

Environmental Screening Advice Note

Screening completed by	Joshua Gittins
Date	01/12/2020

Project Name	Caron Estate NFM Project		
Location	Caron Estate, Teifi Uchaf	Grid reference	SN 72512 61625
Senior User	-	Senior User Post Title	-
Project Manager	Rachel Jarvis	Project Manager Post Title	Senior Officer
Community Risk Register Area (for FRM projects)	Tregaron and Pontrhydfendigaid communities at risk. See existing Western Wales FMRP . Update due 2021.	Strategic Context e.g. CFMP / SMP Policy, RBMP	See new National Flood and Coastal Erosion Management Plan (2020).

Set out the background, scope, description, and objectives of the project (information from project mandate)

Background

The Caron Estate, located to the east of Tregaron, is a 567-ha unenclosed moorland (part of the Elenydd uplands) in the Cambrian Mountains, which feeds the headwaters of the Rivers Teifi and Tywi. There is a history of poor management of these upland environments. This, in-combination with future climate change, will see flood risk increase in the downstream areas of Tregaron and Pontrhydfendigaid. Both Tregaron and Pontyrhydfendigaid communities have benefited in the past from engineering flood alleviation works around the towns, predominantly Tregaron which had significant flood defence works a little over a decade ago. Some Natural Flood Management (NFM) work was delivered in the hills above Pontrhydfendigaid nearly two decades ago. This included tree

planting – mainly riparian. Focussing further up the catchment, this project will complement these engineered solutions, increasing their lifespan and functionality.

At the specific location of this project, there are no current NFM measures. The land has previously been used for grazing with management not taking into account the ecology or hydrology of the site. Therefore, the land is compacted and relatively bare, and this lack of hydraulic roughness is likely to be facilitating low infiltration rates and excessive sheet flow runoff from rain events. The current landowner is keen to understand the landscape better and reinstate a more natural hydrology here, thus using this baseline data to restore naturally functioning habitats and stream regimes across the land.

This work will help attenuate water flow off this significant area of land, and thus reduce pressures on the existing engineering infrastructure protecting the two communities.

Work at this upper catchment scale will also protect a wider remit of infrastructure within the entire Teifi catchment below this point, which is a significant size area.

The outcomes of the project will be driven by the findings of the surveys this summer and will likely offer a suite of options including those shown in the opportunity mapping and described above. All of these interventions will have multiple benefits including increasing biodiversity, in the terrestrial and aquatic systems present here.

Scope & Description of Works

Initial walkovers of the Estate by West Wales Rivers Trust staff have indicated the presence of a number of ditch networks with good potential for work to slow peak flows downstream. The Estate also contains sections of the Afon Fflur and Camddwr, both of which have been historically modified and disconnected from their floodplains. Where appropriate, these banksides can be regraded to enable greater connectivity with their floodplains and therefore greater water storage on the adjacent land.

A series of ponds will also be created at appropriate locations to store further water on the land and enhance the diversity. These locations will be informed by the relevant Phase 1 vegetation and hydrological studies to be funded through this scheme. Proposed works will include:

- Catchment Woodland planting – informed by the survey and partners Woodland Trust
- Riparian woodland planting (as above)
- River restoration/ floodplain reconnection – informed by Hydrological study and expertise from NRW/Rivers Trust (Principle delivery partner)
- Runoff attenuation features (open water)
- Blocking of ditches that have formed and are eroding/degrading peat – informed by Hydrological study and expertise from NRW/Rivers Trust

Environmental Screening

Key environmental receptors	Environmental Desk Based Assessment	Follow up Action Required	Who will carry out the follow up action?	Action Tracker
	<p><u>Population & Human Health</u> Currently at risk of flooding there are 100 plus properties in Tregaron and 50 plus in Pontrhydfendigaid; majority of these are residential. Within the Caron Estate, however, there is one residential property, under Caron Estate ownership. This is accessible through a few small roads tracking through the Estate. The area has sporting rights (including fishing) owned by the state and there are a number of Public Rights of Way (footpaths and bridleways) across the estate which require consideration.</p> <p><u>Biodiversity, Fisheries & Invasive Non Native Species</u> Some headwaters of the River</p>	<p><u>Population & Human Health (Recreation)</u> The Project Manager (PM) should consider any construction-phase impacts on nearby properties, e.g. noise, vibration, light etc, with this kind of project this will most likely be related to traffic going accessing the site. Agree appropriate working hours (for contractor or in-house Operations team) and traffic management with Ceredigion County Council (CCC) in advance to mitigate any issues relating to construction disturbances. Minimise the footprint and confirm the construction compound requirements, if any.</p> <p>Consult with CCC's Rights of Way officer to discuss any diversions or closures necessary during the proposed works.</p> <p><u>Biodiversity, Fisheries & Invasive Non Native Species</u> It is recommended that an Extended Phase I Habitat</p>	PM	<p><i>To be completed by PM to document whether action has been completed. Advice Note should then be used as supporting document when applying for project approval (e.g. submissions to Project Approval Board / Programme Board).</i></p>

