Sustainable Land Management Incentive Scheme

Financing Measures for the Protection of Drinking Water Sources

Information Booklet
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1. General information

Scottish Water wishes to work in partnership with land managers, owners and tenants to protect drinking water sources from diffuse pollution within 6 priority catchments across Scotland.

Land managers, however, cannot be expected to cover the costs for protecting drinking water sources where the action required to do so is above pre-existing legal requirements (e.g. General Binding Rules (GBRs), cross compliance, Nitrate Vulnerable Zone (NVZ) rules).

Our Sustainable Land Management (SLM) Incentive Scheme provides financial assistance for selected measures to help protect drinking water sources. The scheme part finances changes to be made which are over and above regulatory compliance.

By working together it is hoped that public health is protected, a sustainable approach to the improvement and protection of drinking water quality is adopted and that land managers are not disadvantaged by selecting a more sustainable approach.

This is an exciting opportunity to work in a different way that if successful will benefit drinking water supplies, the environment and land managers.
Who is eligible to apply?

Our SLM Scheme is currently available in the following areas:

- River Ugie Catchment;
- River Deveron Catchment;
- Loch of Lintrathen Catchment;
- Loch Ascog Catchment;
- Lochgoin / Craigendunton Reservoir Catchment;
- Dumfries Basin Aquifer.

Any land manager who owns or operates an agricultural business within these areas is eligible to apply (see Section 2: Catchments for detailed maps).

The applicant must have the authority to enter into an agreement with Scottish Water and deliver the proposals.

How is the scheme being targeted?

Section 2 outlines the catchments that are being targeted by the SLM Incentive Scheme. These catchments have been identified by Scottish Water as having particular pressures from diffuse pollution that are affecting the quality of drinking water. They are also catchments where we consider that partnership working with land managers is likely to produce the greatest benefits. All land within the areas shown in Section 2 is eligible under the SLM Incentive Scheme.

To ensure financing is targeted for maximum benefit, applications will be prioritised according to their ability to improve drinking water quality within the catchment.

What does the scheme provide?

The scheme consists of a range of management and capital items, which are available for specific catchments (Table 1).

The level of financing varies depending on the item and whether the farm is situated within a Less Favoured Area (LFA), this ranges from 60-100%. Further details are provided in Section 3: Eligible items.
Table 1: The eligible items currently within the SLM Incentive Scheme.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Eligible Catchments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Land management</td>
<td></td>
</tr>
<tr>
<td>1.1</td>
<td>Water Environment Management Plan</td>
<td>Ugie, Deveron, Lintrathen, Ascog, Dumfries</td>
</tr>
<tr>
<td>1.2</td>
<td>Water Environment Management Plan (including nutrient management)</td>
<td>Lintrathen, Ascog, Dumfries</td>
</tr>
<tr>
<td>1.3</td>
<td>Technical support</td>
<td>Ugie, Deveron, Lintrathen, Ascog, Dumfries</td>
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<tr>
<td></td>
<td>Pesticide controls</td>
<td></td>
</tr>
<tr>
<td>2.1</td>
<td>Plant protection product substitution</td>
<td>Ugie, Deveron</td>
</tr>
<tr>
<td>2.2</td>
<td>Pesticide sprayer loading area</td>
<td>Ugie, Deveron</td>
</tr>
<tr>
<td>2.3</td>
<td>Biobed</td>
<td>Ugie, Deveron</td>
</tr>
<tr>
<td></td>
<td>Stock fencing and livestock watering</td>
<td></td>
</tr>
<tr>
<td>3.1</td>
<td>Stock fencing</td>
<td>Ugie, Deveron, Lintrathen, Ascog, Dumfries</td>
</tr>
<tr>
<td>3.2</td>
<td>Water trough</td>
<td>Ugie, Deveron, Lintrathen, Ascog, Dumfries</td>
</tr>
<tr>
<td>3.3</td>
<td>Base for water trough</td>
<td>Ugie, Deveron, Lintrathen, Ascog, Dumfries</td>
</tr>
<tr>
<td>3.4</td>
<td>Pasture pump</td>
<td>Ugie, Deveron, Lintrathen, Ascog, Dumfries</td>
</tr>
<tr>
<td>3.5</td>
<td>Supply pipe</td>
<td>Ugie, Deveron, Lintrathen, Ascog, Dumfries</td>
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<tr>
<td>3.6</td>
<td>Electric water pumps</td>
<td>Ugie, Deveron, Lintrathen, Ascog, Dumfries</td>
</tr>
<tr>
<td>3.7</td>
<td>Water storage tanks</td>
<td>Ugie, Deveron, Lintrathen, Ascog, Dumfries</td>
</tr>
<tr>
<td>3.8</td>
<td>Thrust boring for supply pipes</td>
<td>Ugie, Deveron, Lintrathen, Ascog, Dumfries</td>
</tr>
<tr>
<td>3.9</td>
<td>Mains connection to water supply</td>
<td>Ugie, Deveron, Lintrathen, Ascog, Dumfries</td>
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<tr>
<td></td>
<td>Field Management</td>
<td></td>
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<tr>
<td>4.1</td>
<td>Loosen compacted soil layers</td>
<td>Ugie, Deveron, Lintrathen, Ascog, Dumfries</td>
</tr>
<tr>
<td>4.2</td>
<td>Cultivate and drill along the slope contour</td>
<td>Ugie, Deveron, Lintrathen, Ascog, Dumfries</td>
</tr>
<tr>
<td>4.3</td>
<td>Manage over-winter tramlines</td>
<td>Ugie, Deveron, Lintrathen, Ascog, Dumfries</td>
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<tr>
<td></td>
<td>Reducing surface flow</td>
<td></td>
</tr>
<tr>
<td>5.1</td>
<td>Gate re-location</td>
<td>Ugie, Deveron, Lintrathen, Ascog, Dumfries</td>
</tr>
<tr>
<td>5.2</td>
<td>Re-surfacing of gateways</td>
<td>Ugie, Deveron, Lintrathen, Ascog, Dumfries</td>
</tr>
<tr>
<td>5.3</td>
<td>Cross drains under farm tracks</td>
<td>Ugie, Deveron, Lintrathen, Ascog, Dumfries</td>
</tr>
<tr>
<td>5.4</td>
<td>Grassed swales</td>
<td>Ugie, Deveron, Lintrathen, Ascog, Dumfries</td>
</tr>
<tr>
<td>5.5</td>
<td>Check dams</td>
<td>Ugie, Deveron, Lintrathen, Ascog, Dumfries</td>
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<tr>
<td></td>
<td>Man-made ditch modifications</td>
<td></td>
</tr>
<tr>
<td>6.1</td>
<td>In-ditch seepage barriers</td>
<td>Ugie, Deveron, Lintrathen, Ascog, Dumfries</td>
</tr>
<tr>
<td>6.2</td>
<td>In-ditch vegetated re-profiling</td>
<td>Ugie, Deveron, Lintrathen, Ascog, Dumfries</td>
</tr>
<tr>
<td></td>
<td>Peatlands</td>
<td></td>
</tr>
<tr>
<td>7.1</td>
<td>Grip blocking</td>
<td>Ugie, Deveron, Lochgoin / Craigendunton</td>
</tr>
<tr>
<td>7.2</td>
<td>Peatland restoration</td>
<td>Ugie, Deveron, Lochgoin / Craigendunton</td>
</tr>
<tr>
<td>8.0</td>
<td>Re-imbursement of costs</td>
<td>All</td>
</tr>
</tbody>
</table>
The maximum annual financing per business is £20,000 (with the exception of de-minimis payments for Item 8.0). If desired, this finance can be provided directly to contractors once the relevant agreed measures have been completed in line with the specifications (see Section 3 for specifications).

