

Raising Awareness of Diffuse Pollution

&

Implementing measures on the ground

Pete Wright
SEPA Operations Land Unit

Why I'm here...

“many of them are very clued up about DP and the GBRs. We've been asked to help out on awareness raising/reporting of pollution events.... They might be interested in livestock watering & poaching”

– Eilidh Johnston, RBP Coordinator

What is to be covered

Diffuse Pollution and raising awareness

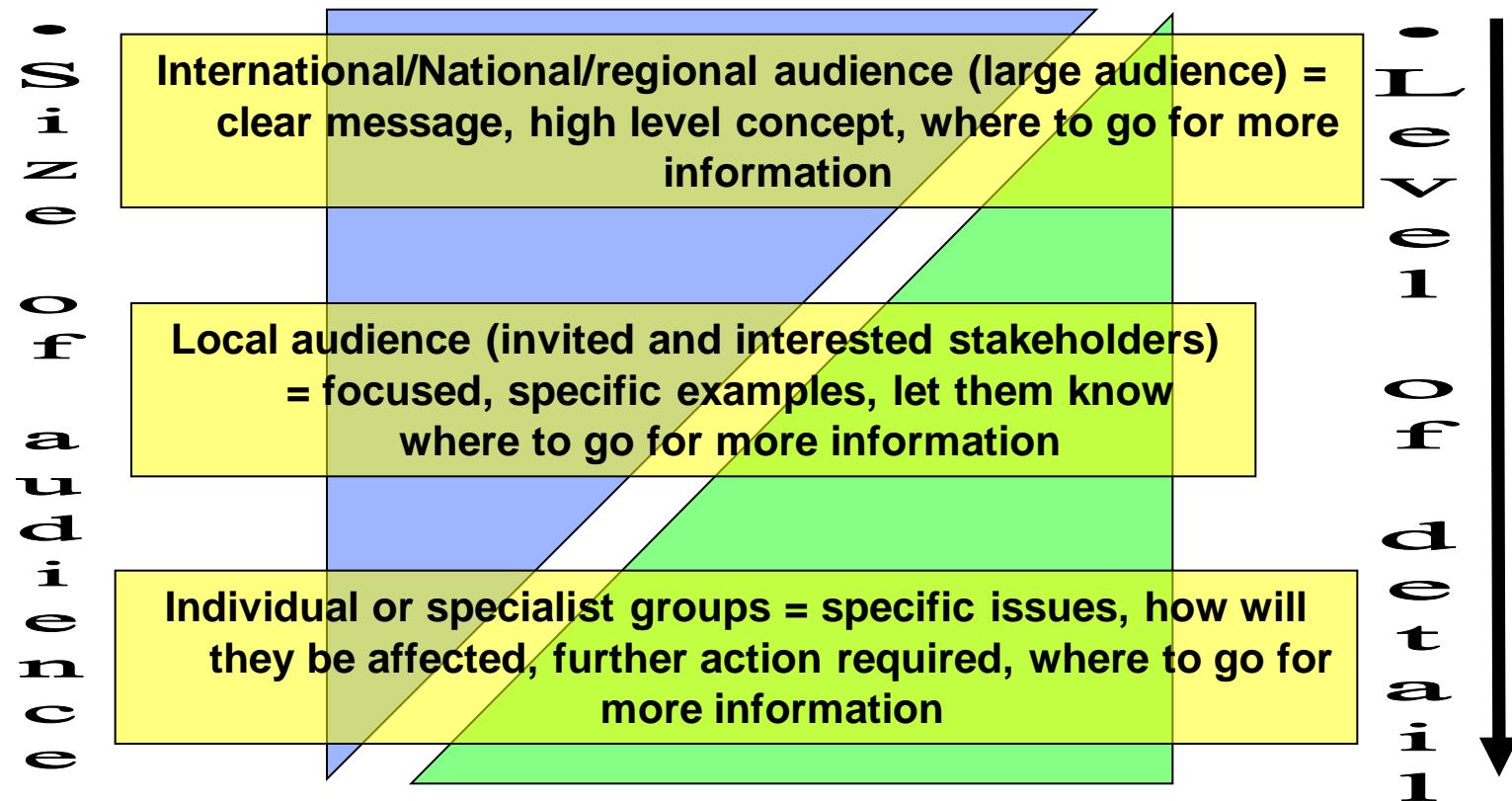
- Assessing the audience
- Levels of awareness
- Running a successful awareness campaign

Implementing measures on the ground

- How we encourage compliance
- Dealing with the problems site
- What has been done
- The Poaching issue....

