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Waters of LIFE Farmer Training

Run Off Risk Assessment

Dec 2025

WHAT WE'LL COVER

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1. Principles of Runoff Risk Assessment (RRA)
2. Tools of RRA
3. Exercise
4. Q&A
5. Field Visit

Local Water Quality

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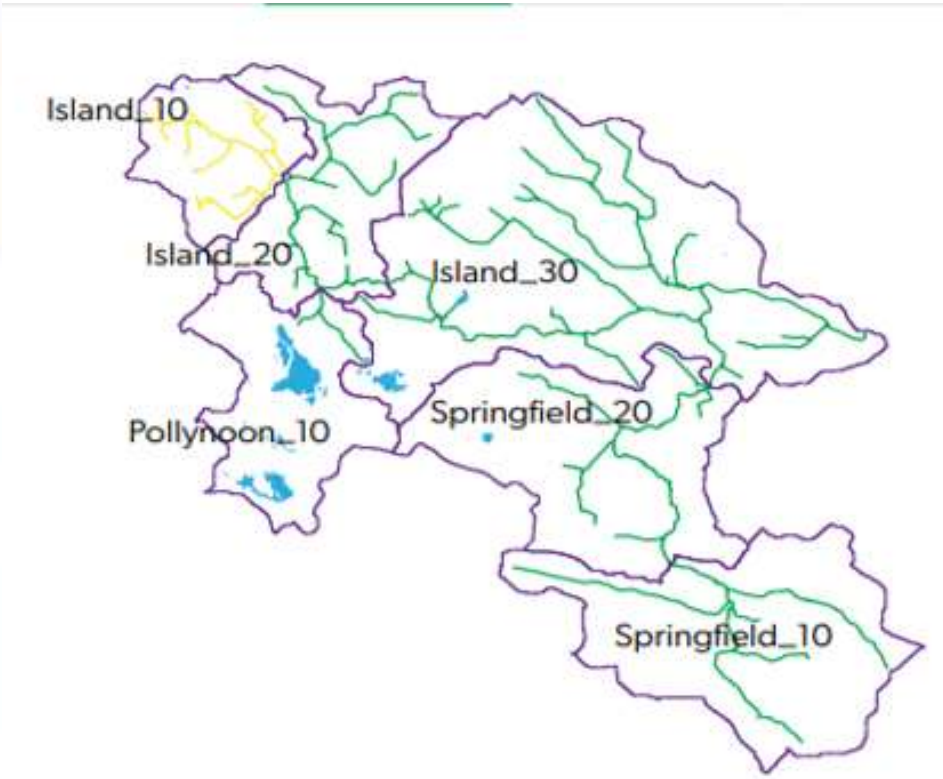
Status 2016-2021	EPA status, objective and risk		
Water body	**Ecological status of water quality**	**Water quality objective**	**Is it at risk of not meeting its objective?**
Island_10	**Moderate**	Restore to good	At risk
Island_20	Good	Protect	Not at risk
Island_30	Good	Restore to high	At risk
Springfield_10	Good	Protect	Not at risk
Springfield_20	Good	Protect	More assessment needed
Pollynoon_10	Good	Protect	More assessment needed



Local Water Quality

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Water Body	Ecological Status of Water Quality	Water Quality Objective	Is it at risk of not meeting its objective?
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Source-Pathway-Receptor (S-P-R)

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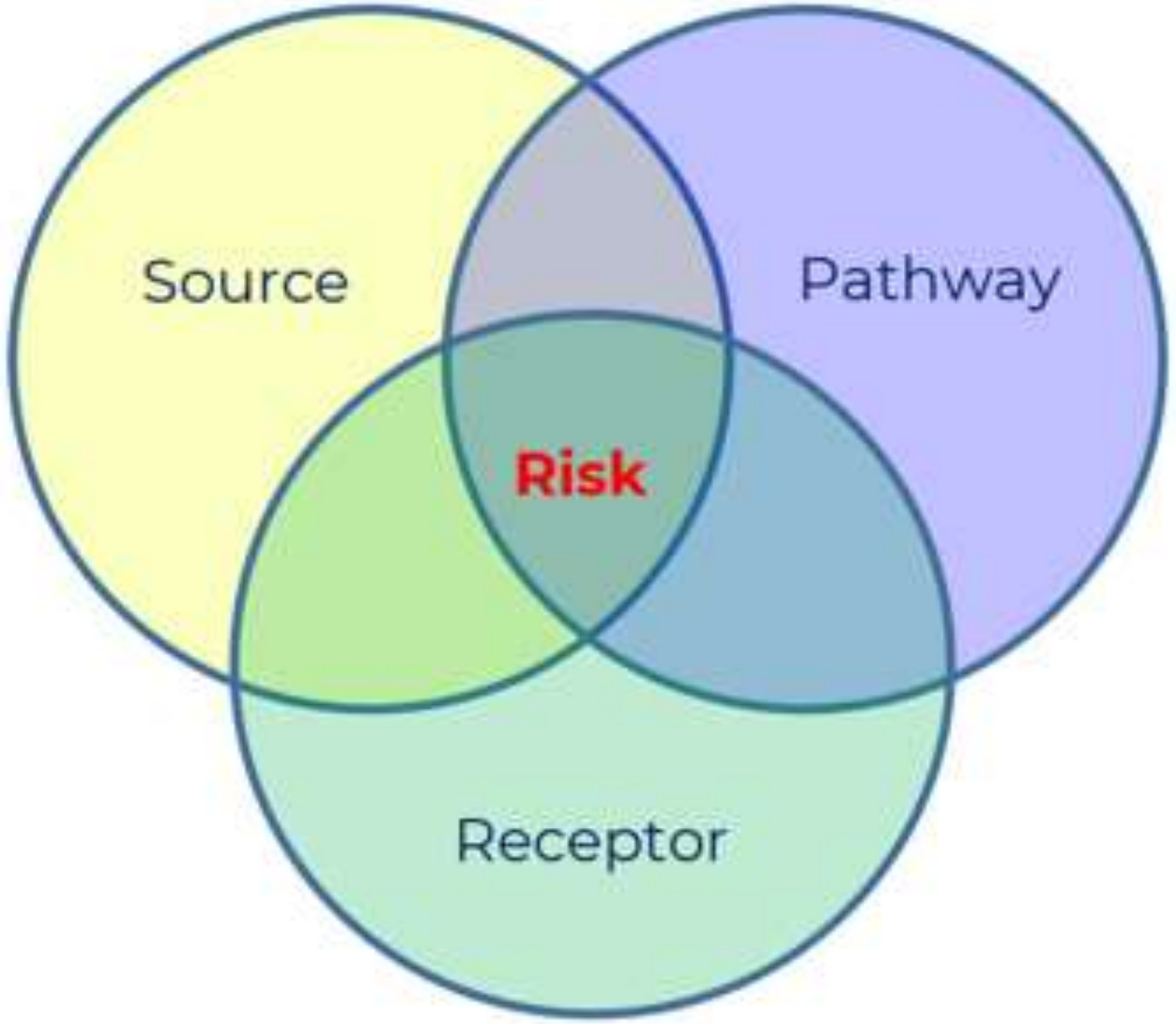
The source-pathway-receptor model is used to conduct runoff risk assessment.