To reduce the administrative burden and for ease of application, standard rates have been set for certain capital items (see Section 3). For other items detailed quotes may be required. Some items may be added or removed during the lifetime of the SLM Incentive Scheme. For an up-to-date list see our website www.scottishwater.co.uk/protectdwsources.

Land managers must obtain any necessary planning or consents and abide by any relevant statutory requirements (e.g. Building Regulations). It is possible that costs for these consents can be financed under Item 8.0 of the scheme. It is also important to check that proposals do not break any byelaws or obstruct rights of way.

The standard of construction must meet the agreed technical specification (Section 3). Health and safety requirements must be met for both the installation of the item and the item itself.

Financial support is not available to meet the cost of:

- repair of broken or damaged existing static or mobile equipment;
- investments which do not result in any additional protection of a drinking water source;
- capital works which are already underway;
- meeting regulatory compliance.

The incentive will not be paid if financing has already been received from another source for the same work.

No financial support will be made for investments that increase production capacity.

How to apply

An application form is available at www.scottishwater.co.uk/protectdwsources.

There are three ways to complete this application form. These include:

- completed by the applicant;
- completed by Scottish Water with the applicant (no charge);
- completed by a land agent on behalf of the applicant.
Completed application forms should be sent to: Sustainable Land Management Team
Scottish Water
PO Box 8855
Edinburgh
EH10 6YQ

Details of the application process are summarised in Section 4. All applications must be received by Scottish Water by 30th November 2014. All activities and work conducted under the Incentive Scheme must be completed and all claims submitted to Scottish Water by 1st March 2015. All final payments will be made by 31st March 2015.

If you would like to discuss the SLM Incentive Scheme or wish for assistance from Scottish Water to complete an application please e-mail us at protectdwsources@scottishwater.co.uk. Alternatively, you can call our Customer Helpline 0845 601 8855 and ask to speak to one of our Catchment Liaison Officers.

Additional information

It may be necessary to contact the Scottish Environment Protection Agency (SEPA) regarding the installation of certain items or to obtain any necessary licences (see Section 3 for further details). Local SEPA offices can be found at http://apps.sepa.org.uk/map/index.html.

Scottish Natural Heritage should be contacted for further information and advice on peatland restoration http://www.snh.gov.uk/contact-us/how-to-contact-us/.

Further information on diffuse pollution and Nitrate Vulnerable Zones can be found below.

Controlled Activities Regulations: A practical guide.
www.sepa.org.uk/water/water_publications.aspx

Information on the diffuse pollution GBRs.
www.sepa.org.uk/water/diffuse_pollution.aspx
www.sears.scotland.gov.uk

The SEPA guidance on best management practices, provides practical advice for reducing the risk of pollution from agricultural activities.
www.sepa.org.uk/bmp

Prevention of Environmental Pollution from Agricultural Activity (PEPFAA) guides

Nitrate Vulnerable Zones
http://www.scotland.gov.uk/Topics/farmingrural/Agriculture/Environment/NVZIntro
2. Catchments

There are six priority areas which are eligible for the SLM Incentive Scheme. The location of these areas is given in Figure 1. Further details about each catchment and the priorities within them are given below.

Figure 1. Areas eligible for the Scottish Water SLM Incentive Scheme.

1 These catchments are subject to change throughout the lifetime of the Initiative. To find out whether you are in a priority catchment visit www.scottishwater.co.uk/protectdwsources
River Ugie catchment

The catchment boundary for the River Ugie is given in Figure 2. The main pressure on drinking water quality within this catchment is pesticide and financing will be prioritised for items that help address pesticide transport to the River Ugie.

The following measures will be considered in this catchment:

- Water Environment Management Plan;
- Technical support;
- Plant protection product substitution;
- Installation of a pesticide sprayer loading area;
- Installation of a biobed;
- Stock fencing & livestock watering;
- Loosen compacted soil layers;
- Cultivate and drill along the slope contour;
- Manage over-winter tramlines;
- Gate re-location and re-surfacing of gateways;
- Cross drains, swales and check dams;
- Man-made ditch modifications;
- Peatland grip blocking;
- Peat restoration;
- Re-imbursement of costs.

Figure 2. River Ugie catchment (outlined in red).
River Deveron catchment

The catchment boundary for the River Deveron is given in Figure 3. The main pressure on drinking water quality within this catchment is pesticide and financing will be prioritised for items that help address pesticide transport to the River Deveron.

The following measures will be considered in this catchment:

- Water Environment Management Plan;
- Technical support;
- Plant protection product substitution;
- Installation of a pesticide sprayer loading area;
- Installation of a biobed;
- Stock fencing & livestock watering;
- Loosen compacted soil layers;
- Cultivate and drill along the slope contour;
- Manage over-winter tramlines;
- Gate re-location and re-surfacing of gateways;
- Cross drains, swales and check dams;
- Man-made ditch modifications;
- Peatland grip blocking;
- Peat restoration;
- Re-imbursement of costs.

Figure 3. River Deveron catchment (outlined in red).
Loch of Lintrathen catchment

The catchment boundary for the Loch of Lintrathen is given in Figure 4. The main pressure on drinking water quality within this catchment is nutrients, particularly phosphorus. Financing will therefore be prioritised for items that help address nutrient transport to the Loch.

The following measures will be considered in this catchment:

- Water Environment Management Plan (including nutrient management);
- Technical support;
- Stock fencing & livestock watering;
- Loosen compacted soil layers;
- Cultivate and drill along the slope contour;
- Manage over-winter tramlines;
- Gate re-location and re-surfacing of gateways;
- Cross drains, swales and check dams;
- Man-made ditch modifications;
- Re-imbursement of costs.

Figure 4. Loch of Lintrathen (outlined in red).
Loch Ascog catchment

The catchment boundary for Loch Ascog is given in Figure 5. The main pressure on drinking water quality within this catchment is nutrients, particularly phosphorus. Financing will therefore be prioritised for items that help address nutrient transport to the Loch.

The following measures will be considered in this catchment:

- Water Environment Management Plan (including nutrient management);
- Technical support;
- Stock fencing & livestock watering;
- Loosen compacted soil layers;
- Cultivate and drill along the slope contour;
- Manage over-winter tramlines;
- Gate re-location and re-surfacing of gateways;
- Cross drains, swales and check dams;
- Man-made ditch modifications;
- Re-imbursement of costs.

