





A RESILIENT FUTURE FOR THE GWENT LEVELS INTERIM SUMMARY

DELL
RESOURCES FOR CHANGE LTD
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1. INTRODUCTION

Resources for Change were appointed by the RSPB to devise and run 3 workshops on the Gwent Levels for local stakeholders. The workshops had a target of engaging 60 participants whom represented a diverse range of people with a stake in the future of the Levels.

Two workshops were held at Newport Wetlands Nature Reserve (14th & 26th November) and one at Gwent College, Nash Campus (19th November). Each engaged diverse groups of participants who demonstrated a keenness to participate in useful in-depth discussion.

In total there were 23 participants across the three workshops from a variety of backgrounds. Groups represented by participants were farmers, landowners, established residents, new residents, conservation, the internal drainage district, the internal drainage board, community councillors, elected councillors and the farming unions.

The workshops were run as part of the 'Sustaining the Gwent Levels' project; a European funded, Welsh Government sustainable management scheme initiative.

2. SUMMARY

The workshops were attended by very engaged participants who in almost every case were excited by the discussions and wanted to be involved in detailed and robust analysis of the topic.

The structure of the workshops began with an overview brief along with a brainstorming session to get participants thinking in line with the subject matter. This was followed by breaking into mini groups where ideas were developed further. Finally, the groups came back together to refine what they considered to be the most pressing management concerns and public goods associated with the landscape.

Water management featured as the most important aspect although it was noted that the workshop held at Nash College was less 'water focussed' than the other two. The clear direction of all three workshops is that the water management on the Levels could be better; this was not a criticism of the bodies carrying out the works, but more an acknowledgement of time and financial constraints in the public and agricultural sectors, therefore the discussions were focussed on how to overcome these issues in a manner that would be attractive or at least acceptable to the taxpayer.

'Payment for Ecosystem Services' is not a concept that all businesses are familiar with. Workshop participants however, agreed that the idea of it could be readily understood by all, as in principle it is no different to payment for 'goods and services' with a buyer purchasing from a seller. It was also acknowledged that the special situation for land and water management needs to consider initial delivery, stewardship and maintenance.

This approach was considered for management of both water and soil, and also for management of public accessibility. It was recognised across the groups that ecosystem services have benefits that extend beyond the environment; i.e. all three groups concluded with an acknowledgement that by addressing pressing issues of water and soil management, coupled with effectual access management and provision of biodiversity, society stands to gain more benefits than if the current policies of land management were to continue.

Several options were discussed with two being of greatest interest:

- > Service Level Agreements to deliver and manage/ maintain access and water courses
- > The Dwr Cymru model of not for profit but charges made for water management

3. WORKSHOP FINDINGS



The purpose of the workshop had been explained to all prospective participants.

As a reminder the key questions for exploration were presented. Explaining that the work is not entirely focussed on economics, and that a resilient future must be positive for the environment, society and the economy (triple-bottom line).

The groups considered the characteristics of the Gwent Levels ecosystem, identifying its special qualities:

Water courses: grips, ditches,	Fertile, reclaimed clay land – soil	Archaeology, geology,
reens, pills and sea defences	that retains minerals	topography
Fresh air	Orchards	Mild climate
National nature reserve	Much is SSSI	Biodiversity
Willows, Ash	Access to wildlife	High water table
Hedgerows	Extensive grasslands	Tidal mud flats
Bristol Channel	Some loam and peat	Some woodland



The Project Officer described the goods and services supplied through ecosystems under the four headings of provisioning, Regulating, Cultural and Supporting. Following on from this, two case studies of Welsh farms that result in multiple societal benefits were discussed. The aim was to get participants thinking how the whole Levels area might achieve similar societal benefits.

As a case study of a farm enterprise that considers all aspects of ecosystem services, the Calon Wen Dairy cooperative was described by the project officer. This is a profitable farming cooperative that sows herbal leys instead of commercial ryegrass to feed its dairy herds. The greater diversity of the swards improves soil structure and carbon sequestration as well as allowing the grasses to be productive through dry spells. Overlapping growth habits and patterns also allow for taking advantage of the over-yielding effect leading to productive growth throughout the whole season.

The group discussed how 'the environment suffers when farming is pushed to the limits' and that a change in the way farm payments will be made is inevitable. There seemed to be an acceptance that payments will

be based around environmental benefits. The Calon Wen project demonstrates how these holistic approaches can be profitable.

A further example presented was that of the Vyrnwy Estate in North Montgomeryshire, owned by Hafren Dyfrwdwy and part-managed by RSPB. Under the 'headage payment' scheme the 10,000 hectares site was stocked with 11,000 breeding ewes, now reduced to 2,500 but with cattle and ponies added. In an effort to restore the degraded habitats, drainage channels were also blocked resulting in the restored blanket bog. The improved habitat now supports many important species. Current work is looking to establish long term funding streams to support the ongoing sustainable management of the estate.