	<p>Teifi, a Special Area of Conservation (SAC), drain the potential site. Further, Cors Caron SAC is <1 km west of the site and the Elenydd SAC is within 2 km north of site. The Cwm Doethie – Mynydd Mallaen SAC is also approx. 2.5 km southwest of site and headwaters of the River Wye SAC are within 5 km east of the site. The Elenydd (Mallaen) SAC is also part of the Special Protection Area (SPA). Part of this large SPA is adjacent to the boundary of the potential site. All of these aforementioned SACs are also Sites of Special Scientific Interest (SSSIs), in addition to these, there are six additional SSSIs within 5 km of site (River Irfon, Cae Pwll-y-bo, Coed Mynachlog fawr, Figyn Blaen-Brefi, Rhos Gargoed and Vicarage Meadows).</p> <p>Cors Caron, Nant Irfon (part of River Irfon), Allt Rhyd Y Groes and Claerwen (part of Elenydd SAC) are also all National Nature Reserves.</p> <p>There are hundreds of Local Record Centre priority and protected species points located</p>	<p>surveys be undertaken by an appropriately qualified ecologist, to detail the habitat and vegetation types and whether the priority and protected species and INNS recorded by the LRC are still within the vicinity. This will inform seasonal working plans, but due to the potential presence of breeding birds in the area protected under the Birds Directive 2009, works should not be carried out between April and August. The local Environment Team's fisheries advisors should also be contacted to advise with regards to appropriate mitigation and/or working conditions to avoid disrupting fish stocks or migration.</p> <p>A Habitats Regulations Assessment will likely be required for the proposed works at this site and should be built into the programme and budgets. Also, INNS/biosecurity good practice should be adhered to. Any tree planting should be discussed with NRW plant/tree health team for the area to avoid biosecurity issues and minimised risks of tree disease. Discuss these matters and the ecological surveys with the Ceredigion, Carmarthenshire and Powys Environment Teams as the site straddles the three counties.</p> <p>NRW's protected sites team SSSI.notices@cyfoethnaturiolcymru.gov.uk may also require contacting regarding the need for SSSI Assent once a more defined scope is known in terms of the locality of the works.</p>	<p><i>PM</i></p>	
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	<p>within the potential works site. Further, there are a number of Invasive Non-Native Species (INNS) regions covering the site, designated mainly for birds (e.g. Candada goose, barn owl, goshawk) and flora (e.g. New Zealand Willowherb).</p> <p>There are some areas of Restored, Plantation and Semi-natural, and Unknown category of ancient woodland adjacent to the northern end of the site. There are no Sites of Interest for Nature Conservation within 2 km of the proposed site.</p> <p><u>Land (eg land take)</u></p> <p>The land-use covered by the proposed site is predominantly plantation woodland (as part of the Welsh Government Woodland Estate, managed by NRW), with other areas of unenclosed moorland extending across the Caron Estate site to the west (grade 5 classified agricultural land).</p> <p>Once the extent of the land-use change is known, depending on the locality of the NFM</p>	<p>See the Local Development Plans for Powys, Carmarthenshire and Ceredigion county councils' Local Development Plans. An agreement between the three Local Authorities will be required as to who leads on which parts of the project.</p>	<p><i>PM</i></p>	
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	<p>interventions, land-take should be re-evaluated.</p> <p><u>Soils (eg organic matter, erosion, compaction, sealing)</u> The site is approx. 2.8 km east of the Tregaron Bog Geological Conservation Review Site. There are no active or historic landfill sites within or adjacent to the proposed site – so risk of contaminated land is low. However, the Tywi forest site managed by NRW has the potential for localised contamination from forestry operations.