Assessing the audience

Its all in the detail



Recognise these?



Diffuse Pollution and raising awareness

What is diffuse pollution?

'Pollution arising from land-use activities (rural and urban) that are dispersed across a catchment or sub-catchment and do not arise as a process effluent, municipal sewage effluent or an effluent discharge from farm steadings' - D'Arcy et al, 2000

Putting it in context - Diffuse Pollution

National/regional audience (large audience)

What DP is. Introducing the DP GBRs, links to SEPA website and DP leaflets.

(website, leaflets, national press articles).

Local audience (invited and interested stakeholders)

Technology demonstrations, speakers, focus on the challenges for the area, link to local work and encourage partnership working.

(local leaflets, evening meetings, attendance at events, posters).

Individual or specialist groups

= specific issues, how will they be affected, further action required, where to go for more information.

(Site audits & specific requirements, funding applications).

Diffuse Pollution – the triangle

NATIONAL: CLEAR & CONSISTANT



Dear Sir/Madam

Working together to Improve Scotland's water environment

I am writing to all farm businesses in Scotland on behalf of Scotland's Diffuse Pollution Management Advisory Group (DPMAG) about protecting the water environment from rural diffuse pollution.

Water quality in most of Scotland is good, and it contributes significantly to the rural economy, in terms of food production and supporting non-farming activities such as recreation, forestry, fishing and tourism. There is still, however, a need to maintain and improve water quality in Scotland.

The Diffuse Pollution General Binding Rules (DP GBs) were introduced in April 2008 as an amendment to the Water Environment (Controlled Activities) (Scotland) Regulations 2005. Developed from already widely accepted good practice, such as the Prevention of Environmental Pollution from Agricultural Activity (PEPFAA) Code and 4 Point Plan, the DP GBs present a statutory baseline which should provide a general level of environmental protection. The conditions outlined in each DP GBR are also expected to contribute to water quality improvements and all rural land users have a responsibility to ensure they are working in line with these new requirements.

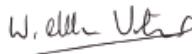
A national programme of awareness raising, guidance and training for land managers on rural diffuse pollution issues affecting Scotland's water quality is underway and further information and events in your area will be advertised via the farming press (e.g. Scottish Farmer and Farming Leader).

The enclosed leaflet explains more about the DP GBs and your obligations. Leaflets relating to specific activities covered by the DP GBs are also available from SEPA's website: www.sepa.org.uk/land/land_publications.aspx or your local SEPA office.

If you have any questions, or you would like more information, you can contact the SEARS customer service on 0845 302050 or email SEPA_diffuse.pollution@sepa.org.uk

We look forward to working with you towards a prosperous and sustainable farming industry.

Yours sincerely



Allan Virtue
Chair - Diffuse Pollution Management Advisory Group (DPMAG)

DPMAG is an advisory group of representatives from agricultural and environmental sectors, including regulatory bodies. The purpose of the group is to work in partnership to help protect and, where practicable, improve the quality of Scotland's water environment. Members include SEPA, Scottish Government, National Farmers Union of Scotland, Scottish Rural Property and Business Association, Confederation of Forest Industries, Forestry Commission Scotland, and Scottish Water.

Diffuse Pollution – the triangle

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What practical steps should I take?

- Check areas around watercourses for poaching and erosion risk. If erosion or poaching is a problem, you could consider mitigation measures to reduce the risk of diffuse pollution such as:
 - removing livestock or significantly reducing stocking density in badly affected fields;
 - erecting temporary or permanent fencing to exclude livestock from badly eroded areas to give vegetation time to recover;
 - providing alternative drinking water supplies (eg a pasture pump may be a suitable alternative in some instances).
- Position feeding rings away from watercourses and field access to make sure vehicle tracks don't link polluting run-off directly or via the road to a nearby burn or river.
- The Scotland Rural Development Programme provides funding for riparian buffer strips, fencing, grass margins, beetle banks and shelter belts, all of which will help mitigate diffuse pollution.