Figure 5. Loch Ascog (outlined in red).
L Lochgoin/Craigendunton reservoir catchment

The catchment boundary for the Craigendunton reservoir is given in Figure 6. The main pressure on drinking water quality is related to colour from peat degradation and financing will be prioritised for items that help restore the peatland to a good condition.

The following measures will be considered in this catchment:

- Peatland grip blocking;
- Peat restoration;
- Re-imbursement of costs.

Figure 6. Lochgoin/Craigendunton reservoir catchment (outlined in red).
Dumfries basin aquifer

The catchment boundary for the Dumfries basin aquifer is given in Figure 7. The main pressure on drinking water quality is nitrate and financing will be prioritised for items that help address nitrate transport to the Dumfries Basin Aquifer.

The following measures will be considered in this catchment:

- Water Environment Management Plan (including nutrient management);
- Technical support;
- Stock fencing & livestock watering;
- Loosen compacted soil layers;
- Cultivate and drill along the slope contour;
- Manage over-winter tramlines;
- Gate re-location and re-surfacing of gateways;
- Cross drains, swales and check dams;
- Man-made ditch modifications;
- Re-imbursement of costs.

Figure 7. Dumfries basin aquifer (outlined in red).
3. Eligible items

The items currently available under the scheme and the technical specifications for these items are outlined below. A summary is provided in Table 2. We shall keep this list under review and it may be subject to change during the lifetime of the Scheme. Any changes to the list of eligible items will appear on:

www.scottishwater.co.uk/protectdwsources.

The financing available from Scottish Water is intended to be compliant with provisions under the State Aid rules, as summarised by Commission Regulation (EC) No 1857/2006.

Under the above constraints, we are able to finance 100% of the cost of the following:

- Water Environment Management Plan;
- Water Environment Management Plan (including nutrient management);
- Technical support;
- Man-made ditch modifications;
- Peatland items;
- Re-imbursement of costs.

The remaining capital items are financed at either a 60% or 75% level depending where the farm is located. If the farm is within a Less Favoured Area (LFA) a 75% finance level applies. For farms outside the LFA the maximum finance is 60%.

The maximum annual financing per business will be £20,000. All costs exclude VAT.
Table 2: Summary of items available under the Scottish Water SLM Incentive Scheme

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
<th>Payment rates</th>
<th>Finance level</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Land management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.1</td>
<td>Water Environment Management Plan</td>
<td>£1,500 (Maximum cost)</td>
<td>100%</td>
</tr>
<tr>
<td>1.2</td>
<td>Water Environment Management Plan (including nutrient management)</td>
<td>£2,000 (Maximum cost)</td>
<td>100%</td>
</tr>
<tr>
<td>1.3</td>
<td>Technical support</td>
<td>Negotiable</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>Pesticide controls</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.1</td>
<td>Plant protection product substitution</td>
<td>Negotiable</td>
<td>60% or 75% b</td>
</tr>
<tr>
<td>2.2</td>
<td>Pesticide sprayer loading area</td>
<td>Negotiable</td>
<td>60% or 75% b</td>
</tr>
<tr>
<td>2.3</td>
<td>Biobed</td>
<td>Negotiable</td>
<td>60% or 75% b</td>
</tr>
<tr>
<td></td>
<td>Stock fencing and livestock watering</td>
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<td></td>
</tr>
<tr>
<td>3.1</td>
<td>Stock fencing</td>
<td>£4.00 per m</td>
<td>60% or 75% b</td>
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<td>3.2</td>
<td>Water trough</td>
<td>£195 per trough</td>
<td>60% or 75% b</td>
</tr>
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<td>3.3</td>
<td>Base for water trough</td>
<td>£100</td>
<td>60% or 75% b</td>
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<td>3.4</td>
<td>Pasture pump</td>
<td>£375 per installed pasture pump</td>
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<td>3.5</td>
<td>Supply pipe</td>
<td>£3.00 per metre of pipe laid</td>
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<td>3.6</td>
<td>Electric water pumps</td>
<td>Negotiable</td>
<td>60% or 75% b</td>
</tr>
<tr>
<td>3.7</td>
<td>Water storage tanks</td>
<td>Negotiable</td>
<td>60% or 75% b</td>
</tr>
<tr>
<td>3.8</td>
<td>Thrust boring for supply pipes</td>
<td>Negotiable</td>
<td>60% or 75% b</td>
</tr>
<tr>
<td>3.9</td>
<td>Mains connection to water supply</td>
<td>Negotiable</td>
<td>60% or 75% b</td>
</tr>
<tr>
<td></td>
<td>Field management</td>
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<td></td>
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<td>4.1</td>
<td>Loosen compacted soil layers</td>
<td>Negotiable</td>
<td>60% or 75% b</td>
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<tr>
<td>4.2</td>
<td>Cultivate and drill along the slope contour</td>
<td>£15 per hectare</td>
<td>60% or 75% b</td>
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<tr>
<td>4.3</td>
<td>Manage over-winter tramlines</td>
<td>£10 per hectare</td>
<td>60% or 75% b</td>
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<tr>
<td>Item</td>
<td>Description</td>
<td>Payment rates</td>
<td>Finance level</td>
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<td></td>
<td>Reducing surface flow</td>
<td></td>
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</tr>
<tr>
<td>5.1</td>
<td>Gate re-location</td>
<td>£140 per gate</td>
<td>60% or 75% a</td>
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<tr>
<td>5.2</td>
<td>Re-surfacing of gateways</td>
<td>£150 per gateway</td>
<td>60% or 75% a</td>
</tr>
<tr>
<td>5.3</td>
<td>Cross drains under farm tracks</td>
<td>£140 per installed drain</td>
<td>60% or 75% a</td>
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<td>5.4</td>
<td>Grassed swales</td>
<td>£5 per metre</td>
<td>60% or 75% a</td>
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<td>5.5</td>
<td>Check dams</td>
<td>£110 per dam</td>
<td>60% or 75% a</td>
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<td></td>
<td>Man-made ditch modifications</td>
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<td>6.1</td>
<td>In ditch seepage barriers</td>
<td>£150 per barrier</td>
<td>100%</td>
</tr>
<tr>
<td>6.2</td>
<td>In ditch vegetated re-profiling</td>
<td>£250 per re-profiled area</td>
<td>100%</td>
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<tr>
<td></td>
<td>Peatland grip blocking</td>
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<td></td>
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<tr>
<td>7.1a</td>
<td>Peat dam</td>
<td>£1.50 per metre</td>
<td>100%</td>
</tr>
<tr>
<td>7.1b</td>
<td>Large corrugated plastic dams (1-2m)</td>
<td>£280 per dam</td>
<td>100%</td>
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<tr>
<td>7.1c</td>
<td>Medium corrugated plastic dams (0.5-1m)</td>
<td>£120 per dam</td>
<td>100%</td>
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<tr>
<td>7.1d</td>
<td>Small corrugated plastic dams (&gt;0.5m)</td>
<td>£60 per dam</td>
<td>100%</td>
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<tr>
<td></td>
<td>Peatland restoration</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.2a</td>
<td>Applying nurse crop</td>
<td>Negotiable a</td>
<td>100%</td>
</tr>
<tr>
<td>7.2b</td>
<td>Brash spreading</td>
<td>Negotiable a</td>
<td>100%</td>
</tr>
<tr>
<td>8.0</td>
<td>Re-imbursement of costs</td>
<td>Negotiable d</td>
<td>100%</td>
</tr>
</tbody>
</table>

a. Two detailed quotes are required for this item for costs up to £5,000. For costs greater than £5,000 three quotes will be required.

b. Finance level is 60% for farms outside the LFA and 75% for farms within the LFA.

c. A quote is required from the Licensed Provider for the cost of mains connection.

d. Finance details must be submitted for costs of permits, consents licences etc.


