

Regulatory Impact Assessment (RIA)

1. Options

- 1.1 The designation of a proposed National Park is a Programme for Government commitment. It is being delivered in response to the Climate and Nature emergencies - the National Park will be vital in supporting nature recovery, and contributing to the Welsh Governments [30by30 framework](#), a commitment to protecting 30% of land, freshwater and sea for people and nature by 2030.
- 1.2 The new proposed National Park - Glyndwr - will play an important role in delivering an approach to sustainable tourism within the designated area. Tourism is a critical part of the economy within the area of the proposed National Park, but it requires a more holistic approach to management and delivery.
- 1.3 National Parks have two purposes set out in law:
 - to conserve and enhance the natural beauty, wildlife and cultural heritage
 - promote opportunities for the understanding and enjoyment of the special qualities of national parks by the public.
- 1.4 There is also the Statutory Duty to foster the economic and social well-being of communities living within the National Park in pursuing purposes s11A National Parks and Access to the Countryside Act (NPAC) 1949.

Context

- 1.5 A National Park is an area formally designated by the Welsh Government to protect and preserve the natural environment. They are areas set aside to ensure that landscapes, wildlife, and cultural heritage are safeguarded while allowing the public to enjoy recreation, education, and outdoor activities. Their primary purpose is to balance conservation with opportunities for people to experience and appreciate the natural environment.
- 1.6 Each National Park is overseen by a National Park Authority (NPA). An NPA is a dedicated governing body with appointed members and clear legal responsibilities for managing the designated area. Among its core duties is the creation of a comprehensive Management Plan that sets out how the Park will be conserved, enhanced, and used over time.
- 1.7 In most cases, an NPA is also granted full planning powers within the National Park boundary. This means it becomes the planning authority responsible for preparing a Local Development Plan and making decisions on planning applications. Through these powers, the NPA can

ensure that development within the National Park supports its long-term conservation and landscape objectives.

- 1.8 NPA's in Wales receive long-term funding from the Welsh Government, supplemented by a levy on local authorities. They also have the ability to attract and secure additional funding from external sources, aiding investment in conservation projects, visitor facilities, and community initiatives.
- 1.9 This RIA seeks to provide a best estimate of the economic and social cost and benefits of the National Park to Wales. The analysis is dictated by the quality and availability of suitable evidence. For Glyndwr, the evidence is highly reliant on secondary sources across all impact areas. The quality of these sources are considered the best available within the time constraints and complexity of the analysis. Despite this, there is a high level of uncertainty with the results, in particular the Net Present Value (NPV) and Benefit Cost Ratio (BCR). The values within the RIA should be used with caution and come heavily caveated.

Natural Resources Wales (NRW) consultation and role

- 1.10 NRW is the Welsh Government's statutory advisor on landscape and the designating authority for any new National Parks or Areas of Outstanding Natural Beauty.
- 1.11 NRW has been evaluating the case for the new National Park in the proposed area, gathering evidence and engaging with key stakeholders and communities.
- 1.12 This has included:
 - a 7-week public engagement period in 2023, where online and in person events were held to gain views from across the stakeholder landscape. NRW received 966 questionnaire responses, with a narrow majority in favour, and identified 11 key themes which were most frequently raised, from landscape conservation, to tourism, housing and implications on planning
 - a [public consultation in](#) 2024.
 - a statutory consultation in 2025 a [detailed report](#) on the consultation was provided as part of the NRW board decision to make the designation order.
- 1.13 NRW, as part of its formal designation programme, appointed Arup to assess the potential economic impacts of designating a new National Park. In June 2025, Arup produced an Economic Impact Review on the proposed National Park.

Shortlist of options

- 1.14 There are only two options being considered within this RIA, the 'do nothing' position, and the designation of the National Park, which is the preferred option. No further options have been assessed as no further options have been raised in the previous work and consultation exercises.

Option 1 - Do nothing

- 1.15 The 'do nothing' option (i.e. 'business-as-usual') is the option against which the preferred option is assessed, and as such the additional costs and benefits are shown as zero in this impact assessment. In the absence of any intervention, the current AONB designation for the Clywdian Range and Dee Valley (CRDV) National Landscape (NL) would continue, as would the management of the surrounding area.
- 1.16 Planning will continue to be managed by the local authorities within the area, and responsibility for the enhancement of the natural landscape and cultural heritage would continue to be overseen by the National Landscape team. Other key impact areas such as housing, tourism, energy and transport would also be in the hands of local authorities, Corporate Joint Committees (CJCs) and town / community councils.

Option 2 – designate the National Park (preferred option)

- 1.17 The preferred option is to designate a new National Park in the proposed area within and surrounding the CRDV NL, with the aim to enhance the natural landscape, and to further enable the public's enjoyment of the environment.
- 1.18 The regulatory impact assessment explores the costs and benefits of the proposed national park in economic terms, against the counterfactual position of the existing CRDV NL and surrounding areas.

2. Costs and benefits of the preferred option

Approach

- 2.1 The cost-benefit analysis draws upon a body of research to assess impacts for the proposed national park in Wales. The approach builds upon the previous economic impact review undertaken by [Arup in June 2025](#), although noting this was a review conducted against a different candidate area. The RIA has been further informed by desk-based research and research of other National Parks within Wales and the UK.
- 2.2 Results are presented in 2025 prices with 2026 as the present value base year. Historic costs have been inflated to 2025 prices using the HM Treasury Gross Domestic Product deflator series. The policy appraisal period is 15 years, to capture five years of transition / setup costs for the National Park and NPA to be setup, and then ten years of NPA

operation. A discount rate of 3.5 percent was used as recommended in HM Treasury Green Book guidance.

- 2.3 Model results are generally presented to two or three significant figures or one decimal place for ease of reading and comparison.
- 2.4 This impact assessment sets out the key areas where the national park designation is expected to impact. Where there is suitable evidence to do so, the impacts have been quantified and represented in monetary terms. Key costs and benefits that could not be monetised have also been identified. There are some important caveats to the analysis.
- 2.5 Uncertainty exists about what resources will be immediately available to the NPA and how they will grow beyond those provided through its core funding from the Welsh Government and local authorities.
- 2.6 The priorities of the NPA and, hence, how it chooses to allocate its resources will depend on the priorities which are set within the Management Plan.
- 2.7 The impacts are complex – many linkages and dependencies exist which create the risk of possible overlaps and double counting. The impact assessment has identified and managed known risks of double counting.
- 2.8 The analysis needs to capture different types of use and non-use value but existing evidence is limited, not only for Glyndwr but for other National Parks and National Landscapes. This is compounded by the limited reliable data to support analysis to fill the key gaps in the assessment of the net benefits.
- 2.9 Not all the potential impacts are considered because of the evidence limitations and expected limited materiality. This includes a lack of primary evidence and a reliance on secondary evidence sources. Future phases of the RIA may want to consider the possibility for development of primary evidence related to the proposed Glyndwr National Park. The range of values within the scenarios presented within the summary of costs and benefits tables represent the uncertainty within those areas which have been able to be monetised.

Counterfactual / baseline

- 2.10 The proposed Glyndwr National Park consists of the CRDV NL and the surrounding area, which covers five local authorities, two CJs, as well as community and town councils (CTCs).
- 2.11 A national landscape is legally designated to conserve and enhance natural beauty. Areas such as planning are controlled by the local authorities that sit within the CRDV – Denbighshire, Wrexham and Flintshire. Lead members from the local authorities sit on a Joint Committee and are supported by a Working Group made up of officers

from NRW, the National Landscape Partnership, and the local authorities. They are supported by partners from across the public and third sectors.

- 2.12 Whilst the NL may dedicate resources to supporting areas such as cultural heritage and tourism, there is no legal duty to undertake these activities.
- 2.13 The NL constitutes a significant proportion of the proposed National Park; however, the remaining area is not currently under any designation. This will mean a change to the management of the landscape and infrastructure in this area, that may have impacts on areas such as renewable energy and housing development.
- 2.14 The additional implications for local authorities, the CRDV NL, CJs and CTCs flow from the reallocation of some functions (e.g. planning and development control) and from the need for additional engagement with stakeholders.
- 2.15 Designation of Glyndwr as a National Park will also place additional obligations on other public bodies under Section 62 of the Environment Act 1995 to have regard to the purpose of a National Park:
 - highway authorities, water companies, and local authorities must consider the purposes of National Parks when making decisions
 - the Welsh Government must also consult with the NPA on major developments or policies that could affect the National Park.

Public sector – costs (transition)

Cost to Welsh Government and NRW

- 2.16 The Welsh Government's costs of establishing a new National Park include those of NRW. The key activities are assumed to comprise:
 - preparation for a public (planning) inquiry – an inquiry is expected given the concerns raised by stakeholders, notably local authorities
 - supporting/participating in the public inquiry which is assumed to last 18 months
 - advising Ministers on how they should respond to the report of the public inquiry
 - supporting Ministers' decision making in response to the inquiry
 - establishing Glyndwr NPA – this is assumed to take 3 further years following Ministers' decision to proceed with designation of Glyndwr.
- 2.17 The National Park is assumed to be fully operational in April 2031. Expected assumed joint economic costs for Welsh Government and NRW costs are £6.3m over the five years (2026/27 – 2030/31) – this is based on the estimated costs of setting up South Downs NPA (with costs adjusted for inflation).

- 2.18 All these costs are largely staff time. Given the uncertainties around the process, the allowance for optimism bias is up to 41% reflecting Green Book guidance.

Table 1: Cost of National Park setup to the Welsh Government and NRW

Costs (£m, 2025/6 prices)	2026-27	2027-28	2028-29	2029-30	2030-31	Total
TOTAL	1.3	1.3	1.3	1.3	1.3	6.3
Up to public inquiry (WG & NRW)	1.3	1.3	0.0	0.0	0.0	2.5
Post public inquiry (Glyndwr NPA)	0.0	0.0	1.3	1.3	1.2	3.8

Cost of establishing the Glyndwr National Park Authority

- 2.19 The activities that the Welsh Government and NRW need to undertake to establish Glyndwr NPA cover five main areas plus a contingency.
- 2.20 Designing governance structures and decision-making processes, recruitment and induction of NPA Board members, including allowances and training, and designing the organisational structure, job evaluation and grading.
- 2.21 Staffing transition, including recruitment campaigns for senior leadership and key posts, HR project team costs, TUPE/transfer, redundancy or exit costs for staff moving from predecessor bodies (if applicable), and change management, training, and cultural development programmes.
- 2.22 Property and accommodation including acquisition or leasing of headquarters and area offices, the fit-out, furniture, security systems, and any accessibility works, as well as costs related to dilapidations or exit costs on any vacated premises elsewhere (if appropriate).
- 2.23 ICT and information systems costs may relate to initial hardware (servers, laptops, mobile devices) and network infrastructure, any core systems such as email, document management, GIS, finance, HR/payroll, planning systems and CRM. In addition, any cost of data migration from existing organisations, data cleansing and licensing, and cyber security set-up.
- 2.24 Branding, communication and engagement may include brand development (such as logo, visual identity, signage standards), initial public awareness campaigns and stakeholder engagement. Design and production of statutory publications, maps and digital content.
- 2.25 There is a contingency and risk allowance, including an optimism bias adjustment.
- 2.26 The recurring economic costs incurred by the Welsh Government which are attributable to designation of Glyndwr as a National Park reflect its limited role providing sponsorship/oversight. Once Glyndwr has been designated and the NPA is fully operational (i.e. assumed to be from

April 2031 onwards), the Welsh Government's role will be like the one it plays in relation to the three existing NPA.

- 2.27 The Welsh Government will need limited additional staff resources to perform this sponsorship/oversight role. It is assumed that two roles will be needed, equating to on full-time equivalent (FTE) in terms of contracted hours:
- 0.5 FTE at Senior Executive Officer level
 - 0.5 FTE at Higher Executive Officer level.
- 2.28 Given the uncertainties, an allowance for optimism bias of up to 41% is included reflecting Green Book guidance. On this basis, the estimated total cost of supporting over its first ten years (i.e. to 2040-41) is £0.7m.
- 2.29 In estimating the recurring revenue and capital costs of Glyndwr NPA, it is important to distinguish between two areas. Firstly, the core activities of the NPA which are assumed to be covered by the grant paid by the Welsh Government and the levy raised from the five local authorities.
- 2.30 Secondary, the discretionary activities which might otherwise be constrained by limited funding available to the NPA. There is some evidence that NPAs take time to build up their capability and capacity to deliver projects that align with their statutory purpose.
- 2.31 The costs (and funding) of the core activities of Glyndwr NPA are estimated by extrapolating from the funding currently provided to the three existing NPAs: the current estimate of £4.8m per annum reflects a simple average of the funding provided in 2024-25 (adjusted to 2025/26 prices).
- 2.32 Potentially, this estimate could be refined to reflect factors such as:
- area
 - population
 - visitor numbers
 - number of local authorities (and other organisations) with which the NPA interacts.
- 2.33 In practice, it should be noted that the evidence suggests that, as NPAs build up their capability and capacity to deliver projects that align with their statutory purpose, they can secure access to additional resources to enable them to expand their activities.

Public sector - costs (recurring)

Ongoing costs of Glyndwr NPA

- 2.34 The recurring economic costs of Glyndwr NPA (revenue and capital) are estimated top down based on the costs incurred by the three existing NPAs in Wales.

- 2.35 The estimated recurring economic costs for Glyndwr NPA need to include both revenue and capital costs – noting that depreciation will be linked to capital spending and should be excluded to avoid double counting.
- 2.36 Expected revenue (ongoing) costs of Glyndwr NPA are outlined in Table 3.
- 2.37 The development of an initial evidence and strategy may require baseline ecological, landscape, cultural heritage and socio-economic surveys. There will be the need to prepare a Management Plan and supporting strategies, as well as a strategic environmental assessment, habitat regulations assessment, etc.
- 2.38 The NPA is responsible for the full cycle of project and programme development and delivery, including setting up and piloting new initiatives, pump-priming priority projects to accelerate progress, delivering projects effectively, and establishing grant schemes that enable wider participation and impact.
- 2.39 It will also be responsible for monitoring, evaluation and reporting activities including ongoing ecological and socio-economic monitoring to track progress and impacts, alongside periodic reviews of the Management Plan and the completion of statutory reporting requirements.
- 2.40 Any member and governance costs include allowances and expenses for [NPA Board members](#). Board members within NPAs are made up of:
- one third of Members appointed by the Welsh Government; and
 - two thirds of Members appointed from councillors of local authorities who have land within the National Park, according to political balance.
- 2.41 There will also be costs associated with meetings, committee support,
- 2.42 and the arrangements needed for effective scrutiny and audit processes.
- 2.43 Running costs for the NPA office and estate covers rent, rates, utilities, maintenance, cleaning and security for offices and depots, as well as insurance requirements including employers' liability, public liability, property and vehicle insurance.
- 2.44 The NPA's ICT operations include the provision of software licences and subscriptions, support contracts, hosting and connectivity services, as well as the systems and processes required for effective cyber security operations and data backups.
- 2.45 Corporate support and overheads encompass finance, procurement and internal audit functions, alongside legal advice and external audit fees, as well as the organisation's communications, stakeholder engagement and partnership-working activities.