In the workshop, the facilitator linked the Vyrnwy example to the overarching purpose of sustainability and working towards resilience of the Gwent Levels. This brought us on to a series of interconnected questions:

- What ecosystem services are important to you / your business?
- Could we utilise ecosystem services better, to improve the resilience of our businesses?
- Living within environmental limits

 Resources
 Money /investment
 Decision-making
 Institutions
 Economic activity at a scale to maximise social, environmental benefits.

The Goal

- How could we deliver ecosystem services differently?
- What resources do we need to do what we've identified?

Discussions on the opportunities for better utilising ecosystem services identified several opportunities:

WILLOWS

There are several opportunities for use, but little current interest in this area. Willows do very well in the freshwater environment of the levels and only require 5 years to grow before the first harvest. Opportunities identified were:

- o Biomass
- Withies
- Development of a Willows and Wetland Centre similar to that at Stoke Gregory, Somerset https://www.englishwillowbaskets.co.uk/pages/visitor-centre.htm

ATTRACTING WALKERS AND VISITORS:

The Levels offers a wide open outside space that can be of incalculable value to people's emotional well-being. There is a large population of several tens of thousands within a short distance, many from what Welsh Government classes as deprived areas. Specific 'public goods' that can be enjoyed by visitors to the Levels include:

- Peace & Tranquillity
- o Relaxation & stress relief
- o Aesthetic value
- Routes for cyclists, runners and walkers
- o Heritage sites built & heritage

o The Wetlands & National nature reserve

Participants were encouraged to think about how this related to their lives and this location.

REENS

The ditches require fencing and frequent recasting to create open water. In some areas they have been neglected for many decades. We need to allow the Levels to absorb more water and acknowledge that the Living Levels Scheme is addressing a small percentage of what needs doing.

SOIL FERTILITY AND MAINTENANCE TO IMPROVE GRAZING.

Livestock farming is predominant with some arable and fruit, but not on a large commercial scale.

Hybrid Rye grasses V herbal leys. How well would they take on the heavy clay soils?

Most levels farms are already quite extensive in nature. There is less requirement for inorganic fertilisers when the soil structure is improved. Herbal leys were recognised as having the potential to do this. Specialist mixes are available for heavier soils but there is presently no precedent for herbal leys on the Gwent Levels and so no evidence to support the claimed benefits locally. The SSSI designations here mean that there is very limited use of fertilisers and 'not much' spreading within 30 metres of water courses.

Current stocking levels are 1 beef / dairy animal per acre so grazing is in high demand.

The participants identified the importance of the link between carbon footprint and trade. There is a strong desire to market local produce and to buy more locally. The appetite is there.

HABITATS

Biodiversity, connectivity of habitat, grass and trees were discussed. Participants were in agreement that trees should not be felled if at all possible and that the open grazing system is not compromised by the presence of managed trees and hedgerows. Maintaining the financial viability of farming systems which also accommodate space for nature was another matter however and these two things were perceived as being disharmonious with one another as things currently stand. However, payment for managing for nature where appropriate could be see as improving farm business financial viability.

Some participants lamented the lack of a local food 'hub' that promotes the produce grown across the Levels and the opportunity costs associated with this. It was pointed out that there is a will amongst consumers to pay more for good quality local produce that is perceived to be of higher value. E.g. Ludlow Food Centre or Pembrokeshire seafood. This would also prove a strong hook for increasing visitor footfall.

WATER MANAGEMENT

The current subsidy (Glastir) for management of the water courses is universally unpopular with landowners and there is widespread aspiration to explore other avenues and opportunities for payment for this 'public good'. The workshops went into considerable detail focussing upon the maintenance of the reens and ditches, which is essential work for land improvement, flood resilience and biodiversity. This area was identified by participants as the main 'win' as it meets triple bottom line criteria providing benefits for economy, society and environment.

It was also identified that farmers can play a much bigger role in managing water courses and ensuring water quality. Farmers are obligated to keep their ditches clear, with at least one side of the ditch being kept open while the other side (preferably the most Northerly facing side) can be hedged or have trees such as willow, along it. Field ditches should ideally be fenced in order to prevent poaching, although some parts would be left open to encourage poaching and so provide habitat for many of the invertebrate life that is nationally important and which supports the SSSI designation.

It was argued that farmers undertaking ditch recasting should be paid for the actual delivery and then for stewardship. Under the current scheme environmental work is frequently unrewarded, promotes excessive uniformity of habitat and can lead to penalties.