**Land management**

**Item 1.1  Water Environment Management Plan (WEMP)**

- **Payment rates:** £1,500 maximum (paid directly to the advisor)
- **Available finance:** 100%
- **Eligible catchments:** Ugie, Deveron, Lintrathen, Ascog, Dumfries

The objective of the WEMP is to identify the sources and pathways of pollutants into the water environment. The WEMP should lead to improvements in drinking water quality, whilst maximising benefits to the farm business and the wider environment.

The WEMP is produced by a qualified advisor who is chosen by the applicant. The WEMP has been designed to act as a management tool for the farm and includes an assessment of the steading and all fields on the farm. The WEMP will identify what measures could be implemented to protect drinking water sources. These measures must exceed regulatory compliance.

Payment will be made directly to the approved advisor. Scottish Water may finance up to 100% of the costs of a WEMP, where the costs relate to providing advice on ways to protect drinking water sources from pollution on the farm.

A specification document has been produced giving more detail on all of the requirements of the WEMP. This is available on our website [www.scottishwater.co.uk/protectdwsources](http://www.scottishwater.co.uk/protectdwsources).

**Item 1.2 Water Environment Management Plan (including nutrient management)**

- **Payment rates:** £2,000 maximum (paid directly to the advisor)
- **Available finance:** 100%
- **Eligible catchments:** Lintrathen, Ascog, Dumfries

For the Loch of Lintrathen, Loch Ascog and Dumfries Basin Aquifer catchments the WEMP can be extended to include soil sampling and analysis (pH and nutrients) and the production of a nutrient management plan.

A specification document has been produced giving more detail on all of the requirements of the WEMP. This is available on our website [www.scottishwater.co.uk/protectdwsources](http://www.scottishwater.co.uk/protectdwsources).
Item 1.3  Technical support

Payment rates:  Negotiable
Available finance:  100%
Eligible catchments:  Ugie, Deveron, Lintrathen, Ascog, Dumfries

This includes advice and technical support, outside the scope of the WEMP, and must be provided by a Scottish Water approved advisor. It includes items such as the National Sprayer Testing Scheme (NSTS), manure and fertiliser spreader calibration and operator training for subjects such as soil and nutrient management.

This item will allow the applicant to participate in training events with expenses paid. Allowable expenses include travel and subsistence for the attendee and for replacement services during the absence of the land manager or farm worker. These expenses will be paid to the attendee of a training event on production of receipts.

Pesticide control

Item 2.1  Plant protection product substitution

Payment rates:  Difference in cost between original and alternative product
Available finance:  60% if outside a LFA or 75% if within a LFA
Eligible catchments:  Ugie, Deveron

We will assist in financing the increased cost incurred by using an alternative plant protection product that is still fit for purpose but is less likely to reach or impact on the water environment. The application may be for a complete field or for part of a field.

Scottish Water will seek specialist advice on the proposed alternative product before approval is given. One example would be the substitution of metaldehyde with ferric phosphate.

An application for this item must include the following:

- the plant protection product/s currently used and evidence of recent usage*;
- the cost per hectare of the current product and number of applications per year*;
- the area of land where the substitute product will be used;
- the details of the proposed alternative product (e.g. trade name and active ingredients, solubility in water and reasons why it will have less impact on water quality);
- the cost of the proposed alternative product per hectare and number of applications per year;
• a calculation showing the difference between existing costs and new costs using the alternative product;
• a clear statement of the amount you wish to claim;
• Any other information you think may be relevant e.g. proposed buffer strip.

We will consider financing continued use of a preferred plant protection product and advise that you contact Scottish Water to discuss the site specific requirements. Our contact details are given at the end of this document.

* Your crop rotation may mean that you have previously grown different crops and therefore used different plant protection products. In this situation, please give evidence of your crop rotation and outline which is the standard product for your next crop.

Item 2.2 Installation of a pesticide sprayer loading area

Payment rates: Negotiable
Available finance: 60% if outside a LFA or 75% if within a LFA
Eligible catchments: Ugie, Deveron

A pesticide loading area provides a dedicated space where pesticides can be safely loaded into sprayers. It can also act as a safe wash down area. The design and location of the pesticide loading area must meet approval by SEPA (please contact the local SEPA office, [http://apps.sepa.org.uk/map/](http://apps.sepa.org.uk/map/)). This Item can be linked to Item 2.3.

Construction of a concrete pesticide sprayer loading, or wash down area, for crop sprayers will require arrangements to be made for disposal of the washings and/or drainage water. You must contact SEPA for advice if you plan to dispose of the pesticide washings/drainage water to land.

This item may include the installation of a new bunded concrete loading area, holding tanks, and any necessary fixed pumps and pipework for removing washings from the holding tank. It also includes all site preparation and excavation works.

The maximum cost for this item is negotiable and will vary according to the benefits it will bring to drinking water quality. Detailed quotes, excluding VAT, must be submitted with this application. For costs up to £5,000 two quotes are required, for costs exceeding £5,000 three quotes must be submitted. These quotes should provide information on the location and design of the sprayer loading area.

Bunded concrete loading area

The structure must be impermeable and not within 10m of any field drain, ditch, pond or watercourse or within 50m of any spring, well or borehole. A site should be chosen that is
not affected by a high water table or liable to flooding. The topsoil should be removed and excavated as necessary (remove and block off any field drains).

The bunded concrete loading area should have 150mm depth of reinforced concrete over 150mm hardcore with not less than a 1:100 slope to collect liquids via a suitable drain that discharges to a suitable holding tank. The surrounding bund should be at least 100mm high to contain liquids.

The size must be adequate to contain all liquids that drop from the sprayer and allow the operator to work freely in all pesticide mixing, loading, washdown and water filling operations.

The width and length of the concrete bunded area should be the sprayer transport width plus 2m and the sprayer length plus 1.5m. Table 3 gives typical sizes based on currently available equipment and work routines.

Table 3. Approximate size of concrete bunded area for different sprayer types.

<table>
<thead>
<tr>
<th>Sprayer Type</th>
<th>Overall Length (m)</th>
<th>Overall Width (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self propelled sprayer</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>Trailer</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>Mounted</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>


Storage/holding tank

A typical storage/holding tank should be sized according to the local site rainfall statistics and concrete area (if there is no roof or cover over the structure).

This tank should be constructed of seamless polyethylene or similar. Old single skin metal tanks are not suitable. The pump switch levels must be set to ensure that not more than 1500 litres of waste is deliberately stored.