Expected capital costs of Glyndwr NPA

2.46 The NPA is expected to incur capital costs including:

- land and rights acquisition including purchase of land, conservation easements (a voluntary, legal agreement between landowner and the NPA restricting development / protecting the landscape), or access rights (where part of the strategy) as well as compensation or management agreements with landowners.
- visitor and operational infrastructure will be required including visitor centres, car parks, toilets, signage, waymarking trails, bridges, boardwalks, viewpoints, and other access infrastructure. There will also need to be depots, workshops, and storage for vehicles and equipment.
- ranger vehicles, boats, tractors, all-terrain vehicles (ATVs), and specialist conservation equipment will need to be purchased.

2.47 There will also need to be periodic major repairs to built assets and infrastructure, along with upgrades to ICT hardware and core systems.

CRDV National Landscape and local authority costs

2.48 Additionally, any material set-up and recurring costs incurred – or avoided - by local authorities and the CRDV National Landscape need to be estimated.

2.49 All local authorities will need to commit officer (and Council Member) time to managing the transition as Glyndwr NPA is established. Whilst some of this cost will be fixed, some will depend on the proportion of the local authority that becomes part of Glyndwr.

2.50 Those local authorities which are currently updating their Local Development Plans (LDPs) may need to do additional work to adjust the area covered by the plan to reflect the National Park boundaries. This will have the biggest impact in Denbighshire, partly due to the area of the county within the National Park boundary, but mainly due to the stage at which the local authorities LDP is at, which will require significant updating.

2.51 Creation of Glyndwr National Park will mean that all five local authorities may incur some additional cost as they engage with a new organisation, the NPA. On the other hand, the local authorities may avoid some costs of planning and development control as responsibility shifts to the NPA, but they will also lose some income from any charges for planning applications.

2.52 Some, additional costs are likely to be incurred if, or when, the CRDV NL transitions to become part of Glyndwr National Park – these costs, however, are assumed to be incorporated within the estimated costs of setting up Glyndwr NPA.

- 2.53 The estimated recurring costs of the Glyndwr National Park include it covering the function of the CRDV NL. As the CRDV NL would have been separately funded in the 'do nothing' counterfactual, this is shown as an avoided cost in the monetised costs and benefits in this impact assessment.

Table 2: Estimated costs to local authorities and the CRDV

Key assumptions		Estimated cost (avoided cost) (£m, 2025/26 prices)
Set up (and transition)		
Local authorities	Additional costs of supporting establishment of Glyndwr NPA and reworking LDP	5.9
CRDV	Additional costs of integration into NPA (including TUPE)	CAPTURED AS PART OF GLYNDWR SET UP
Recurring		
Local authorities	Responding to/engaging with NPA	-0.4
	Avoided cost of planning net of foregone income	
CRDV	Avoided cost of funding CRDV National Landscape – Welsh Government and local authorities	-3.4

- 2.54 The 'All costs and benefits' tables within Section 2.378 represent the costs and benefits across the setup period for the NPA and the recurring costs for the NPA in the first 10 years. Within these tables recurring costs to local authorities are valued as £0.0m. This is because the costs (benefits) incurred each year across the 10-year period of NPA operation are negligible.
- 2.55 The set up (transition) or recurring costs expected to be incurred by corporate joint committees (CJCs), community and town councils (CTCs) and other public sector organisations are highly uncertain (and probably less material) so are not quantified/monetised.
- 2.56 For CJCs and CTCs during the NPA setup and transition there are likely to be small costs but are minor in comparison to others and so are not considered material. Any recurring costs are likely to relate to responding to/engaging with NPA (e.g. in relation to transport).
- 2.57 For other public sector services, during setup and transition of the NPA there are likely to be no material costs i.e. smaller in scale compared to other cost areas. Any recurring costs are likely to relate to the cost of compliance with National Park designation obligations.
- 2.58 Any costs to private and third sector stakeholders have been captured elsewhere in the cost-benefit framework including:

- compliance costs – time and other resources - for landowners, businesses or communities as new policies and regulations are introduced
- time and resource commitments for participation in the NPA's governance and partnership structures.

Public sector transition and recurring costs – summary

2.59 Table 3 provides a summary of the economic costs to the public sector during the setup of the NPA – between 2026/27 to 2030/31 - and any recurring costs incurred post setup, between 2031/32 to 2040/41. Recurring costs will continue post 2040/41. Figures are presented as NPV, a key measure of impact defined as the total value of a proposal's benefits minus its costs, expressed in present values via discounting.

Table 3: Summary of costs to the public sector

	Economic costs (£m, NPV, 2025/6 prices, 2026/7 – 2040/1)		
	Set-up (Transition)	Ongoing	Total
Welsh Government (& NRW)	2.5	0.5	
Glyndwr NPA	3.6	34.6	
Local authorities	5.6	-0.4	
CRDV	0.0	-2.8	
Total	11.6	32.0	43.6

2.60 Consideration also needs to be given to the funding implications for all parts of the public sector in Wales of designating Glyndwr. The funding of Glyndwr NPA matters because it influences the resources available to it and, hence, its ability to deliver on its strategic purposes.

2.61 Four broad sources of funding are available:

- a non-specific grant from the WG
- a levy raised from local authorities
- other (specific) grants from the WG and other public sector and non-public sector organisations
- income earned from its activities (e.g. car parking, planning fees, etc.).

2.62 As noted, the first two sources represent the NPA's core funding which is intended to enable it to fulfil its key obligations; the other two sources are more uncertain/discretionary since they depend on the ability of the NPA to secure the funding based on bringing forward attractive projects to potential funders.

2.63 Currently, the three existing NPAs in Wales derive between 32% and 41% of their total income through their core funding.

2.64 The Welsh Government has committed to:

- ensuring adequate core funding for Glyndwr NPA

- funding the five local authorities so that they will face no (recurring) financial burden from the creation of Glyndwr NPA
- contributing to the transition (set up) costs involved in establishing the Glyndwr NPA.

2.65 Looking ahead, there is uncertainty around what assets the NPA might obtain - and on what terms (e.g. car parks, visitor facilities etc), and how far pressures on local authority budgets could be offset by visitor levy income.

Energy sector – costs

Disbenefits (costs) of Glyndwr on energy

2.66 This section illustrates the potential disbenefits (costs) that could arise from designation of Glyndwr as a National Park on the energy sector. The impacts on renewables generation and transmission are analysed separately (although the two are linked – any impact on generation (and storage) projects could affect the need for more transmission capacity).

2.67 Consideration of the potential impact on the pipeline of renewables generation projects requires an assessment of:

- the significance of the generation projects at risk in the context of Wales's energy needs/energy policy objectives
- the likely impact of designation based on the location and scale of the project
- the economic implications if pipeline projects are not developed (at all, as quickly, on the same scale) – this requires an assessment of what alternative generation projects might be developed, either within or beyond Wales, how this affects GVA and how (if at all) their generation costs might differ and what this implies for the competitiveness of users (and, hence, their expected demand).

2.68 The key impact on the transmission network is on the expected capital cost of developing an enhanced connection between North and South Wales. Like the impact on generation, the significance of designation is highly uncertain depending as it does on:

- the need for the connection
- the potential route options in relation to the boundary of the existing CRDV and the proposed Glyndwr National Park
- the difference in economic costs depending on how the network is developed within the constraints arising from the designation of the National Park.

2.69 In both cases, the nature and significance of the unknowns and uncertainties are such that the estimated impacts can be regarded as only illustrative. More detailed analysis of each project would be needed to narrow down the range of uncertainty.

Renewable energy pipeline

- 2.70 The pipeline of potential projects which could be affected by designation of Glyndwr as a National Park is uncertain. **Error! Reference source not found.** provides a high-level summary of known projects which maybe either at the pre-planning or planning stage which may be impacted most immediately by designation of Glyndwr. Mona offshore wind farm isn't in scope due to its proximity to the National Park. Other possible projects may be affected later.

[redacted information]

- 2.71 Consideration needs to be given to how each renewable energy project might be affected by the designation of Glyndwr.
- 2.72 Three recent planning decisions related to energy generation provide insight into how decisions taken within the planning system could affect the pattern of energy generation in and around the proposed National Park. These are:
- [Awel y Môr offshore wind farm](#)
 - [Pen March wind farm](#)
 - [Y Bryn wind farm](#)
- 2.73 These examples highlight previous planning applications where projects have been either modified or rejected. They point to the restrictions that might arise outside Glyndwr's boundary (but within its setting/view).
- 2.74 Evidence from the examples points to how widely the "setting" of Glyndwr could be defined. It is, however, difficult to assess each of the projects in terms of planning without knowing the detailed location of wind turbines and solar panels. On the one hand, the expected scale and height of some of the proposed turbines suggests their potential visual prominence. On the other hand, there are examples where renewables projects have been allowed to proceed (albeit on a reduced scale) because the economic and carbon benefits were regarded as sufficient to offset the adverse landscape impact.
- 2.75 It is possible that some projects would be able to go ahead unchanged if they are outside the boundary of Glyndwr and wider setting. Some outside Glyndwr could be refined to mitigate potentially unacceptable adverse impacts, especially on the landscape.
- 2.76 The possible economic impacts of designating Glyndwr can be illustrated on two bases assuming that all the pipeline of wind and solar projects outside the National Park boundary are restricted by the designation of Glyndwr – a "worst case" scenario, or those wind and solar projects which are close to either the CRDV NL and/or Eryri National Park (and, so, inside their setting/view) would be restricted i.e. a "best case" scenario.

- 2.77 On this basis, designation of Glyndwr could be expected to restrict:
- between 275MW and 1,000MW of potential wind capacity
 - up to 200MW of solar capacity.
- 2.78 The net impact on Wales – which is the focus of the RIA – also needs to take account of potential displacement (i.e. the possibility that some of the constrained projects could be replaced with other renewable projects located elsewhere in Wales). In the absence of a detailed project by project analysis, two scenarios are illustrated: the first assumes that 80% of constrained projects would be replaced and the second assumed that only half would be.
- 2.79 The economic implications can be illustrated in terms of the potential direct and indirect loss of GVA that would result by drawing on the analysis in Renewables UK's recent report '[Wind, Solar and Tidal Stream: Unleashing the Full Value of Welsh Renewables](#)'. This provides a basis for estimating the GVA per MW that might be at risk on a NPV basis.
- 2.80 Table 4 summarises the estimated illustrative disbenefits of designation of Glyndwr as a National Park measured as loss of GVA.
- 2.81 If all the pipeline of wind and solar projects outside the National Park boundary are restricted by the designation of Glyndwr – a “worst case” – then the loss of GVA could be much as £700m.
- 2.82 If only those wind and solar projects which are close to either the CRDV National Landscape and/or Eryri National Park (and, so, inside their setting/view) are restricted. – a “best case” – then the loss of GVA would fall to £215m.
- 2.83 The net impact on Wales – which is the focus of the RIA – needs to take account of the potential displacement:
- under the “worst case” scenario, the net impact could be between £280m and £560m
 - under the “best case”, the net impact could be between £85m and £170m.
- 2.84 These estimates exclude any impact on greenhouse gas (GHG) emissions – in practice, assuming that the constrained projects would be replaced by other renewable energy projects elsewhere in the UK the impact would be small and largely limited to delay in decarbonisation.

Table 4: Potential disbenefit (cost) of designation to the energy sector in North Wales

Type	Likelihood of National Park being a constraint	MW	Impact (before displacement, £m, NATIONAL PARKV)	Impact (after displacement, £m, NPV)	
				80%	50%
Onshore wind	Total	950	665	530	265
	High likelihood	280	220	175	90
	Medium likelihood	380	255	205	100
	Low likelihood	290	190	150	75
Solar	Total	200	35	30	15
	High likelihood	0	0	0	0
	Medium likelihood	50	10	10	5
	Low likelihood	150	25	20	10
Onshore wind and solar	Total	1150	700	560	280
	High likelihood	280	220	175	90
	Medium likelihood	430	265	215	105
	Low likelihood	440	215	170	85

Transmission network

- 2.85 The significance of designating Glyndwr as a National Park on the transmission network can be measured in terms of its impact on the costs of its development compared with the alternative if only the CRDV NL remains.
- 2.86 The ability to transfer power efficiently and securely between the north and south of Wales, and across the UK, has been identified as essential to meet [Britain's 2030 offshore wind targets](#). Since no detailed north–south route has yet been determined, the analysis can only be indicative based on assumptions about how much overhead line might need to be undergrounded and the additional costs of undergrounding.
- 2.87 The [JET / Green GEN](#) report shows that the indicative cost of a new 400 kV overhead line is £2–3m per km whereas the cost of an undergrounded cable is 4.5–5 x as much (i.e. £9–15m/km). Thus, the additional costs of each extra kilometre that need to be undergrounded is £7–12m/km.
- 2.88 The length of additional undergrounding can be estimated assuming that:
- 5-10 km out of a 100 km north-south corridor would need to be undergrounded with only the current NL designation of the CRDV
 - With the same strategic corridor, an expanded Glyndwr National Park would require 15–25 km to be undergrounded.
- 2.89 On this basis, the extra undergrounding due to the National Park would be between 10 and 20km. The incremental cost would be between £70–

240m for one 400 kV project. If more undergrounding was needed, or if tunnelling rather than simple direct-buried cable were required, the incremental costs would be significantly higher. Conversely, if the transmission could be routed to avoid some or most of the additional designated area, the incremental cost would fall.

- 2.90 The present value of the increased costs depends on the timing of construction: for illustration, it is assumed that construction could start in three to five years.
- 2.91 The potential net value of designation of Glyndwr as a National Park are:
- Between £280m to £560m for renewable energy pipeline projects
 - Between £56m to £240m for the additional costs of strengthening grid transmission network in Wales.

Natural capital – costs

Natural capital costs – nature restoration

- 2.92 The starting point for assessing the potential benefits of Glyndwr's nature restoration activities is to consider what it can afford to do based on the unit costs of habitat restoration and species recovery.
- 2.93 The cost of habitat restoration, which is habitat- and method-specific, has two elements:
- capital costs (e.g. one-off creation/restoration earthworks, planting, hydrology changes, etc.)
 - ongoing management/aftercare (e.g. annual cutting/grazing, water level control, monitoring).
- 2.94 Table 5 provides indicative costs per hectare drawn from different sources. It is important to note that:
- the cost of work on rivers and some linear habitats is often expressed per kilometre, rather than per hectare; for example, UK river restoration is sometimes quoted at £25k–£80k per km
 - the cost of land purchase and the opportunity cost can dominate the cost of lowland schemes, even if “works costs” look moderate.

Table 5: Potential costs by habitat type

Habitat type		Costs
Woodland (creation/establishment)		Broadleaves: £17,000 - £19,000/ha over 100 years [PV over rotation] Conifers: £12,700 - £14,200/ha over 50 years [PV over rotation]
Freshwater / floodplain wetland habitats	Coastal & floodplain grazing marsh	Capital restoration/re-establishment: £1,280/ha Annual management/restoration/re-establishment: £100 – £315/ha/year
	Fens	Restoration: £575/ha (capital/land cost component) plus annual costs Re-establishment: £815/ha (capital) plus £250 – £380/ha/year
	Reedbeds	Restoration: £817/ha (capital/land cost component) plus annual costs Re-establishment: £1,361/ha (capital) plus £250 – £380/ha/year
	Lowland raised bog (separate from upland peat)	Restoration: £4,975/ha (capital/land cost component) plus annual costs Re-establishment: £815/ha (capital) plus £250 – £380/ha/year

2.95 The main drivers of the costs of habitat restoration on farmland are:

- protection infrastructure (especially fencing/guards)
- seed/species specification (cheap mixes vs specialist diverse mixes)
- ground preparation requirements (spray-off, cultivation, reseeding vs low-disturbance)
- scale and access (small, awkward parcels cost more per unit)
- opportunity cost (i.e. lost cropping/grazing margin) which is often the largest economic cost.

