



RHONDDA CYNON TAF COUNTY BOROUGH COUNCIL

CLIMATE CHANGE CABINET SUB COMMITTEE

3 OCTOBER 2022

**PEATLANDS IN RHONDDA CYNON TAF COUNTY BOROUGH COUNCIL
UPDATE FOR MEMBERS**

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1. PURPOSE OF THE REPORT

- 1.1 The purpose of the report is to update members on works relating to peatlands in Rhondda Cynon Taf County Borough Council.

2. RECOMMENDATIONS

- 2.1 It is recommended that members consider the progress reported, and endorse the proposed central objective for peatland management and the direction for future work.

3. REASONS FOR RECOMMENDATIONS

- 3.1 To take forward the next steps in the RCT peatland programme with specific consideration of peatland extent, condition and the restoration and management options for:
- CO₂ emission reductions,
 - Carbon storage,
 - Floodrisk reductions and
 - Biodiversity enhancement.

4. BACKGROUND

- 4.1 In November 2021, Members received a [report](#) on 'Nature's Assets' which highlighted the importance of the peatland resource in RCT. Subsequently an officer working group was established to take forward work associated with this report.

- 4.2 Peatlands are the largest and most important stores of carbon in the natural environment in RCT. Peat is an organic-rich deposit that has accumulated, very slowly, in wet locations since the last ice-age. Peatlands provide important 'ecosystem services' like natural flood risk management, biodiversity, knowledge archives and cultural resources as well as carbon storage. As noted in our earlier report, measuring carbon storage and the way carbon and methane (a more powerful but shorter-lived greenhouse gas) move through the environment is extremely complex, and is the subject of much on-going research and investigation at the UK and Wales level.

5. **WORK RELATING TO PEATBOGS**

- 5.1 In RCT, we have significant information relating to our peatbogs, derived from site specific surveys, planning applications and local knowledge that can complement national research. The table in Appendix 1 identifies the past planning consents, granted by the Authority, which have included the restoration of peatland and associated habitats. These agreements with developers have been negotiated for some time now under the nature conservation requirements of policy AW8 in the RCT Local Development Plan 2011. Most are in the form of S106 agreements (typically for 25 years) although a few are enforced via conditions on the planning consent. These schemes may also be contributing to flood risk mitigation and carbon emission reductions, although this is an area that requires more research and it is not usually monitored by the developers.
- 5.2 Many of these habitat management plans are associated with renewable energy projects. National Grid's peat bog restoration scheme at Hirwaun attracted widespread attention around COP26 in Glasgow, see [press release](#). This scheme is the result of planning negotiations to protect an important biodiversity resource, but is also being recognised for its carbon storage importance.
- 5.3 In the last financial year, we let a contract to one of the UK's foremost peatland hydrologists, to undertake an RCT specific assessment building on, what at the time was, the latest Universal Peat Map of Wales (2015 UPM) and the UK carbon storage and emissions modelling (Evans et al 2017). This research informed the UK carbon accounts submitted to COP26 last year. It established that most peatlands in the UK, and similarly in RCT, are likely to be emitting carbon (about 3% of UK emissions), with only a few peatlands in 'good condition' and likely to be 'sequestering' (or taking in more) carbon. This is based on a land-use and condition model which proposes CO₂e (carbon di-oxide equivalent) emission rates derived from empirical research.

- 5.4 Arising from the RCT specific work so far, the proposed central objective for peatland management is:

To maximise ecosystem service provision from peatlands within the RCT area, with high value given to minimising Green House Gas (GHG) emissions from, and maximizing carbon storage within, peatlands.