Three stages were identified:

Delivery: There is an initial outlay of time and finance that needs to be compensated. The steps required are:

- · Cutting the hedge out
- Recasting the Ditch
- Fencing
- Spreading and reseeding the spoil

For undertaking all of this work the commercial rate is £30 per metre. Pollarding would also be required in some places. The current break-even on the cost of this work would be £28.20 but this assumes that the work could always be carried out by the farmer who already owns the equipment; it is not a commercial rate.

There is also the issue of the farmer losing an area of grazing while spoil from the recasting is spread and the subsequent reseed takes time to establish. Farmers present expressed that there should be a compensation package available in this instance. The project officer explained that mob grazing can be employed to address this issue.

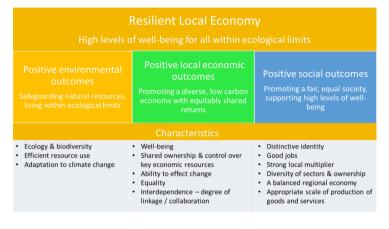
It was questioned whether this work would be of the same cost if carried out by the public sector. Participants were of the opinion that the 'cost would be less if private contractors were employed'. The wider point being that farmers could do most of the work as contractors, leading to better value for the taxpayer.

Maintenance: Perpetuating the open ditches requires ongoing maintenance which incurs costs. The main field ditches require clearing every 4 /5 years. It was calculated that this works out at £8/metre. Farmers would maintain hedgerows themselves and cut back growth annually.

Outcome: There was a strong feeling that the current scheme fails to work at a landscape level and distorts management. There was also a desire to see current legislation enforced such as the 'polluter pays' principle. Interestingly, this was seized upon by the farmers present. There is a very great benefit to this work as it improves productive capacity of the land, mitigates flooding, improves & maintains water quality and increases and supports biodiversity.

Monitoring: It was agreed that a well-established monitoring process would be needed and could include photographs and fixed-point photography, but would be backed up by common sense, practical and local

knowledge and subject expertise. Having this structure would facilitate coordinated outcomes that work at a landscape / catchment scale. The current SGL modelling & monitoring contract should help describe what this should look like.



This part of the workshop enabled participants to consider how they would prioritise the services and opportunities within the Gwent Levels.

They looked at what they would like to do or be willing to do and also what they as taxpayers would be willing to pay for.

Two questions were formulated:

- ➤ How to encourage people to keep working in the landscape?
- How to increase income in the area?

It was agreed that the answer to both questions is to increase interest in the area via education, in its widest use of the term.

The following key topics were agreed to be of greatest significance:

Beside each heading are scores. Towards the end of each workshop participants were given four sticky dots and invited to place their dots by the topic they considered to be most relevant and likely to deliver for resilience of Gwent Levels. They could select four different actions/topics or place all their dots next to one topic. The scores are in chronological order: Newport Wetlands Centre (NWC); Gwent College Nash Campus (GCN)

WATER MANAGEMENT - scores: 13 NWC; 9 GCN; 12 NWC.

- It was agreed that taxpayers would be willing to pay for water quality and drainage (grips) although it was questioned whether landowners taking responsibility for this wholesale from the public sector and utility companies would be retrograde. However, it was felt that this responsibility would be a very positive step for some farmers and landowners. Monitoring would need to be in place, and this is where the IDB could have a significant role and perhaps even be reinstated.
- Government would need to describe the benefits to the taxpayers, e.g. tell the public that land managers are to be paid for reducing the risk of fluvial flooding, along with a whole range of other benefits to the public. The Government then needs to address the matter of very high / no insurance for those affected properties.
- January 2020 (subsequently pushed back due to further consultation) enforcing water quality legislation.
- Pay landowners to maintain ditches and possibly some sections of the main reens.

- Pay landowners to provide run-off / water storage capacity
- Require all new ditches to join the adjacent reen.
- There is potential to facilitate partnership working in order achieve landscape scale targets.
- Dwr Cymru is a not for profit company and it was suggested that this model of charging for water, sewage, surface water could be taken to fund water management.
- A strong regime is required to prevent misuse and pollution.
- Increased use of reed bed systems
- Soil & land management go hand in hand with water management.
- The tidal flood defences need investment; it is expected that sea water levels will rise by 1.04 metres over the coming 100 years. Outlets need enlarging.
- Fluvial flood defence: SUDS are compulsory but there are issues in that the legislation that exists requires enforcement which means that public bodies need the right resources.
- 'Currently landowners incur costs for water management' was a theme that emerged. What this
 means is that there is a perception amongst landowners that the benefit of managing the ditches
 is difficult for a farmer to quantify in regard to the farm business, while wider societal benefits are
 unacknowledged by its beneficiaries.
- If all the private water courses on the Levels were cleaned out, then water storage could increase by "at least 50%". This was a figure agreed upon by both the representative of the IDD and a former IDB engineer. Benefits in the realm of public goods would be; protection of property; habitat enhancement with increased biodiversity, increased pollinator habitat, more efficient farming, retention of heritage features such as the Roman field system.