2.96 The unit costs vary by habitat and intervention type as illustrated - Table 6 provides indicative costs per hectare drawn from different sources:

- creation and restoration of species-rich grassland and meadows covers key steps like plant control, ground prep and seeding with the seed mix being a major cost component
- flower-rich margins, blocks and in-field strips are typically cheaper to establish than whole-field reversion, but costs vary with seed mix and how much cultivation is needed
- the cost of hedgerows, boundaries and tree establishment is linear, but often central to farm habitat restoration
- fencing and livestock exclusion is often required for wetlands, riparian buffers and new hedges/trees

- earthworks dominate the cost of ponds and scraped with access, spoil handling and whether consents/ecology constraints apply.

Table 6: Costs by habitat type and intervention

Habitat	Costs
Species-rich grassland and meadows (creation & restoration)	Typical capital costs: £800–£3,000/ha to create and manage meadow Major cost component is seed mix: £250/ha to >£500/ha depending on species complexity Management (payments as a proxy): £646/ha per year
Flower-rich margins, blocks and in-field strips	Typically cheaper to establish than whole-field reversion Costs vary with seed mix and how much cultivation needed • Seed costs - £250/ha to over £500/ha for mixes • Management (payments as a proxy): £798/ha/year.
Hedgerows, boundaries and tree establishment	English capital grant payment rates are useful benchmarks: • Planting new hedges: £22.97/m • Hedgerow laying: £13.52/m • Hedgerow gapping-up: £17.22/m
Fencing and livestock exclusion (often required for wetlands, riparian buffers, new hedges/trees)	England capital grant payment rates: • Fencing: £6.34/m • Sheep netting: £7.47/m • Permanent electric fencing: £5.66/m
Ponds, scrapes and wet features	Site specific Earthworks dominate costs - depend on access, spoil handling and whether consents/ecology constraints apply Capital grant benchmark in England for create/restore ponds up to 2 ha is £1,879.46 per pond

- 2.97 The costs of projects to restore species vary depending on a number of factors. For example, whether animals/plants must be bred/reared/translocated rather than responding via habitat management only.
- 2.98 The level of threat mitigation intensity (predator control, fence marking/removal, invasive control, disturbance management), as well as monitoring requirements (e.g. baseline surveys, telemetry/camera traps, genetics, long-term follow-up).
- 2.99 There is also the scale and stakeholder complexity, e.g. number of landholdings, visitor pressures, partnership working.
- 2.100 Based on research¹²³⁴⁵⁶, prudent budgets for planning purposes are:

¹ [Resources - Back From The Brink](#)

² [Cairngorms Capercaillie Project](#)

³ [About Saving Wildcats | Scottish wildcat conservation and recovery | Saving Wildcats](#)

⁴ [Saving Wildcats | Frequently Asked Questions | Saving Wildcats](#)

⁵ [Species Survival Fund | The National Lottery Heritage Fund](#)

⁶ [National Landscapes - North Wessex Downs National Landscape secures £1.5m grant to boost nature](#)

- £250k-£3m over around two years for localised / short-duration species recovery packages (often multi-species and habitat-led).
- £2-3m over several years for single-species, Park-scale recovery with multi-pronged interventions (e.g. disturbance, habitat, monitoring and stakeholder work)
- £5m over around six years for species recovery projects which require captive breeding/translocation infrastructure and long-term release/monitoring
- £1m per year over four to five years for large multi-species programmes across many protected landscapes.

2.101 The costs of bird restoration and protection in North Wales vary widely by species and by the intensity of the intervention (e.g. habitat work only vs. habitat and predator management with fencing and monitoring). For example:

- For upland breeding waders (especially curlew), the RSPB's [Curlew Trial Management](#) work incurs habitat management costs of over £150,000 per annum in direct costs on a 10 km² trial site (excluding project staff, monitoring, volunteer coordination, community engagement, permissions, vehicles, equipment and nest and temporary fencing)
- The separate Wales-wide partnership project, [Wales Curlew Connections / Cysylltu Gylfinir Cymru](#), received almost £1m from the Welsh Government for a project covering multiple areas including Mynydd Hiraethog SSSI, Migneint–Arenig–Dduallt SSSI and Ruabon/Llantysilio Mountains and Minera SSSI
- For seabird protection, the [Nature Networks Fund \(Round 2\)](#) awarded small and medium sized projects between £85,000 and £250,000. Similarly, the [RSPB's "Biosecurity for Wales" project](#) was awarded £250,000 to prevent establishment of non-native mammal predators (e.g., rats) that adversely impact ground-nesting seabirds.

2.102 There are also similar examples related to birds such as the black grouse and the chough.

2.103 Based on these examples, prudent budgets for planning purposes would range from c£100k per annum for a limited, volunteer-based project to between £250k and £1m for a collaborative landscape programme.

Natural capital costs – climate change mitigation

2.104 Peatlands are defined as areas with more than 40cm of organic material in the upper 80cm of soil profile and are highly effective carbon stores. [Research](#) shows that they can play a crucial role in nature-based climate mitigation, storing an estimated 500 to 1,000 tonnes of carbon per hectare, making them one of the most efficient natural carbon sinks. They hold more carbon than an equivalent area of forest. They are also

valuable habitats and, as such, they support a wide range of species (biodiversity).

- 2.105 [Over 75% of UK peatlands](#) are estimated to be damaged. When they dry out, they release carbon and other greenhouse gases. It is estimated that restoring degraded peatlands could prevent up to 1.91 gigatonnes of CO₂-equivalent emissions per annum.
- 2.106 Although they cover only 4% of Wales, peatlands store up to 30% of the country's soil carbon. Moreover, [NRW estimates that around 90% of peatlands are damaged](#) (i.e., they risk being a net source of emissions and other externalities rather than a sink). Peatland restoration can also support water purification and control flood risk.
- 2.107 [The Welsh Government aims to restore 45,000 hectares by 2050](#). It is assumed that 2,500 hectares will be restored per annum at an indicative cost of £5 million per annum (i.e. £2,000 per hectare).
- 2.108 There are estimated to be 8,868 hectares of peatland in the proposed National Park, with significant areas in the south-west. The activities of Glyndwr NPA could help to protect and restore these vital carbon sinks.
- 2.109 Peatland restoration costs vary materially depending on condition, technique, access constraints and the scope of costs included (e.g. foregone agricultural/forestry income).
- 2.110 The [benchmark cost](#) is around £1,000 per hectare:
- the UK median cost in 2019 was £1,009/ha but the range between the minimum and maximum reported costs was £3,707/ha
 - the median in Scotland in 2022 based on Peatland Action data was £1,026/ha (with mean costs notably higher due to a tail of expensive sites)
 - another Scottish programme reported an average cost per ha for 2022–23 at £1,400/ha (NatureScot reporting for Peatland Action).
- 2.111 The costs vary by technique: gully blocking with peat costs £105/ha whereas gully blocking with rock costs £5,883/ha at the high end.
- 2.112 Based on these examples, a prudent budget for planning purposes would range from £1,000 to £1,500 per hectare for “standard” upland interventions (e.g., grip/ditch blocking and reprofiling where access is reasonable) but the cost could be several times higher if there were complications such as the need for heavy machinery and difficulty accessing remote sites.
- 2.113 An alternative activity that Glyndwr NPA might undertake to mitigate climate change is woodland planting. Unit costs in the UK vary sharply depending on factors such as the species mix (e.g. broadleaf vs conifer), the stocking density and browsing pressure.

- 2.114 The best cost evidence comes from [Forest Research case studies](#) for England and grant-rate schedules.
- 2.115 The costs from the Forest Research case studies are summarised in Table 7. The table shows the costs:
- of planting only (i.e. trees and planting labour)
 - of the year-one establishment (i.e. planting plus typical early protections/infrastructure)
 - over a rotation (i.e. the establishment costs and longer-run items; discounted present value over a 50-year rotation for conifers and 100 years for broadleaves/mixed).
- 2.116 It should be noted that road/track specification and wildlife management (fencing/guards/squirrel/deer control) can dominate costs depending on objectives and browsing pressure. Small woods are much more expensive per hectare due largely to fencing/overheads not scaling down.

Table 7: Costs of woodland creation

	Planting only (trees and planting labour)	Year-one establishment (planting plus typical early protections and infrastructure)	Costs over a rotation (establishment and longer-run items, NPV)
Small broadleaves (2 ha, 100y)			£16,027 – £18,162/ha
Large productive conifers (102 ha)		£2,231 – £2,957/ha	£5,665 – £6,453/ha
Large broadleaves (96 ha)		£4,473 – £6,702/ha	£7,788 – £10,044/ha
Mixed woodland (48 ha, no slope)	£1.63 – £1.96 per tree (for 1,800 trees/ha)	£3,350 – £4,572/ha	£6,230 – £7,510/ha
Mixed woodland (48 ha, 25–30% slope)	£2,934 – £3,528 per hectare for planting alone (no fencing, guards ground preparation)	£3,791 – £5,290/ha	£6,676 – £8,235/ha
Small woods			e.g. broadleaves 2 ha: £8,579 – £10,705/ha

- 2.117 Whilst grant scheme rates do not necessarily reflect actual costs, they are designed to reflect typical costs and, therefore, incentivise land managers and others to invest in woodland restoration and afforestation.

- 2.118 [Scotland](#) (Forestry Grant Scheme – Woodland Creation, Oct 2025 schedule): total payment rates (per ha) vary by woodland type: Conifer £2,960/ha; Broadleaves £5,520/ha, Native broadleaves £3,200/ha.
- 2.119 [Wales](#) (Woodland Creation Grant, Window 4 – 2024 rules): capital planting payments (per ha): Enhanced Mixed Woodland £5,146/ha, Native Woodland – Carbon £6,170/ha, Native Woodland – Biodiversity (1,600/ha) £4,550/ha, with stated multi-year maintenance rates layered on top.
- 2.120 [Northern Ireland](#) (DAERA – Small Woodland Grant Scheme, 2023 announcement): An indicative published establishment grant is £2,925/ha (with an additional fencing grant where needed).
- 2.121 Based on these examples, a prudent budget for planning purposes would be:
- £2,000 - £3,000 per hectare for large scale, productive conifer planting on accessible sites which would be higher if roads and/or deer fencing was needed
 - £4,500 - £7,000 per hectare for native broadleaf creation, increasing to £9,000 - £11,000 per hectare if done in small scale blocks
 - £3,300 - £5,300 per hectare for mixed woods depending on slope/access and protection needs.
- 2.122 An indication of the expected unit costs of creating and restoring hedgerows can be derived from:
- public payment rates
 - real world contractor quotes.
- 2.123 In England, the [Countryside Stewardship](#) scheme has fixed payment rates per metre:
- planting new hedges (BN11): £22.97/m (£22,970/km)
 - gapping-up (BN7): £17.22/m (£17,220/km)
 - hedgerow laying (BN5): £13.52/m (£13,520/km)
 - hedgerow coppicing (BN6): £5.33/m (£5,330/km)
 - ongoing management (not restoration, but part of a package) is paid at £13 per 100m per year per side.
- 2.124 In Wales, indicative payment rates in the [Small Grants – Environment scheme](#) were:
- hedge laying: £9.73/m (£9,730/km)
 - hedge coppicing and gapping-up: £6.16/m
 - plant new hedges: £6.16/m (£6,160/km)
- 2.125 The Carbon small-grant rates pays higher rates in some cases: e.g. new hedge planting £9.39/m and hedge laying £15.38/m.).

- 2.126 Real-world pricing varies hugely depending on hedge condition, access, style, disposal, fencing/rabbit netting, etc.
- 2.127 Based on the above factors, the following budgets may be appropriate:
- new hedge planting: £15–£30/m depending on protection/fencing, soil preparation, plant mix and density and access
 - gapping-up: £10–£20/m depending on extent of gaps and protection needs
 - hedge laying: £10–£25/m depending on style, overstood hedges, stake/binder specification and arisings
 - coppicing: £5–£10/m depending on biomass handling and follow-up protection.

Tourism – costs

Environmental costs

- 2.128 A 2018 New Economics Foundation (NEF) [study](#) of the CRDV NL provided the cost of managing litter and path maintenance.
- 2.129 The study identified the environmental impacts of visitors, across six popular destinations. Visitors' perceptions of the environmental impact (against a counterfactual position of other tourism sites they had visited) was not negative. The most common issues identified by users and site managers were litter, including dog waste – where a total cost across all sites was approximately £17,500 per year. Path maintenance was also identified, with a cost of £16,900 per year, as well as livestock damage, although no costs for this were identified in the study.
- 2.130 To estimate the cost to the National Park of the new visitors on the environment, primarily managing the additional litter and path degradation, the 2018 values have been uplifted using GDP deflators and then apportioned to the new visitor numbers.
- 2.131 Across the 10-year period of NPA operation (between 2031-2 and 2040-41) the cost is estimated to be £2.4m.
- 2.132 Whilst littering and path maintenance have been calculated within the cost benefit analysis. There are other areas of environmental impact that haven't been quantified but have social impact to communities and visitors.
- 2.133 These include fly camping, illegal off roading, and parking on verges as evidenced within Eryri and Bannau Brecheiniog. Additional illegal activities within Glyndwr may potentially place additional responsibilities on local emergency services.
- 2.134 New visitors will also place pressures on supporting infrastructure including roads, water and sewage, as well energy consumption.

- 2.135 Budget may well be apportioned to these operations by the NPA once established.

Natural capital – monetisable benefits

- 2.136 There is a key assumption in calculating the benefits of the Glyndwr National Park on natural capital, based on the other National Parks in Wales, that the Glyndwr NPA may have better resourcing and access to additional grants and funding to support natural capital bids, against the current position of the CRDV NL. The influence of Glyndwr NPA will also extend outside the boundaries of the CRDV NL, which would not be receiving the same level of investment as within a National Park.
- 2.137 The natural capital of Glyndwr National Park, like that of all National Parks, is an integral feature – it represents the stock of natural assets (e.g. soil, water, air, habitats, species) that produces flows of benefits (“ecosystem services”) which are reflected in enhanced economic prosperity and well-being. The services include regulating activities such as water purification and climate regulation through carbon storage and flood control and support services like soil formation and nutrient cycling.
- 2.138 The focus of this part of the cost-benefit analysis is on assessing the net benefits of designating Glyndwr as a National Park on the value of its natural capital (i.e. the gross benefits less any possible disbenefits).
- 2.139 The analysis focuses on:
- the non-market use value of activities to conserve and enhance the natural capital of Glyndwr and the non-use value (i.e. the existence value, the bequest value and the altruistic value) – the related market impacts (e.g. the impact on visitors to Glyndwr) are captured in the part of the cost-benefit framework which deals with the visitor economy
 - illustrating the value of the ecosystem services at risk in Glyndwr recognising that this does not represent the impact of designation
 - considering what, if any, evidence is available on the potential returns from projects intended to conserve and enhance the natural capital.

