

Pearl Mussel Project EIP



An Roinn Talmhaíochta,
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Department of Agriculture,
Food and the Marine



'The European Agricultural Fund
for Rural Development: Europe
investing in rural areas'.



Presentation Outline

- Overview of PMP
- Freshwater Pearl Mussel requirements
- What are results-based payments?
- Pearl Mussel Project programme



Background

- Total budget of 10 million, 5 year project
- European Innovation Partnership (EIP)
- Funded by DAFM as part of Ireland's Rural Development Programme 2014-2020 (Article 35(1) of Commission Regulation (EU) 1305/2013)
- Project team based in Kenmare, County Kerry and Westport County Mayo



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Project Aim

“To design and implement an innovative programme to contribute towards the long term conservation of critical Freshwater Pearl Mussel populations in Ireland by working with rural farming communities.

To support the development of a vibrant local economy.”



Top eight catchments

(c.748 eligible farmers)



	Number of farmers			Area (ha) farmland	Average farm size (ha)
	Total farmers	Private farms	Commonage only		
Glaskeelan	49	12	37	582	11.9
Bundorragha	94	11	83	4397	46.8
Dawros	60	33	27	4680	78.0
Owenriff	115	85	30	4459	38.8
Owenagappul	88	39	49	1968	22.4
Caragh	150	137	13	10449	69.7
Currane	88	74	14	5927	67.4
Kerry Blackwater	104	93	11	8255	79.4
TOTAL	748	484	264	40717	

<http://bit.ly/PMPcatchments>



Freshwater Pearl Mussel

Margaritifera margaritifera

- Biology
 - Complex life cycle
 - Live to 120 years
 - Indicator of exceptionally clean and healthy environment
 - Endangered, nearly all Irish populations on verge of extinction
 - Top eight catchments are best remaining populations
- Pressures
 - Flow
 - Sediment
 - Nutrients
- Conservation
 - Concentrating efforts on those catchments with juvenile recruitment (top eight)



Nuts and bolts

Q1: What are results-based payments?

Q2: How do we assess results in the PMP?



What are results-based payments?

- Payments are linked to the quality of the biodiversity (habitats &/or species)
- Result indicators are used to determine a quality score verified at field level
- A range of quality and scores exist, where higher quality = higher payment level
- Increased cost-effectiveness with money saved on poorer ecological quality



Creating a market

- Apply market value on the services that High Nature Value farmland provides



Environmental Services (products)

- Focus on Freshwater Pearl Mussel will deliver environmental services of high value to society
 - Clean water
 - Flood regulation
 - Climate regulation (carbon storage)
 - Natural landscapes
 - High levels of biodiversity
 - Improved soil conditions
- Payment to farmers based on achieving targets that reflect provision of these services



PMP design approach

- Locally adapted, practical and results focused
- Balance incentivising higher quality output and overall scheme complexity
- Facilitate flexible and adaptive management on farm
- Build local trust and capacity
- Account for factors outside the farmers control



What result indicators can we use for Freshwater Pearl Mussel?

- Key habitats in target catchments



Scorecards for:

- Grassland
- Peatland
- Scrub
- Whole farm watercourse assessment



Scorecard

Guidance documents

BBAPS 2021 Scorecard - Conservation of Biodiversity

Location: _____ County: _____
 Site Name: _____ County: _____
 Full name: _____ Date: _____

2. Date of grazing and level of management (20 observations)

Grazing				Livestock			
Level	Intensity	Season	Time	Species	Amount	Time	Notes
Too low	Low	None	None	None	None	None	

