

SR DP FARM ADVISORY SERVICE



Alternative Watering Systems




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Diffuse Water Pollution

- Occurs when nutrients, pesticides, faecal bacteria, chemicals and fine sediments are lost from the land into water
- **This represents a cost to the farm business**



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Diffuse Pollution - Source Pathway Receptor




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Poaching




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Priority Catchments:

- GAEC 5 – Protecting Soil Against Erosion
Field and bankside erosion
- GBR's – Protecting Water Quality
Poaching within 5 m of water course
- Livestock keepers encouraged to exclude livestock from open water courses and traditional water drinking points.
- How can you provide alternative drinking supply?




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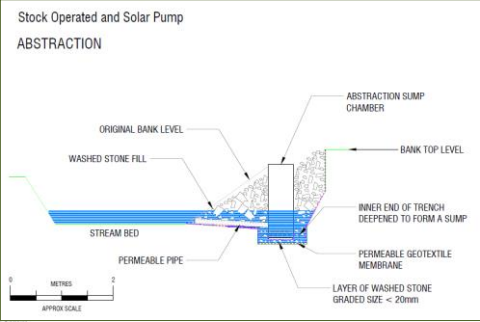
Pasture (nose) Pump




Abstraction Method



Stock Operated and Solar Pump
ABSTRACTION



Labels in diagram: ORIGINAL BANK LEVEL, WASHED STONE FILL, STREAM BED, PERMEABLE PIPE, ABSTRACTION SLUMP CHAMBER, BANK TOP LEVEL, INNER END OF TRENCH DEEPEINED TO FORM A SUMP, PERMEABLE GEOTEXTILE MEMBRANE, LAYER OF WASHED STONE GRADED SIZE < 20mm.

Scale: 0 METRES 2 APPROX SCALE

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SEPA Approved Design






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Solar Pump System



Option 1.
Solar panel which powers pump



Option 2.
Solar panel charges battery which operates pump.


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Hydrum (Papa pump)

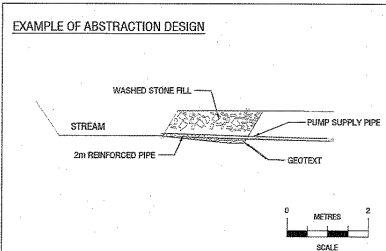
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Hydrum – Abstraction Design



Requires constant flow of water into supply pipe

EXAMPLE OF ABSTRACTION DESIGN



Labels in diagram: WASHED STONE FILL, STREAM, 2m REINFORCED PIPE, PUMP SUPPLY PIPE, GEOTEXT.

Scale: 0 METRES 2 SCALE

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Hot Spot Fencing





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Manage to Reduce Risk




Can you alter field management?

- Temporary electric fencing
- Reduced stocking density
- Cut for silage
- Graze with sheep only









Wider Benefits






- Animal Health Disease
 - From the water or wet and poached grassland
 - Johnes
 - Leptospirosis
 - Salmonella, cryptosporidia
 - Fluke, coccidiosis and clostridial disease
 - Physical injury lameness

Funding Options



- Funding is possible under the Agri-Environment Climate Scheme, but it is competitive. (AECS)
- Management payment (ha) for excluding livestock
 - Water margins in arable: £495/ha
 - Water margins in grassland: £123/ha
- Forestry Grant Scheme and other woodland grant schemes

AECS Reduced Stocking




- Grazed Grassland: £80/ha
 - Manage for target species: Lapwing, Curlew, Snipe and Redshank
- Wetland Management: £90/ha
- Habitat Mosaic: £104/ha









Capital Funding






- Stock fence: £5.50/m
- Gate: £170
- Abstraction point: £476
- Stock powered pump: £450
- Water powered pump: £1,350
- Solar pump £2,000 – £3,000
- Pipe work & connections (buried) £7.77/m
- **Actual cost items**

Stading Diffuse Pollution



- Funding available for actions within stading
- Concrete to form bunds or kerbs to divert water: £7.20/m
- Installation of sediment traps: £10.50/m
- Construction of pond or swale to intercept lightly soiled run-off: £15-21/m²

Application Deadlines




- Woodland grant application accepted at any time
- Agri-Environment Climate Scheme (AECS)
Next submission deadline 31 March 2018








Information



Technical Notes Available Tonight
Pumps Types
Abstraction Point Design

Agri-environment Grant Scheme
www.ruralpayments.org

Information Farming & Water Scotland





Stand the Gap

2 5 5 10 50








4 Key Points



- Minimise dirty water around the stabling
- Make best use of nutrients
- Prepare a Risk Assessment for spreading Manures & Slurry
- Look at how you manage water margins fencing off worst areas for poaching – Grants available for now.

Thank You