Protection and enhancement of natural capital through nature restoration - possible activities of the new National Park (Glyndwr)

- 2.140 Biodiversity plays a key role in maintaining and enhancing ecosystem resilience. The proposed designation of Glyndwr as a National Park means that the NPA can influence many important habitats by undertaking a range of activities to conserve and enhance biodiversity. These activities may include:
- restoring priority habitats at landscape scale (i.e. the most degraded and /or most valuable for biodiversity):
 - restoring rivers, floodplains and freshwater ecology:

- reducing pressures that prevent habitat and species recovery:
- supporting targeted species recovery and reintroductions where evidence and feasibility are strong
- working with farmers and land managers to deliver nature recovery on working land:
- developing and implementing nature recovery strategies, monitoring and prioritisation that identify delivery zones, priority habitats and species and partner responsibilities
- mobilising funding and private investment for restoration so that restoration can be undertaken at scale

2.141 Economic valuation of the benefits of protecting and enhancing biodiversity poses many challenges including accounting for site specificity and identifying a clear counterfactual.

2.142 Nonetheless, some estimates are available:

- a [paper](#) examining public preferences and willingness to pay for nature conservation in the North York Moors in 1999 found that individuals would be willing to pay £119.05 per person per year for nature conservation across all 11 UK National Parks.
- [Defra](#) estimates that the annual benefit NPAs add to the condition of National Parks is around £9m assuming that the net biodiversity benefit of SSSIs in favourable condition is £741 per ha per annum. This estimate has some important caveats attached to it.

2.143 More recently, work by the Environment and Rural Affairs Monitoring & Modelling Programme ([ERAMMP](#)) – in support of the development of the Welsh Sustainable Farming Scheme (SFS) – has estimated the biodiversity benefits from restoring and creating habitats on farmland (e.g. in hedgerows, woodland and grassland).

2.144 The estimated net benefits consider all the elements of additionality. Over a ten-year period of operation (from 2030-31), Glyndwr NPA is estimated to generate benefits with a net value of between £2.4m and £3.1m from its activities to restore habitats and promote species recovery.

Natural capital benefits – climate change mitigation of peatland

2.145 Peatlands – defined as areas with [more than 40cm of organic material in the upper 80cm of soil profile](#) - are highly effective carbon stores. Research shows that they can play a crucial role in nature-based climate mitigation, storing an estimated 500 to 1,000 tonnes of carbon per hectare, making them one of the most efficient natural carbon sinks. They hold more carbon than an equivalent area of forest. They are also valuable habitats and, as such, they support a wide range of species (biodiversity).

2.146 There are estimated to be 8,868 hectares of peatland in the proposed National Park, with significant areas in the south-west. The activities of Glyndwr NPA could help to protect and restore these vital carbon sinks.

2.147 The economic value of peatland is the present value of:

- the avoided damage
- the restored ecosystem services (e.g. carbon storage, water quality, flood attenuation, wildfire risk reduction)
- any market revenues (e.g., carbon units)
- boosted local economic activity (jobs and supply-chain spend).

2.148 This value, which could accrue over decades, is sensitive to:

- how much peatland is restored and its baseline condition
- downstream water assets
- flood receptors
- wildfire exposure
- access/recreation demand
- the time horizon and discount rate

2.149 The climate change benefits are the most significant element in the value of peatland restoration. The Office for National Statistics (ONS) estimates that restoring 55% of peatlands to near-natural condition would deliver a net benefit of [£45–£51b](#) (NPV) across the UK.

2.150 The impact on water supply is also material. [ONS](#) estimates that peatlands supply over 25% of UK drinking water which was valued at £888m in 2016. The recreational value of peatlands is equivalent to around 180 million hours (worth £274m in 2016). Estimates of the BCR for nature-based solutions suggests an economic return of £4.62 per £1 invested (plus employment and long-run maintenance GVA estimates).

2.151 Evaluation of a Welsh peatland project ([LIFE Welsh Raised Bogs](#)) found that spending of £1.24m inside Wales supported 13.2 FTE job-years through contractors/suppliers.

2.152 Several published studies provide estimates of the BCR of peatland restoration in Great Britain. The study's results are site dependent, and not all benefits are monetised. Climate-related benefits due to avoided emissions / sequestration and some amenity/recreation-type values are included but impacts on wider water quality, flood risk and biodiversity are omitted.

2.153 A [report](#) for the Climate Change Committee (CCC) by Vivid Economics finds that:

- upland peat restoration has an implied BCR of 4
- lowland peat restoration has an implied BCR of 34
- woodland to bog has an implied BCR of 2

- 2.154 An ex-post evaluation of [Scotland's Peatland Action](#) (10,000 ha restored, 2013–2016) has a central BCR estimate of 1.39 with a range between ~0.9 (low) and 1.88 (high). The same paper forecasts a forward looking BCR of 1.15 (with a range between 0.75 and 1.56).
- 2.155 The difference in the BCRs are linked to:
- the scope of benefits monetised
 - baseline peat condition and where restoration happens
 - carbon values and discounting
 - cost assumptions.
- 2.156 Many peatland CBAs are sensitive to the appraisal period (25y vs 100y vs 300y) because carbon and hydrological benefits accrue long-term. The evidence for Wales is more limited. For example, NRW's LIFE Welsh Raised Bogs report focuses only on the GVA and jobs. An alternative approach is to estimate the benefits of peatland restoration per hectare.
- 2.157 The Cambridge Economics [report](#) of UK upland peat restoration for the RSPB (based on a 100-year present value (PV), at 2019 prices) estimates total benefits of £20,801 per ha, of which carbon is £18,179/ha and recreation is £2,622 per ha. The total PV of the costs are £4,499 / ha, of which capital is £1,473/ha and operating is £3,025/ha.
- 2.158 From the evaluation of the [Scotland Peatland Action](#), Glenk and Martin-Ortega implicitly estimate that the PV of the benefits is £2,816 / ha and the PV of the costs is £2,026 / ha. This is more conservative than the UK upland peat CBA because it is a programme-scale evaluation with different benefit coverage/assumptions. The forward-looking analysis in the same report estimates that the PV of the benefits are £2,104 / ha whilst the PV of the costs is £1,830 / ha.

Natural capital benefits – climate change mitigation of woodlands

- 2.159 If Glyndwr is designated as a National Park, it would mean that the NPA could potentially protect and expand the woodlands, thereby boosting their vital role in tackling climate change. The NPA could play an active role in planting woodland.
- 2.160 There are more woodlands in the south-west of the proposed National Park where the Dyfnant Forest is located, on the edge of the Cambrian mountains just south of Lake Vyrnwy. It forms part of the National Forest for Wales which forms a connected ecological network running throughout Wales
- 2.161 The ancient woodland includes Ancient Semi Natural Woodland (ASNW), Restored Ancient Woodland Site (RAWS), Plantation on Ancient Woodland Site (PAWS) or Ancient Woodland Site of Unknown

Category (AWSU). These areas are generally those that have been continuously wooded since at least 1600 AD (i.e. the trees are over 400 years old). There are more ancient trees present in the south of the Candidate Area including in the Dyfnant Forest as well as along parts of the River Vyrnwy.

- 2.162 Evidence shows woodlands are also important carbon sinks. Fast-growing conifer plantations absorb the most CO₂ over 30 years, while native broadleaf and natural woodlands reach similar levels over time.
- 2.163 A report by [Scottish Forestry](#) suggests that lightly managed broadleaf woodland sequesters about 1.3 tCO₂ per hectare annually compared to 4.9 tCO₂ for moderately growing conifer plantations.
- 2.164 The [ONS](#) estimates that the economic value of the UK's trees and woods is £382 billion. This includes their benefit for public health, air quality, flood regulation and urban heat regulation.
- 2.165 A [report](#) valuing Wales' National Parks estimated the value of carbon sequestered through peat and woodland at £24.2m to £97.2m.
- 2.166 The estimated net benefits consider all the elements of additionality. Over a ten-year period of operation (from 2030-31), Glyndwr NPA is estimated to generate benefits with a net value of £0.8m from its activities to mitigate climate change through peatland, woodland and hedgerow creation and enhancement. This is calculated from the estimated gross benefits (£1.9m) minus the costs (£1.1m).

Natural capital benefits – climate change adaptation

- 2.167 Estimates of the benefit–cost ratios (BCRs) of initiatives that seek to reduce the risk of wildfires are mostly for projects involving upland peatland (blanket bog) restoration and rewetting where reduced wildfire risk is one of several co-benefits (alongside reduced carbon emissions, improved water quality, enhanced flood regulation, improved access to recreation and enhanced biodiversity). The wildfire component is often not monetised separately, but the interventions are explicitly linked to lowering wildfire risk as wetter peat is less flammable and tends to reduce the build-up of highly flammable shrub/grass fuels.
- 2.168 A Parliamentary Office of Science and Technology [briefing](#) comments that raising peat water tables/rewetting can lower wildfire risk by reducing shrub/grass fuels.
- 2.169 There is less evidence of the BCR of site-level wildfire interventions that are common in National Parks / National Landscapes (e.g., fire breaks/fuel breaks, access/water-point upgrades, visitor behaviour campaigns, prescribed burning regimes, grazing changes, detection technology).

- 2.170 The River Dee and its estuary are of high conservation value. They are designated as two Special Areas of Conservation (SACs) and three Sites of Special Scientific Interest (SSSIs). Notable features include floating water plantain, Atlantic salmon, lamprey and otter. The Dee Estuary's intertidal habitats support large populations of wading birds and are also designated as a Special Protection Area and Ramsar site.
- 2.171 Various studies have assessed the BCRs on natural flood risk management schemes in Wales and the rest of Great Britain. The proposed National Park has areas susceptible to flooding, particularly those on the River Dee such as Corwen. The [floods in 2020](#) illustrate the challenges presented for communities at risk within the proposed Glyndwr boundary area.
- 2.172 NRW's [report](#) on Long-term Investment Requirements for Flood Defences in Wales estimates an expected range for the BCR of between 2.8 and 13, which covers all types of flood risk management investment.
- 2.173 However, empirical data specific to Wales is lacking, and a [report](#) for the Welsh Government, 'Review of Natural Flood Management in Wales (Final Report)', notes the lack of consistent post-implementation information to quantify flood-risk-management benefits and effectiveness across schemes.
- 2.174 An [assessment](#) of natural flood management (NFM) across Great Britain, which integrates national hydrological models with flood risk modelling and an optimisation framework, estimates that NFM investment programmes achieve an overall BCR of ~3 to 5. This estimate only includes the expected reduction in damages to residential properties.
- 2.175 A [report](#) commissioned for The Wildlife Trusts evaluated NFM schemes across 10 Wildlife Trust. It reported an average BCR of 4 over 10 years rising to 10 over 30 years.
- 2.176 These studies indicate that the BCR depends on:
- the length of the appraisal period
 - how widely the benefits are drawn – and whether wider ecosystem / social benefits can be monetised
 - the extent of local exposure (i.e. the properties/infrastructure at risk) and hydrological suitability
- 2.177 Wales' multi-agency wildfire prevention framing explicitly treats wildfire as a socio-economic and public service resilience issue, not just an environmental one.
- 2.178 Avoiding wildfires can deliver benefits by preventing costs to public services, land and asset owners, businesses and households. This is through

- lower emergency response and recovery spend
- avoided damage to public forests
- reduced health and productivity losses from smoke exposure
- lower water treatment and catchment management costs
- avoided carbon emissions and “cost of carbon” liabilities
- reduced disruption to rural economies, tourism and access

2.179 The estimated net benefits are assumed to reflect all the elements of additionality. The average BCR for natural flood risk management schemes is assumed to be between 4 and 10; the average BCR for wildfire prevention initiatives is assumed to be between 1.5 and 10.

2.180 On this basis, over a ten-year period of operation (from 2030-31), the climate change adaptation activities of Glyndwr NPA are estimated to generate benefits with a net value of between £9.8m and £50m; these increase to between £12.6m and £64.5m over a 25-year period.

Culture and heritage – monetisable benefits

2.181 Culture and heritage are integral parts of National Parks – they give character and distinctiveness to their landscapes. Glyndwr contains a wealth of historic and cultural assets which, along with strong ties to Welsh language, literature and folklore, contribute to the area's distinct identity.

2.182 Designation of Glyndwr as a National Park can enhance the value of the assets through its management role. The focus of this analysis is on assessing the net benefits of designation of Glyndwr. It is important to distinguish the incremental effect of this from the projects subsequently delivered by the NPA.

2.183 These net benefits are assessed against a counterfactual that assumes that Glyndwr is not designated as a National Park. Furthermore, it also considers how other future policy developments could affect the condition of the historic and cultural assets.

2.184 Uncertainty exists about:

- how the resources the NPA will have available to it in the future will grow beyond those provided through its core funding - over time, the NPA may be able to attract additional discretionary funding from the Welsh Government, local authorities and third parties
- how the resources will be spent by the NPA – each NPA has discretion as to how it allocates its available resources between its priorities.

2.185 This makes it difficult to assess with confidence what the NPA's future net benefits will be and how they might develop.

- 2.186 This analysis is on the use value not captured by market values and non-use value - other related market impacts are captured elsewhere in the cost-benefit framework, as well as considering any available evidence on the potential returns from project intended to conserve the historic and cultural assets.
- 2.187 The analysis concentrates on those net benefits which are expected to be most material and can be quantified and valued most credibly.
- 2.188 The potential/expected net benefits need to be compared to the costs to the Welsh Government (and other parts of the public sector) of establishing and then operating Glyndwr NPA.
- 2.189 There are some important caveats to the analysis, including the scale and nature of the net benefits depend on the type activities that the NPA undertakes. The impacts are also complex with many linkages existing which creates the risk of possible overlaps and double counting. Different types of use and non-use value need to be captured, and there is a lack of reliable data to support assessment of the net benefits. Not all the potential impacts are considered.

Potential activities related to culture and heritage

- 2.190 The potential direct benefits of an NPA's activities to conserve the culture and heritage of Glyndwr are founded on protecting the "product" (i.e. place character and distinctiveness) to improve the offer to potential visitors and, thereby, stimulate their spending. This potentially sustains employment in the visitor economy.
- 2.191 The activities also generate indirect economic benefits through their impact on investment in conservation and construction. This spending may bring additional economic benefits, especially to the local economy.
- 2.192 The focus is on the indirect benefits of the NPA's potential activities; the direct benefits are considered later.
- 2.193 In addition, the activities potentially bring benefits by:
- delivering non-market value
 - improving appreciation of Glyndwr's special qualities for users and non-users alike (which is considered separately).
 - supporting opportunities for volunteers (which are considered separately).
- 2.194 If National Park designation results in better resourcing and/or improved coordination of activities to conserve and protect culture and heritage, this could increase the benefits derived from these assets.