Further Information

Controlled Activities Regulations: A practical guide
Specific regulatory advice about the activities you carry out.
www.sepa.org.uk/water/water_publications.aspx

Diffuse Pollution GBRs

More detailed information on the new DP GBRs.
www.sepa.org.uk/wfd
www.sears.scotland.gov.uk

Guidance on best management practices

Practical advice for farmers on reducing the risk of pollution from agricultural activities.
www.sepa.org.uk/bmp

NetRegs

Up-to-date advice on environmental regulations for small and medium size businesses.
www.netregs.gov.uk

Prevention of environmental pollution from agricultural activity (PEPFAA) code guides

www.scotland.gov.uk/Resource/Doc/37428/0014235.pdf
www.scotland.gov.uk/Resource/Doc/46729/0024251.pdf

4 Point plan

The Scottish Agricultural College guidance on reducing diffuse pollution risk and protecting water quality.
www.sac.ac.uk/mainrep/pdfs/fourpointplan.pdf

Tibre

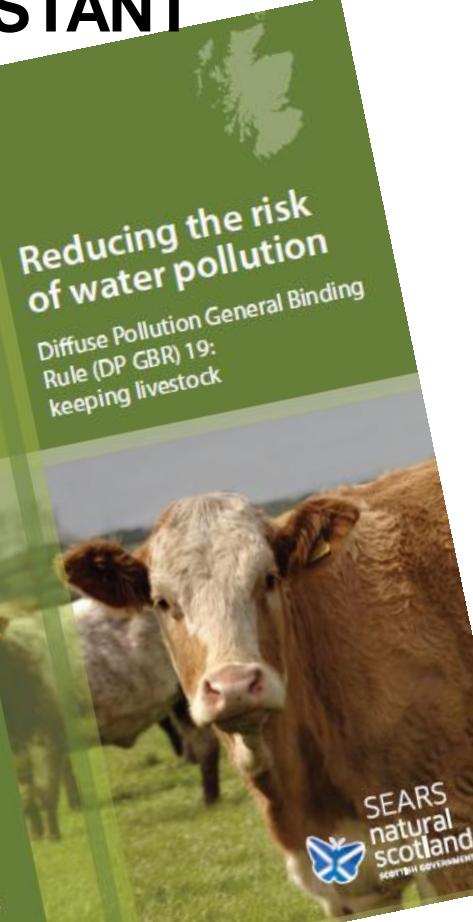
A Scottish Natural Heritage initiative showing how technology in farming can benefit the environment.
www.snh.org.uk/tibre

What Is SEARS?

SEARS is a partnership delivering rural and environmental services on behalf of the Scottish Government. SEARS provides:

- a streamlined service
- easy access to information and advice
- a consistent and responsive service
- a customer focused service.

For further information on the Diffuse Pollution GBRs please get in touch with your local office or contact SEARS:
Tel 0845 30 20 50
Email info@sears.scotland.gov.uk
www.sears.scotland.gov.uk

