farm.



How does this help the environment?

Hedgerows are an excellent source of pollen and nectar for invertebrates, fruit and berries for farmland birds and nesting and hibernation habitat for a variety of farm wildlife. Planting new hedges will create wildlife corridors, helping to link existing farm habitats.

How does this help my business?

A strong network of well managed hedgerows is a great asset for the farm, providing shelter for livestock, windbreaks and reducing soil erosion and run-off. They can also provide year round habitat for beneficial insects and pollinators, benefitting adjacent crops.

Biodiversity monitoring service
We are offering a monitoring service to measure the biodiversity improvements created by this item. Speak to your Agricultural Advisor if you're interested in this.

STEPS032

Grant Value: Hedge plants and materials provided through the Severn Trent Water - Woodland Trust partnership

Eligibility

Each farm can apply for up to 750m of new planting where woodland is also being created through STEPS, in order to connect habitats.

Applications which do not include woodland planting are limited to 250m of hedgerow per year.

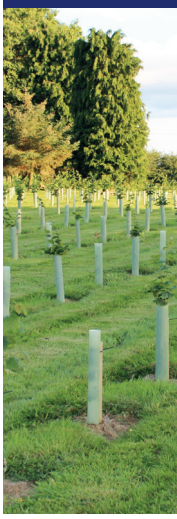
New hedgerows should only be planted on the following:

- Sites of former hedgerows (look at **old-maps.co.uk** or other historical map websites)
- Where linking existing or newly created habitat
- Where extension will help to reduce soil erosion and run-off.

The applicant must ensure that the hedge is not being planted on a site that will damage existing habitats (see **Magic.gov.uk**), species, archaeology or infrastructure.

This option must be discussed with your Agricultural Advisor to ensure that proposed sites are eligible.

STEPS032 Planting new hedgerows



Guidance

- Plant hedgerows between November 1st and February 28th.
- Prepare the ground along a 1.5m wide strip to provide good soil conditions and as little competition from other vegetation as possible.
- Any pre-planting herbicides applied to the area should only be done so in September.
- Plants used for the hedge must be:
  - 2-year-old transplants and at least 400mm to 600mm high
  - locally appropriate native species, with no one species making up more than 50% of the total and at least 5 species used (the more diverse the mix used the more invertebrates it will attract)
  - planted in a staggered double row 40cm apart with a minimum of 5 plants per metre.
- Consider planting new hedgerow trees every 10m if they are characteristic of the local landscape.
- Tree protection will be provided, type specific to the planting site.
- Any new plants which have failed should be replaced in the following planting season.
- Keep clear of weeds until the hedgerow is established.
- Protect the hedgerow from damage by livestock with fencing and/or from small mammals with spiral guards. Guards and tree shelters can be removed once plants are established.

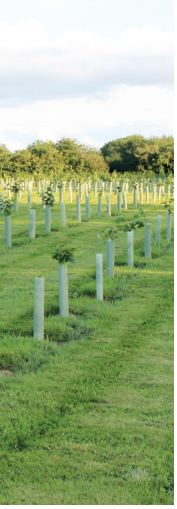
Evidence

Ensure that the following records are retained:

- Map showing location of hedgerow
- Photos showing location and condition of planted hedgerow.

Woodland creation

Small areas of new woodland can easily be fitted into the farm holding.



How does this help the environment?

The UK has only 13% woodland cover, compared with an EU average of 37%. Planting new areas of woodland creates shade and shelter for a variety of farm wildlife and planting close to existing wildlife-rich areas will help to buffer them from the impacts of neighbouring land use and better connect existing farm habitats.

How does this help my business?

Integrating trees and woodland into farmland can bring great benefits, minimising run-off from fields, reducing the impact of flooding and helping to reduce ammonia emissions. Small copses or shelter belts all contribute to creating more resilient landscapes.

Biodiversity monitoring service
We are offering a monitoring service to measure the biodiversity improvements created by this item. Speak to your Agricultural Advisor if you're interested in this.

STEPS033

Grant value: Trees and materials provided through the Severn Trent Water - Woodland Trust partnership

Eligibility

Woodland must be in situ for a minimum of 12 years. After 12 years, you may require a felling permit if you wish to remove the woodland.

Landowners must submit maps of proposed woodland area with their application.