Non-market benefits of culture and heritage

- 2.195 Glyndwr NPA has the potential to deliver non-market benefits through its culture and heritage conservation activities. These include:

- 2.196 Heritage conservation in National Parks increases access to high-quality, meaningful places and supports “active” participation (e.g. volunteering, skills training, events). Substantial evidence links this engagement to improved wellbeing, including place attachment, belonging, intergenerational connection and social cohesion which are all correlated with better mental health outcomes. A [report](#) for North Yorks National Park has estimated the value of engagement and volunteering and it concluded that each £1 invested in DEFRA-funded activity generated £7 in health and wellbeing benefits.
- 2.197 [Research](#) by Department for Culture, Media and Sport values the improvement in UK adults’ general health from engaging with culture and heritage at just over £18bn a year, with additional financial benefits for other more specific aspects of mental and physical illness. Frontier estimates that the health and wellbeing benefits from an adult engaging with culture and heritage every few months or more (e.g. visiting a museum, gallery or watching a concert) are worth around £1,000 per year.
- 2.198 Heritage-focused programmes in National Parks (place-name work, interpretation, conserving vernacular character, cultural events, community archaeology, etc.) strengthen:
- shared local narratives and identity
 - community pride and stewardship
 - bridging social capital across age groups and between residents and visitors.
- 2.199 These outcomes are consistently identified in heritage social impact evidence reviews.
- 2.200 National Park led interpretation and education (schools, guided walks, exhibitions, citizen science/community archaeology) build local historical knowledge, environmental awareness and more responsible recreation behaviours, reducing unintentional damage to sensitive sites. Historic England’s synthesis of social impact evidence includes education/learning pathways among core outcomes of heritage engagement.
- 2.201 There are [significant potential environmental co-benefits from conserving-built heritage](#) (e.g. avoiding demolition and new construction to retain embodied carbon and reducing demand for new materials). In National Parks, this is operationalised through:
- planning decisions that favour repair over replacement
 - conservation advice and grant support for traditional buildings
 - promotion of appropriate retrofit approaches for historic fabric.
- 2.202 Many heritage features National Parks conserve are also high-value ecological infrastructure, for example:

- hedgerows (habitat connectivity, biodiversity, carbon storage, runoff/flood mitigation)
 - historic field patterns, walls and boundary features supporting mosaic habitats
 - traditional grazing regimes that maintain species-rich grasslands/heath mosaics
- 2.203 UK evidence highlights hedgerows' contributions to biodiversity and carbon storage and wider ecosystem services.
- 2.204 Heritage interpretation and access management (path routing, signage, site hardening where appropriate, "leave no trace" messaging tied to place history) can reduce:
- erosion and trampling damage to archaeology and historic landscape features
 - disturbance in culturally important sites that are also ecologically sensitive.
- 2.205 This is typically framed as conserving "special qualities" while enabling enjoyment, consistent with National Park purposes.
- 2.206 Park-led heritage activity helps sustain endangered traditional skills (e.g. stonemasonry, thatching, lime work, slate, conservation joinery), which is relevant both for cultural continuity and for maintaining the capacity to care for historic assets over the long term. In [Scotland](#), for instance, historic environment Scotland has publicly highlighted a heritage skills risk picture and the need for skills pipeline interventions.
- 2.207 Conservation creates a non-market benefit, keeping heritage assets and cultural landscapes intact so future generations retain the option to experience, study and use them. This is a standard benefit category in cultural ecosystem services and wellbeing framing for natural resources in Wales.
- 2.208 Where National Parks fund or convene heritage projects, they can increase community agency through:
- co-designed local place plans, heritage partnerships and stewardship groups
 - improved community capability to bid for funds and deliver projects.
- 2.209 This is visible in heritage fund evaluation themes around strengthening local organisations and grassroots delivery capacity.
- 2.210 National Parks do not report a single, standardised cultural and heritage conservation spend line in their accounts. Instead, most sets of NPA accounts capture work on culture and heritage across multiple programmes and projects spanning planning, conservation, access and community.

- 2.211 Core (“business-as-usual”) culture and heritage conservation budgets
- 2.212 Where known, NPAs’ dedicated historic environment budget is commonly in the low hundreds of thousands per year: the [Yorkshire Dales NPA](#) has a discrete budget for the historic environment (covering listed buildings at risk, scheduled monuments work and staff) running at between around £150,000 (2024/25) and £182,660 (2026/27).
- 2.213 Time-limited, externally funded heritage programmes:
- 2.214 On top of the core budget, some NPA’s periodically run large programmes funded by bodies such as the National Lottery Heritage Foundation (NLHF). For example, the [Cairngorms NPA](#) spent £645,000 in 2023/24 on Cairngorms 2030 (Heritage Horizons): this was part of an NLHF award of £10.7 million to deliver a five-year programme
- 2.215 Culture and heritage conservation delivery within a NPA is likely to be of the order of £0.15m to £0.2m per annum based on evidence from Yorkshire Dales NPA and the National Lottery Heritage Fund. Major programmes such as these can increase spending considerably. These costs are already captured within the recurring costs of Glyndwr NPA operation
- 2.216 The estimated net benefits are assumed to reflect all the elements of additionality. The average BCR on spending/investment on culture and heritage conservation is assumed to be between 1.5 and 20. On this basis, over a ten-year period of operation (from 2030-31), the activities of Glyndwr NPA are estimated to generate benefits with a net value of between £2.8m and £5.6m.

Direct market benefits of culture and heritage

- 2.217 Glyndwr NPA can drive direct market value through its impact on the visitor economy by raising spend and reducing seasonality.
- 2.218 Cultural and heritage assets are important determinants of why people visit a location, how long they stay and how much they spend. The NPA’s activities could create value by maintaining historic sites, conserving vernacular character through planning/design control, managing visitor access to archaeology/monuments, interpretation programmes and running heritage attractions (where applicable). All could increase the attractiveness, capacity and quality of the destination—supporting accommodation, food and drink, guiding, transport, retail and outdoor activity businesses.
- 2.219 National Parks have been shown to be important contributors to the visitor economy. This is covered further as part of the visitor economy section.
- 2.220 Wider market values can be driven by the Glyndwr NPA through a number of areas.

- 2.221 An NPA can support the provision of stable, local jobs in culture and heritage-led construction and specialist trades. [English Heritage](#) found that 7.4% of working farm buildings showed signs of structural failure nationally compared with 2.3% in National Parks and 6.8% in National Landscapes.
- 2.222 Conserving historic buildings and structures is labour-intensive and requires specialist skills, supporting SMEs and trades (e.g. stonemasonry, joinery, conservation engineering and heritage surveying). [Historic England](#) estimates that in 2022 England's heritage sector contributed £44.9bn GVA and supported 523,000+ jobs. The direct contribution was £15.3bn (0.80% of England's total), the indirect contribution was (£14.9 bn) and the induced effect (£14.7 bn). For every £1 of GVA that the sector directly generates, an additional £1.93 is added in the wider economy.
- 2.223 NPA activities such as provision of conservation grants/advice and enforcing repairs does not replace outcomes through planning/listed building controls and promoting traditional materials and methods.
- 2.224 The NPA supports the place brand and the willingness to invest within the National Park. Protected cultural and heritage landscapes and well-managed historic places typically command a brand premium which means that they can attract higher-value tourism, second home/retirement demand (with mixed impacts) and certain business types that value quality of place (creative, professional services, hospitality investment, local produce brands).
- 2.225 Evidence consistently frames heritage as a driver of local prosperity and productivity when it is actively managed and integrated with wider place strategies. Strong design/place policies, conservation-area management, investment in heritage attractions and cultural programming all have the potential to reinforce Glyndwr's market position and reduce the risk of "place degradation" that can undermine long-term value.
- 2.226 Culture and heritage activities support economic diversification beyond agriculture/forestry—e.g., farm-based accommodation in historic buildings, cultural tourism, guiding, crafts, local food branding and events. Welsh National Parks have been characterised as having a high share of employment linked to environmental assets; the same logic applies to cultural landscape quality that underpins visitor demand.
- 2.227 The preservation and use of traditional buildings, managing visitor pressures to protect the asset while maintaining access and supporting interpretation-based enterprises all have the potential to contribute value.
- 2.228 The NPA's work on heritage conservation could also generate benefits by avoiding or reducing the cost of:

- future major repair liabilities
- damage to sensitive sites (avoiding restoration costs and reputational harm)
- inappropriate development that would erode destination competitiveness over time.

2.229 This impact is harder to quantify but is material in the context of the case for sustained conservation funding (especially where deferred maintenance creates sharp cost escalation)

Volunteering – monetisable benefits

2.230 Volunteers are widely used by NPAs and their delivery partners to extend capacity to fulfil their purpose.

2.231 National Parks depend on the support of a thriving and diverse community of volunteers for help to natural landscapes, support local communities and keep National Parks open and accessible for visitors.

2.232 Roles typically fall into one (or more) of categories:

- Conservation and habitat management including tree planting, walling and vegetation clearance (e.g. Eryri's Young Rangers programme supports hands-on care of historic sites, hotspots, woodlands and nature reserves)
- Access and path maintenance – all Welsh National Parks involve volunteers in path maintenance
- Visitor engagement (e.g. Pembrokeshire Coast provides site/centre-based volunteer roles as part of its business model)
- Heritage and culture interpretation, surveys and site care (e.g. Bannau Brycheiniog gets volunteers involved in heritage surveys)
- Monitoring and citizen science (e.g. wildlife surveys, recording, data)
- Operational support (e.g. Pembrokeshire Coast describes a mix of home, office and outside roles).

2.233 There are various estimates exist of the scale of volunteering across current National Parks in Wales:

- A Campaign for National Parks briefing (drawing on prior assessment of Welsh National Parks) states that Welsh NPAS recruit and coordinate over 15,000 hours of volunteering activity each year
- Eryri NPA reported 1,600+ volunteer hours plus an additional 220 hours on Cader Idris in 2022
- Bannau Brycheiniog NPA reported that 195 volunteers contributed 13,000 hours in 2017
- Pembrokeshire Coast NPA reported 346 volunteer days in 2021/22.

2.234 [Evidence](#) from the National Survey for Wales estimates the proportion of adults volunteering in 2022-23 in each of the five local authorities where Glyndwr is located:

- Denbighshire – 26.3%
- Flintshire – 30.1%
- Gwynedd 33.3%
- Powys – 42.1%
- Wrexham – 29.3%
- Wales – 29.7%.

2.235 On average, each volunteer provided around 3 hours per week.

2.236 Broader evidence exists for the UK as a whole and England. It is estimated that around 5,000 volunteers support National Parks each year.

2.237 The [UK Biodiversity Indicators](#) series shows that volunteer time for all conservation activities – not just within National Parks - increased by 62% between 2000 and 2023: the equivalent figure for England only showed a 44% increase in volunteer hours.

Volunteering – economic benefits

2.238 All NPAs in the UK harness volunteers to help them achieve their objectives

2.239 Volunteering can deliver benefits in several ways:

- NPAs benefit if the cost of organising volunteers is less than the benefits of the work they carry out
- Volunteers benefit if they derive enjoyment and gain new skills and experience
- The public benefits if volunteering provides (public) goods that would not otherwise have been provided.

2.240 There are also potential indirect benefits of volunteering.

2.241 The value of the work undertaken by volunteers will depend on several factors for example age, ability, expertise etc.

2.242 No evaluation studies directly assess the value of volunteer activities in the National Parks, but the value can be estimated as the opportunity cost of volunteers' time (i.e. the marginal wage rate). This will depend on many factors including age, education etc. National, regional and minimum wage rates have been used to estimate the value of volunteers' time.

2.243 The Campaign for National Parks [briefing](#) cites the estimated value of 15,000 volunteer hours at around £175,000 in 2013 (i.e. £11.70 per hour)

2.244 Another [report](#) - Valuing England's National Parks (2013) - estimates the economic value of volunteering at over £3.2 million (based on volunteer

days reported by NPAs and using a value of £50 per day (unskilled) and £100 per day (semi-skilled) with an assumed 50/50 split.

- 2.245 A [Defra working paper](#) (2011) uses different hourly wage rates (the UK and regional average and minimum wage) to estimate the value of volunteers' time in three National Parks in 2008/9: for the Peak District, the value of 10,116 volunteer days (70,812 hours) was estimated at between £419,915 (based on the minimum wage) and £781,056 (using UK hourly pay rates).
- 2.246 Evidence exists that volunteering boosts the skills and employability of volunteers. The National Council for Voluntary Organisations ([NCVO](#)) found that 71% of volunteers cite gaining new skills and experience as a benefit (higher among younger volunteers) and in 2023, NCVO found that 60% of recent volunteers reported using their professional skills and 63% their non-professional skills

Volunteering - social benefits

- 2.247 Volunteering helps with personal wellbeing and provides mental health benefits. DCMS commissioned research estimates that the value of wellbeing benefits to volunteers in England (in 2021/22) is £673 per volunteer per annum, and that volunteering at least once a year is associated with a 0.033 increase in life satisfaction on a 1–7 scale
- 2.248 A University of Essex evaluation of volunteering with The Wildlife Trusts found significant improvements in mental wellbeing over a 12-week period
- 2.249 A UK longitudinal study based on the British Household Panel Survey reports a positive association between volunteering and mental wellbeing across the life course
- 2.250 The NCVO's national "Time Well Spent" report found that 77% of volunteers said that volunteering improved their mental health and wellbeing.
- 2.251 Stronger stewardship, pro-environment behaviours and legitimacy are key aspects of development for individuals engaging in volunteering activities. Nature-based programme evaluations commonly evidence increased connection to nature and motivation to protect local wildlife, alongside reduced loneliness/social isolation Volunteer rangers/wardens act as trusted messengers – they improve behavioural norms and support safer recreation: National Parks and their partners frequently report outputs (people engaged, sites cared for).
- 2.252 Volunteering helps with establishing social connections and reducing isolation. NCVO reports that almost 90% of volunteers said that they met new people through volunteering; younger adults were particularly likely to cite the benefit saying it helped them feel less isolated

- 2.253 An accord between Public Health England and National Parks England notes evidence that accessing green space can support greater community cohesion and less social isolation
- 2.254 DCMS [analysis](#) finds that volunteers are 2.4% more likely to agree they feel a sense of belonging to their neighbourhood and 10.4% more likely to express a willingness to improve their neighbourhood.

Volunteering – net benefit

- 2.255 The estimated net benefits consider all the elements of additionality. Over a ten-year period of operation (from 2030-31), the volunteering opportunities provided by Glyndwr are estimated to generate (net) benefits with a net value of between -£1.3m (i.e. a disbenefit) in the low scenario and £2.5m in a high scenario, from its activities to restore habitats and promote species recovery. The NPA is estimated to spend £1.6m over the 10 year period on volunteering, with benefits ranging from £0.3m in a low scenario, to £4m in a high scenario.

Tourism – monetisable benefits

- 2.256 In Wales, the total GVA for tourism-related industries was £3,390m in 2019. Tourism related employment (jobs) within Wales was 159,000 in 2022.
- 2.257 Specific evidence of the costs and benefits to the proposed national park is limited. A [2018 study](#) by NEF Consulting estimated visitor numbers for the six primary attraction sites within the Clwydian Range and Dee Valley. The study found that these key sites attracted approximately 1.1 million visitors, generating nearly £32 million in visitor expenditure in 2018.
- 2.258 An economic impact report commissioned by NRW and delivered by Arup in June 2025, estimated the GVA of a previous candidate area to be £599 million, but didn't specify the value of the visitor economy within that calculation.
- 2.259 [The Great Britain Tourism](#) survey annual report from 2024 provides a breakdown of the number of visitors to Wales, where they are from, and whether they are day visitors or overnight visitors. In 2024, there were 20.24 million day visitors, and 10.29 million overnight visitors (excluding business and miscellaneous trips). 67% of visitors from Great Britain (excluding Wales) were on day trips, with 86% of visitors from overseas staying overnight.
- 2.260 Exeter University's Outdoor Recreation Valuation ([ORVal](#)) tool has been used to calculate the number of new visitors to the National Park by examining the substitution possibilities open to people visiting Glyndwr.
- 2.261 The ORVal Recreation Demand Model is used to estimate the welfare value of greenspaces - essentially the monetary equivalent of the

wellbeing visitors gain from being able to visit these spaces. By analysing how different features of a greenspace (such as woodland or play areas) affect visitor welfare, and how travel costs reduce it, the model provides a way to convert welfare changes into monetary values.