Further information is given in the Pesticide Handling Area and Biobed Manual (The Voluntary Initiative, March 2013).
Item 2.3 Installation of a biobed

Payment rates: Negotiable
Available finance: 60% if outside a LFA or 75% if within a LFA
Eligible catchments: Ugie, Deveron

Biobeds are designed to collect, retain and degrade pesticide residues in washings arising from pesticide handling activities and have the potential to reduce pollution to the water environment. They are not a substitute for best practice and every effort should still be made to avoid spills or splashes of pesticide concentrates. The design and location of the biobed must meet approval by SEPA (please contact the local SEPA office, http://apps.sepa.org.uk/map/).

A biobed is a mixture of peat free compost, soil and straw (biomix) covered with turf that is placed in a lined pit. The surface area of the biobed depends on the water loading, which is controlled by the nature and frequency of pesticide handling activities on the farm. A minimum depth of 1-1.5m is suggested. There are two types of biobed; indirect and direct.

Indirect Biobed

With this system all pesticide mixing and handling takes place on an impermeable surface with a sealed drainage system (Item 2.2). This directs run-off to an adjacent biobed (via gravity or a pump).

Direct Biobed

With a direct system the sprayer is parked, washed and filled on reinforced steel mesh grid over the biobed. Gravity helps with movement of liquids and the liquids are contained in one area. It is unlikely that any existing facility on the farm would be suitable for modification (unlike the indirect system), so a new construction will be needed.

SEPA should be consulted regarding site-specific advice and regulatory matters. The treatment of pesticide washings in a biobed is covered by the Waste Management Licensing Regulations 1994. This will require registration for a waste exemption from SEPA, which is free of charge.

An exemption allows the 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. An exemption is also available to allow the re-use of the liquid residue from the biobed (e.g. for subsequent sprayer washing).

Where the liquid residue is disposed of to land, a CAR authorisation would be required from SEPA under the Water Environment (Controlled Activities) (Scotland) Regulations 2005. The cost for this authorisation can be applied for under Item 8.0 Re-imbursement of costs.

Any biobed financed under this scheme must be constructed, used and maintained in accordance with: Pesticide Handling Area and Biobed Manual (The Voluntary Initiative,
March 2013). Further information can be found through the Voluntary Initiative at http://www.biobeds.info/content/default.asp

The maximum cost for this item is negotiable and will vary according to the benefits it will bring to drinking water quality. Detailed quotes, excluding VAT, must be submitted with this application. For costs up to £5,000 two quotes are required, for costs exceeding £5,000 three quotes must be submitted. These should provide information on the location and design of the biobed.

**Stock fencing and livestock watering**

**Item 3.1 Stock fencing**

**Maximum payment rate:** £4.00 per metre

**Available finance:** 60% if outside a LFA or 75% if within a LFA

**Eligible catchments:** Ugie, Deveron, Lintrathen, Ascog, Dumfries

Scottish Water will assist in the financing of stock fencing to support the establishment of buffer strips adjacent to watercourses. This fence must be fit for purpose and form a stock-proof barrier.

For conventional stock fencing there must be a minimum of 6 line wires or 2 line wires and woven wire netting. Areas prone to flooding must use line wire fencing only, to avoid debris collecting across the fence.

Barbed wire should not be used as a separate line wire where fallow deer are present.

Posts must be placed at intervals of no more than 3.5m from the post centres. For a high tensile pattern fence the same requirements apply to the number of line wires or netting, but posts may be placed at up to 12m from the post centres (6m spacing if cattle are present). The minimum woodwork sizes for fencing against sheep and cattle are given in Table 4.

**Table 4. Minimum woodwork sizes for fencing.**

<table>
<thead>
<tr>
<th></th>
<th>Length (m)</th>
<th>Top Diameter (cm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strainer/end posts</td>
<td>2.3</td>
<td>10-13</td>
</tr>
<tr>
<td>Posts</td>
<td>2.0</td>
<td>8-10</td>
</tr>
<tr>
<td>Stakes</td>
<td>1.7</td>
<td>8-10</td>
</tr>
</tbody>
</table>

When erecting a fence, consider installing gates where these are necessary to allow any appropriate management activities or husbandry operations. The finance for fencing does not cover the cost of any gates.
Item 3.2 Water trough

Maximum payment rate: £195 per trough
Available finance: 60% if outside a LFA or 75% if within a LFA
Eligible catchments: Ugie, Deveron, Lintrathen, Ascog, Dumfries

Water troughs can be financed when traditional watering points within a field are fenced off to exclude stock access to the watercourse. The troughs must be placed in a suitable location to minimise soil poaching and run off, a minimum of 5m from a watercourse. This should be checked on a regular basis to ensure that there is no water leakage.

The water trough must be a purpose-made unit constructed of galvanised steel, concrete, spray-moulded glass reinforced cement (GRC) or polyethylene and with a ball cock to regulate the water supply in accordance with local byelaws.

The trough must be permanently mounted on a suitable durable base to avoid soil poaching (see Item 3.3), with a stopcock to control the water supply.

The supply of water to a trough may require permission from SEPA depending on the source of water. If water is taken from a bore hole, well or watercourse the landowner may require a registration or licence depending on the quantity abstracted:

- Less than 10 cubic metres (m³) per day - General Binding Rules (GBRs) apply;
- Between 10-50m³ a day – registration required;
- Above 50m³ a day – licence required.

If a licence is required this Item can also be used in conjunction with Item 8.0 Re-imbursement of costs. Please contact your local SEPA office for further information (http://apps.sepa.org.uk/map/).

Item 3.3 Base for water trough

Maximum payment rate: £100 per trough
Available finance: 60% if outside a LFA or 75% if within a LFA
Eligible catchments: Ugie, Deveron, Lintrathen, Ascog, Dumfries

This item can be applied for in conjunction with an application for a water trough and will help reduce soil poaching around the trough.

The following specifications should be met:

- The soil 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 around the water trough and the resulting base should extend to a minimum width of 2.5m in total;
• Prior to placing the hardcore; a geotextile membrane should be laid over the excavated area;
• The hardcore should be well compacted by rolling to a minimum depth of 150mm;
• The finished hardcore should be blinded with at least 50mm of suitable blinding material to allow drainage;
• Timber boards will provide an edge to the hardbase to help retain the hardcore.

Item 3.4 Cattle operated pasture or nose pump with base

Maximum payment rate: £375 per installed pump
Available finance: 60% if outside a LFA or 75% if within a LFA
Eligible catchments: Ugie, Deveron, Lintrathen, Ascog, Dumfries

This item can be financed when traditional watering points within a field are fenced off to exclude stock access to the watercourse. A pasture pump will provide water for approximately 20 cattle and must be placed in a suitable location to minimise soil poaching and avoid generating run off, a minimum of 5m from a watercourse. This should be checked on a regular basis to ensure that there is no water leakage.

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.

The pump should normally be of cast iron with a low wear level mechanism. The connection and valve are to be of a non-corrosive material. A metal splash pan can be positioned under the reservoir to catch spillage.