The potential source of a pollutant must be identified, followed by the pathway connecting the source to the receptor (e.g., the stream/river).



Source

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Pathway

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Receptor

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Definition of Risk

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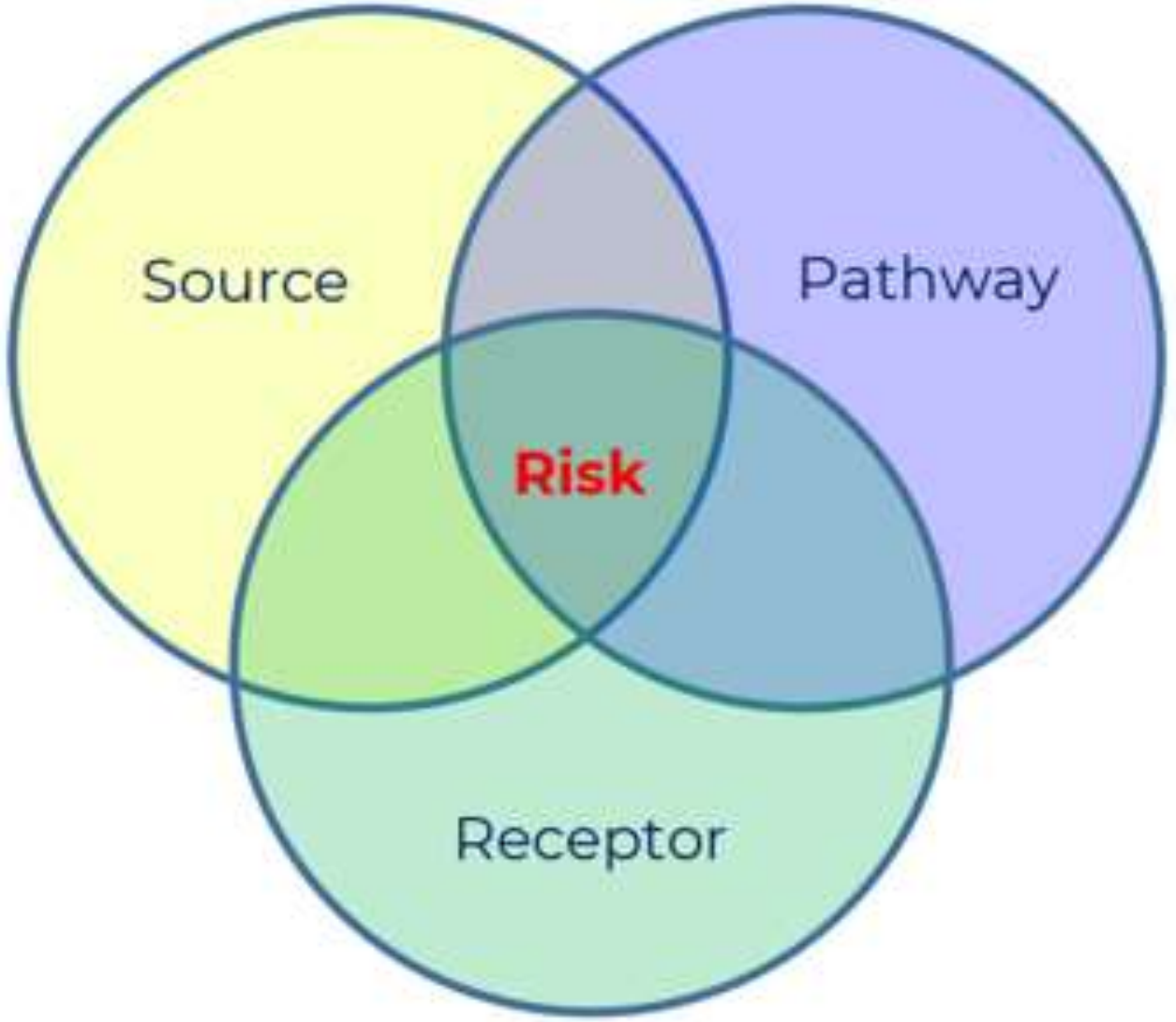
- RISK TO WATER QUALITY:

- Anywhere you find a pathway between a pollutant source and a stream/river, there is a risk to water quality.