- 2.262 To value an existing greenspace, the model estimates how much welfare individuals would lose if they could no longer visit it, then converts this loss into money and aggregates it across the adult population of England and Wales for a year.
- 2.263 For Wales, the model is estimated from data collected in the 2014 [Welsh Outdoor Recreation Survey \(WORS\)](#) survey.
- 2.264 The tool provides a best estimate of current visitor numbers, new day visitors, and the welfare value those visitors derive from the National Park. Having been funded by Defra and designed for government to measure the recreational value of natural assets, it's considered a credible source for this study.
- 2.265 The model calculates the estimated number of visitors to the area before designation. This was calculated at approximately 3.28 million.
- 2.266 On establishment, the model estimates the number of new day visitors to be 1.06 million for the first year – adjusted to take into account the general increasing trend in visitor numbers to the UK, which according to travel trends reported by [ONS](#) rose on average by 2.5% year on year between 2013 and 2023. The new visits reported by the tool are estimates of how many of the visits to a particular site are greenspace trips that would not have occurred without that site.
- 2.267 The estimated number of new visitors has been split by those visiting from Wales, the rest of Great Britain, and overseas. For visitors from Wales, it is assumed that if they weren't new visitors to Glyndwr, they would have visited another destination within Wales. They have therefore not been included within any of the final cost benefit analysis.

Table 8: Estimated visitor numbers to Glyndwr (2031/32)

	Visitors from Wales	Visitors from rest of GB	Visitors from Overseas	Total
Visitor numbers to Glyndwr				
Total visitors to proposed national park (2018, millions)	1.87	1.29	0.12	3.28
Total new visitors to proposed national park (estimated, millions)	0.62	0.43	0.04	1.09
Total new visitors to proposed national park (estimated, millions) adjusted for annual UK wide increase in visitor numbers	0.61	0.42	0.04	1.06

- 2.268 The number of visitors to Glyndwr after year one, is then expected to continue to rise in line with the average annual visitor increase of 2.5% reported by ONS.

Welfare value – day and overnight visitors

- 2.269 The welfare value or ‘willingness to pay’ of a new day visitor has also been calculated using ORVal. The welfare value is the monetary equivalent of the welfare enjoyed by individuals as a result of having access to a greenspace (in this case Glyndwr National Park) on a particular day.
- 2.270 As outlined, the displacement factor is related to where any day visitors from Wales to the National Park will instead visit another part of Wales. Visitors from Wales are not included within the calculation of welfare value.
- 2.271 Additional spending from visitors has not been included CBA as it is already considered a key part of the welfare value. The benefit of visitors from Wales and the rest of GB visiting the new National Park instead of travelling overseas has also not been included within the CBA.
- 2.272 The demand equations used within the [ORVal tool](#) include a variable which captures whether or not the area is a National Park with a distinction made between paths (track, footway, path, cycleway, byway, trail, bridleway) and parks (country park, national nature reserves, local nature reserves and OpenStreetMap parks). These have been used as a proxy for the upper limit on the impact of designation, recognising that there will likely be some biases in the econometric estimates. These proxies point to an effect of around 16/17% for parks and 26/27% for paths.
- 2.273 The mid-range of each proxy have been used within the calculation to provide an upper and lower range of values.
- 2.274 The ORVal tool also uses value of time estimates derived from the Department for Transport 2014 [WebTAG book](#). To reflect price uplift, the GDP deflator for 2025 has been used.
- 2.275 For Glyndwr, the welfare value of the total estimated new day visitors is calculated at between £3.0 - £3.2 million for the first year (2025 prices), taking into account the non-use of visitors from Wales. This then increases in line with the average rate of annual visitor increases seen across the UK between 2013 and 2023 (2.5%).

Table 9: Welfare value for day visitors to Glyndwr NATIONAL PARK (2031/32)

	Adjusted for average increase in day visitors, 2025 prices, £m
Welfare value (16.5%) per annum	3.0
Welfare value (26.5%) per annum	3.2

- 2.276 Across the 10-year period post NPA setup (2031-32 to 2040-41), the net value (2025 prices) of day visitors are expected to be in the range of £33.2 - £36 million.
- 2.277 The welfare value of overnight visitors has been calculated for visitors from England and Scotland, shortened to 'Other Great Britain (GB)', and visitors from overseas.
- 2.278 The number of overnight visitors from 'other GB' to Glyndwr has been calculated by using the ORVal data and the percentage of visitors from 'other GB' to North Wales in 2024 taken from the [Great Britain Tourism Survey](#). This was then multiplied against the number of overnight visitors from 'other GB'. The same methodology was used for overseas visitors, using data taken from the [Office for National Statistics International Passenger Survey](#) in 2024.
- 2.279 The welfare value of a day visitor was used as a conservative estimate for the value of an overnight visitor, due to the lack of alternative data.
- 2.280 The additional welfare net value of overnight stays for both 'other GB' and overseas visitors is estimated at £3.6 - £3.8m over the 10 years.
- 2.281 This gives a total net welfare value for both day and overnight visitors to Glyndwr of between £34m and £36m over the 10 year period.

Housing - monetisable benefits

Housing stock value

- 2.282 The impact of designation of Glyndwr can be illustrated by considering the potential impact on the value of the housing stock within the National Park.
- 2.283 Designation could affect the value in two broad ways:
- by protecting the price premium by sustaining the special qualities of the landscape (i.e. by avoiding any further damage)
 - by boosting the price premium if it can enhance landscape quality.
- 2.284 The current value of the housing stock in the CRDV National Landscape and the rest of the proposed National Park is estimated based on:
- the number of houses of different types
 - the average (median) price for each house type by local authority.
- 2.285 Also shown is the (assumed) proportion of the value which is attributable to the house price premium associated with designation. This is informed by the results of the [Nationwide analysis](#) under different scenarios/assumptions about the scale of the premium.
- 2.286 The results show that the total value of the housing stock within the proposed boundary of Glyndwr is £1.5bn.

Table 10: Value of housing stock (Glyndwr)

Value of housing stock (£m)	
CRDV	£1,000
Rest of Glyndwr	£490
Glyndwr - total	£1,490

2.287 Research by Nationwide, which seeks to adjust for the factors affecting price premiums on houses, finds that:

- properties located within a National Park in England and Wales commanded, on average, a 25% price premium 2022 compared to similar properties outside these areas - equivalent to approximately £66,700 based on current UK average house prices
- Properties in AONBs in England and Wales earned a 15% premium in 2024 – this is slightly higher than 13% for AONBs on the same like-for-like basis (12 months to June 2022).

2.288 In Wales, the price premium is generally lower but more variable than elsewhere in the UK:

- Pembrokeshire Coast has the highest premium at 55%
- Bannau Brycheiniog has a 4% premium (less than English National Parks)

2.289 If it is assumed that designation of Glyndwr as a National Park could boost the price premium by enhancing its special qualities, then the benefit will depend on how quickly and how far the premium could be increased. The analysis is based on a consistent and sustained year on year percentage increase across the assessment period, for the purposes of simplicity. Table 11 illustrates the potential impact based on different sets of assumptions.

2.290 The key points to note are that:

- in a high scenario where there is an assumed 3% increase in house prices, the benefit in the CRDV could be up to £30m per annum
- the benefit in the rest of Glyndwr in a high scenario where prices see a 5% increase, the value could be up to £25m per annum
- across the whole of the national park combined, the total increase in could be £55m per year, in a high scenario

Table 11: Increase in value of housing stock within Glyndwr, based on different scenarios

	% increase in value of housing stock (per annum)	Increase in value of housing stock (£m, per annum)
CRDV		
Low	0%	£0
Central	2%	£20
High	3%	£30
Rest of Glyndwr		
Low	0%	£0
Central	2.5%	£12
High	5%	£25
Glyndwr (CRDV + rest of Glyndwr)		
Low		£0
Central		£32
High		£55

2.291 As noted, any increase in the value of the housing stock – and by implication, rental levels – could result in averse economic and social impacts which need to be offset against the benefit.

2.292 Quantitative evidence on the scale of these potential costs is limited, but relevant indicators are:

- vacancy rates and hard-to-fill posts (NHS, schools, social care, hospitality), staff turnover which reflect labour market pressure
- the rate of net migration by age group, school rolls, household formation rates which reflect demographic pressures
- rent-to-income ratios, concealed households, overcrowding and homelessness which reflect housing stress
- levels of year-round occupancy, service closures (post office, GP branch, bus routes) civic participation which indicate community viability
- commuting flows and changes in travel-to-work growth which reflects displacement.

2.293 The potential positive impact of designation of Glyndwr on the value of the housing stock is very sensitive to the assumed nature and scale of the effect on house prices. Depending on the scenario, the impact could be as much as £55m per annum. The economic and social costs, however, need to be offset against this.

Non-monetisable benefits and disbenefits

Landscape

2.294 The economic value of the landscape in Glyndwr National Park can be expressed in terms of:

- The (non-market) value from protecting the amenity derived (i.e. the economic welfare that people derive from aspects such as the scenery, tranquillity, recreation, cultural identity)
 - The market value of the boost to the visitor economy and other environment-dependent economic activity as reflected in the direct and economic impact of spending on GVA and jobs.
- 2.295 The primary focus is on non-market value; market value impact is assessed as part of the impact on the visitor economy.
- 2.296 No estimates of the non-market value have been identified specifically for Glyndwr but some useful benchmarks exist for other National Parks in Wales. Different valuation methods can be used.
- 2.297 A model-based welfare evidence method (based on travel cost):
- a peer-reviewed [study](#) on Dartmoor National Park estimates aggregate recreational benefits in a wide range, £20m to £250m per annum, depending on valuation method and assumptions.
 - ERAMMP [reports](#) 158 million visits/year to the natural environment in Wales with an annual welfare value of £570m value in 2020 prices - a large share attributable to woodland-containing sites/paths
 - the ORVal tool estimates the number of visits and their economic welfare value (consumer surplus): as a useful Wales-wide benchmark for the amenity and recreation value, ORVAL estimated the average value per visit to a green space at £3.06–£4.31 in 2018 prices, but this reflects all greenspace and does not adjust for displaced visits.
- 2.298 Stated-preference studies (“willingness to pay”):
- a [study](#) of the North York Moors reported mean WTP of £3.10 per individual per year for conservation
 - a UK-wide contingent valuation [study](#) of local parks/green spaces estimates that the mean WTP for existence/maintenance of the asset (not just National Parks) is up to £33/year per adult (Fields in Trust)
- 2.299 The available evidence needs to be interpreted with caution for several important reasons because the estimated values are not “pure landscape amenity” (i.e. a single willingness-to-pay figure for scenic beauty): instead, they reflect bundles of attributes of landscape quality (tourism, recreation, etc.). They measure the total value at risk, not the change in value attributable to designation of the National Park and are gross values which do not always consider the elements of additionality. They typically reflect economic welfare, which is broader than, but includes GVA (derived from visitor spending): this means care is needed to avoid double counting
- 2.300 In terms of the net benefit/disbenefit, all the material landscape protection benefits (and disbenefits) expected to arise from designation

of Glyndwr as a National Park are considered elsewhere in the cost-benefit analysis framework.

Other economy

- 2.301 Public administration is the biggest employer in Wales out of the Standard Industrial Codes (“SIC”) code sectors commonly used in procurement and supply chains. Of the five local authorities that sit within the proposed national park boundary, there are 306,500 people employed across 20 sectors. Human health and social work activities, manufacturing, and the wholesale and retail trade (including repair of motor vehicles and motorcycles) are the three highest employed sectors, with over 130,000 employees.
- 2.302 There are over 27,000 VAT and/or PAYE based enterprises within the five local authorities across all industry groupings. Of these enterprises 21,120 have an employment size of 0-4, with a further 3,125 employing between 5-9. 90% of enterprises within the five local authorities fall into these two employment categories.
- 2.303 The economic impact - both positive and negative - of the proposed national park on other sectors outside of areas being covered elsewhere within the impact framework (such as energy, tourism, agriculture, housing and commercial property) is difficult to precisely quantify without a detailed breakdown of all the sectors operating within the National Park boundary, and the surrounding area.
- 2.304 The economic potential / development of the Glyndwr national park and surrounding area is highly dependent on the support and conditions set within the NPA approach to managing the local economy and its economic development.
- 2.305 Other national parks have seen increases in sectors outside of tourism, with [South Downs national park publishing its 2025 economic profile report](#), highlighting several successes including:
- 50% growth in manufacturing employment – led by the sustainable food and drink and consumer chemical production sub-sectors.
 - The most numerous business type within the national park are professional and scientific services, due to the parks proximity to knowledge hubs and universities.
 - It has 18 B-Corps, showing the parks support for values driven enterprises.
- 2.306 Within Wales national parks there is little public data to support the performance of the national parks in supporting or developing other types of economies outside of tourism.
- 2.307 Audit Wales published a report on [Income Diversification for Eryri National Park in 2022-23](#), with a key recommendation being developing

a strategic approach to income diversification, noting undertaking income diversification requires Eryri to have enough capacity, skills and robust yet agile systems in place. It notes the need for income diversification to allow them to deliver more than core funding and levy funds allow.

- 2.308 Within its [annual report](#) Eryri National Park has a series of Wellbeing Objectives linked to Wellbeing of Future Generations Act. Within its Resilient Communities area, an objective is to develop a local economy which supports both the designation and the management of Eryri as a National Park. The successful delivery of this objective is measured against a number of performance indicators, all of which are orientated towards a visitor economy and mitigating the various pressures it creates.
- 2.309 Pembrokeshire National Park has a plan to improve its support to local communities within its [Partnership Plan](#) for the National Park between 2025-2029. This plan includes addressing poverty and deprivation through tackling the high number of poorly paid seasonal jobs and limited employment opportunities, as well as procuring more through local businesses.
- 2.310 Whilst useful context for how Glyndwr NPA may manage positively support a diverse local economy, the lack of quantitative data related to the area and how a local economy may benefit or be impacted, makes it challenging to quantify and monetise its value.
- 2.311 National Park designation may have a net long term positive impact on the opportunities for wider economic development within the National Park and areas within close proximity, although this conclusion is unquantified due to lack of available data.