The pumps can be installed as a single unit, or in a cluster. General guidance for the installation of a single pump is as follows:

• The pump should be securely anchored to prevent movement;
• The hardstanding area should consist of a minimum area around the pasture pump of 1m by 1m and 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;
• Hardcore should be well compacted on a geotextile liner by rolling to a minimum depth of 150mm;
• The hardstanding area should be edged with preserved timber (not smaller than 150mm by 50mm) to prevent the movement of the hardcore.

Permission from SEPA may be required for this item. It will depend on the source and quantity of water abstracted (See Item 3.2 for details) or if installation results in engineering
activities in or around the watercourse. Please contact your local SEPA office for further information (http://apps.sepa.org.uk/map/).

Item 3.5 Water supply pipe

Maximum payment rate: £3.00 per metre
Available finance: 60% if outside a LFA or 75% if within a LFA
Eligible catchments: Ugie, Deveron, Lintrathen, Ascog, Dumfries

This item can be applied for in conjunction with an application for a water trough or pasture pump.

The water supply pipe may be of polyethylene or UPVC and must be laid underground at a minimum depth of 800mm.

Item 3.6 Electric water pumps

Payment rates: Negotiable
Available finance: 60% if outside a LFA or 75% if within a LFA
Eligible catchments: Ugie, Deveron, Lintrathen, Ascog, Dumfries

This item can be applied for in conjunction with an application for a water trough. It is available when it is not possible to move water to the water troughs using gravity.

Detailed quotes, excluding VAT, must be submitted with this application. For costs up to £5,000 two quotes are required, for costs exceeding £5,000 three quotes must be submitted. The application should include a justification for the size and choice of pump.
**Item 3.7 Water storage tank**

**Payment rates:** Negotiable  
**Available finance:** 60% if outside a LFA or 75% if within a LFA  
**Eligible catchments:** Ugie, Deveron, Lintrathen, Ascog, Dumfries

This item can be applied for in conjunction with an application for a water trough. It is available when a storage tank is required to allow water to be supplied to the water troughs.

The maximum cost for this item is negotiable and will vary according to the benefits it will bring to drinking water quality. Detailed quotes, excluding VAT, must be submitted with this application. For costs up to £5,000 two quotes are required, for costs exceeding £5,000 three quotes must be submitted. The application should justify the size of storage tank selected.

**Item 3.8 Thrust boring for supply pipes**

**Payment rates:** Negotiable  
**Available finance:** 60% if outside a LFA or 75% if within a LFA  
**Eligible catchments:** Ugie, Deveron, Lintrathen, Ascog, Dumfries

This item can be applied for in conjunction with an application for a water trough and supply pipe. It is available when it is necessary to cross a public highway or private road in order to place a supply pipe to a water trough.

The maximum cost for this item is negotiable and will vary according to the benefits it will bring to drinking water quality. Detailed quotes, excluding VAT, must be submitted with this application. For costs up to £5,000 two quotes are required, for costs exceeding £5,000 three quotes must be submitted. The application should justify the size of storage tank selected.

**Item 3.9 Mains connection**

**Payment rates:** Negotiable  
**Available finance:** 60% if outside a LFA or 75% if within a LFA  
**Eligible catchments:** Ugie, Deveron, Lintrathen, Ascog, Dumfries

This item can be applied for in conjunction with an application for a water trough. It is available when it is necessary to connect to a main water supply in order to supply water to a water trough.
A quote from the Licensed Provider for the cost of the connection must be submitted with the application. Details on Licensed Providers in Scotland can be found at http://www.scotlandontap.gov.uk.

**Field management**

**Item 4.1 Loosen compacted soil layers**

**Payment rates:** Negotiable

**Available finance:** 60% if outside a LFA or 75% if within a LFA

**Eligible catchments:** Ugie, Deveron, Lintrathen, Ascog, Dumfries

Compaction of fields increases soil erosion and surface flows and increases the risk of soil, manure, nutrients and pesticides reaching watercourses.

This item will assist in financing a contractor to reduce soil compaction for improved grassland or cultivated fields where there is a risk of surface flow reaching a watercourse. The type of machinery required depends on the soil type, texture and the depth of compaction, but would include shallow spiking or subsoiling. Expert advice should be sought on the appropriate machinery.

To maximise the benefit and avoid any further soil compaction, only use machinery when the soil is dry at the depth that is to be managed. It is possible that this process may cause initial damage to the root system for grassland fields. Scottish Water are not responsible for any losses incurred from this action.

The maximum cost for this item is negotiable and will vary according to the benefits it will bring to drinking water quality. Detailed quotes, excluding VAT, must be submitted with this application. For costs up to £5,000 two quotes are required, for costs exceeding £5,000 three quotes must be submitted.
Item 4.2 Cultivate and drill along the slope contour

Maximum payment rate: £15 per hectare
Available finance: 60% if outside a LFA or 75% if within a LFA
Eligible catchments: Ugie, Deveron, Lintrathen, Ascog, Dumfries

When land is cultivated and drilled along the contour it can reduce surface flow and reduce the risk of sediments, nutrients and pesticides reaching the watercourse.

This item is suitable for crops grown on gentle and moderate slopes with simple slope patterns, particularly for fields close to a watercourse. This option is not suitable for fields with complex slopes as it may not be practical to follow the contours accurately. Cultivation and drilling should not be carried out across very steep slopes, due to the risk of machinery overturning.

The item will assist in financing the additional cost incurred by cultivating and drilling across the slope.

We will consider financing continued use of this item and advise that you contact Scottish Water to discuss the site specific requirements. Our contact details are given at the end of this document.

Item 4.3 Manage over-winter tramlines

Maximum payment rate: £10 per hectare
Available finance: 60% if outside a LFA or 75% if within a LFA
Eligible catchments: Ugie, Deveron, Lintrathen, Ascog, Dumfries

This item is available for fields close to watercourses and can be used to help prevent surface flow and sediment movement along compacted tramlines. This will reduce the amount of soil erosion across a field but also reduce the risk of sediment, nutrients and pesticides reaching the water course.

When applications are made during autumn and winter (October to February) a simple tine should be used to disrupt the tramline. This breaks up the soil compaction and encourages water to infiltrate into the soil.

We will consider financing continued use of this item and advise that you contact us to discuss the site specific requirements. Our contact details are given at the end of this document.
Reducing surface flow

**Item 5.1 Gate re-location**

**Maximum payment rate:** £140 per gate

**Available finance:** 60% if outside a LFA or 75% if within a LFA

**Eligible catchments:** Ugie, Deveron, Lintrathen, Ascog, Dumfries

Moving a gate to a different location can reduce the risk of surface flow, caused by soil compaction around the gateway, reaching the water course.

The new location must have a lower risk of any surface flow reaching a watercourse.

New hanging and slamming posts should be used. The old gateway must be filled to form a semi-permeable barrier (can be used in conjunction with Item 3.1 Stock fencing) and any associated tracks must be re-routed, ensuring that the disused sections do not generate any surface flow.

Any new gateways that give access onto highways will need planning permission.