</p> <p><u>Water (eg hydromorphological changes, quantity and quality)</u> The proposed site drains the into the headwaters of the upper River Teifi, a SAC. The upper Teifi is considered a 'Moderate' WFD status waterbody, overall. As is the Fflur tributary and the Teifi</p>	<p><u>Geology & Soils</u></p> <p>Geosciences (geoscience@cyfoethnaturiolcymru.gov.uk) should be consulted with regards to the plans for any groundworks to install NFM features; once plans have been finalised.</p> <p>During construction or surveying, correct waste management procedures should be followed. Refer to and follow relevant Guidance for Pollution Prevention (for Wales, Scotland and NI), specifically PPG 1, 5, 6, 21 and 22.</p> <p>Regarding any construction compound and access, the compound footprint should be minimal, with mitigation in place to protect soils from damage (e.g. compaction etc.). Any additional access required should be constructed as temporary and the reinstatement of initial land-use should take place post-works.</p> <p><u>Water (inc WFD)</u></p> <p>The project may require Flood Risk Activity Permits (FRAP) or Ordinary Watercourse Consent (OWC) for any works affecting flood risk in or around waterbodies (depending on scale). Any works should be planned and timed to minimise the risk of flooding affecting construction – ideally, the construction plant</p>	<p>PM</p> <p>PM</p>	
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	<p>running through Cors Caron.</p> <p>The proposed site also drains into headwaters of the River Tywi and Llyn Brianne reservoir. The upper Tywi headwaters are considered 'Poor' WFD status waterbodies, overall.</p> <p>The Brenig headwaters of the Teifi is a Drinking Water Protected Area.</p>	<p>(and any materials) should be stored outside of any floodplains.</p> <p>There will also be the requirement for a WFD Preliminary Assessment for either or both of the above-mentioned rivers depending on the scope of the works adjacent to the headwaters of these main rivers. Discuss these requirements with the relevant Environment Team for the region the works/rivers fall in.</p> <p>Close consultation should be had with NRW geomorphologist (Dale.Cox@cyfoethnaturiolcymru.gov.uk) to determine any waterbody restoration and or interventions for working with natural processes. Consultation here may also inform NFM options.</p> <p>During construction, water and sediment quality management is important to undertake with care to prevent pollution. Appropriate mitigation will be required to minimise fine sediment (i.e. silt and clays) pollution and the correct management of any fuel/oils during construction should be undertaken. The sediment and water quality management procedures should be outlined clearly in the project Method Statement. The Method Statement and Environmental Action Plan should be communicated to the local Environment Teams and the EAT prior to any construction.</p>		
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	<p><u>Air</u> There are no known Air Quality Monitoring Stations situation near the proposed project site.</p> <p>It is anticipated that there will be little to no effect on the local area's air quality from this project.</p> <p><u>Climate (eg greenhouse gas emissions, impacts relevant to adaptation)</u></p> <p>Under changing climates, the fluvial risks of flooding to the residents and businesses of Tregaron and Pontrhydfendigaid could be exacerbated. This project sets out to install nature-based solutions to manage forthcoming flood risk.</p> <p><u>Landscape</u> Over half the proposed site is located within the Upland</p>	<p><u>Air</u> N/A</p> <p><u>Climatic Factors</u></p> <p>Project designers should consider potential opportunities for better local climate change adaption (e.g. minimise GHG emissions, using low-carbon material, offset tree/shrub planting for shade and green engineering options rather than materials with high carbon footprints as well as taking opportunities to restore the natural environment so as to increase carbon sequestration) and sustainable resource management. The above is assumed to be a priority for this type of project anyway.</p> <p>The project's carbon usage needs consideration through both the design and construction phases. Lower carbon design options and materials should be considered early.</p> <p><u>Landscape</u> The design of any permanent structures should be</p>	<p><i>PM</i></p>	