Mining

- 2.312 Mining generated £114 million of GVA in North Wales in 2022, and £93 million in 2023. In [2019](#), mining represented 0.2% of all workplace employment in Wales.
- 2.313 Finding economic data on mining and quarrying operations within the public domain is challenging. Aggregate prices or production costs are limited in transparency due to industry confidentiality concerns. Prices can vary significantly based on location, quality, and quantity, with retail prices being much higher than primary, bulk, or quarry-gate prices.
- 2.314 In the [Scottish Aggregates Levy evidence review](#), research was undertaken on cost assumptions. The report used a British Geological Survey 2008 report on aggregate production requirements in England, where the typical ex-quarry prices in the East Midlands in 2005 were estimated at £10–12 per tonne for crushed rock and £6–8 per tonne for sand and gravel. For analytical purposes, it was assumed that

Scotland's 2005 average prices matched these values—taken as £11 per tonne for crushed rock and £7 per tonne for sand and gravel. They then used aggregates price indices from the ONS monthly bulletin on building materials and components, these 2005 figures were converted to 2018 price levels, resulting in updated estimates of £13.87 per tonne for crushed rock and £8.38 per tonne for sand and gravel.

- 2.315 Evidence from Flintshire Council indicated that the Aggregates Levy for Sand and Gravel alone contributes £0.98m and £2.7m from crushed rock, based upon the figures provided within the [Aggregates and Minerals survey in 2023](#).
- 2.316 Within the cost benefit analysis for mining and quarrying activity within Glyndwr, it is assumed that existing operations will continue until the planning permission on the extraction sites expire. This will include any additional tax revenues from the aggregates levy. The analysis focuses on any additional active quarries that aren't currently within the National Landscape, as well as inactive quarries that may seek to become active in the future.
- 2.317 Determining the volumes of aggregate, sand and gravel being extracted within each site, as well as potential for the use of reserves at current active sites, has been challenging to substantiate due to lack of data.
- 2.318 [Burley Hill quarry](#), which is currently an inactive quarry that is located within the CRDV National Landscape, was denied planning permission on the grounds it will have an unacceptable effect on the tranquillity of the CRDV National Landscape, subject to appeal. The application was for the extraction of 3.8 million tonnes of limestone over 15 years.
- 2.319 [Graig Quarry](#), which currently sits outside the CRDV National Landscape, is currently going through an appeals process to extend the quarry site, to enable the extraction of another 4.4 million tonnes of minerals over the next 25 years.
- 2.320 These more recent applications show the existing challenges for mining and quarrying operations within or close to an existing designated landscape. It is likely restrictions will increase with the designation of Glyndwr, and this will impact on a wider area than the current National Landscape.
- 2.321 There is a national planning policy in place on mining and quarrying in national parks, but without the NPA having a planning policy position in place around mining and quarrying, it is difficult to definitively calculate the impact in economic terms.
- 2.322 Using StatWales data, across the five local authorities within the Glyndwr National Park, employment in mining and quarrying as increased from 500 jobs in 2014 to 700 jobs in 2024. It is unknown how

many of these jobs are attributable to active mines within or close to the proximity of the proposed National Park.

- 2.323 Employment in mining is reducing, with the industry becoming [increasingly mechanised](#), although mining and quarrying operations can add indirect value to local economies through supply chains, such as logistics and transport, as well as underpinning the construction, manufacturing, and energy industries.
- 2.324 There are disadvantages related to the extractive industries. Mining and quarrying can be noisy and produce significant levels of dust and particulates of a variety of sizes, with [quarrying being responsible for 4.6% of PM10 emissions in 2018, and 0.8% of PM2.5 emissions](#) within the same year.
- 2.325 Mineral developments are subject to stringent controls and conditions regulated by local planning authorities, Natural Resources Wales, environment health officers and the Health and Safety Executive. During the planning permission process, an EIA must be submitted which identifies, describes and assesses the direct and indirect effects of the proposed development on a wide range of factors, including the local community and health.
- 2.326 Nevertheless, risks do remain and aligned to the damage to the landscape, mining and quarrying operations are not generally favoured within a designated landscape.
- 2.327 National Park designation will have a net long term negative impact on the mining industry within the National Park and areas within close proximity, although this conclusion is unquantified due to lack of available data.

Other commercial property

- 2.328 Commercial developments often face stricter planning controls than in nearby non-park areas. Planning applications must justify that they do not harm landscape character.
- 2.329 There also tends to be strict limits on scale, design, and use with NPAs often require developments to:
- use local materials and vernacular design
 - maintain low building heights
 - demonstrate minimal landscape impact
 - fit into the existing settlement pattern (no new towns or large suburban estates)
- 2.330 This then has a downstream impact on commercial real estate and property with major office parks, logistics hubs, large retail centres, and large hotels rarely being approved. Small-scale, locally oriented commercial projects are more likely to pass

- 2.331 While commercial development is constrained, national parks do drive strong demand in certain industries, which often need support to allow expansion. These include:
- tourism and leisure property
 - small-scale hospitality
 - sustainable and eco-based businesses
 - rural coworking spaces (increasing since COVID-19)
 - specialty retail (outdoor gear, local crafts, artisanal food)
- 2.332 Property values can also be higher for small commercial units within national parks because supply is low and visitor demand is usually strong. Most public data on property price uplift within protected landscapes (or within proximity) relates to housing stock, although it is fair to assume that commercial property will see a similar uplift.
- 2.333 There remains strong demand for both industrial land and premises in North Wales along the A55 Corridor and the A483 at Wrexham, but supply is extremely constrained. Deeside Industrial Park also continues to attract significant interest due to its close links to the M56 and Merseyside, resulting in very limited availability. Over the past 12 months, the Development Bank has played an important role in supporting the expansion plans of existing businesses as well as encouraging new inward investment.
- 2.334 There can be an inference of a likely uplift of between 20-40% for commercial property within or surrounding national parks in the UK based on housing prices and the scarcity of stock – however the level of detail to apply that inference to the Glyndwr national park is challenging due to availability of commercial property data and pricing in the area.
- 2.335 For Glyndwr the impact of this possible approach of the NPA in economic terms is hard to determine. Local development plans in national parks elsewhere in the UK have put in place policies which impact existing local businesses both positively and negatively. For example, in the South Downs National Park, they have policies including:
- intensifying the commercial use of existing employment sites and make a more efficient use of brownfield land
 - for local employment sites, commercial uses will be safeguarded from development proposals for non-commercial uses, with evidence of a robust marketing campaign of at least 18 months being required.
 - specific considerations in relation to the wine industry and its development
- 2.336 Increased planning restrictions on property development can also create a shift in the business landscape both within and around a national park. For some businesses it creates more favourable conditions, such as

tourism and hospitality. For others it can make business operations and expansion more challenging – particularly industries that require property not usually conducive to a national park landscape. This may mean businesses moving the location of operations, and whilst for Wales economy as a whole this may not be an adverse impact as they shift from location A to location B within Wales, it does run the risk of businesses especially in the National Park area moving over to the border of England.

- 2.337 The construction industry within the designated National Park could be considered as one of the key industries impacted by a reduced or more stringent planning conditions. Employment within the construction sector in the five local authorities that sit within the national park area stood at 19,800 in 2019. 4.2% of employment is in construction making it the second largest sector. It is unknown how many of these are employed within or in close proximity to the national park, and how the national park will impact employment until planning policy is decided by the NPA.
- 2.338 There may also be indirect impacts of restricted commercial property development as a result of Glyndwr National Park, although the level of additionality is difficult to quantify versus the counterfactual position of the existing National Landscape and surrounding area.
- 2.339 National Park designation will have a net long term negative impact on the other commercial property sector within the National Park and areas within close proximity, although this conclusion is unquantified due to lack of available data and dependant on the way the National Park planning policy is managed.

Education

- 2.340 Glyndwr NPA can potentially fulfil its purpose to increase public understanding of the special qualities of National Park. This includes demonstrating the links between culture and nature. It can do this in several different ways including:
- offering access improvements
 - providing information at visitor centres to support interpretation
 - offering guided walks by rangers
 - providing learning programmes
 - delivering citizen science
 - working specifically with schools and under-represented groups.
- 2.341 This suggests that apart from the NL, no other organisation is currently promoting improved understanding of Glyndwr's special qualities. Moreover, a [study](#) for Defra in 2011 found that NPAs were more likely to undertake awareness raising activities (93% and 29% respectively).

2.342 If Glyndwr is designated as a National Park, the NPA can generate value by promoting public understanding and enjoyment of its special qualities. Value arises through two linked mechanisms:

- Increased benefits that people – users - derive from Glyndwr (e.g. experience quality, wellbeing, learning, identity)
- protection of the assets that underpin these benefits (e.g. by shaping behaviour, reducing pressures and building stewardship).

2.343 This combination has the potential to produce both economic and social value.

2.344 Economically this allows a number of benefits, including:

- Higher visitor-economy returns and a stronger place brand. Projects that improve understanding/enjoyment typically raise the length of stay and spend per visit, provide better seasonal spread, boost local capture and increase the likelihood of return visits. This value is considered further as part of the section on access and the visitor economy
- Avoided costs through better visitor management and asset protection. Understanding-focused interventions can reduce the costs associated with erosion, litter, habitat disturbance, conflict and enforcement, unplanned parking/traffic impacts and emergency incidents driven by poor preparation/route choice. These are avoidable externalities which lower public-sector and land-management costs while protecting the qualities that drive demand.
- Health-related economic gains. Health gains from recreation are valued nationally at over £320m annually. Projects that convert “a beautiful place exists” into “people can access it, feel welcome, and know what to do safely” are precisely the kinds of interventions that increase participation and, therefore, these gains (especially when designed for inactive or excluded groups).
- Skills, employment pathways, and local enterprise. Projects to promote enjoyment and understanding may include accredited learning, youth programmes, green skills, guiding, hospitality and heritage interpretation training, as well as volunteering pathways that build employability and community capacity.
- Leveraging external funding and partner investment. A well-evidenced narrative about Glyndwr’s special qualities with a supporting public engagement programme can help to attract additional funding because it clarifies potential outcomes. This aligns with the Welsh Government’s view of designated landscapes as strategic national assets expected to realise their full value.

2.345 Little, if any, robust evidence exists on the potential value of Glyndwr’s education activities, so these benefits are not quantified and valued separately. Some of the potential benefits, however, will be reflected in

the expected pattern of visitors to Glyndwr (e.g. because this reflects visitors' experience).

Transport

2.346 [Ambition North Wales](#) (ANW) represents the North Wales CJC. The CJC has two key duties:

- to develop a Regional Transport Plan (RTP) – the current one covers the period 2025 to 2030
- to develop a Strategic Development Plan.

2.347 Both plans are essential for spatial planning at a strategic level: they align transport infrastructure and land use in North Wales with the needs of the communities, economy and environment. The CJC has the power to promote regional economic well-being by creating a cohesive system that seeks to ensure that North Wales can provide the skills, employability and economic opportunities needed for a prosperous future.

2.348 Glyndwr NPA can influence the transport system, either directly (planning) or through statutory influence/partnership. It can affect priorities, supply, demand and operations (including safety).

2.349 Table 12 illustrates the potential activities of the NPA. An important distinction needs to be made between those which are linked to the NPA's role as the planning authority and its statutory influence over other bodies' transport decisions and those which involve (co-) developing and delivering more structured interventions, such as visitor access programmes and parking demand management.

2.350 Designation of Glyndwr enables the former group of activities whilst the latter depend on the NPA having sufficient resources. In practice, however, it will take time before Glyndwr is able to secure the resources

Table 12: Potential NPA transport activities and impacts

Glyndwr NPA Activities		Transport impacts
Development planning and development management	Act as the Local Planning Authority which includes Local Development Plans and deciding most planning applications.	• Trip generation and distribution (e.g. accommodation and attractions) • Parking supply/standards, access design and routing • Planning conditions/obligations (e.g. Travel Plans, EV charging)
Statutory “have regard” influence on other transport decision-makers	Use the Environment Act 1995 s.62 duty (i.e. “have regard” to National Park purposes when making decisions)	Shapes design/mitigation of highway schemes, traffic management proposals, signage etc in/near Park – may affect scheme appraisal
Input to major consenting regimes and strategic infrastructure	Provide evidence and representations on DNS and other large proposals that affect the National Park	• Construction traffic routing/hauling, abnormal loads, highway safety • Operational traffic, tourism uplift, parking overspill, mitigation packages
Visitor access and demand management programmes	Lead or co-lead “hotspot” visitor access programmes with partners, covering parking, public transport, walking/cycling and visitor information	• Peak congestion relief, less illegal parking, improved network reliability • Mode shift tools: shuttle buses, gateway parking, integrated ticketing/info
Parking strategy and site management	Through planning powers and partnership programmes, shape where parking is provided, restrained or relocated plus management measures at high-demand sites	• Direct effect on car-based demand, dwell times, and congestion intensity • Spillover management into communities (safety/access for residents)
Walking/cycling access improvements and alignment with Active Travel duties	Participate in mapping, route prioritisation and scheme development in/around Parks	• Builds out non-motorised networks linking settlements, gateways, attractions • Supports mode shift for visitors and residents; reduces short car trips
Evidence, monitoring, and strategy to shape regional transport investment	• Commission or contribute to transport evidence to support planning policy and partnership funding bids • Feed into RTP development and delivery	Influences which schemes get prioritised and funded (bus corridors, gateways, active travel spines, demand management)
Standards, guidance and design stewardship	Apply landscape and placemaking requirements through planning that affect transport design (e.g. signage, lighting, parking design)	Constrains or reshapes highway engineering solutions; pushes toward lower-impact interventions and demand management

2.351 More generally, the future development of the transport system within Glyndwr will be strongly influenced by delivery of the RTP.

2.352 The RTP seeks to enhance public transport services and active travel thereby contributing to mitigating the adverse impacts of increased

traffic, particularly in sensitive areas. They are intended to reduce tourism induced road congestion and parking pressures and mitigate adverse impacts on visual amenity/maintain integrity of local landscapes.

- 2.353 Transport infrastructure enhancements could adversely affect the National Park where physical changes are required (e.g. road building, parking or active travel infrastructure): planning is needed to avoid a negative impact on the National Parks scenic and cultural value.
- 2.354 Active travel policies are unlikely to reduce vehicle usage in the more remote parts of the National Park. Policies to better integrate public transport could support modal shift from private vehicles to sustainable transport which could ease the adverse effects of traffic congestion and parking pressures on popular tourist destinations. Reallocation of road and parking space and discouraging single occupancy car use through parking charges could reduce road traffic and parking pressures, enhancing visual amenity.
- 2.355 By improving public transport services and active travel infrastructure, the RTP seeks to facilitate better connectivity between communities and key cultural sites. By reducing traffic congestion and enhancing accessibility, the RTP aims to make it easier for individuals, particularly those without private vehicles, to visit cultural venues, heritage sites and improve connectivity between local Welsh-speaking communities. Improved connectivity between Welsh speaking communities and to educational resources for learning Welsh can promote daily use of the Welsh language. Overall, the RTP policies collectively contribute to the preservation and promotion of local cultural heritage without posing risks to designated heritage assets.
- 2.356 In summary, it is difficult to disentangle the potential impacts of the NPAs activities from those of the underlying RTP in the absence of greater clarity about exactly what interventions can be expected by both the NPA and ANW (and the local authorities). For this reason, they cannot be quantified or monetised.

Agriculture

- 2.357 There are planning implications for the agricultural sector as a result of National Park designation. Planning Policy Wales allows new farm and forestry buildings when essential or when existing structures are unsuitable, with a strong emphasis on reusing buildings to protect the landscape, particularly in National Parks. Existing Welsh NPAs support high-quality development, including farm buildings, by guiding and collaborating with developers. Their role is to balance development with conservation of natural capital and cultural heritage, not to impose stricter controls than other planning bodies.

