WILD ATLANTIC NATURE LIFE

Whole-farm Score Card

Farmer ID:
Surveyor:
Survey date:

Note on determining overall whole-farm result:
The result of the whole-farm assessment is the lowest score (0.3, 0.6, 1, or 1.2) achieved in any of the individual sections A-E below.

Overall whole-farm result:

- ☐ Poor 0.3
- ☐ Inadequate 0.6
- ☐ Good 1
- ☐ Excellent 1.2

A Farmyard Assessment *(see overleaf for further details)*

Do any of the following items present a risk to watercourses? *(please tick)* ☐ Yes (0.6) ☐ No (1.2)

- ☐ Silage Pit
- ☐ Separation of clean & dirty water
- ☐ Slurry storage
- ☐ Diesel / oil tanks
- ☐ Other
  If 'Other' please specify:
- ☐ Round bale storage
- ☐ Livestock handling areas
- ☐ Farmyards
- ☐ Loose houses - effluent being collected
- ☐ Gutters & storm drains
- ☐ Farmyard manure storage
- ☐ Sheep dipping & spread area
- ☐ Inappropriate use of pesticides

B Farm nutrient balance indicator *(for farms with slurry storage only, see overleaf for further explanation)*

Extent of suitable (trafficable) spread lands (X)? _____ ha

Number of livestock units housed over winter (Y)? _____ LU

Ratio of available spread lands to minimum required spread lands [X/(Y*0.506)]: _____

Result of farm nutrient balance assessment:

- ☐ **Poor (0.3)** *Ratio of available spread lands to minimum required spread lands: <0.6*
- ☐ **Inadequate (0.6)** *Ratio of available spread lands to minimum required spread lands: 0.6-0.8*
- ☐ **Adequate (1.2)** *Ratio of available spread lands to minimum required spread lands: >0.8*

C Level of damage to watercourse

What is the level of damage to water courses as a result of livestock or vehicular access?

- ☐ **High (0.3)** Evidence of trampling and dunging in river. Presence of eroded banks and disturbed waterways. Direct pathway to natural watercourses.
- ☐ **Moderate (0.6)** Evidence of some poaching and trampling. Direct pathway to natural watercourses.
- ☐ **Low (1)** Access to drains evident but pathway to natural watercourses is impeded.
- ☐ **None (1.2)** No evidence of damage to watercourses as a result of livestock access.

D Risk of nutrient or sediment entering watercourses

What is the level of risk of sediment or nutrients entering watercourse?

- ☐ **High (0.3)** Absence of functional buffer zones from watercourses / drains. Bank erosion, slumping and poaching likely to be observed.
- ☐ **Moderate (0.6)** Buffer zones are absent or have been breached and there are pathways by which nutrients / sediment can enter watercourses and drains visible at some locations.
- ☐ **Low (1)** Pathways by which nutrients/sediment can enter watercourses are present but only as a minor pinch-point or Pathways to natural watercourses are impeded.
- ☐ **None (1.2)** There are no visible pathways by which nutrients/sediment can enter watercourses and drains. No visible bank erosion, trampling or poaching.

E Flow

Describe the drains on site.

- ☐ **Recently cleared/created (0.3)** Drains have been recently cleared or created flowing directly into natural watercourses.
- ☐ **Free flowing (0.6)** Drains are un-vegetated and/or free-flowing and follow direct pathway to natural watercourses.
- ☐ **Reduced-flow (1)** Drains are partly blocked and vegetated, and/or pathway to watercourse is impeded.
- ☐ **Naturalised (1.2)** All drains are fully blocked and/or vegetated. Drains with gravel/cobble substrate & stable vegetated banks

Reason for outcome:

Management advice:

Whole-farm assessment- tip sheet

This project has received funding from the European Union's LIFE programme under Grant Agreement No. LIFE18 IPE/IE/000002.

July 2021

A Farmyard Assessment

Do any of the following items present risk to watercourse?