Definition of Risk

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- High Risk
- Source: soil
- Pathway: Overland Flow
- Receptor: Water channel

Definition of Risk

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- Low Risk
- Source: soil
- Pathway: Overland Flow
- Receptor: None

Definition of Point of Interest

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Areas on the farm that should be followed up for investigation

- Points of interest include:

- Potential sources of pollutants
- Poaching/erosion
- Areas used for silage bale storage etc

- Significant pathways for pollutants
- Farm trackways
- Drainage ditches
- In-field flow pathways

Soil Types and Groundwater Vulnerability

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- Free Draining (Downward flow)

- High Risk
- Nitrates Loss

- Poor Draining (Overland flow)

- High Risk
- Sediment Loss
- Phosphorus Loss

Tools of the Runoff Risk Assessment

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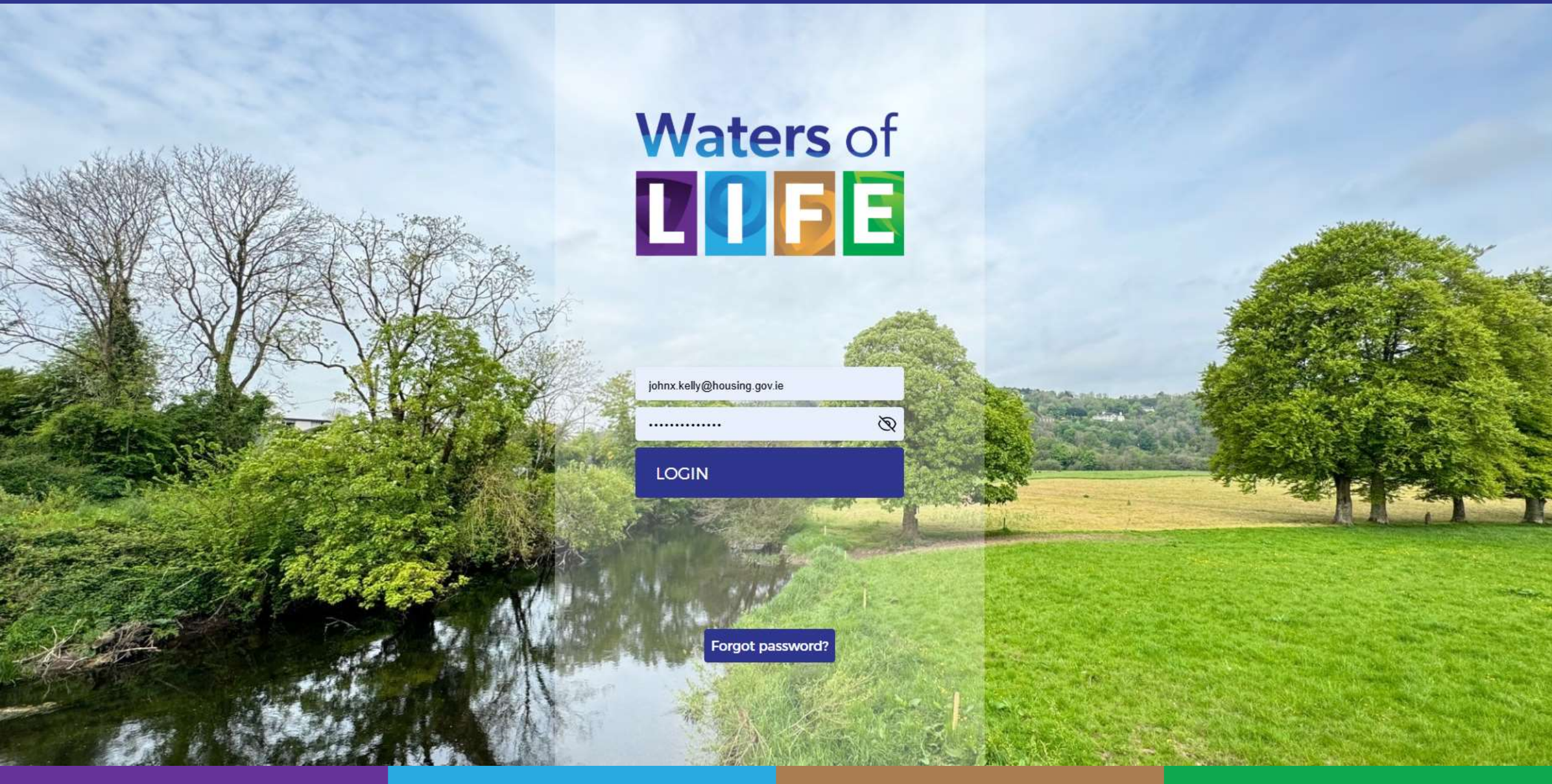

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FARMER TRAINING

Runoff Risk Assessment – Dec 11th 2025

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An Roinn Tithíochta, Pleanála agus Rialtais Áitiúil
Department of Housing, Planning and Local Government

FARM IN AREA SIMILAR TO ISLANDS

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FARM IN AREA SIMILAR TO ISLANDS WITH RIVER

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FARM IN AREA SIMILAR TO ISLANDS WITH RIVER; DRAINS

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FARM IN AREA SIMILAR TO ISLANDS WITH RIVER; DRAINS; FLOW

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FARM IN AREA SIMILAR TO ISLANDS WITH RIVER; DRAINS; FLOW AND RIVER CROSSING