- 2.358 While protecting the best and most versatile (BMV) land is a consideration, it is only one of several factors in planning decisions. As noted, only 8.2% of the previous candidate area was BMV land, and about 50% is already protected. This limits the potential impact of planning restrictions in Glyndwr.
- 2.359 For funding of agricultural businesses, the Welsh Government offers several farming support schemes, including the recently introduced SFS which seeks to promote environmentally responsible farming. Additional support comes through schemes such as the Agricultural Diversification and Horticultural Scheme, Habitat Wales, and various small grants. These funding pots are available to all farms regardless of whether they are inside a National Park (or other designated landscape). Fermio Bro support is available for farms within designated landscapes.
- 2.360 Existing NPAs offer additional advice and support to farmers and land managers. The help provided is tailored to the specific circumstances of the National Park and the types of land management involved. The NPAs also advocate on behalf of farmers and land managers, representing them in dealing with national government and agencies.
- 2.361 Diversification into farm tourism, local food production and other rural enterprises can potentially improve farm viability. Growth of the visitor economy in the National Park offers significant opportunities for local communities and businesses, including farming enterprises that wish to diversify. This could involve offering self-catering or bed and breakfast accommodation, bike hire or selling farm produce directly to visitors through farm shops and cafés.
- 2.362 Planning Policy Wales allows such diversification where it complements existing farming activities: for example, Eryri NPA's Local Development Plan Policy 20 supports it where it forms part of a formal farm business plan.
- 2.363 National Park designation has the potential to boost an area's recognition, especially outside Wales. This could offer promotional advantages for local products and enable producers to secure premium prices. For instance:
- Eryri NPA works closely with farmers and the agricultural sector to promote sustainable farming methods that enhance the quality of produce, making it more attractive to premium markets.
 - Over 200 businesses in the Cairngorms use National Park branding, and the NPA supports initiatives like the Cairngorms Farmers Market and the Creative Cairngorms artists and craft workers' association.
- 2.364 Initiatives like this could increase both the value added by agriculture as well as employment.

2.365 The gross impact of designation of Glyndwr on the agricultural sector is ambiguous. On the one hand, planning restrictions may increase the cost of investment. On the other hand, any price premium for farmers as well as the diversification opportunities depend on how the area's profile can be raised. This means it is difficult to assess the gross benefits/disbenefits with any certainty. For this reason, they have not been quantified or monetised. The impacts on natural capital and cultural heritage are considered elsewhere.

Communities

2.366 Several academic and policy-studies estimate the monetary value of social capital (or components of it).

2.367 A [study](#) from 2015 estimated the “shadow price” of social capital (i.e. how much extra income would compensate for changes in people's social trust or social networks). The study, which covered 45 European countries, found that:

- a one-standard-deviation increase in interpersonal trust is worth about €7,913/year (in foregone income) in terms of personal well-being
- institutional trust was valued similarly (€7,405)
- the importance of family (as social capital proxy) at ~€7,312

2.368 A [report](#) by Local Trust / Frontier Economics (2021) looked at investments in social infrastructure (e.g. community centres, facilities that foster local interaction). It found that such investments delivered benefits including social cohesion, civic engagement and reduced loneliness (all parts of social capital).

2.369 A [review](#) titled Measuring and Valuing Social Capital: A Systematic Review noted that “few” studies had attempted a full monetary valuation but highlighted that social capital can contribute to better educational outcomes, employment, health and community stability which, in turn, can be linked to economic gains. It argued for distinguishing outputs of social capital (e.g. network connections, trust) from outcomes (e.g. improved employment, health, community functioning) and where possible, translating outcomes into financial or economic terms (e.g. higher wages, reduced welfare costs, increased firm value).

2.370 In practice, however, this is hard to do because monetising social capital relies on several strong assumptions (which may not always hold):

- increases in social trust (or participation) directly improve well-being or income
- individuals would accept lower income in exchange for higher social well-being

- 2.371 Shadow-pricing also measures a theoretical trade-off which doesn't necessarily reflect real income changes so it only shows what people might accept.
- 2.372 Many social capital benefits are long-term, diffuse and collective which makes them very hard to assign to a single individual or to monetise reliably
- 2.373 It is difficult to disentangle the potential benefits (and disbenefits) of the NPA's activities on social capital from those on the five other capitals covered within the cost-benefit analysis framework. Moreover, it is difficult to quantify and monetise the impacts without knowing more precisely how the NPA would allocate its resources. For these reasons, they have not been quantified or monetised.

Local authority visitor levy

- 2.374 The Welsh Government plans to introduce a [visitor levy](#) on overnight stays in 2027. Local authorities will have the power to implement a per-person, per-night charge. The proposed levy rates are:
- £1.30 per person per night for hotels, B&Bs, and self-catering accommodation
 - £0.75 per person per night for hostels and campsites.
- 2.375 If all local authorities in Wales were to introduce a visitor levy, it could raise up to £33m annually. This funding would be spent by local authorities who would have a duty to consult NPAs where present in their area. The funding could be used to help communities manage the costs of tourism, support the Welsh language and promote sustainable tourism growth (e.g. by improving local infrastructure—such as toilets, footpaths, beaches, and visitor centres—for the benefit of both residents and visitors).
- 2.376 The 2023 STEAM reports for Welsh National Parks break down overnight visitors into serviced (hotels, guesthouses, B&Bs) and non-serviced accommodation (camping, caravanning, hostels, schools, colleges, cottages). They also provide estimates of the average length of stay.
- 2.377 The estimated revenue from the visitor levy for each existing Welsh National Park has been estimated by Arup using 2023 tourism figures and 2025 prices. The indicative tourism levy revenue for each of the existing Welsh National Parks ranges from £1.1m to £6.4m. This wide range reflects differences in the proportion of overnight visitors (e.g. 88% of visitors to Bannau Brechinog were day trippers).

Summary of costs and benefits for the preferred option

- 2.378 Estimates of the costs and benefits in each year of the 15-year appraisal period are presented in the tables below. The monetised costs and benefits are presented across three scenarios - high, low and middle. These scenarios are used due to the uncertainty of the evidence and secondary data utilised within the modelling as described above. The assessment of monetised costs and benefits indicates the benefit-cost ratio (BCR) is below 1 in all three scenarios..
- 2.379 However, as explained in the revised [Green Book](#), it is important the BCR of a project is not considered in isolation and that unmonetisable benefits (and costs) are also factored into the assessment of social value. The Appraisal Summary Table (AST) on the following page summarises the potential wider impacts of designating Glyndwr as a National Park.

Appraisal summary table

	Description of option	Non-monetisable costs and benefits	Public sector financial impact	How impacts are distributed among key groups
Option 2 - Preferred option	Designate a new National Park in the proposed area within and surrounding the CRDV NL	Not all the potential impacts are considered within the BCR because of the evidence limitations and expected limited materiality. This includes a lack of primary evidence and a reliance on secondary evidence sources. A summary of these impact areas are outlined below. Landscape - the (non-market) value from protecting the amenity derived (i.e. the economic welfare that people derive from aspects such as the scenery, tranquillity, recreation, cultural identity Other economy – the costs or benefits of the National Park on other sectors outside of those that have been monetised, including the mining industry Other property – the costs or benefits of being able to develop additional commercial property within the National Park Education – increasing public understanding of the special qualities of National Park Transport – the costs or benefits of the National Park on the transport system, limited by the understanding of interventions being delivered by the NPA and ANW. Agriculture – the impact (cost/benefit) of the National Park on planning for agriculture, or the provision of a price premium. Communities – the social value of a National Park (although may be captured through welfare value and other impact areas)	For the public sector, the costs of the new National Park are split into the transitional costs of establishing a National Park Authority (NPA), and the recurring, or operational costs. The Welsh Government's costs of establishing a new National Park include those of NRW. Key activities are related to the expected planning inquiry and establishing Glyndwr NPA. These are estimated at £3m. The NPA will incur both revenue and capital costs in its setup and through its ongoing operation. In setup costs could be up to £3.6m over a five-year period, with ongoing costs up to £34.6m over the following 10 years of operation. Local authorities and CRDV NL costs are directed through areas including staff time, updating Local Development Plans (LDPs), as well the loss of any planning application charges. The local authorities may avoid some costs of planning and development control as responsibility shifts to the NPA. Setup costs are estimated at £5.6m, with cost savings expected of £3.2m during the operational phase of the NPA. Total public sector costs are estimated at £43.6m.	A detailed distributional or place based analysis has not been undertaken, but the impacts across different groups within, or in proximity, to the new National Park can be speculatively assessed. The most material cost will be on larger energy businesses, although downstream impacts may be felt within local supply chains and smaller businesses. The cost to the public sector has been outlined, but there is uncertainty on this given the lack of a defined management structure for the NPA. Whilst housing values will likely see an increase as a result of designation, the impact on local residents, such as first time home buyers, hasn't been quantified. Tourism will provide potential benefits for visitors through their welfare value and contribution to the local area, although there are costs in the clean-up of litter and maintenance of paths. Further costs related to increased visitors across areas such as transport and public services - which may impact certain demographics more than others - have not been fully quantified. Volunteering will see benefits to National Park residents and visitors, based on the expected monetary support for volunteering from the NPA. The natural capital benefits will see expected small but significant downstream effects for nature-based business, as will activities related to the preservation of culture and heritage within the National Park.

All costs and benefits

Costs - middle scenario

Costs	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34	2034-35	2035-36	2036-37	2037-38	2038-39	2039-40	2040-41
National Park set up costs															
WG (& NRW)	£1.3M	£1.2M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M
GLYNDWR NPA	£0.0M	£0.0M	£1.3M	£1.3M	£1.2M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M
Local authorities	£0.2M	£0.2M	£1.7M	£1.7M	£1.3M	£0.6M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M
NPA recurring costs															
WG	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.1M	£0.1M	£0.1M	£0.1M	£0.1M	£0.1M	£0.1M	£0.1M	£0.1M	£0.1M
GLYNDWR NPA	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£4.4M	£4.4M	£4.3M	£4.3M	£4.2M	£4.2M	£4.1M	£4.1M	£4.0M	£4.0M
CRDV NL	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	-£0.4M	-£0.4M	-£0.3M	-£0.3M	-£0.3M	-£0.3M	-£0.3M	-£0.3M	-£0.3M	-£0.3M
Local authorities	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M
Sectoral costs (mid)															
Energy (renewables)	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£35.0M	£35.0M	£35.0M	£35.0M	£35.0M	£35.0M	£35.0M	£35.0M	£35.0M	£35.0M
Energy (transmission)	£0.0M	£0.0M	£0.0M	£0.0M	£7.0M	£47.0M	£47.0M	£47.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M
Tourism	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.2M	£0.3M	£0.3M	£0.3M	£0.3M	£0.3M	£0.3M	£0.3M	£0.3M	£0.3M
Total	£1.5M	£1.5M	£3.0M	£3.0M	£9.6M	£87.0M	£86.3M	£86.2M	£39.2M	£39.2M	£39.1M	£39.1M	£39.0M	£39.0M	£39.0M

Costs - low scenario

Costs	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34	2034-35	2035-36	2036-37	2037-38	2038-39	2039-40	2040-41
National Park set up costs															
WG (& NRW)	£1.3M	£1.2M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M
GLYNDWR NPA	£0.0M	£0.0M	£1.3M	£1.3M	£1.2M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M
Local authorities	£0.2M	£0.2M	£1.7M	£1.7M	£1.3M	£0.6M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M
NPA recurring costs															
WG	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.1M	£0.1M	£0.1M	£0.1M	£0.1M	£0.1M	£0.1M	£0.1M	£0.1M	£0.1M
GLYNDWR NPA	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£4.4M	£4.4M	£4.3M	£4.3M	£4.2M	£4.2M	£4.1M	£4.1M	£4.0M	£4.0M
CRDV NL	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	-£0.4M	-£0.4M	-£0.3M	-£0.3M	-£0.3M	-£0.3M	-£0.3M	-£0.3M	-£0.3M	-£0.3M
Local authorities	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M
Sectoral costs (low)															
Energy (renewables)	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£28.0M	£28.0M	£28.0M	£28.0M	£28.0M	£28.0M	£28.0M	£28.0M	£28.0M	£28.0M
Energy (transmission)	£0.0M	£0.0M	£0.0M	£0.0M	£14.0M	£14.0M	£14.0M	£14.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M
Tourism	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.2M	£0.3M	£0.3M	£0.3M	£0.3M	£0.3M	£0.3M	£0.3M	£0.3M	£0.3M
Total	£1.5M	£1.5M	£3.0M	£3.0M	£16.6M	£47.0M	£46.3M	£46.2M	£32.2M	£32.2M	£32.1M	£32.1M	£32.0M	£32.0M	£32.0M

Costs - high scenario

Costs	2026-27	2027-28	2028-29	2029-30	2030-31	2031-32	2032-33	2033-34	2034-35	2035-36	2036-37	2037-38	2038-39	2039-40	2040-41
National Park set up costs															
WG (& NRW)	£1.3M	£1.2M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M
GLYNDWR NPA	£0.0M	£0.0M	£1.3M	£1.3M	£1.2M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M
Local authorities	£0.2M	£0.2M	£1.7M	£1.7M	£1.3M	£0.6M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M
NPA recurring costs															
WG	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.1M	£0.1M	£0.1M	£0.1M	£0.1M	£0.1M	£0.1M	£0.1M	£0.1M	£0.1M
GLYNDWR NPA	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£4.4M	£4.4M	£4.3M	£4.3M	£4.2M	£4.2M	£4.1M	£4.1M	£4.0M	£4.0M
CRDV NL	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	-£0.4M	-£0.4M	-£0.3M	-£0.3M	-£0.3M	-£0.3M	-£0.3M	-£0.3M	-£0.3M	-£0.3M
Local authorities	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M
Sectoral costs (high)															
Energy (renewables)	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£56.0M	£56.0M	£56.0M	£56.0M	£56.0M	£56.0M	£56.0M	£56.0M	£56.0M	£56.0M
Energy (transmission)	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£80.0M	£80.0M	£80.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M
Tourism	£0.0M	£0.0M	£0.0M	£0.0M	£0.0M	£0.2M	£0.3M	£0.3M	£0.3M	£0.3M	£0.3M	£0.3M	£0.3M	£0.3M	£0.3M
Total	£1.5M	£1.5M	£3.0M	£3.0M	£2.6M	£141.0M	£140.3M	£140.2M	£60.2M	£60.2M	£60.1M	£60.1M	£60.0M	£60.0M	£60.0M

Benefits – middle scenario

[illegible]

Benefits – low scenario

[illegible]

Benefits – high scenario

[illegible]

Middle scenario

15-year NPV estimates (2025 prices, 2026 present value)

Present Value Costs	£415.8M
Present Value Benefits	£288.6M
Net Present Value (NPV)	-£127.2M
Benefit:Cost Ratio (BCR)	0.69

Low scenario

15-year NPV estimates (2025 prices, 2026 present value)

Present Value Costs	£290.6M
Present Value Benefits	£35.6M
Net Present Value (NPV)	-£255.0M
Benefit:Cost Ratio (BCR)	0.12

High scenario

15-year NPV estimates (2025 prices, 2026 present value)

Present Value Costs	£642.5M
Present Value Benefits	£468.7M
Net Present Value (NPV)	-£173.7M
Benefit:Cost Ratio (BCR)	0.73