**Item 5.2 Re-surfacing of gateways**

**Maximum payment rate:** £150 per gateway

**Available finance:** 60% if outside a LFA or 75% if within a LFA

**Eligible catchments:** Ugie, Deveron, Lintrathen, Ascog, Dumfries

This item will protect the gateway area and reduce the risk of sediment, nutrients and pesticides reaching the watercourse.

The re-surfaced area should be at least the full width of the gateway multiplied by the length of the gate into the field (opened at 90 degrees). In many cases this area may need to be extended to accommodate specific circumstances and will relate to the type and frequency of vehicle and livestock movements.

The following specifications should be met:

- The area should be excavated to a minimum depth of 150mm, or down to a naturally occurring sub-base, the depth of which will vary according to the type of ground;
- The excavated soil should be spread on the verges of the field track and profiled to permit drainage;
• A geotextile membrane should be laid over the excavated area;
• Aggregate/hardcore should be applied to a minimum consolidated depth of 150mm. The depth depends on the soil type but the depth of existing ruts can be used as a guide;
• If there is a requirement for a thicker depth of hardcore, successive layers (each 150mm thick) should be applied;
• The whole of the hardcore area should be well compacted.

Item 5.3 Cross drains under farm tracks

Maximum payment rate: £140 per installed drain
Available finance: 60% if outside a LFA or 75% if within a LFA
Eligible catchments: Ugie, Deveron, Lintrathen, Ascog, Dumfries

Tracks can act as a pathway for surface flow and can be a risk of transporting sediments, nutrients and pesticides to the water course.

An open channel is the most effective way of intercepting run-off from a track as it can be easily cleared of accumulated silt and debris.

This item includes excavating a channel across the width of the track to a minimum depth of 100mm and widths of 100-250mm. The depth and spacing of these cross channels will depend on the volume of water that needs to be intercepted, which will depend on the track construction, the slope of the track and the amount of rainfall. It may be appropriate to construct the channel in concrete with a gridded top which must be at least 150mm wide.

The water from the cross drains should be directed to a drainage outlet such as a ditch or culvert. Alternatively these can be directed into grassed swales (see Items 5.4 and Item 5.5 below).
Item 5.4 Grassed swales

Maximum payment rate: £5 per metre

Available finance: 60% if outside a LFA or 75% if within a LFA

Eligible catchments: Ugie, Deveron, Lintrathen, Ascog, Dumfries

Grassed swales are linear areas of grass which are designed to allow surface flow to collect and soak away, trapping sediment. This item can be used in conjunction with cross-drains (Item 5.3), and ideally used with check dams (Item 5.5) to slow the flow of water.

The item consists of site preparation and excavation of the swale. Please note that in 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 plenty of time for water to soak away and for sediment to settle.

The following specifications should be met:

- 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 be graded to 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.

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.
Item 5.5 Check dams

Maximum payment rate: £110 per dam
Available finance: 60% if outside a LFA or 75% if within a LFA
Eligible catchments: Ugie, Deveron, Lintrathen, Ascog, Dumfries

Check dams slow down the flow of water within a swale and allow any sediment within the surface flow to be deposited. This improves the efficiency of the swale. They should be located at regular intervals along the swale; the steeper the slope the shorter the distance should be between each check dam.

The following specifications should be met:

• A trench should be excavated along the width of the swale, this should be 200mm deep and 3.3m long;
• The check dam should be built up to 75-150mm. This should be made of graded broken stone to a height of 500mm above the floor of the swale;
• Build the check dam at the down slope end of the trench, leave the upslope end of the trench empty;
• The side slopes of the check dam should be at a maximum gradient of 1 in 2.

Man-made ditch modifications

Item 6.1 In-ditch seepage barriers

Payment rates: £150 per barrier
Available finance: 100%
Eligible catchments: Ugie, Deveron, Lintrathen, Ascog, Dumfries

A seepage barrier is a dam that allows the slow passage of water through it. By slowing down the flow it allows sediment to be deposited and helps remove nutrients and pesticides from the water.

Advice and assistance from SEPA will be required for this item. Please contact your local SEPA office for further information (http://apps.sepa.org.uk/map/).

This item can also be used in conjunction with Item 8.0 Re-imbursement of costs.
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 number of barriers in any one ditch would depend on the gradient, with steep gradients benefiting from more structures.

Seepage barriers must not be constructed on natural watercourses, due to the requirement to ensure free fish movement, or where there is a high risk to land or property if the structure was to cause local flooding.

The seepage barrier should be no more than 4m wide and 1m high. Wooden slats (pressure treated) should be formed either vertically or horizontally (if less than 2m wide) leaving 1-2mm gap between each barrier. This allows water to seep through the barrier over a period of time. Galvanised steel girders may be used as holding posts for the slats. The slats must be sufficient strength to resist the force of fast flowing water and be durable.

The wood must not be treated with a chemical wood preservative product as these are toxic to aquatic life. Materials other then timber may be used for construction as long as they allow water to percolate through at a suitable speed.

**Item 6.2 In-ditch vegetated re-profiling**

**Payment rates:** £250 per re-profiled area

**Available finance:** 100%

**Eligible catchments:** Ugie, Deveron, Lintrathen, Ascog, Dumfries

In ditch re-profiling (also known as in-ditch wetlands) are ditches that have been widened and re-profiled to create areas where wetland vegetation can develop. This vegetation slows water flow, increases sediment deposition and can reduce the quantities of nutrient and pesticides in the water. Conditions within this vegetated area are ideal for the removal of nitrogen.

Advice and assistance from SEPA will be required for this item. Please contact your local SEPA office for further information (http://apps.sepa.org.uk/map/).

This item can also be used in conjunction with Item 8.0 Re-imbursement of costs.

The re-profiled area should be located within man-made field ditches where land on either side is owned by the applicant. Normally these should be created in ditches with shallow gradients which do not have continuous flow year round.

This item must not be constructed on natural watercourses, due to the requirement to ensure free fish movement, or where there is a high risk to land or property if the structure was to cause local flooding. The downstream edge of the re-profiled area should not be located close to a field drain outlet and typically should be at least 3m away.
The design will need to be tailored for specific sites, following specialist advice, but the general construction requirements are outlined below:

- Work should be carried out during a dry period to avoid any unnecessary soil damage;
- Widen an area to no more than 3m in width and at least 10m in length. This should be re-profiled to ensure that the depth of water across the majority of the ditch is around 50cm in depth with a maximum of 75cm;
- Spread the silt thinly over the top of the banks to prevent weeds from dominating;
- Create a soil bund with a pipe at the lower end of the ditch to act as an outflow. The bund should be made wider than the ditch;
- In the bund, locate the pipe 30cm below the top of the bank. The pipe diameter will be dependent on flow but it is recommended that one or two pipes are set inside the bund and should be between 20-28cm in diameter. This option can also be combined with a seepage barrier (Item 6.1) where sediment load is high, to avoid an adverse impact on the vegetated area;
- Allow the area to naturally re-vegetate. Alternatively, wetland species may be planted which are typical of the local area. For reed, rush and sedge species, plant at a density of 3 plants per m².