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	<p>Ceredigion Historic Landscape Area. The proposed site is primarily within the Cambrian Mountains National Landscape Character Area.</p> <p>The proposed site is not within an Area of Outstanding Natural Beauty or a National Park.</p> <p><u>Cultural Heritage</u></p> <p>Tregaron is a designated Conservation Area. There are also three Listed Buildings within or on the boundary of the proposed works area: Capel Soar (and attached house), Outbuilding by Capel Soar (and attached wall) and Nant Ystalwyn.</p> <p>Further, there are eleven Scheduled Monuments (SMs) within or on the border of the proposed site: Blaen Glasffwrdd cairn cemetery, Fagwys Las Deserted Settlement, Glasffwrdd Holy Well, Blaen Glasffwrdd longhouse, Cefncerrig Round cairn, Blaen Camddwr Round cairn, Cairn Cemetery on Esgair Gerwyn, Bryn Cosyn Cairn Cemetery, Bryngwyn Bach Round Cairn Cemetery, Tir Hir Medieval Platform and Carn Fflur Round cairn cemetery.</p>	<p>consulted on by EAT's Landscape Architect (Marianne.jones@cyfoethnaturiolcymru.gov.uk) in terms of how they might affect the area's landscape character.</p> <p><u>Cultural Heritage</u></p> <p>Listed Building consent may be required if works are undertaken within close proximity to the buildings. Measures should be put in place to prevent any effects on the building or the surrounding landscape. Early discussions with the appropriate Local Planning Authority (LPA) and Cadw will be required. Consultation with the local authority Conservation Officer regarding the proposed works potentially affecting the landscape proximate to a Conservation Area will also be required. SM consent may be required if any of the proposed works directly affect an SM or its setting.</p> <p>There is potential for unknown archaeological finds where groundworks are undertaken.</p> <p>The Dyfed Archaeological Trust (DAT) will be consulted regarding the sensitivities in the area surrounding this project, and will advise on any further constraints.</p>	<p><i>PM</i></p> <p><i>PM (EAT will consult DAT)</i></p>	
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Likely consenting route	<p><u>Material Assets</u> Potential utilities within the area need to be identified in the areas of localised work.</p> <p>Correct waste management procedures should be undertaken; the PM should be familiar with any necessary waste licencing requirements and contractor checks must be done</p>	<p><u>Material Assets</u> Progress a utilities search of any localised areas that will be intervened upon. Consult with local NRW (Environment Officer) and Waste licencing team. The Waste licencing team can advise on the Definition of Waste (Code of Practice and Exemptions).</p>	PM	
	<p>The consenting route for these works at this stage is not clear. There are a number of EIA regulations (i.e. agriculture, forestry, land drainage) which may or may not be triggered, dependent upon the type and scale of work. There may be the need to advertise under certain EIA regulations the decision not to undertake a statutory EIA; EAT can advise if this is the case.</p> <p>We do not expect planning permission to be required, however, if any large structures are part of the design, this may change. The LPA should be consulted if it is thought that planning may be and/or works are planned within functionally-linked land to local European Protected Sites and/or Listed Buildings.</p> <p>As the localised scope of works is developed, EAT should be consulted to inform on the consenting route so that sensitive constraints can be avoided and/or mitigated against effects. This is an iterative and ongoing process throughout the project.</p>		PM	
	<ul style="list-style-type: none"> • Habitats Regulations Assessment • WFD Preliminary Assessments • FRAP or OWC • Potentially a Countryside and Rights of Way assent (SSSI assent) • Potentially Scheduled Monument Asset and/or Listed Building Consent. 		PM	
Environmental	<p><i>In delivering our projects we should consider what wider benefits we can deliver, for example:</i></p>			Ensure any benefits