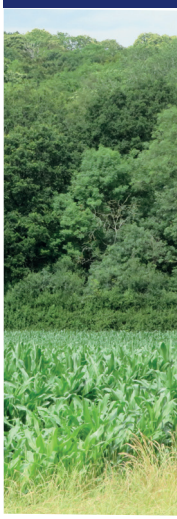
The applicant must ensure that the wood is not being planted on a site that will damage existing habitats (see **Magic.gov.uk**), species, archaeology or infrastructure.

This option must be discussed with your Agricultural Advisor with agreements subject to a visit to ensure that proposed sites are eligible.

All planting must comply with the UK Forestry Standard.

Landowners within Derbyshire and Nottinghamshire catchments should check eligibility with their Agricultural Advisor.

STEPS033
Woodland creation



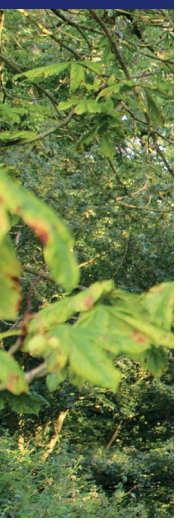
Guidance

- Plant new areas of native woodland totalling 0.5 ha to 3 ha in size, with individual blocks no less than 0.1 ha in size and 10m wide (6m if adjacent to watercourse).
- Planting rate will be 1,000 to 1,600 trees per ha with minimum 2.5m spacing (subject to an advisory visit) and planted along contours.
- Saplings are provided from local Woodland Trust approved nurseries (comprising 75% trees and 25% shrubs).
- Tree protection will be provided, type specific to the planting site.
- Landowners are responsible for planting the saplings - site-specific guidance will be provided.
- After establishment ensure that the saplings remain protected from mammal damage and weed suppression, replacing failed transplants the following planting season and removing tree guards when trees are matured.

Evidence

- Retain photos and maps of planted area.

Woodland condition assessment



This option can be used to help guide a subsequent application to the STEPS Biodiversity innovation option for woodland management options or to other schemes available.

How does this help the environment?

Woodland management takes time, expense and effort and many farm woodlands go unmanaged. Consider having your woodland surveyed to provide advice and guidance as to how best to manage your woodland habitats to benefit the farm's wildlife.

How does this help my business?

Well managed woodlands can provide a useful timber source as well as benefiting sporting interests and providing rural employment.

STEPS034

Grant value: Cost of Assessment funded through the Severn Trent Water – Woodland Trust partnership

Eligibility

Woodland must be a planted ancient woodland site or an ancient semi-natural woodland site (as mapped on **Magic.gov.uk**).

This option must be discussed with your Agricultural Advisor.

There is no minimum size but commissioning of plans is at the discretion of the Woodland Trust.

STEPS034 Woodland condition assessment

Guidance

- Submit a map of the proposed woodland management area with your application.
- A management plan will be funded and completed by The Woodland Trust.
- Recommended works will be paid at 50% of cost and can be applied for through the STEPS Innovation item or other schemes. For example; thinning, scrub clearance, coppicing, creation of rides and glades, re-planting etc.

Useful resources and help

In addition to the Severn Trent requirements for each STEPS option, you should also be aware that all works undertaken must conform to UK legislation and you should consult the relevant authority or guidelines to check you comply. Some things to consider are detailed over the page along with additional resources.

Useful resources and help

For capital items

Each capital item must have a minimum design life of at least 5 years.

If it is covered by The Water Resources (Control of Pollution) (Silage, Slurry, and Agricultural Fuel Oil) (England) Regulations 2010 (as amended 2013) (SSAFO) it must have a design life of at least 20 years.

You can check the requirements at:
gov.uk/guidance/storing-silage-slurry-and-agricultural-fuel-oil

Works should also comply with Nitrate vulnerable Zone requirements:
gov.uk/guidance/nutrient-management-nitrate-vulnerable-zones

For slurry store covers, more information is available at:
adlib.everysite.co.uk/adlib/defra/content.aspx?doc=11356&id=11370

General information of about separating clean and dirty water on the farm is available from the Rivers Trust at:
theriverstrust.org/media/2017/04/Pinpoint-Water-Management-.pdf

All work must comply with all relevant health and safety legislation and British Standards (BS) or equivalent. Check the online database for further information go to:
BSIgroup.com and search the standards database.