Note that the finance available for this item is for an individual re-profiled area, although the exact dimensions of this can vary (minimum of 10m in length).
Scottish Natural Heritage should be contacted for further information and advice on peatland restoration [http://www.snh.gov.uk/contact-us/how-to-contact-us/].

Item 7.1 Grip blocking

Payment rates:  
(7.1a) Peat Dam  £1.50 per metre  
(7.1b) Large corrugated plastic dams  £280 per dam  
(7.1c) Medium corrugated plastic dams  £120 per dam  
(7.1d) Small corrugated plastic dams  £60 per dam  

Available finance:  100%  

Eligible catchments: Ugie, Deveron, Lochgoin/Craigendunton  

Moorland gripping is the practice of excavating ditches in an attempt to drain wet areas of heath and blanket bog. This practice has led to a deterioration of these habitats which can impact on drinking water quality. Grip blocking can help restore the natural drainage patterns, encourage re-vegetation and reduce erosion. It also has the ability to increase carbon storage.

SEPA should be contacted before work commences to advise whether the work requires authorisation under the Controlled Activities Regulations. Please contact your local SEPA office for further information ([http://apps.sepa.org.uk/map/](http://apps.sepa.org.uk/map/)).

There are two methods to block grips available under the SLM Incentive Scheme; peat dams and plastic dams.

Peat Dams  

The average distance between peat dams will be 25m and no more than 50m. The distance between dams should be such that there is one dam per 20cm drop in ground level.

The operator must re-profile the grip edges and each individual peat dam installed to the full depth and width of the grip.

The dam must extend 10cm above the top of the grip and along the grip by at least two times the maximum width of the grip at that point.

Where the dam is to be built, the face and base of the grip should be cleared back to unoxidised peat, to create a key for the dam. Any turf removed must be retained and replaced on top of the dam.
Only use vehicles with low ground pressure tyres that will not damage ground vegetation.

**Plastic dams**

Pre-formed recycled plastic piling can also be used to block grips.

The material has considerable advantages over standard peat dams, it is light (making transport easier), durable (at least a 150-year life expectancy) and easy to work with (dams can be constructed very quickly). Care, however, should be taken to ensure that the plastic dam is sealed to avoid the formation of peat pipes at the edges of the dam. The size of the dam relates to the width of the grip:

- Large corrugated plastic dams – suitable for large grips of depth up to 1-2m wide.
- Medium corrugated plastic dams - suitable for medium grips up to 1m wide and deep.
- Small corrugated plastic dams - suitable for small grips up to 0.5m wide and deep.

Detailed requirements for the location and installation of plastic piling dams can be obtained from Scottish Natural Heritage.

**Item 7.2 Peat restoration**

**Payment rates:**

- (7.2a) Application of nurse crop  Negotiable
- (7.2b) Heather brash spreading  Negotiable

**Available finance:**  100%

**Eligible catchments:** Ugie, Deveron, Lochgoin/Craigendunton

The need for regeneration of exposed peat is important; it reduces erosion, improves water quality and creates a unique habitat.

A nurse crop is a fast growing grass species which is applied to provide initial surface stabilisation of the exposed peat whilst heather establishes. This nurse crop will eventually die off after about 3-5 years by which time the heather should have established. The species used in the nurse crop should be native to the particular area of peat, or are known through trials to act as a good soil stabilising and nurse crop (they grow quickly and provide some protection and moisture retention to assist the slowly establishing native plants).

Heather brash can be applied onto exposed areas of peat. This process protects the surface of the peat, preventing further erosion, supplies fresh heather seeds within the brash and encourages germination and growth of the seeds (can be used in conjunction with Item 7.2a).
The maximum cost for these items are negotiable and will vary according to the benefits it will bring to drinking water quality. Detailed quotes, excluding VAT, must be submitted with this application. For costs up to £5,000 two quotes are required, for costs exceeding £5,000 three quotes must be submitted.

**Re-imbursement**

**Item 8.0 Re-imbursement of costs**

**Payment rates:**  Negotiable

**Available finance:**  100% (De Minimus payment)

Costs will be reimbursed to any applicant for the fees associated with any planning consent, environmental permit or other necessary permit required in order to conduct the works agreed between Scottish Water by an applicant. Re-imbursement will be made on original receipts submitted for the costs.

The applicant is responsible for making applications for any associated permit. No costs will be reimbursed until any relevant permits have been secured.

When applying for this item details of any other De Minimus payments received over the past three years will have to be given.
### 4. Application process

The application process has been summarised in Figure 8 and is outlined below.

There are various means to complete an application form which include:

- completed by applicant;
- completed by Scottish Water with the applicant (no charge);
- completed by land agent on behalf of the applicant.

All applications must be received by Scottish Water by 30th November 2014.

Once the application has been received by Scottish Water it will be assigned to a Catchment Liaison Officer.

If the application includes the installation of capital items (Items 2-7 within the scheme) the Catchment Liaison Officer will visit the farm to review the application. This visit will assess how the proposed capital items will protect or improve the quality of drinking water within the catchment. In some circumstances it may be determined that not all capital items in the application are required and in this situation the application may be financed in part. Applications that have no or little benefit to water quality (according to the pressure within the catchment) will not be financed.

Based on the farm visit a recommendation will be made to the SLM Incentive Scheme review board, who will make the final decision on the application. The applicant will then receive a letter informing them of the outcome.

If successful, the letter will be accompanied by an information pack, containing an acceptance form and details of how to claim. Payment will be given once the Catchment Liaison Officer has reviewed the installed items.

When a Water Environment Management Plan or Technical support has been applied for, Scottish Water will make a decision on these items without a farm visit. A letter will be sent to the applicant and the named advisor to inform them of the outcome.

In the case of a disagreement between Scottish Water and any successful applicant, Scottish Water will propose the way forward.

The Catchment Liaison Officer will be available to answer queries relating to the agreement made between Scottish Water and the applicant.
Figure 8. Application process for the SLM Incentive Scheme
Contact us

Further details of Scottish Water’s Sustainable Land Management Incentive Scheme can be found at: [www.scottishwater.co.uk/protectdwsources](http://www.scottishwater.co.uk/protectdwsources); by e-mailing us at [protectdwsources@scottishwater.co.uk](mailto:protectdwsources@scottishwater.co.uk); or by calling our Customer Helpline **0845 601 8855** and asking to speak to one of our Catchment Liaison Officers.

Or you can write to us at:

**Sustainable Land Management Team**
Scottish Water
PO Box 8855
Edinburgh
EH10 6YQ

Alternative formats of this booklet can be made available free of charge. For information on Braille, large print, audio and a variety of languages, please call our Customer Helpline.

If you have a disability, medical condition or other reason where you will need special assistance from Scottish Water then please contact us and we can add your name, address and special requirements to our confidential Additional Support Register.

We record calls for quality and training purposes.

For more information on Scottish Water, our charges and our customer charter call our Customer Helpline on **0845 601 8855** or visit our website at:

[www.scottishwater.co.uk](http://www.scottishwater.co.uk)

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