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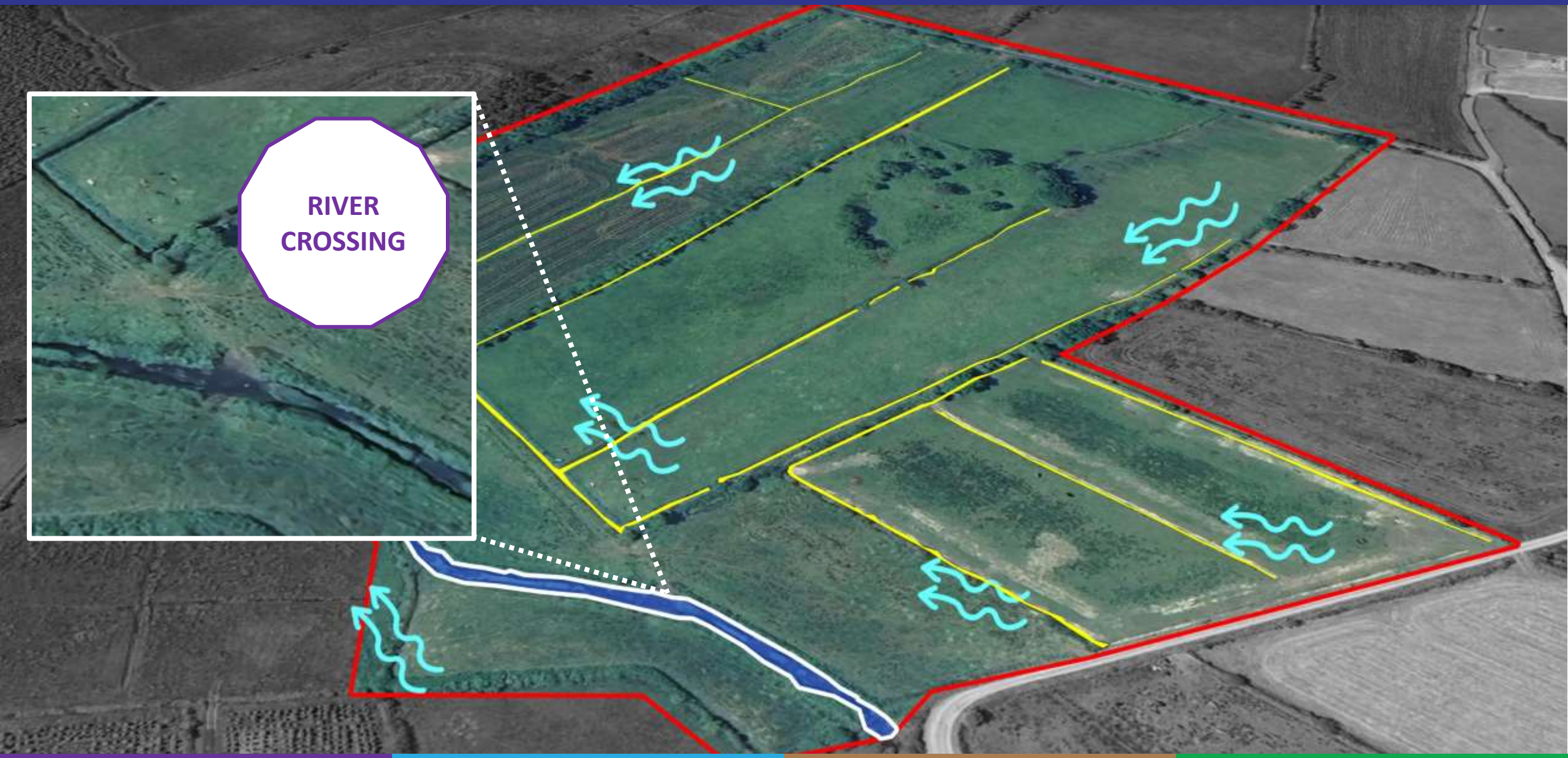

FARM IN AREA SIMILAR TO ISLANDS WITH RIVER; DRAINS; FLOW

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5 MORE POINTS OF INTEREST:

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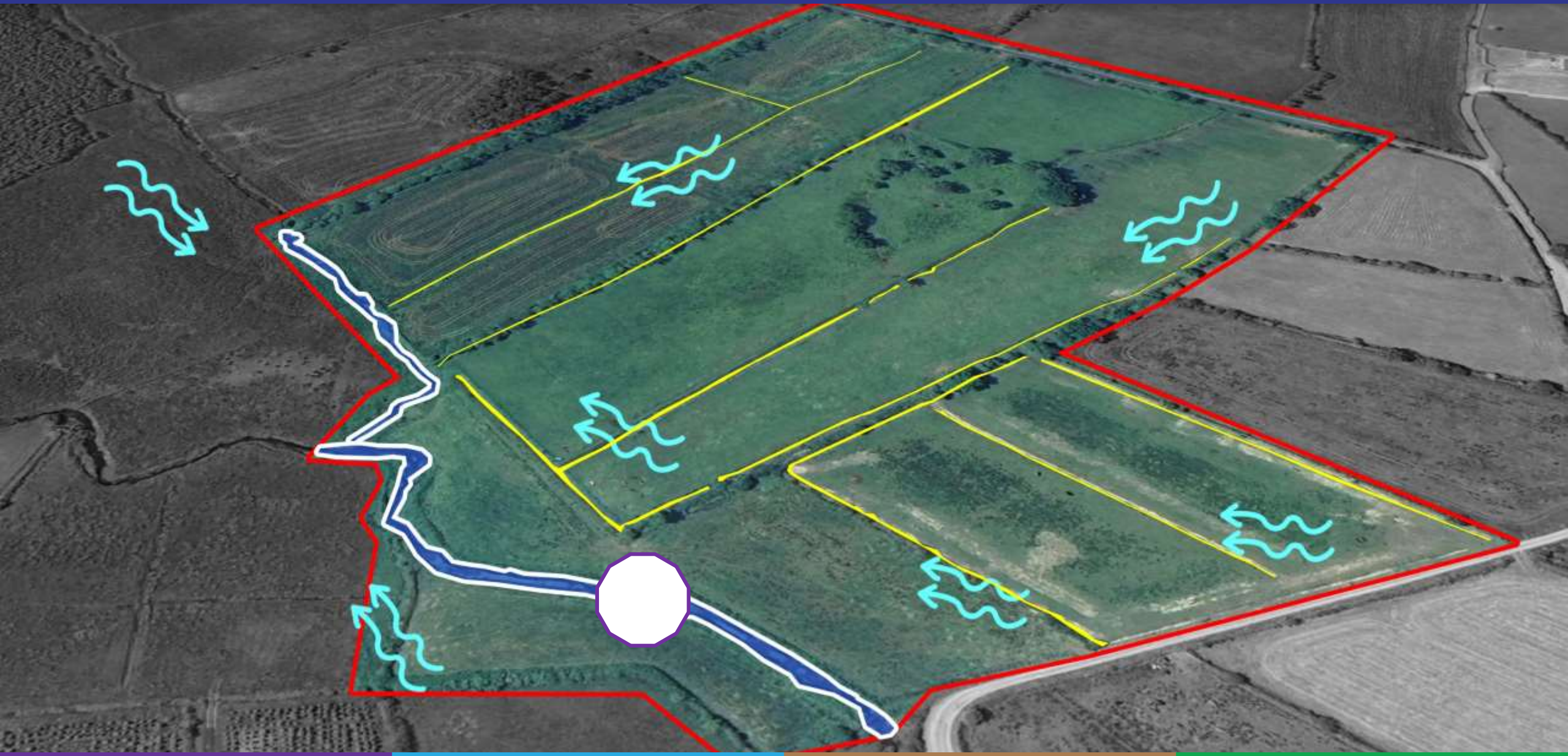