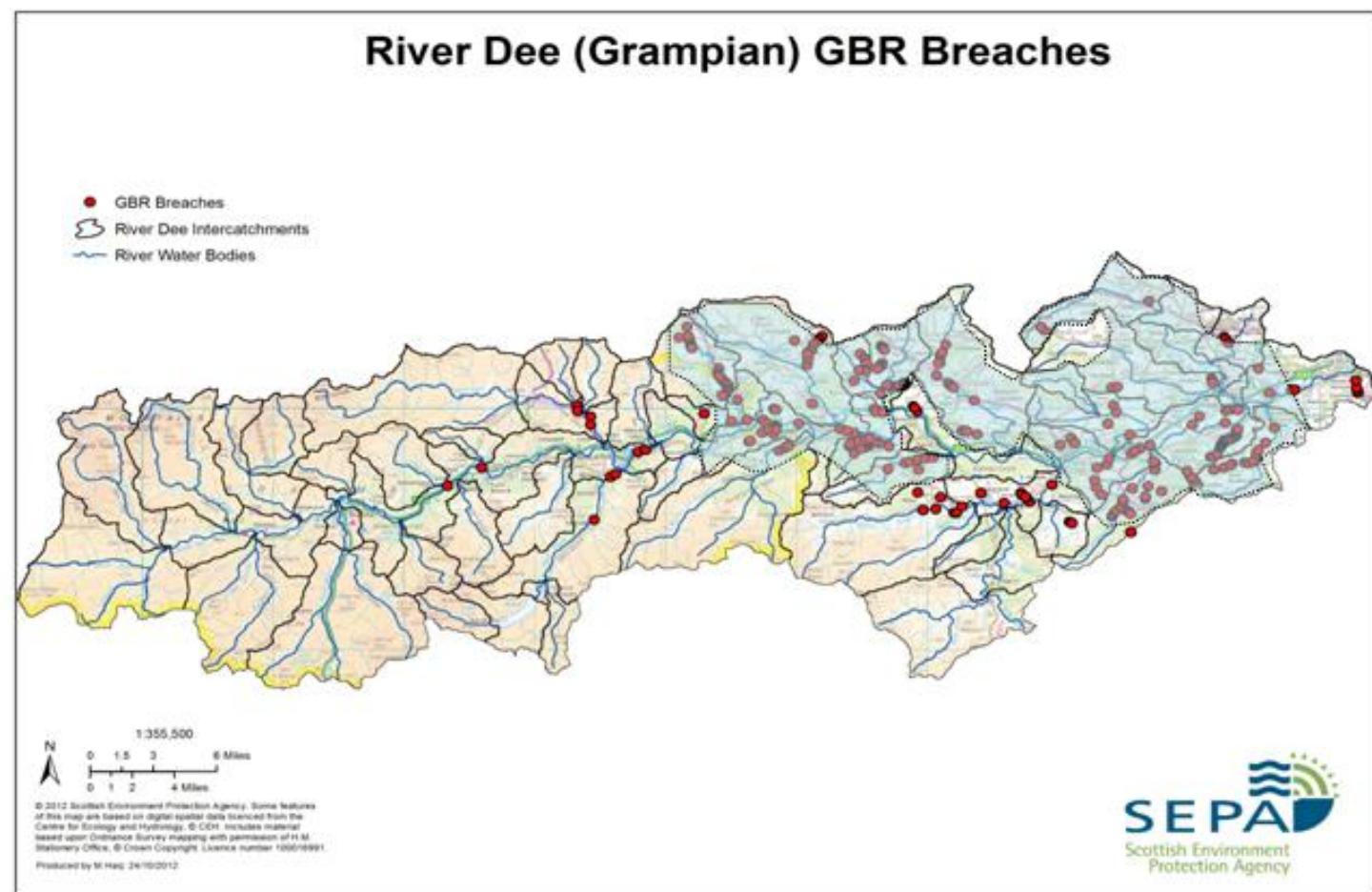


Diffuse Pollution – the triangle

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Diffuse Pollution – the triangle

Local level engagement – reinforce and engage



Diffuse Pollution – the triangle

Local level engagement – reinforce and engage



Diffuse Pollution – the triangle

Local level engagement – reinforce and engage

Diffuse Pollution – the triangle

Face to Face – first impressions count

Dear Sirs

Working together to benefit your business by protecting the environment

Your farm and land are situated within the Dee Catchment, one of 14 Diffuse Pollution Priority Catchments in Scotland. These are rivers and coastal areas that are currently failing to meet water quality standards, and which will not achieve improved water quality without a focused management approach. Priority catchments are of high amenity value for land managers, residents and visitors alike in terms of their use, environment and economy.

As your farm is in the Dee catchment, I would like to arrange to call on Thursday 8th November at 10:00 and carry out an inspection of the ~~steading~~ and land at *.**

The visit will take approximately one day although it will only be necessary for you to be present for about 1 hour at the start of the inspection. The officer will be looking at any impact on the water environment from activities such as:

- fertiliser collection, storage and applications
- livestock impact on watercourses
- cultivation of land & pesticide use
- sheep dipping
- drainage from ~~steadings~~ and land

You will receive written feedback on the inspection and be given the opportunity to have a follow-up appointment to discuss the findings of the visit.