3. Percentage of high quality and species

3.1. Percentage of positive indicator species within 1m of the edge of the field (up to 1000m)

Level	1	2	3	4	5	6	7	8	9	10
Score	1	2	3	4	5	6	7	8	9	10

3.2. Number of high quality and/or indicator species seen throughout the field (up to 1000m)

Level	1	2	3	4	5	6	7	8	9	10
Score	1	2	3	4	5	6	7	8	9	10

3.3. Cover of negative indicator species (weeds) covering throughout the field (up to 1000m)

Level	1	2	3	4	5	6	7	8	9	10
Score	1	2	3	4	5	6	7	8	9	10

3.4. What is the main type of weed species present? (up to 1000m)

Level	1	2	3	4	5	6	7	8	9	10
Score	1	2	3	4	5	6	7	8	9	10

4. Site management

4.1. Fencing levels

Level	1	2	3	4	5	6	7	8	9	10
Score	1	2	3	4	5	6	7	8	9	10

4.2. What is the fence level? (up to 1000m)

Level	1	2	3	4	5	6	7	8	9	10
Score	1	2	3	4	5	6	7	8	9	10

4.3. Level of fencing to surrounding?

Level	1	2	3	4	5	6	7	8	9	10
Score	1	2	3	4	5	6	7	8	9	10

4.4. Are there bare soil or erosion?

Level	1	2	3	4	5	6	7	8	9	10
Score	1	2	3	4	5	6	7	8	9	10

4.5. Is there damage to natural water courses?

Level	1	2	3	4	5	6	7	8	9	10
Score	1	2	3	4	5	6	7	8	9	10

4.6. Are there any damaging activities on the field (e.g. mowing, etc.)

Level	1	2	3	4	5	6	7	8	9	10
Score	1	2	3	4	5	6	7	8	9	10

5. Additional information

Notes: _____

Comments: _____

Conservation Management Actions: _____

10/10

Biological diversity

1.1. Positive indicator species within 1m of the edge of the field

1.2. Number of high quality and/or indicator species seen throughout the field

1.3. Cover of negative indicator species (weeds) covering throughout the field

1.4. What is the main type of weed species present?

2. Site management

2.1. Fencing levels

2.2. What is the fence level?

2.3. Level of fencing to surrounding?

2.4. Are there bare soil or erosion?

2.5. Is there damage to natural water courses?

2.6. Are there any damaging activities on the field (e.g. mowing, etc.)

3. Additional information

Notes: _____

Comments: _____

Conservation Management Actions: _____

MANAGEMENT

BBAPS Co. Leitrim

Species Rich Grasslands

1.1. Positive indicator species within 1m of the edge of the field

1.2. Number of high quality and/or indicator species seen throughout the field

1.3. Cover of negative indicator species (weeds) covering throughout the field

1.4. What is the main type of weed species present?

2. Site management

2.1. Fencing levels

2.2. What is the fence level?

2.3. Level of fencing to surrounding?

2.4. Are there bare soil or erosion?

2.5. Is there damage to natural water courses?

2.6. Are there any damaging activities on the field (e.g. mowing, etc.)

3. Additional information

Notes: _____

Comments: _____

Conservation Management Actions: _____

Sample habitat quality

Blanket bog / Wet Heath



Low quality
(Score 0-3)
€ 0



Moderate quality
(Score 4-6)
€ € €



High quality
(Score 8-10)
€ € € €

Sample habitat quality

Wet grassland



Low quality
(Score 0-3)
€ 0



Moderate quality
(Score 4-6)
€ € €



High quality
(Score 7-10)
€ € € €

Connectivity with target

- Watercourses: streams and drains
- Whole farm approach
- Farm score adjusted based on result of assessment
 - Good quality: 1.25
 - Adequate quality: 1
 - Poor quality: 0.6
 - Very poor quality: 0.3