6 POINTS OF INTEREST:

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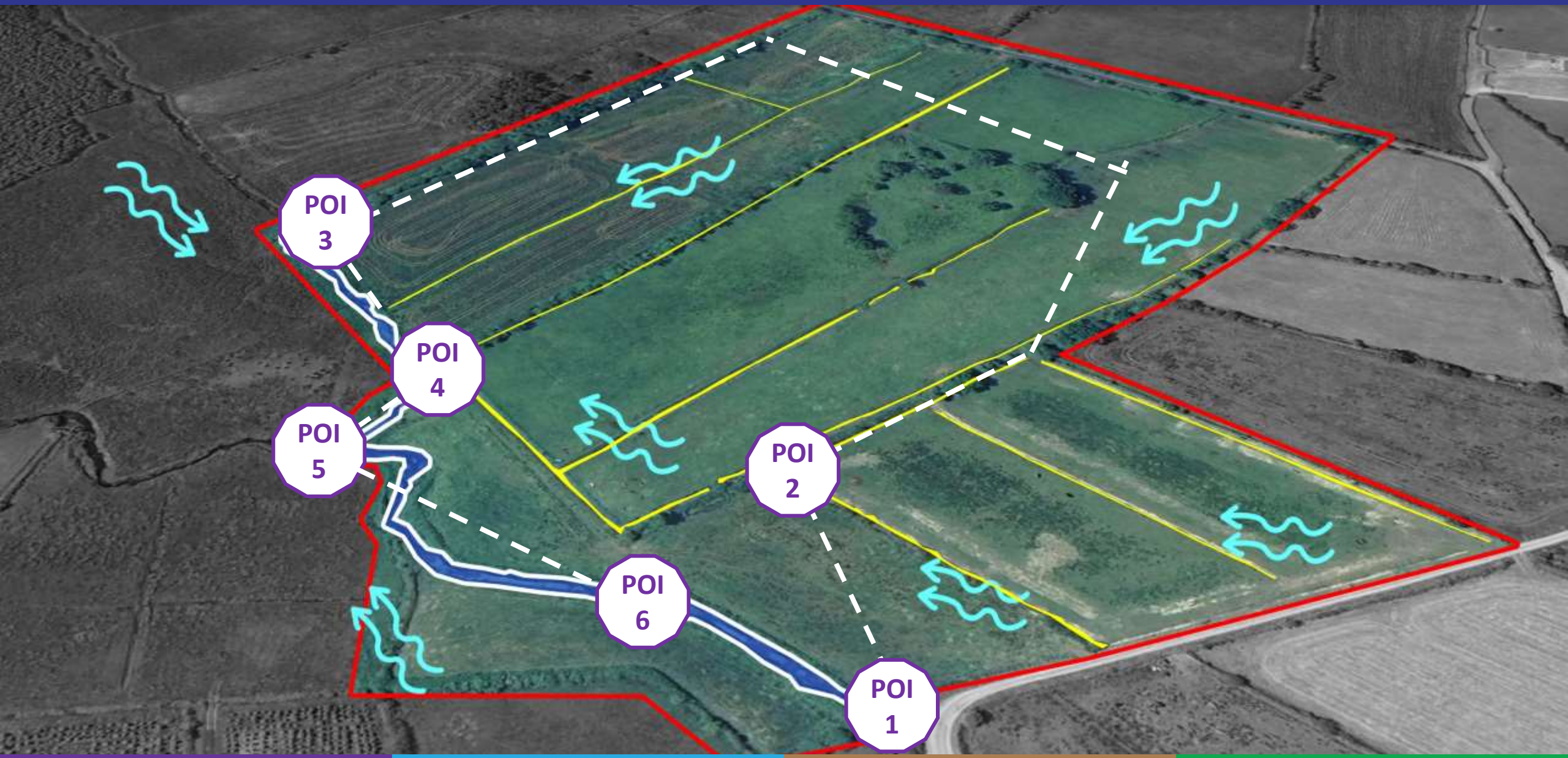