- [ ] Silage pit
- [ ] Round bale storage
- [ ] Gutters & storm drains
- [ ] Facilities to divert clean water from roofs and clean yards away from dirty yards
- [ ] Cattle crush/handling areas or gathering areas for sheep
- [ ] Farmyard manure storage
- [ ] Slurry storage
- [ ] Yards clean & tidy
- [ ] Sheep dipping & spread areas
- [ ] Diesel/oil tanks
- [ ] Loose houses- effluent being collected
- [ ] Inappropriate use of pesticides (refers to full holding)
- [ ] Other

B Farm nutrient balance indicator (for farms with slurry storage only)

The volume of slurry generated in relation to the availability of suitable spread lands influences the whole farm score. To determine the ratio of available to required spread lands it is necessary to know:

- the number of housed livestock and amount of slurry generated (stored)
- length of housing period
- area of suitable spread lands
- appropriate stocking rates considering the characteristics of the catchments (assumed to be 11kgP / Ha (≈ 13.8m³ slurry))

The final ratio is assigned to one of three categories:

<0.6	**Poor**	*0.6-0.8*	**Inadequate**	*>0.8*	**Adequate**

How to calculate ratio:

[A] - Extent of suitable spread lands in hectares

[B] - Number of livestock units housed

[C] - Volume of slurry generated *(stored)*
(**B x 0.29** *(amount in m³ generated by 1 unit)* **x 24** *(weeks housed)*)

[D] - Amount equivalent kg of P (**C x 0.8** *(amount of P in 1m³)*)

[E] - Minimum extent of spread lands (**D / 11** *(appropriate spread rate of P per hectare)*)

Ratio - A / E *(Available spread lands : Minimum required spread lands)*

Where required the farm advisor and Wild Atlantic Nature team will work with the farmer to devise a solution to ensure appropriate nutrient management informed by an assessment of pathway risk.

C Level of damage to watercourses (indicative guide to assist assessment)

Damage to watercourse by livestock / vehicles

No damage visible

None

Damage visible *(trampling / dunging / eroded banks)*

Ford	<10m length of watercourse impacted	10-20m length of watercourse impacted	>20m length of watercourse impacted
Stone / gravel substrate — Low	Pathway impeded or 'other' watercourse — Low	Pathway impeded — Low	Pathway impeded — Moderate
Fine silt / peat — Moderate	Priority watercourse — Moderate	'Other' watercourse — Moderate	Any watercourse — High
Damage due to uncontrolled access — High		Priority watercourse — High	

D Risk of nutrient or sediment entering watercourses

The level of risk in this section requires a Source-Pathway-Receptor connection.

Typical source types include: Land on which chemical or organic fertiliser is applied; bare soil; sediment arising from poaching damage, machinery tracks or recent reseeds etc. Risk of run-off increases when field is sloped towards river and where vegetation comprises a tight evenly grazed sward.

Absent or compromised buffer zones resulting in pathways to a watercourse will result in a 'poor' or 'moderate' risk score. Where pathways comprise only minor 'pinch-points' or are absent, the risk level may be 'low' or 'none'.

E Flow

Drains are characterised as follows:

Recently cleared/created (<1year previously): Free-flowing bare soil bringing nutrients/sediment directly into watercourse.

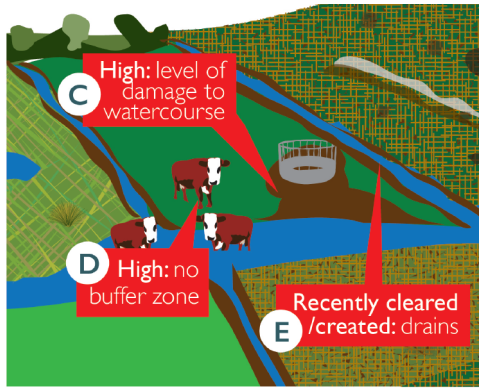
Free-flowing: Cleared/created (>1year previously) and flowing into watercourse but likely to have some revegetation.

Reduced-flow: Some flow but pathway to watercourse is impeded with vegetation or other impediment.

Naturalised: Fully vegetated and/or blocked.

Note: Do not consider modified watercourses that have become naturalised, i.e. substrates of clean cobbles / pebbles present.

Examples of Assessment C, D & E ranging from poor to excellent:



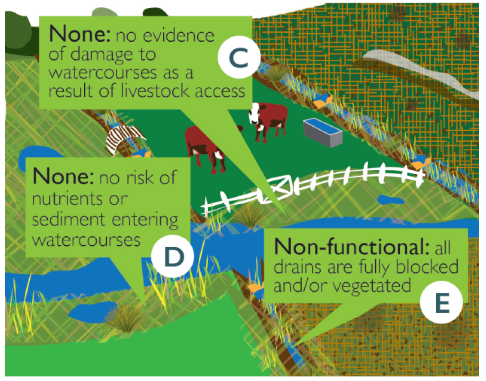


Image credit: Pearl Mussel Project