Using technology to deliver effectively

Experience from Irish Pilots & Mainstream AES (ACRES Cooperation)

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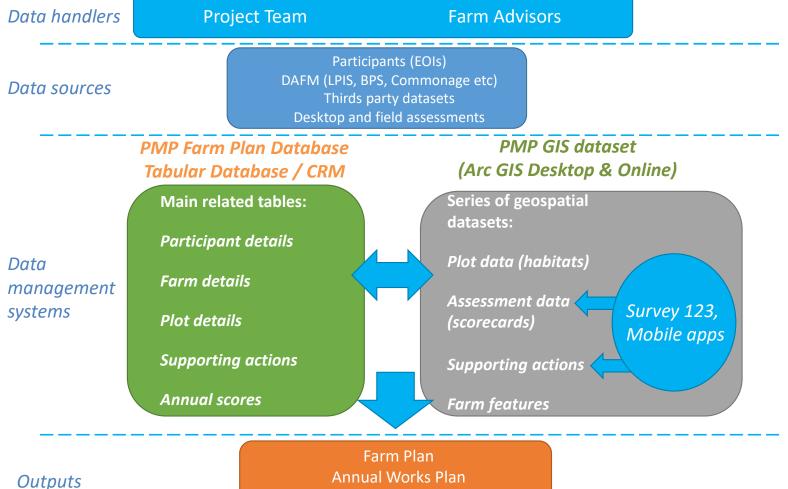
IT Requirements of data management system

Experience from Pearl Mussel Project EIP (Pilot RBPS)

- Results-based agri-environmental scheme
 - Year 4 of a 6 year project
 - 470 Farmers receive annual payments
 - Working with 60 agricultural advisors
- Data includes geospatial and tabular data
 - Farmer data (incl. personal information)
 - Land parcel data
 - Annual environmental data related to farmers and land
 - Data on annual measures to be undertaken by farmers
 - Management plans
 - Payment calculations and payment reports



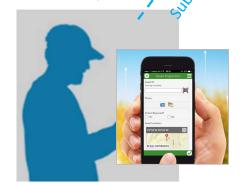
Pearl Mussel Programme - Data management Structure



Payment Sheets

Online Mapping System

Advisors (field assessors)



Mobile data capture

Data feeds Into following outputs:

- Payment sheets
- Annual works plan
- Management Advice

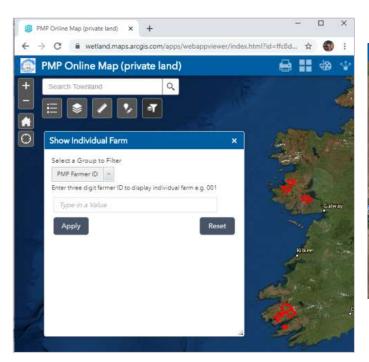


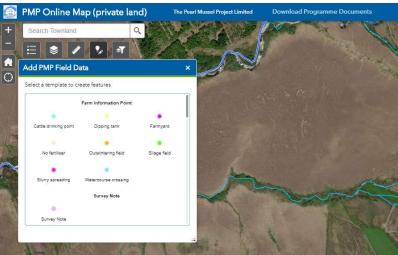
Project team



Pearl Mussel Project

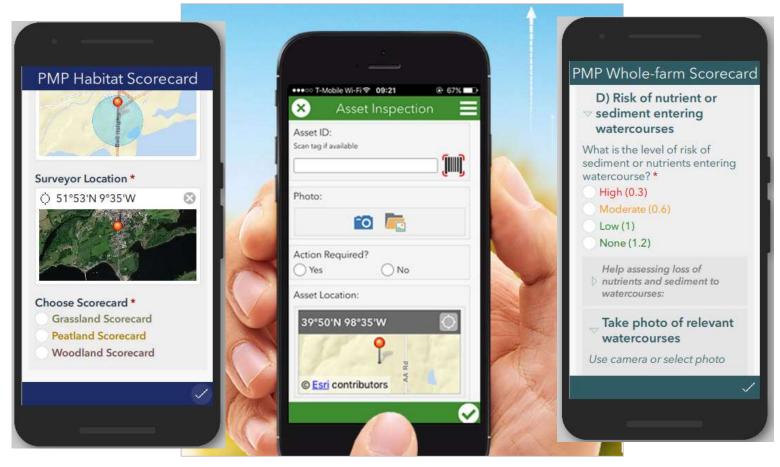
PMP Online map (hosted on ESRI ArcGIS Online Platform)







Mobile field recording





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Farm Plan Database (outputs) contd...