- 5.5 This would encompass
- Mapping the presence and condition of peatlands
 - Quantifying carbon fluxes (as they contribute to net zero)
 - Identifying other 'ecosystem services' and
 - The investigation of cost-effective restoration.
- 5.6 The 2015 UPM provided a base map for the consultant's original RCT work but this has now been superseded by the publication of the new Map and [Data portal for Wales](#) (2022) which gives more detailed information and will feed into future UK /Wales GHG emissions inventories. Further work is now required to update the condition categories for RCT peatlands (based on the 2022 map) and to include additional information from RCT sources. This will create a GIS-based system of :
- RCT peatland extent and
 - RCT peatland condition categories
- 5.7 This will aid decision making on cost-effective restoration and provide data for Net Zero calculations as well as contributing to identifying opportunities for biodiversity and natural flood risk management. This work will be completed in the autumn. A PowerPoint presentation describing the work to date is included in Appendix 2.
- 5.8 The work undertaken so far has highlighted that peatlands in the worst condition are emitting the most carbon, and even partial restoration can reduce these emissions. Peatland condition is typically improved by raising the water-table and making them wetter. For peatlands to become 'sequestering', that is adding to their carbon store (albeit at a very slow rate), the water table needs to be close to the surface for much of the year, allowing the anaerobic (oxygen free) conditions for dead vegetation to be preserved and not break down.
- 5.9 The National Peatland Action Plan is a 5 year plan of peatland restoration in Wales. Peatlands can only deliver the full range of environmental benefits and services when in good ecological condition. NRW, who deliver the Plan, recently launched a grant scheme for 22/23 to enable grant recipients to develop costed restoration projects from September 2022 until April 2023. Working with the consultant

Rigare Ltd. has enabled RCT to identify a significant Council owned peatland as a potential site for future restoration works. An application to NRW was submitted on the 30th of June 2022 for a peatland restoration planning project at Cwmparc with a total project cost of £23,866.25. The grant funding amount requested totalled at £22,366.25. The project will involve partnership between the Council and Rigare Ltd. Offers to successful applicants will be issued in early September 2022.

- 5.10 In addition, the Authority's Flood Risk Management (FRM) department are developing a Natural Flood Management/Peat Bog Restoration project within the borough to explore how peat bog restoration may contribute to upland catchment management by reducing peak flows and providing a potential flood risk benefit to high risk communities downstream. The FRM department are exploring opportunities to work with the large wind farm sites located within the upper catchments of RCT, of which a large proportion of RCT's peat bogs are located. Baseline assessments and restoration works have already been carried out at the wind farm sites, making them excellent sites to model and further investigate the potential benefits of peat bog restoration for natural flood management.
- 5.11 As part of the Living Landscapes project, approved by cabinet in October 2021, (see [report](#)), grant funding has been obtained to undertake capital works at a number of sites in the current financial year. At least two of these sites contain small areas of peatland and the funding will facilitate cost effective future management of the stored carbon and the enhancement of their biodiversity.
- 5.12 Members will be aware that NRW manage a significant area of the peatland in RCT as part of the Welsh Government Woodland Estate. Officers have made observations to NRW on their recent Forest Resource Plans for the lower Rhondda, specifically in relation to these areas (including Pentre). As the National Peatland Action Plan includes afforested peatland as one of the six priorities, we would hope to progress further discussions of practical projects that could be taken forward with NRW.

6. EQUALITY AND DIVERSITY IMPLICATIONS / SOCIO-ECONOMIC DUTY

- 6.1 There are no implications as a direct result of this report.

7. WELSH LANGUAGE IMPLICATIONS

- 7.1 There are no Welsh language implications as a result of the recommendations set out in the report.

8. CONSULTATION / INVOLVEMENT

- 8.1 The sub committee's discussion and recommendation will inform the cabinet decision

9. FINANCIAL IMPLICATION(S)

- 9.1 The immediate costs associated with this work can be met from existing budgets. Any restoration works would be subject to further consideration.

10 LEGAL IMPLICATIONS OR LEGISLATION CONSIDERED

- 10.1 No legal implications have been identified.

11. LINKS TO THE CORPORATE AND NATIONAL PRIORITIES AND THE WELL-BEING OF FUTURE GENERATIONS ACT.

- 11.1 The peatland work contributes to the Council's priorities as set out in the Council's Corporate Plan. Specifically, it contributes to 'People' by creating more natural communities that promote and maintain mental wellbeing and to 'Places' by Getting the best out of our environment by looking after and investing in our greenspaces and specifically delivering natural carbon storage solutions across the County Borough to enhance air quality and reduce the impact of greenhouse gasses.

- 11.2 It also reflects the five ways of working in the Well-being of Future Generations Act. Sustainable management is based on long-term considerations and is focused on preventative and precautionary action. The strategy aims to involve all the relevant stakeholders and to integrate peatland restoration activity into the wider operations of the Council. It will contribute specifically to the Resilience and Global Responsibility goals of the Act, but in the longer term it could have implications for all the goals.

Other Information:-

Relevant Scrutiny Committee

Climate Change, Frontline Services & Prosperity Scrutiny

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