Thank you for your anticipated co-operation. Should you have any queries regarding this letter, or you need to change the date/time of the appointment please do not hesitate to contact me on

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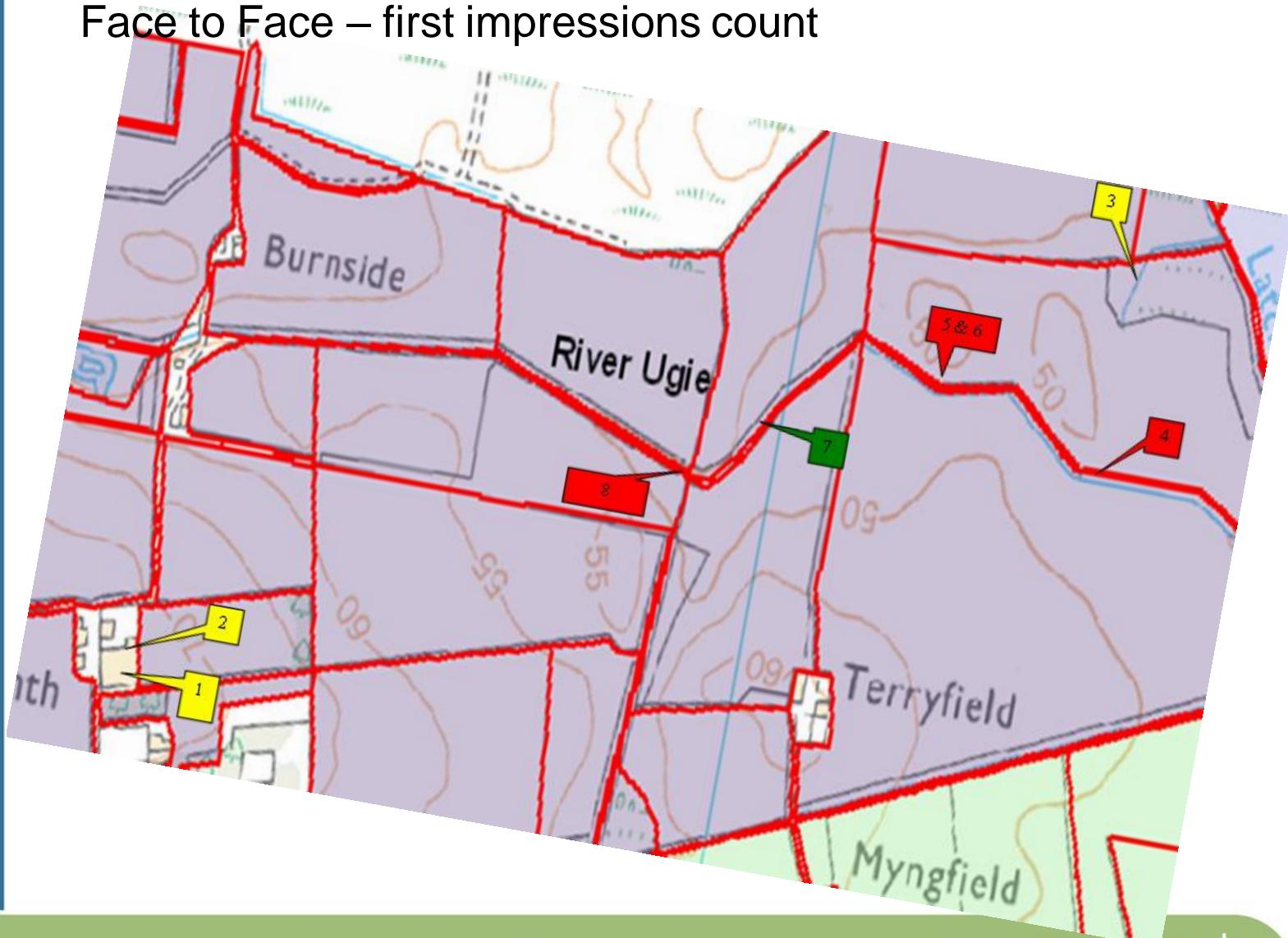
<p>Mr Ref: Your Ref: Your Reference Your Ref: Your Reference</p> <p>If telephoning ask for: Pete Wright</p> <p>Insert Date (Format = DD March 2003)</p>	
<p>Noel R Gall Home Farm Kininmath Peterhead Aberdeenshire AB42 4JD</p>	
<p>Dear Mr Gall</p> <p>Findings of Diffuse Pollution Visit at Home Farm</p> <p>I apologise for the delay in writing to you with respect to the farm visit that took place as part of the Diffuse Pollution Priority work SEPA undertook in the River Ugie catchment.</p> <p>We visited you on 28th August 2011 to look at the ways you can minimise diffuse pollution from your land. The visit focussed on farm <u>steading</u> and field activities. The attached map(s) shows where there is a non-compliance with current 'rules' or where there were risks of diffuse pollution. The attached table provides more information on the findings. This information may be shared with Scottish Water to assist in the development of targeted catchment measures to increase the quality of raw water at the Forthill Water Treatment Works, Peterhead.</p> <p>During our visit, the ways in which you can manage the risks of diffuse pollution were identified and these potential solutions have been detailed on the attached table. Many of these solutions also make potential business efficiency savings. SEPA plan to carry out a follow up within 12 months of the date of the initial visit. We will contact you to arrange a suitable time.</p> <p>In the meantime, if you would like to discuss any of the points raised in the letter, please contact me on 01349 865448 or by email: peter.wright2@sepa.org.uk. Alternatively you can write to me at SEPA Elgin office, 28 Perimeter Road, Pinefield, Elgin, IV30 6AF.</p>	

