Pearl Mussel Project	t Whole-farm Assessmen	t	
PMP Farmer ID:	Surveyor:	Overall	Category: Multiplication factor: Poor 0.3
	Survey date:	whole-farm result:	Inadequate 0.6
Note on determining overall w	hole-farm result:	or ( 2)	Good 1
achieved in any of the individual sec	tions A-E below.	JT 1.2)	Excellent 1.2
A Farmyard Assessme	<b>nt</b> (see overleaf for further details)		
Do any of the following item	ns present a risk to watercour	ses? (please tick)	Yes (0.6) / No (1.2)
Silage Pit Separation	on of clean OSlurry storage	O Diesel / oil tanks	Other
Round bale Livestock areas	k handling 🛛 Farmyards	Loose houses - effluent being collected	If 'Other' please specify:
Gutters & Farmyard storm drains	d manure Sheep dipping & spread areas	Inappropriate use of pesticides	
B Farm nutrient baland	ce indicator (for farms with slur	ry storage only, see overleaf for	further explanation)
Extent of suitable (trafficable	e) spread lands (X)?		ha
Number of livestock units he	oused over winter (Y)?		LU
Ratio of available spread land Result of farm nutrient balance Poor (0.3) Ratio of available spi lands to minimum re spread lands: <0.6	ds to minimum required spread e assessment: read equired Inadequate (0.6) Ratio o lands t spread	d lands [X/(Y*0.506)]: of available spread o minimum required lands: 0.6-0.8	<b>:e (1.2)</b> Ratio of available spread lands to minimum required spread lands: >0.8
C Level of damage to v What is the level of damage High (0.3) Evidence of trampling and dunging of eroded banks and disturbed wat pathway to natural watercourses.	in river. Presence terways. Direct water courses as a result of Moderate (0.6 Evidence of some and trampling. Dir to natural watero	by <b>Low</b> (1) e poaching rect pathway ourses. by <b>Low</b> (1) Access to drains of but pathway to na watercourses is in	<b>cess?</b> None (1.2) evident No evidence of damage atural to watercourses as a npeded. result of livestock access.
D Risk of nutrient or s	sediment entering waterco	ourses	
What is the level of risk of se	ediment or nutrients entering	watercourse?	
High (0.3)IAbsence of functional bufferBuzones from watercourses /bedrains. Bank erosion,paslumping and poaching likelyseto be observed.an	Moderate (0.6) uffer zones are absent or have een breached and there are athways by which nutrients / diment can enter watercourses ad drains visible at some locations.	Low (1) Pathways by which nutrients/sediment can enter watercourses are present but on a minor pinch-point or Pathways natural watercourses are impede	None (1.2)There are no visible pathways by which nutrients/sedimently ascan enter watercourses and drains. No visible bank erosionid.trampling or poaching.
E Flow			
Describe the drains on site.			
Recently cleared/created (0. Drains have been recently cleared or created flowing directly into natural watercourses.	3) Free flowing (0.6) Drains are un-vegetated and/or free-flowing and follow direct pathway to natural watercourse	Reduced-flow (1) Drains are partly blocked an vegetated, and/or pathway to es. watercourse is impeded.	Naturalised (1.2)   d All drains are fully blocked   and/or vegetated. Drains   with gravel/cobble substrate   & ctable vegetated backs
Reason for outcome:			a stable vegetated ballis
Management advice:			



Earmyard	<b>B</b> Farm nutrient balance indicator (for farms with slurry storage only)			
Assessment		How to calculate ratio:		
Do any of the following items	spread lands influences the whole farm score To determine the ratio of	Number of livestock units housed <b>[A]</b>		
present risk to watercourse?	available to required spread lands it is necessary to know:	Extent of suitable spread lands in hectares [B]		
Silage pit	- the number of housed livestock and amount of slurry generated (stored)	Volume of slurry generated (stored) (A $\times$ 0.29 (amount in m <sup>3</sup> generated by 1 unit) $\times$		
Round bale storage	- length of housing period	24 (weeks housed)) [C]		
Gutters & storm drains	- area of suitable spread lands	Amount equivalent kg of P (C $\times$ 0.8 (amount of P in 1m <sup>3</sup> )) [D]		
Facilities to divert clean water	- appropriate stocking rates considering the characteristics of the catchments (assumed to be $1 \text{ kgP} / \text{Ha}$ (~ 13.8m3 slurry))	Minimum extent of spread lands (D / II (appropriate spread rate of P per hectare))[E]		
from roofs and clean yards	The final ratio is assigned to one of three categories:	Ratio of available spread lands : Minimum required spread lands (B/E)		
Cattle crush/handling areas or gathering areas for sheep	poor (<0.6) inadequate (0.6-0.8) adequate (>0.8)	Where required the farm advisor and PMP team will work with the farmer to devise a solution to ensure appropriate nutrient management informed by an assessment of pathway risk.		
Farmyard manure storage	C Level of damage to watercourses (indicative guide to assist assessmen	t)		
Slurry storage	Damage to watercourse by livestock / vehicles			
Yards clean & tidy	Damage visible			
Sheep dipping & spread areas	(trampling / dunging / eroded bank	(s)		
Diesel/oil tanks	visible Ford Stone / gravel <10m Pathway 10-20m Path substrate length of length of length of length of	way impeded >20m Pathway length of impeded		
Loose houses - effluent being	None Low vatercourse watercourse impacted Non-	FPM watercourse impacted Apr		
collected	Moderate EPM	Moderate watercourse		
Inappropriate use of pesticides (refers to full holding)	Damage due to watercourse FPM	High D High		
	High	buffer zone Recently cleared		
		E //created: drains		

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

**Free-flowing:** Cleared/created (>I year 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.

Non-functional:

F

None: no el

Vonet no m

D

C