Payment streams

Results Payments

*Environmental target is measured
(scored 1-10)*

Better quality = Higher scores = Higher
payments



Supporting Actions Payments

*Payment to complete
measures to help improve
result*



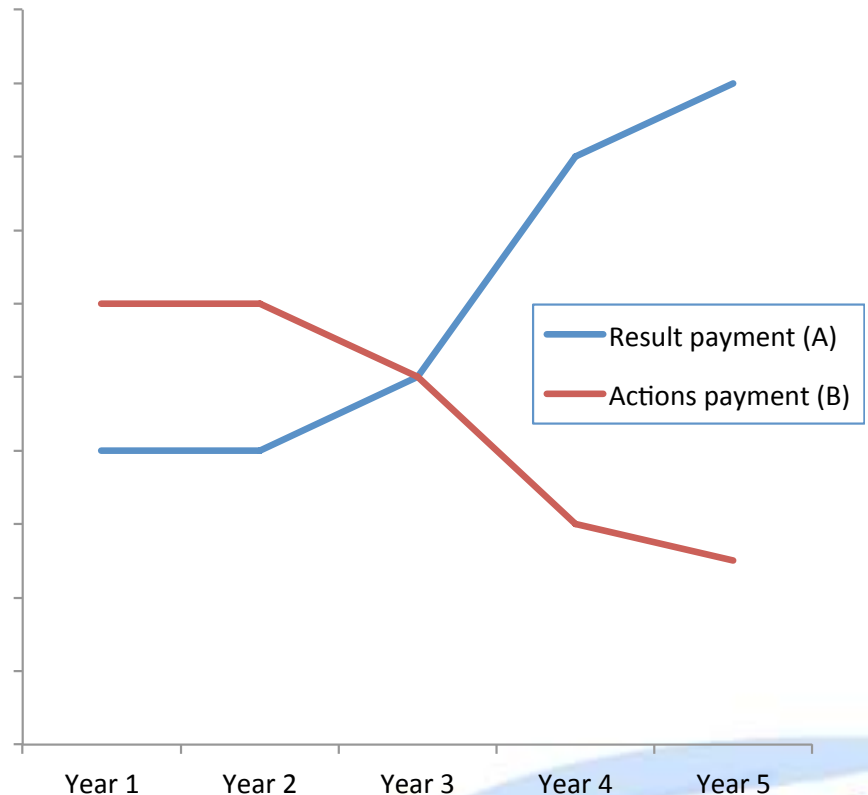
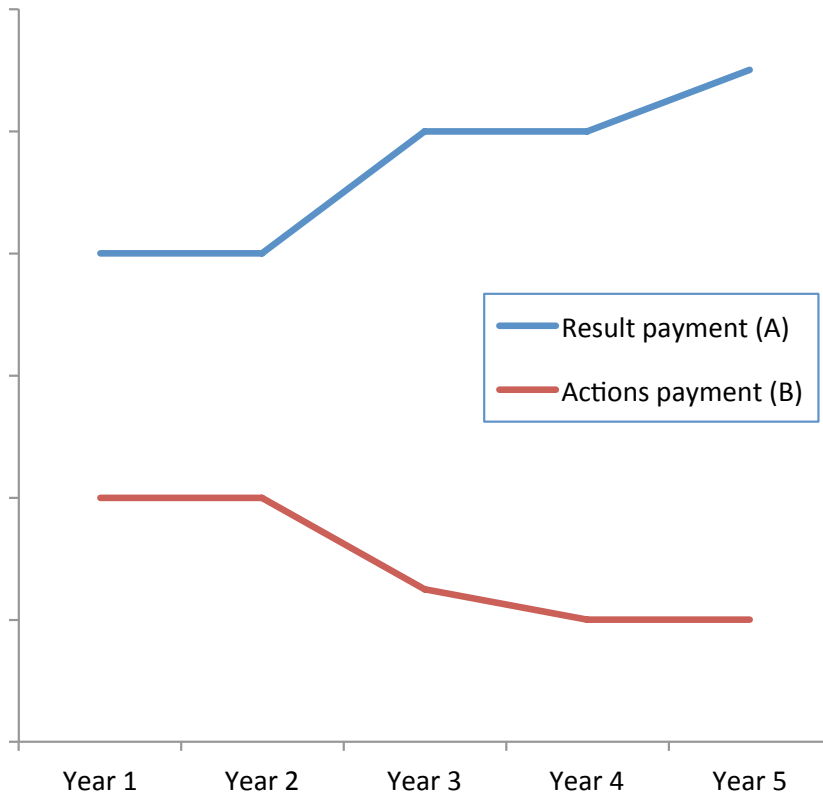
Sample payment profiles