Management Advice Reports (annual)

Plot ID	Habitat	Scor	e Comment (management advice to improve score)
01	Bog / Heath	8	Remove negative/non native species through methods approved by project team
02	Bog / Heath	10	Continue current management of this high quality peatland.
03	Grassland	8	Removal of gorse scrub following PMP supporting action specification.
04	Grassland	9	Continue with current management of this high quality grassland.



Farm Plan Database (outputs) contd.. Payment sheets

Breakdown of payment (see page 2 for further details)	Private lands
Habitat quality payment (after GLAS deduction)	€2305
Floodplain payment	€225
Sub-total	€2530
Adjusted based on whole-farm result	€1518
Final payment adjustment	<u> </u>
Results based payment (private lands, see breakdown above)	€1518
Supplementary payment (applies to payments below €1100)	(+) €0
	€1518
Adjustment for non-attendance at annual training (10% deduction)	(-) €0
FINAL PAYMENT DUE TO PARTICIPANT	€1518

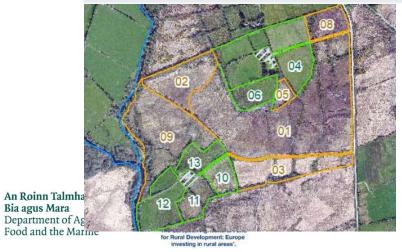






Farm Plan Database (outputs) contd.. Payment sheets

Plot No.	LPIS Parcel ID	Habitat	GLAS	Floodplain	Length (m)	Score	Area (ha)	Payment calculation Plo	ot payment
04	H21713054	Grassland	FHPN	N		4	4.84	€329.12 (4.84ha @ €68)	€329
07	H21709040	Grassland	FHPN	Υ	100	5	1.49	€117.71 (1.49ha @ €79)	€118
12	H21713049	Grassland	FHPN	Potential		5	2.08	€164.32 (2.08ha @ €79)	€164
03	H21713061	Bog / Heath	FHPN	N		5	2.61	€206.19 (2.61ha @ €79)	€206
13	H21713049	Grassland	FHPN	N		6	1.02	€91.8 (1.02ha @ €90)	€92
08	H21713043	Bog / Heath	FHPN	N		6	1.09	€98.1 (1.09ha @ €90)	€98
10	H21713049	Grassland	FHPN	N		7	0.86	€86.86 (.86ha @ €101)	€87
11	H21713049	Grassland	FHPN	N		7	1.16	€102.01 (1.01ha @ €101); €9.15 (.15ha @ €61)	€111
09	H21713049	Bog / Heath	FHPN	Potential		7	4.93	€300.73 (4.93ha @ €61)	€301
01	H21713044	Bog / Heath	FHPN	N		7	11.68	€605.12 (9.92ha @ €61); €40.48 (1.76ha @ €23)	€646
05	H21713056	Bog / Heath	LIPP	N		8	0.42	€16.8 (.42ha @ €40) Less GLAS Deduction of: €6.72	€10
06	H21713055	Grassland	LIPP	N		8	1.11	€44.4 (1.11ha @ €40) Less GLAS Deduction of: €17.76	€27
02	H21713044	Bog / Heath	FHPN	Potential		10	2.33	€116.5 (2.33ha @ €50)	€117



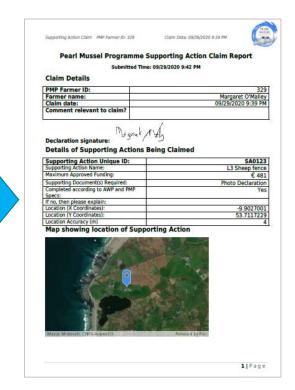


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Supporting Action Claims (farmer self claim app.)











Environmental screening of farm actions

- RBPS data enables
 - Targeting of farm actions (NPIs, Landscape Actions)
 - Screening of environmental impacts in approval process
- Scorecard and other environmental data to inform screening
 - GIS overlap of actions against environmental receptors
 - Suggested decline or approve based on characteristics of action vs sensitivity of the receptor



Other uses

- Only scratching the surface
- Technology should enable:
 - Improved field assessments (scoring) (remote sensing, existing datasets, use of drones etc)
 - Verification checks
 - Increase efficiencies around many work flows
 - Enable enhanced farmer engagement
 - Improved availability and interrogation of project data





Challenges around IT

- Upscaling presents challenges all easily overcome
 - Technology should be solution rather than obstacle
- Integrating RBPS into existing IT infrastructure
- Data flow between stakeholders (project team, paying agency, advisors, farmers, other relevant agencies)
- Requirement for IT engagement early in design phase
 - Need understanding of what we want to achieve
- Requirement to adapt to evolving scheme



Thank you!





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