6 POINTS OF INTEREST:

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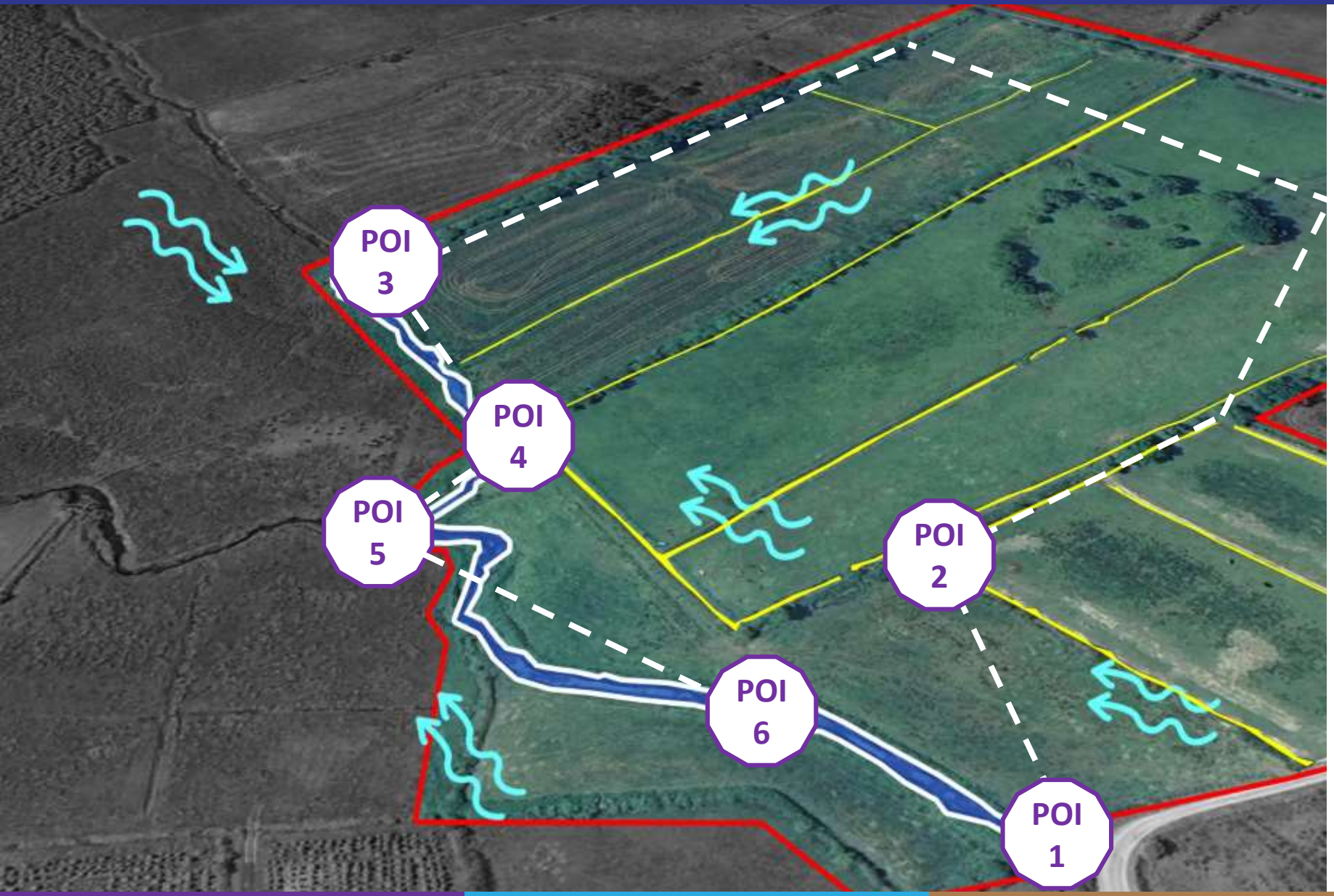

Points of Interest:

1. Drain connection
2. Drain connection
3. Drain connection
4. Drain connection
5. River connection
6. River crossing

SUPPORTING ACTION 1: RIVER CROSSING

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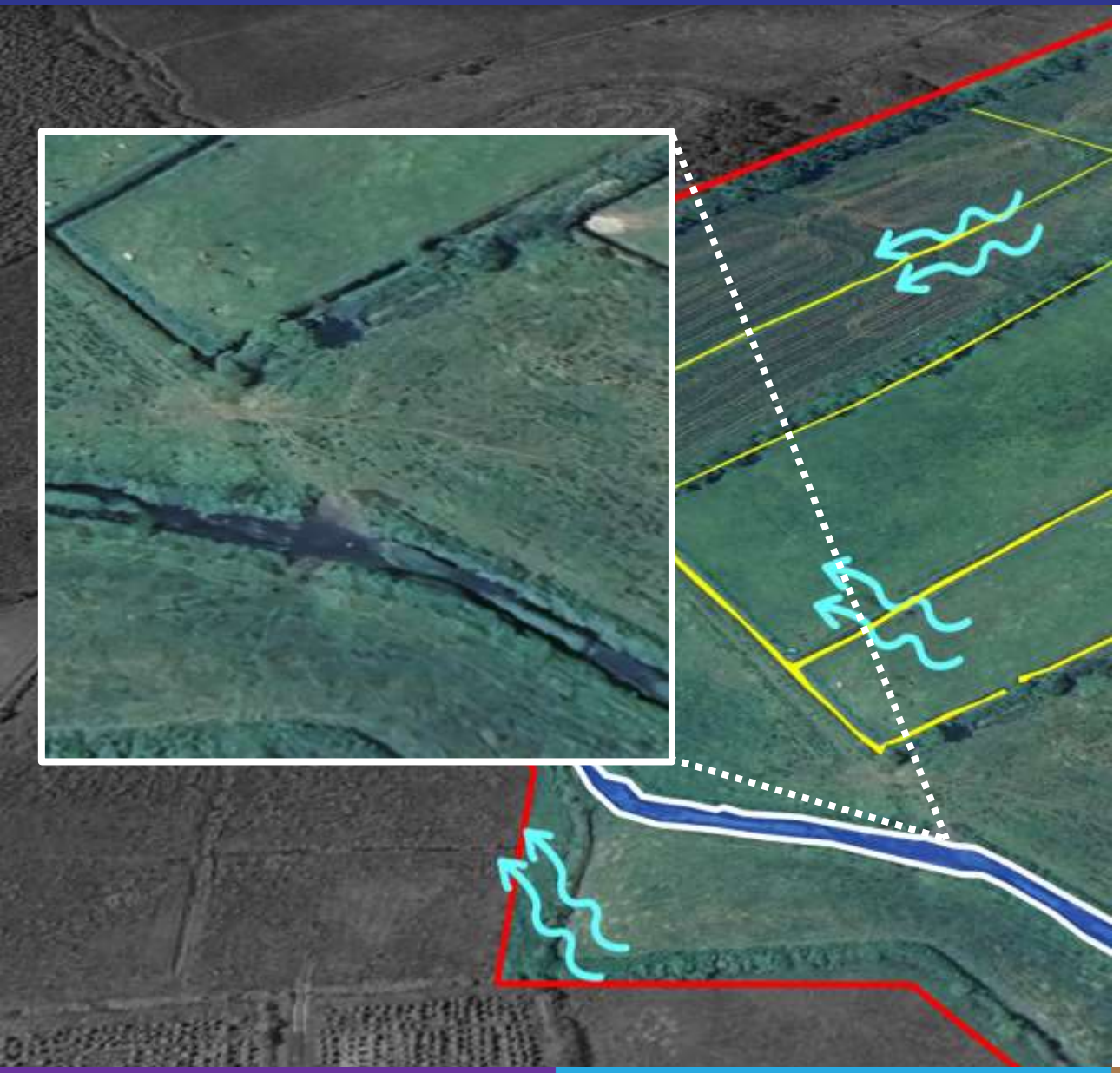

River crossings can introduce sediment and pollutants into the river.

Replacing crossings with a proper bridge can positively impact the river.

Bridge should be fit for purpose and constructed with materials that will not cause pollution.

Clear-span bridges are preferred.

Responsibility of farmer to ensure legal requirements are adhered to.

Payment Rate: 50% of cost to €5,000

SUPPORTING ACTION 2: VEGETATED BUNDED DRAIN

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Ditches/drains are a major pathway for water, sediment, and nutrients.

Vegetated bunded drains retain sediment and nutrients

Not suitable for

- Streams
- Hilly areas with risk of flash flooding
- Free-draining areas

A suitable ditch or drain, dry or wet must have a slope of less than 5%.

Payment Rate:
€1,000 per drain. 20m to 50m

SUPPORTING ACTION 3: SEDIMENT TRAPS

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A sediment trap is shallow basin with a slight slope on its base to intercept run off.

High in the ground to account for ground water.

Does not connect directly to drain
Can be fenced where required

Payment Rate:
€120 per unit per year

SUPPORTING ACTION 4: LIVESTOCK WATER PROVISION

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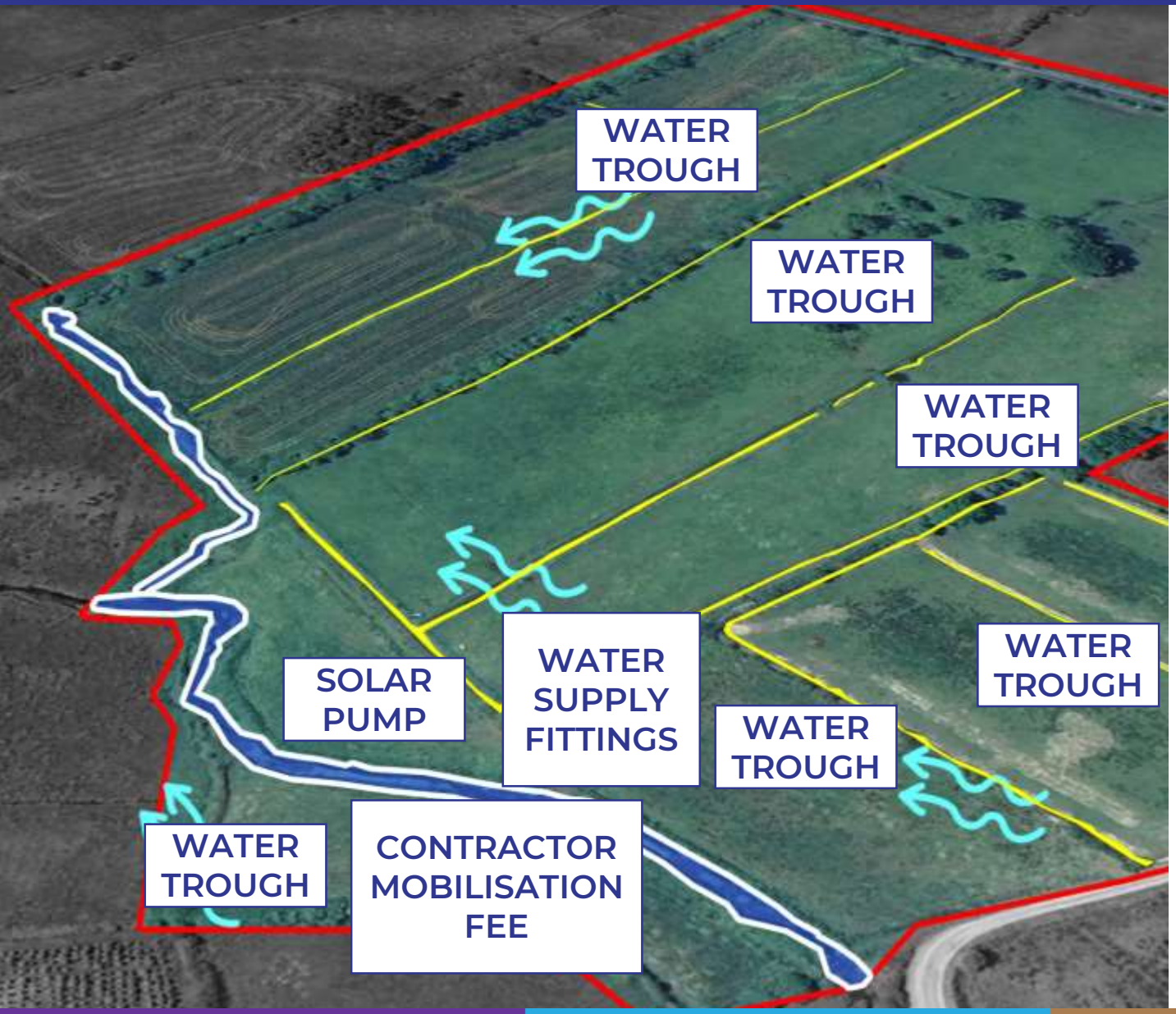