Yours sincerely

FINDINGS OF VISIT AT HOME FARM ON 28 th August 2011		
WHAT WE FOUND		POLLUTION BREACHES
LOCATION		WHAT NEEDS TO BE DONE
Soil stones deposited on bed and bank of watercourse following installation of fence	4 & 6	Best practice would encourage to remove from edge of the field or away from field completely
Livestock were causing significant poaching at various points along the watercourses of the farm. You must ensure that livestock do not cause significant poaching within 5 metres of a river, burn or ditch, (including dry ditches)	5 8	Issue discussed - damage has not altered for years and as always been like this – sites to be monitored and if situation worsens, action must be taken to reduce the impact of the poaching. Site to be reviewed in summer 2012 to assess impacts of grazing. At point (8) consider fixing/improving discharge point from drain/pipe so that it does not discharge onto land which is easily eroded. To improve situation, consider options to reduce impacts on watercourse. Potential solutions could involve, where possible: (1) Fence off watercourse and install water trough close to existing mains water supply (2) Reduce stocking density of livestock in field and monitor water point for potential impacts (3) Install gravity water feed system (4) any other suitable option as discussed with SEPA. Please ensure that you contact SEPA prior to installing any system
WHAT WE FOUND		POLLUTION RISKS
Midden drainage not collected from temporarily stored FYM.	1	Discussed issue – temporary midden only, material stored at steading until field are suitable for spreading or storage. If material is stored for longer period in the future, please ensure drainage is contained (temporary bund).

Diffuse Pollution – the triangle

Face to Face – first impressions count



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Face to Face – first impressions count



Diffuse Pollution – the triangle

Face to Face – first impressions count



Getting it wrong



*What other pressures
are there*

How important are you?