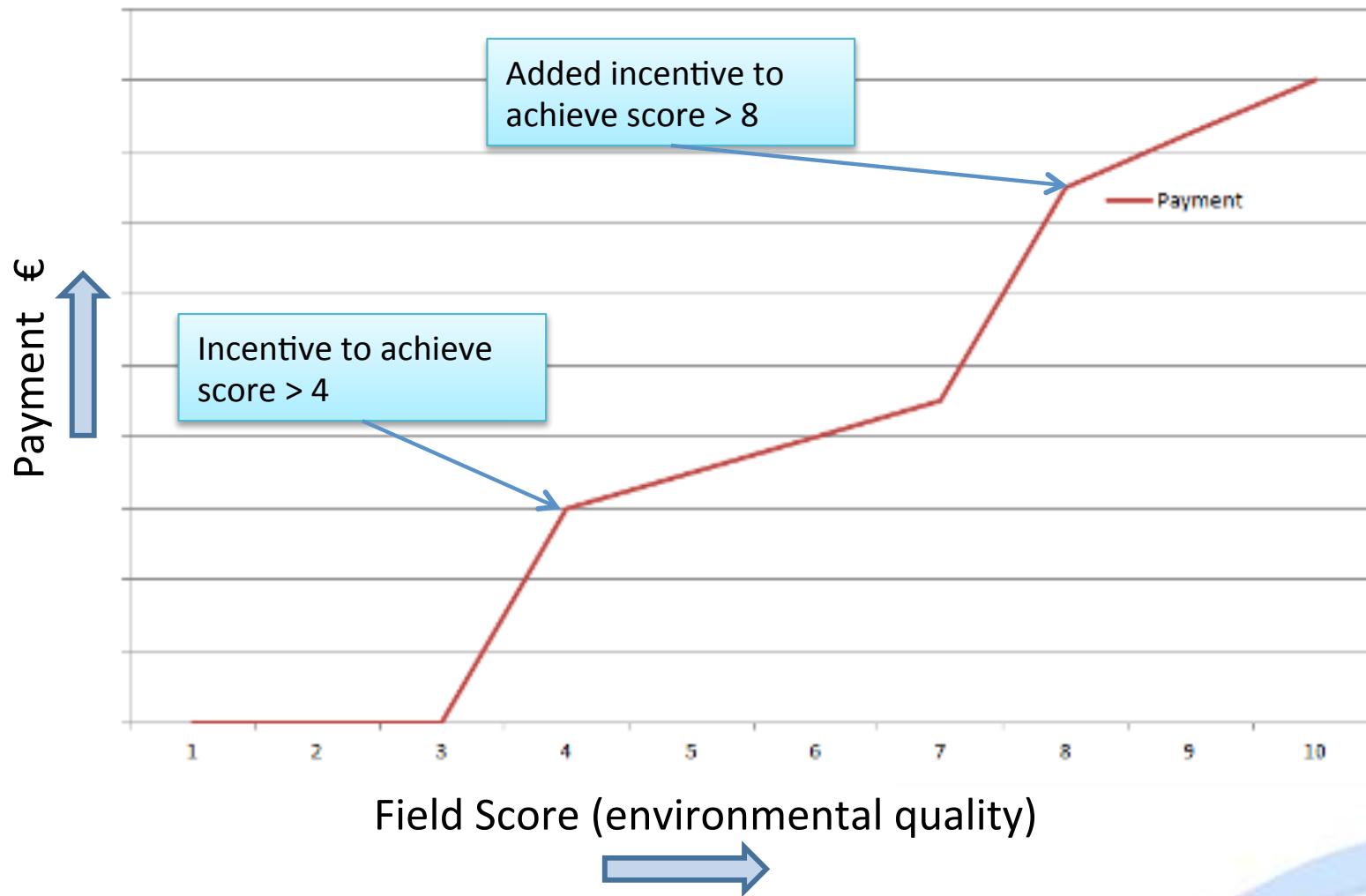
Farmer 1
High environmental score year 1



