Sustaining the Gwent Levels
Sustainable Management Scheme Project
Highly designated landscape:

- 6 SSSIs
- National Nature Reserve
- River Usk SAC
- Severn Estuary European Marine Site – SPA, SAC & Ramsar
- Landscape of Outstanding Historic Interest
Watercourse hierarchy

Main reens

Field drains

Ditches/Grips
Project Background

New Legislation –
• Environment (Wales) Act.
• Well-being of Future Generations (Wales) Act.

Wider Context –
• Declining species & habitats.
• Climate Change.
• Water quality issues.

Policy Context -
• Declining budgets.
• Pressure on government to respond to water quality issues.
• Brexit
• Also now Covid-19 becomes a factor
Threats

**Encroaching development:**
- M4 Relief Road
- Tidal Lagoons
- Small scale renewables – turbines.
- Solar farms
- Private dwellings

**Changing Land Management**
Farming practices have changed - no longer support habitats and species.
Policies – CAP – have driven farmers into production at all costs approach that leaves little space for nature.

**Disconnection**
People are disconnected from where food comes from and the other benefits they gain from land management.
Also disconnection from nature and the positive aspects of healthy ecosystems.
Living Levels Partnership

Heritage Lottery Fund — partnership including RSPB, NRW, Gwent Wildlife Trust, Bumblebee Conservation Trust, Buglife, Gwent Archive, National Trust, Sustrans, Cardiff Council, Newport Council, Monmouthshire Council, Cardiff Story Museum.

£3.7 million pound


Project team based at Pye Corner — 9 staff.
Aims of Sustaining the Gwent Levels.

Demonstrate sustainable land management on the Gwent Levels.

Establish the impacts of delivering sustainable land management on farm businesses.

Influence future land management policy and support.

Improve the environment of the Gwent Levels for people and wildlife, whilst supporting sustainable farm businesses.

Investigating alternative methods of funding land management.
The project will contribute to or deliver priorities identified within a range of current policy areas including:

- Area Statements
- Local Well-being plans
- Post Brexit land use policy development within a place based approach.
- Nature Recovery Plan
- Natural Resources Policy
- River Basin Management Plan
- SoNaRR
- Delivery of SMNR
- WFG Act & Environment Act
Project Actions:

Co-ordinate action for:

- Water & nutrient management.
- Management of designated site features including ditches, willow pollards and orchards.
- Identify opportunities to restore or create pollinator habitat.
- Provide nesting sites for priority bird species.
- Establish the costs of delivering sustainable land management.
- Identify the support requirements to deliver positive outcomes i.e. advice & guidance.
- Investigate the wider benefits land management provides through an Ecosystem Services Assessment of the Gwent Levels.
- Identify the services valued by local communities and raise awareness of the benefits provided by sustainable land management.
- Investigate the opportunities for payment for ecosystem services to fund sustainable land management.
- Investigate the impacts of modern underdrainage on a range of factors including condition of SSSIs, flood impacts.
Working with farmers
Capital Works
Ditch Re-casting
## Farms we are working with:

<table>
<thead>
<tr>
<th>Farms</th>
<th>Ditches</th>
<th>Pollards</th>
<th>Orchest (ha.)</th>
<th>NMP’s</th>
<th>Water Quality Assessments</th>
<th>Nest boxes</th>
<th>Pollinator Surveys</th>
<th>PES Involvement</th>
<th>Farming System</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sluice House</td>
<td>Y</td>
<td>0</td>
<td>0</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Sheep, 17 acres of herbal ley being trialed from Sept 2020</td>
</tr>
<tr>
<td>New</td>
<td>Y</td>
<td>1</td>
<td>0.05</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Egg Laying, One of 2 ‘intensive’ project farms</td>
</tr>
<tr>
<td>Fair Orchard</td>
<td>Y</td>
<td>0</td>
<td>0</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Beef, involved in underdrainage project</td>
</tr>
<tr>
<td>Arch</td>
<td>Y</td>
<td>1</td>
<td>0</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Beef, contributed to PES workshops</td>
</tr>
<tr>
<td>Cross</td>
<td>Y</td>
<td>9</td>
<td>0.62</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Dairy, Underdrainage / PES involvement / Chris Clarke assessment.</td>
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<tr>
<td>Great Newera</td>
<td>Y</td>
<td>0</td>
<td>0.86</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Mixed, trialing 5 acres of herbal ley in disked recast ditch spoil</td>
</tr>
<tr>
<td>Hazel</td>
<td>N</td>
<td>0</td>
<td>0</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Winter Grazing, Restoring 7.5 acres of traditional meadow</td>
</tr>
<tr>
<td>Whitson</td>
<td>Y</td>
<td>5</td>
<td>0.2</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>Beef</td>
</tr>
<tr>
<td>Great Porcon</td>
<td>Y</td>
<td>13</td>
<td>0</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>Beef, PES involvement / CC assessment?</td>
</tr>
<tr>
<td>Mead</td>
<td>Y</td>
<td>8</td>
<td>0.38</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>N</td>
<td>Dairy, second of 2 ‘intensive’ project farms</td>
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<table>
<thead>
<tr>
<th>Total</th>
<th>5,119 m</th>
<th>37</th>
<th>2.12</th>
<th>9</th>
<th>2</th>
<th>7</th>
<th>6 to date</th>
<th>7</th>
<th>All grass based</th>
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<tbody>
<tr>
<td>Distance</td>
<td>4 km</td>
<td>30</td>
<td>5 Ha.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

A number of other farms are also identified as potentials to receive capital works under the SMS funding:

- Greenfields: 0.6
- Off Church Lane: 400 m
- Off Starlight Mile: 597 m
- Oakfield
- Porton House: 0.63
- Little Porton: 0.17
- Cherry Orchard: 0.3
- 5 Fields: Y, 0
- Sampson Court: 0.3

| Total         | 797 m   | 4  | 2   |
Monitoring & Modelling
Monitoring – Environment Systems

Remote sensing data
Fieldwork
Farmer Questionnaires

Outcomes:
• Inform future species monitoring schemes in Wales – previous schemes GMEP & ERAMMP have struggled to monitor species.
• Provide baseline for future monitoring.
Modelling – Environment Systems

• Ecosystem Services Assessment – what level of ecosystem services is the landscape currently providing?
• Ecosystem Modelling – what level of ES could the landscape deliver under a number of scenarios?
• What impact would change in land management have for ES?
Underdrainage Contract  – Rigare Ltd

- Increased pressure from farmers to underdrain the land
- We have a poor understanding of the impacts of underdrainage on a range of factors.
- Eco-hydrologists employed to build upon current understanding
Organised with Resources 4 Change.

2 x facilitated workshops
Interested parties and local stakeholders.

To engage local stakeholders and raise awareness and understanding of Ecosystem Services.

Better understand what local people appreciate from the landscape.

Feed into discussions around local PES schemes.
Key Findings:

Uncertain futures

- Farmers are uncertain of what changes in the next 3-5 years mean for land management on the Levels.

Role of the project officer critical – Lewis well respected so good foundation

- Good opportunity to develop network with SGL as the facilitator
- Consider SGL becoming Farmer’s friend role, to raise awareness of compliance with basic environmental regulations
- Provide forum for working through the changes in support as a result of Brexit/COVID.

Discussion on concerns amongst farmers – soil and grass management

- Farmers have a range of challenges but nowhere to discuss them – includes soils and land management, management of water levels, economics, management of reens and ditches.

Develop farmer to farmer discussion groups

Consider developing some innovations that are on the SGL wish list?

- If there are ideas it might be worth seeing if any farmers want to work with you. Consider some co-developed ideas for future areas of support
We still have a way to go yet but we feel there is a lot to build on:

We are already in discussions about how we can expand the scope of the project to better inform development of future land use policy.

The project is still evolving, exploring new markets to build resilient communities.

We want to continually adapt in order to inform policy developments and contribute to the discussions around climate change and Brexit.

Explore potential to capture C in the landscape and farming’s potential to contribute. Assist in the Green Recovery.

Continually communicate what we’re doing.
Thanks to

Welsh Government
Project partners
Rigare Ltd
Resources 4 Change
Farmers who are participating
Local people/stakeholders who have engaged in the project.