Prevents sediment source from livestock access in a cost effective way.

Must be a clear requirement

No crossover with TAMS

Payment Rates:

Solar pump: €2,500/unit (Max. 2)

Trough: Up to €300/unit.

Water Supply Fittings: €300/unit.

Contractor Mobilisation Fee: €200

SUPPORTING ACTION 5: FENCING

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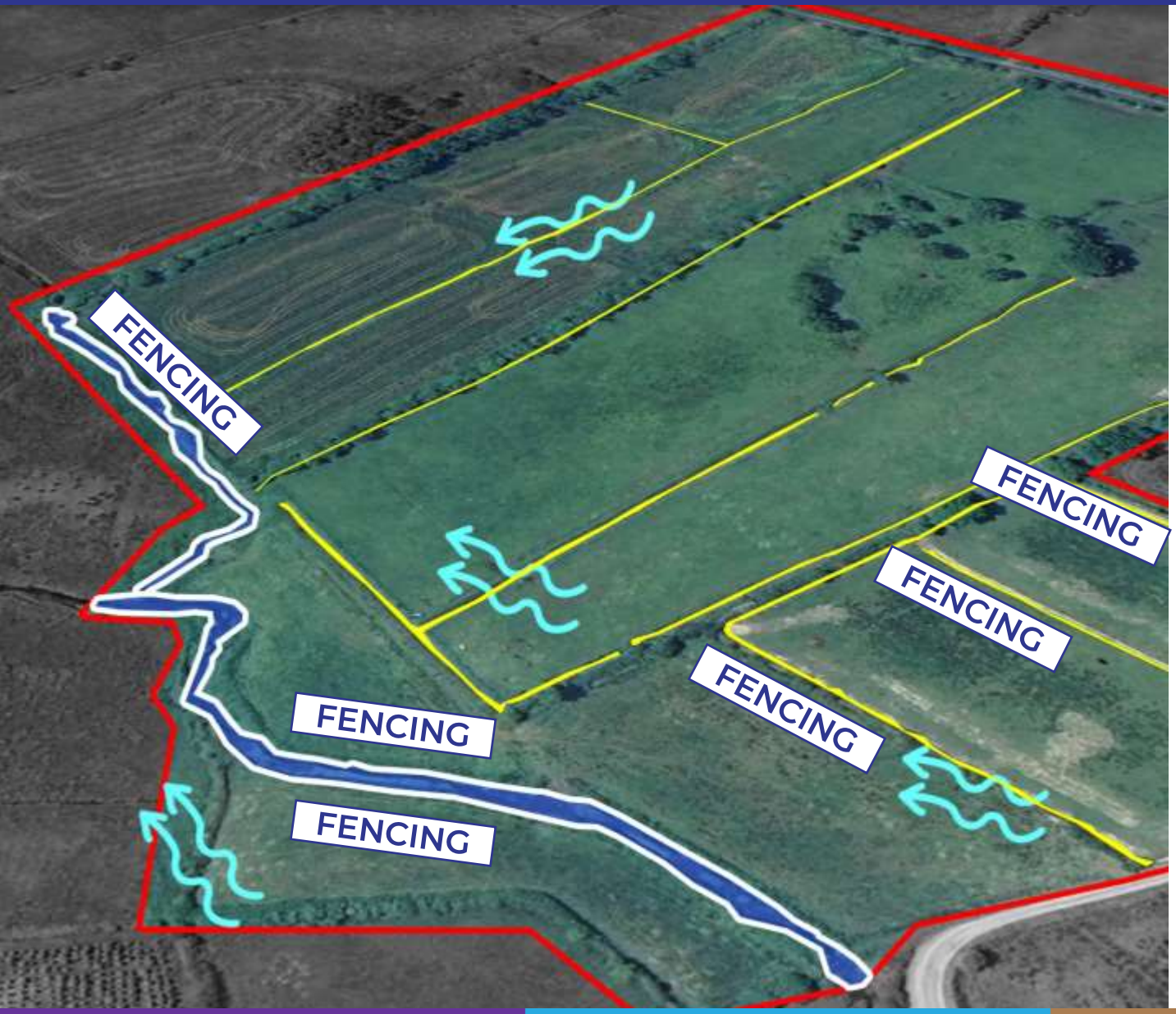

Prevents live stock access

Permanent and stock proof

Follow DAFM spec

Pigtails not permitted

Old fence removed

Not used to divide a field

Payment Rates:

Permanent SS electric: €2.77/m.
Barbed wire fence: €4.50/m