If you intend to use the public water supply to perform any agricultural activity such as filling troughs or topping up rainwater harvesting tanks, you must fit a non-return valve and comply with the Water Supply (Water Fittings) Regulations 1999.
legislation.gov.uk/uksi/1999/1148/contents/made

Planning permission may be required depending on the capital item chosen. Consult your local planning authority or National Park authority to seek informal advice.

Where land is located within an Area of Outstanding Natural Beauty, AONB officers may need to be consulted on the location of proposed capital items and the materials to be used.

When installing a culvert over stream or ditch, all work must comply with the culvert design and operation guide:
https://bit.ly/2yHFahb

For water management structures on the farm, advice and/or consents must be obtained from the Environment Agency at:
enquiries@environment-agency.gov.uk
or Telephone **03708 506 506.**

You should also consult your local Internal Drainage Board.

For guidance on the construction of swales, wetlands and water management structures, the Environment Agency has produced a Rural Sustainable Drainage handbook:
gov.uk/government/uploads/system/uploads/attachment_data/file/291508/scho0612buwh-e-e.pdf

For in-field works or groundwork

Work must be undertaken and installed in accordance with:

- Protecting our Water, Soil and Air: A Code of Good Agricultural Practice for farmers, growers and land managers (CoGAP)
- Groundwater Protection Code: Use and disposal of sheep dip compounds; and any higher standards that apply
- Any crop sown created for Ecological Focus Area (EFA, CAP greening criteria) cannot be claimed under STEPS. EFA is a regulatory requirement which cannot be funded by STEPS. For guidance to the Basic Payment Scheme, go online and search for BPS 2019. **(gov.uk/guidance/bps-2019)**

Work carried out near the top of a river bank may require flood defence consent. Depending on the size of watercourse you should consult the Environment Agency Telephone **03708506506** or email **enquiries@environment-agency.gov.uk**

Applicants must also consider the work's impact on the landscape.

If your work affects any of the following you will need consent from Natural England or from the relevant authority:

- **Natural Environment:**
  - Protected Species, such as Great Crested Newt and Bats species
  - National Nature Reserve (NNR)
  - Local Nature Reserves
  - Protected sites e.g. Site of Special Scientific Interest (SSSI), N2K.
- **Historic environment:**
  - Listed Building
  - Scheduled Monument
  - Registered Battlefield
  - Registered Parkland
  - Registered Battlefields.

The Water Supply (Water Fittings) Regulations 1999

For all options relating to the above regulations, which are Options STEPS014, 015, 016, 017a and b, we strongly advise that all applicants make themselves familiar with the regulations and adhere to them. Especially where any supply of water is using the public water supply.

Failure to do so can lead to legal action being taken. For more information please refer to The Regulations and their Schedules (SI 1999 No. 1148 and No. 1506) are available from HMSO you can find these online: **defra.gov.uk/environment/water/industry/wsregs99**

For pesticide handling and washdown facilities

You should notify the Environment Agency of your intentions by calling them on **03708506506** or email **enquiries@environment-agency.gov.uk**

You should check whether your intended construction location is located in a groundwater source protection zone 1 or 2, as if this is the case it is unlikely you will be able to construct pesticide washdown facilities.

Biobeds/biofilters require an Environment Agency T32 waste exemption to legally treat dilute pesticide washings. These are simple to obtain and may be applied for free online. Go online to **gov.uk** and search for **guidance/waste-exemption-t32-treatment-ofwaste-in-a-biobed-or-biofilter.**

When a biobed/biofilter has come the end of its life, the biomix inside can be composted for a year and then spread to land. To do this you also need a U10 exemption from the environment agency, again these are free and available to apply for online. Go online to **gov.uk** and search for **guidance/waste-exemptionu10-spreading-waste-to-benefit-agriculturalland**

Further design advice is also available on how to size the loading and washdown area and holding tanks, and on pesticide washing volume calculations, from Catchment Sensitive Farming Go online to **gov.uk** and search for **guidance/catchment-sensitivefarming-reduce-agricultural-water-pollution.**

The Voluntary initiative has also produced a complete guidance manual on all aspects of washdown area and biobed construction, including which is the best option to suit your farm needs. Go to **voluntaryinitiative.org.uk/en/water/biobeds**.

Dedicated support and advice

To help you get the best out of what's on offer, our local Agricultural Advisors are available to help you.

All of our team have an agricultural background, most have agricultural degrees, are BASIS qualified, and some have FACTS qualifications. Some of the team are also farmers, with farms located in our region.

stwater.co.uk/steps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