SEPA

LA

Vet

Deliveries

Police

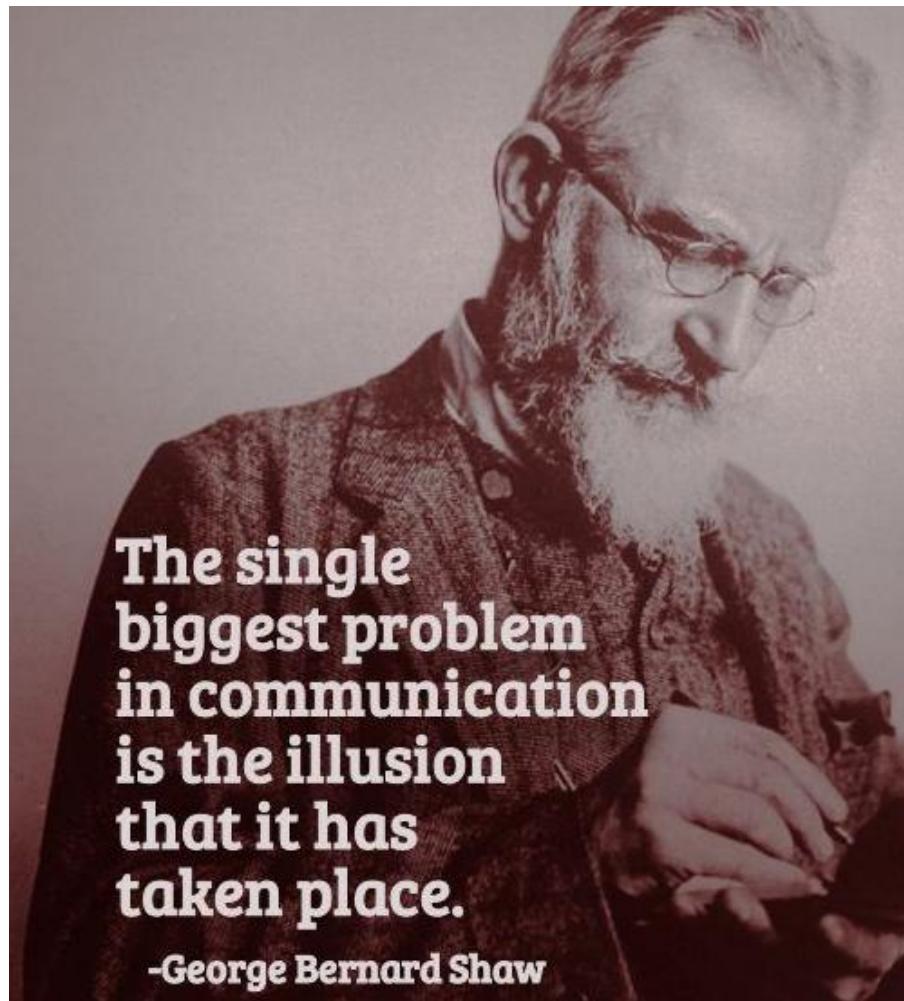
SGRID

Farm Assurance

HSE

Professionals

on.... and on....



**The single
biggest problem
in communication
is the illusion
that it has
taken place.**

-George Bernard Shaw

Implementing measures on the ground

- How we encourage compliance & dealing with pollution reports
- Measuring success
- The Poaching issue....

Encouraging compliance & Environmental events



- **Enforcement procedure**
- Emphasise the positives
- Address non-compliances
- Follow-up
- **Problem sites**
- Work with the local SEPA office
- Multi-agency approach

Measuring success

Implementing the measures:

Ugie Catchment

- 350 farms visited

(75% of issues are fixed or being addressed)

- Still issues in the catchment regards pesticide use (where to concentrate in the future?)

Measures photographs....



Measures photographs....



Keeping of livestock (GBR 19)

- **Significant erosion or poaching is not permitted within 5 metres of surface water or wetlands.**
- **Livestock shall not be allowed to enter within 5 metres of a spring, well or borehole that supplies water for human consumption**
- **Livestock feeders must not be positioned within 10 metres of any surface water or wetland.**



Poaching - What is significant?

- Loss of soil
- Step change in the profile of the bed/bank
- Loss of vegetation
- Alterations to the 'natural' flow of the watercourse
- Evidence of livestock in the watercourse
- Low level of regeneration between uses
- Site by site assessment

POACHING THE PROBLEMS



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Poaching solutions



The header of the Papa Pump website features the company name 'Papa Pump® Water Powered Technology' in a stylized font. A login box with fields for 'username', 'password', and 'login' is positioned at the top right. Below the login box are links for 'become a distributor', 'password?', 'Email: Contact Us', and a navigation menu with links to 'Home', 'About Us', 'Buy a Papa Pump', 'Problems Solved', 'Media Centre', 'Choose your site', 'Installation Guide' (which is highlighted in dark grey), and 'Service Centre'.

Solutions



How to Install The Papa Water Powered Pump

Having purchased your Papa water powered pump, it is important that the groundwork is carefully prepared - you can do this yourself.

However, you might need help with the groundworks if you do not have equipment or time.

If you decide to install yourself or have a team in to do it; make sure you follow our Golden Rules on site preparation to make the installation smoother, safer and more effective.

Please see the below illustration of some previous installs to help you with how it works; click on the thumbnail images for an enlargement and description...

How it works








Where to go from here

- Local SEPA Team
- Co-ordinators
- SEPA Land Unit
- Joint working with neighbouring trusts and organisations
- Challenge the issues
- Run events and campaigns

- **Diffuse Pollution and raising awareness**
- Assessing the audience
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- **Implementing measures on the ground**
- How we encourage compliance
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Questions/comments/discussion

peter.wright2@sepa.org.uk

END