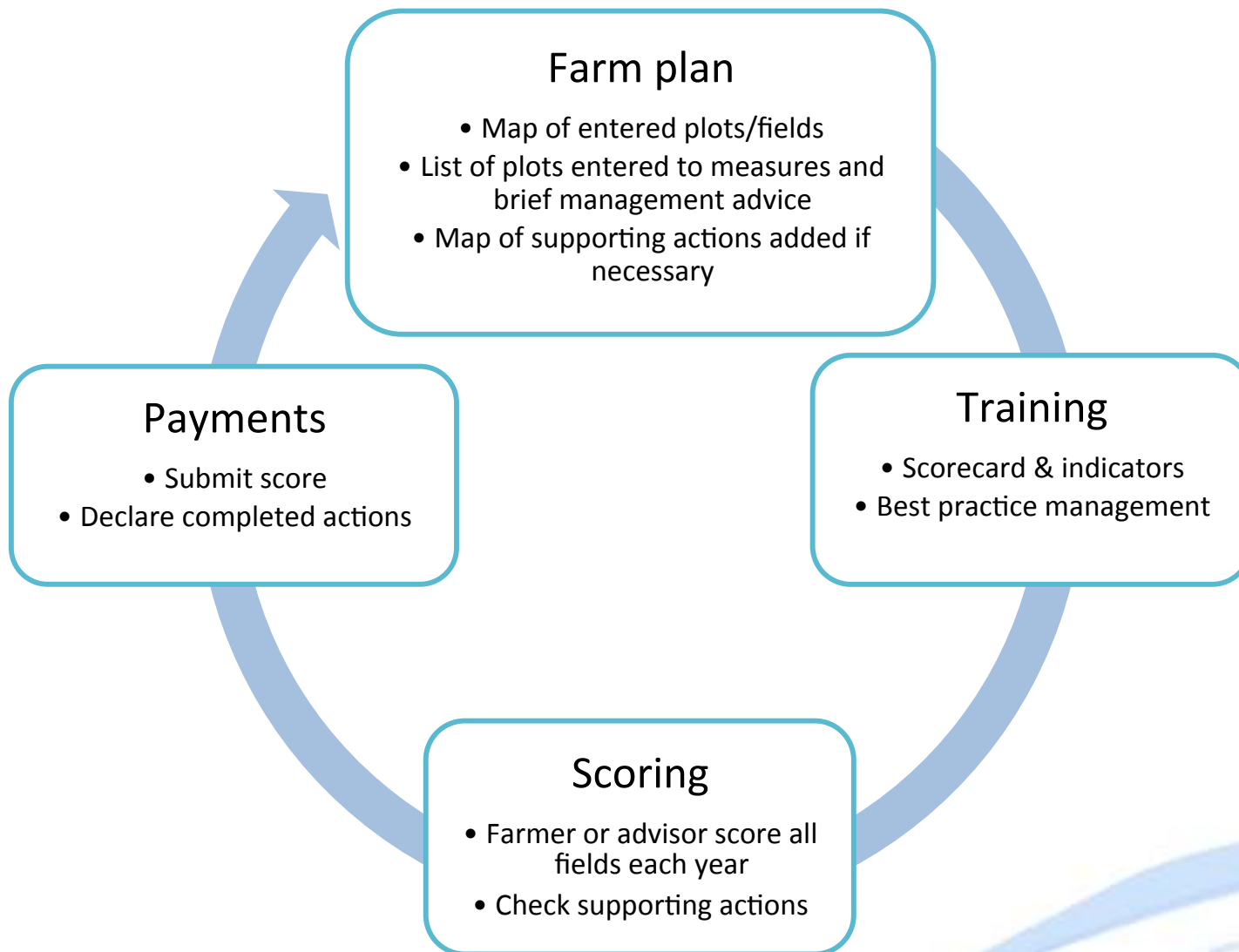
Farmer 2
Low environmental score year 1



Result Based Payment Scale



PMP assessment process





Priority Ranking

Private lands

Mussel river
Other watercourse
Other area of catchment

Commonage

Mussel river
Other watercourse
Other area of catchment

High



Next steps

- Recruit two catchment officers to join team
- Farmer meetings in each area (late 2018)
- Publish outline of scheme – guidance documents, T&Cs
- Recruit participating farmers
- Advisor and farmer training