HABITAT AND BIODIVERSITY - score: 7 NWC; 13 GCN; 5 NWC.

- There needs to be an integrated, landscape scale method of identifying the best 'value for' implementation of habitat management. NB. This is something that is being explored via the Sustaining the Gwent Levels projects modelling contract.
- Reens contain invertebrates and other species that are nationally and even internationally important. In addition, the landscape is home to water vole, otter, barn owl, grass snake and many other iconic species. In order to thrive they need connectivity of habitat.
- With climate change forcing migratory species further North, the Gwent Levels will become home for an ever more diverse range of species such as Glossy Ibis, already present at the NNR.
- It was pointed out that the local authorities and the Highways Authority are responsible for roadside verges and the hedgerows that run alongside the roads. These play a very important role in habitat management and connectivity.
- Pollination needs to be a higher priority than it presently is.
- The loss of historic orchards was much lamented.
- Including the seaboard vegetation in surveys.
- Greater incentives to run farms extensively "there aren't actually very many on the Levels that are intensively managed."
- Incentives to reduce stocking, increase biodiversity and improve habitat.

• "Creation of buffer zones would increase flora, thus benefitting invertebrates, birds, smaller mammals etc." NB: This would already happen through good management of existing water courses and possibly hints at farmers lacking specific guidance.

HEALTH & WELL-BEING (including Tourism, leisure, education) - score: 7 NWC; 19 GCN; 7 NWC.

- With the right policies in place Gwent Levels land managers can help to deliver WG's well-being goals.
- Everybody should be able to get outside and enjoy nature.
- "People have lost their connection with the land" and "many fear the wide-open spaces and being alone".
- "Considerable local opportunity for 'Social prescribing'."
- Education for young and economically inactive people by engaging them with the animals, landscape and nature. Start with the kids and expand initiative.
- National 'epidemic' of type 2 diabetes schemes for exercise, information, getting out for physical activity.
- Opportunities for groups at higher risk of discrimination.
- Paying for access having the right policies to make this work.
- The Coastal path is where we get the worst complaints: Newport to Cardiff border and from there to the Docks. (livestock, rubbish, blocked access, dog fouling).
- Newport council only has 2 Countryside Officers to carry out all footpath maintenance.
- "There could be Service Level Agreements between local authorities and farmers to maintain their footpaths which are checked annually by the Countryside Officers." NB: Such schemes would need to take into account current legal obligations regarding RoW's and would also require enforcement.
- Youngsters will stay in the area if they have strong personal relationships. They need places to build and develop those relationships.
- There must be ongoing work to prevent / stop abuse of the countryside through activities such as burning and fly-tipping.
- Keep pushing the message that extensively farmed food produces better quality food which is better for all of us.
- Local farmers can supply local consumers with highly nutritious foods. For example, mead farm supplies milk and butter locally. Meat is also an option mooted by some but legislation is perceived as a barrier.
- Niche marketing of local produce to promote the area. A 'Gwent Levels' brand.
- Apple trees If there are greater numbers of orchards across the levels then there will be gluts of apples to harvest in the coming years. What does the local market for this look like? (Cider, cider vinegar etc.)

4. BARRIERS TO RESILIENCE

- Ever fewer children from farming families are in the schools. The upshot is that kids from urban areas have less and less knowledge about farming and the countryside in general.
- Public footpaths enable access to the countryside but these are limited or not well known and in high summer often poorly maintained and overgrown.
- Issues of public transport prevent a lot of people on the outskirts of the Levels from accessing the countryside i.e. Dyffryn Estate.
- There is a general lack of opportunities across the board.
- Farmers want to manage their land sustainably but income is so low that both their will and capacity to do so is both very limited.
- Food is so cheap that actual profit is either very low or non-existent while imported food is cheap. There appears to be a lack of political will to change this.

PROBLEMS HIGHLIGHTED

- * Run off from works is feeding polluted water into Monks Ditch and other reens.
- ❖ Failure of the sewage pipe from Chepstow,
- How can we deal with slurry sustainably?
- The perception is that public bodies are not sufficiently enforcing existing legislation that would protect the Levels.
- ❖ Is the SSSI designation providing sufficient protection to the landscape? Would an AONB designation greater protection?
- There are several issues with the current agri-environment scheme e.g. entry often doesn't reward the previous long-term sustainable management that has been carried out voluntarily.



Cronfa Amaethyddol Ewrop ar gyfer Datblygu Gwledig: Ewrop yn Buddsoddi mewn Ardaloedd Gwledig The European Agricultural Fund for Rural Development: Europe Investing in Rural Areas