Scotland’s Approach to Diffuse Pollution

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Land Unit
Diffuse Pollution in Scotland

• Current condition of surface and ground water bodies in Scotland River Basin District

18% water bodies downgraded because of diffuse pollution (DP)
• DP from agriculture is largest pollution pressure
• Nutrients, pesticides, soil, faecal contaminants – driven by rainfall and land use
Fertiliser application & storage
Keeping of Livestock
Land Cultivation
Pesticide application
Sheep Dipping
Scotland and SEPA’s Approach to DP Mitigation

Catchment selection based on good science demonstrate impact, pollutant source and pathways.

National approach

Priority catchment approach -

Evidence Base

Awareness Raising

Targeted Engagement
Diffuse pollution — a challenge for Scotland?

What is diffuse pollution?
Diffuse pollution can be described as the dispersed and dispersed type of pollutants such as sediments, chemical, bacteria and nutrients. The surrounding environment. Often, the pollution can be as dispersed as from land that isn’t in or adjacent to a water body, or pollutants being leached to groundwater.

In terms of rural land use, examples include soil losses through farming or irrigation, or agricultural runoff from livestock. For example, livestock containing waste products can be a source of diffuse pollution from nutrient leaching to groundwater. In addition, diffuse pollution can also occur from a number of activities across a catchment area.

What can be done to reduce diffuse pollution?
Reducing diffuse pollution is important to protect water quality and ecosystems across Scotland. There are several actions that can be taken to reduce diffuse pollution:

1. **Improving land management practices**: This includes activities such as better rotation, improving soil health, and reducing the use of fertilizers and pesticides.
2. **Increasing awareness and education**: Raising awareness among land managers and farmers on the importance of good land management practices.
3. **Supporting research and development**: Funding research to develop new technologies and methods for reducing diffuse pollution.
4. **Regulatory measures**: Implementing regulations and standards to control diffuse pollution sources.

These measures will contribute to the overall improvement of water quality in Scotland. In the meantime, it is also important to continue monitoring and evaluating the effectiveness of these measures.
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www.sepa.org.uk
Diffuse Pollution in Scotland

Prioritised on human health impacts,
WFD classification
and statutory designations
Catchment walking our evidence base

- 18 months
- 5835km walked
- 5169 non compliance with GBR’s + other polluting issues
Evidence base – catchment walking
GBR breaches in the Eye Water and Pease Bay catchments
Awareness Raising

- 4000 letters and leaflets sent to land managers
- Over 300 workshop, events, presentations
- Over 30 Press releases in 6 priority catchment
- 15 Articles in Scottish farmer - PC updates etc
- 15 Articles in other organisations magazine
- Catchment Characterisation Reports in production for each priority catchment, and technical summaries – 7 printed
- 10 radio interviews / 1 TV interview
- Pod cast with SAC
- Text alerts from NFUS and SAC
- Leaflet mail shots – equine
- Golf course managers / green keepers guidance
- Web page links with others
- Twitter
Land manager 1 to 1 engagement

- Staff specifically trained for farmer engagement
- Farmer visits started in October 2011
- Over 3,200 initial engagement visits completed
- Farm visit focuses on steading & land use.
- Findings are explained to land managers in a way that enables them to make informed decisions which can improve both their business and environment
- Land manager receive a letter, map based report and mitigation advice and date for follow up visit if required
### Non-Compliance

<table>
<thead>
<tr>
<th>Map ID</th>
<th>What We Found</th>
<th>What needs to be done</th>
<th>Timescale</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The oil storage tank is currently unbound. Oil storage facilities must have a bund or secondary containment system. The bund must be impermeable to oil and water and be capable of holding 110% of the capacity of the tank. Where more than one tank is being stored together, the bund should be designed to contain 110% of the largest tank capacity or 25% of the combined tank capacity, whichever volume is greater. There should be no tap outlets for draining off rainwater (OSR).</td>
<td>Bund or replace the existing oil storage tank in line with the requirements outlined.</td>
<td>12 months</td>
</tr>
</tbody>
</table>

### Advisory

<table>
<thead>
<tr>
<th>Map ID</th>
<th>What We Found</th>
<th>What should be done</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>There is a risk of significant poaching or erosion within 5 metres of the water environment.</td>
<td>Poaching can often occur because the area offers shelter and shade to livestock or access to water for drinking. By designing shelter points into your field and providing alternative access to water, you can reduce the amount of poaching that occurs along the banks of watercourses. Consider using temporary or permanent fencing to exclude livestock from these sections of the water environment. This should allow the damaged area to recover naturally. Future grazing will need to be carefully managed and monitored to ensure that significant poaching does not recur. There are many different designs for alternative, offline, access to drinking water such as extension of mains supply if available; extent use of any existing farm bores or spring supply; utilise a water bowser; using a gravity supply from water environment; pasture pump (small herd 20 cow/pump) or abstraction via pump. This will reduce diffuse pollution and may help to reduce the transfer of some animal diseases.</td>
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</table>

Please refer to Best Management Practices 47 to 50 for further advice.

### Best Practice

<table>
<thead>
<tr>
<th>Map ID</th>
<th>Type</th>
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<tbody>
<tr>
<td>Overall Farm</td>
<td>To help you to comply with this rule SEPA is promoting the use of Planet Scotland to increase business efficiency. Good nutrient management is important for both farm efficiency and protection the environment. The free software is available at <a href="http://www.planetoffarmers.co.uk">www.planetoffarmers.co.uk</a> alternatively you can find the information in paper form from your local SAC office.</td>
</tr>
<tr>
<td>Water Trough</td>
<td></td>
</tr>
</tbody>
</table>
## Summary of cycle 1

<table>
<thead>
<tr>
<th>Task</th>
<th>Outcome</th>
<th>Duration of work</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walking</td>
<td>14 catchments 5835 Km</td>
<td>5169 breaches</td>
</tr>
<tr>
<td>Awareness</td>
<td>Events &amp; guidance</td>
<td>400 attend, leaflets, podcasts, articles</td>
</tr>
<tr>
<td>1 to1</td>
<td>Visits Farms in operational areas</td>
<td>3221 unit inspected, compliance rate of sector low 30%</td>
</tr>
<tr>
<td>Revisits</td>
<td>To non compliant farms</td>
<td>715 1st visits, 50% compliant, 35% working towards, 15% nothing</td>
</tr>
</tbody>
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Next Steps

- Complete work in initial 14 catchments
- Start work in RBMP2 catchments
- Continue to work with land managers to reach compliance
- Step up the awareness campaign
- Monitor effectiveness
- Look for gaps, septic tanks, targeted rules ……
Thank you listening

Further information is available at:

www.sepa.org.uk/diffusepollution

www.farmingandwaterscotland.org.uk