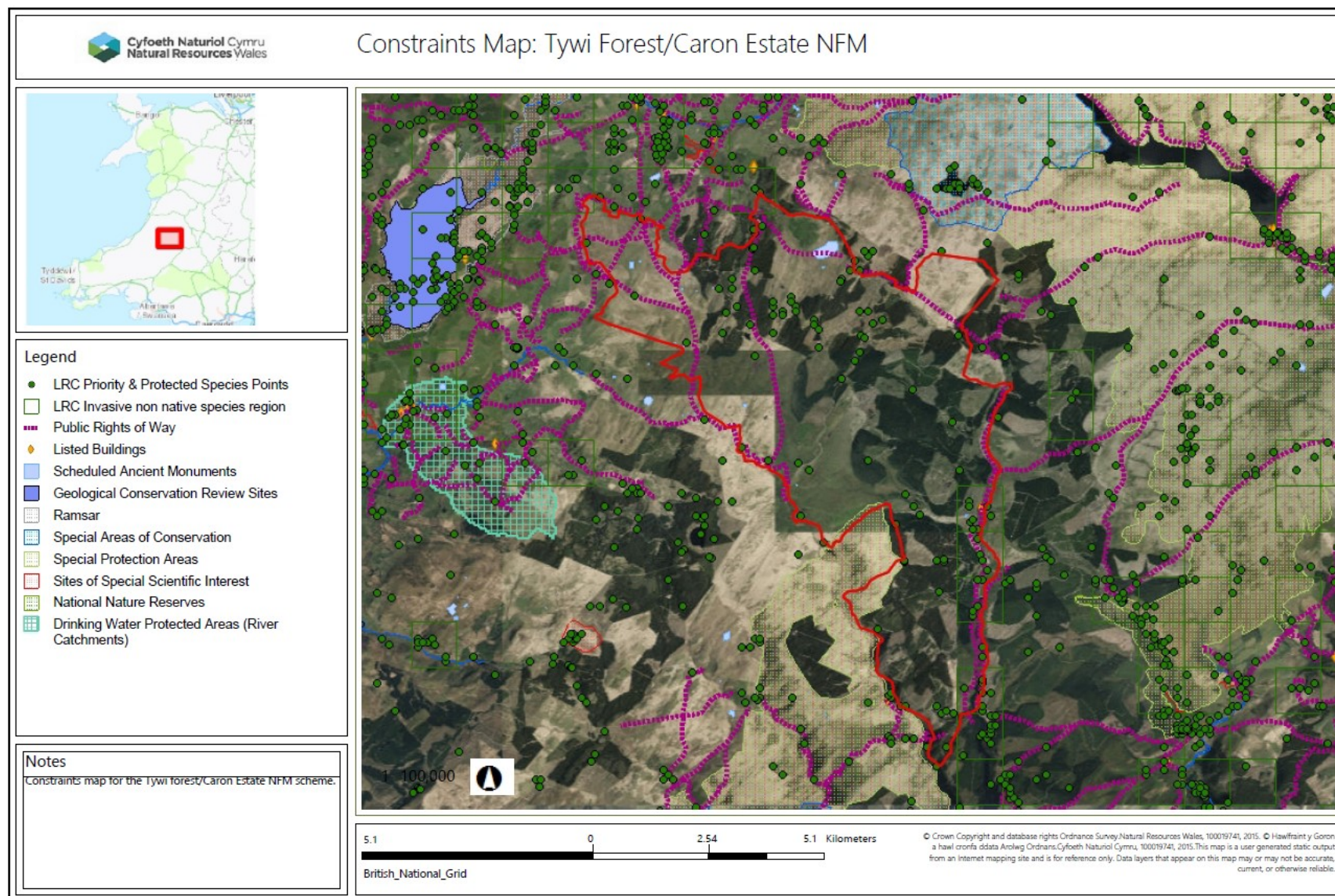
opportunities	<ul style="list-style-type: none"> • Can your project build in measures to slow the flow of water, consequently having flood risk and water quality benefits? • Where associated with water courses can your project deliver Water Framework Directive benefits e.g. bank naturalisation, treatment of Invasive Non Native Species, hydromorphological improvements etc.? • Where associated with Natura 2000 sites, can your project deliver any actions required under the Prioritised Improvement Plans? • Are there any opportunities for using green engineering / green infrastructure? • Can recreational or access opportunities be delivered through your project? • Are there any opportunities for planting trees or shrubs? • Are there any opportunities to promote simple changes to land management to provide food, shelter and nest sites for pollinators? • Are there any opportunities for habitat improvement or creation, paying particular attention to resilience (connectivity, diversity, condition) of habitats within or linked to the study area? • Are there any opportunities for community engagement or education? • Are there any opportunities to improve fish habitat or passage? 	PM	delivered are reported to the benefactor and to the communications team for publicising.
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A map highlighting some of the scheme constraints has been included within Annex 1.
Record of all consultation responses can be found within Annex 2.

Screening Conclusion

- Following internal consultation, it has been determined that this project is not likely to lead to significant environmental effects provided that good working practices and any additional mitigation identified is implemented. Unless the project scope changes, this project does not require Environmental Assessment Team (EAT) involvement. However, EAT should be consulted as the project design works develop to ascertain if this remains the case.
- This note has been prepared to assist the project manager (PM) in taking forward actions and in documenting this for project approval purposes. The PM can seek assistance from local Natural Resource Management/Environment Teams for specific tasks identified in Table 2, which must be agreed as part of the project planning stage. If at any point the scope of the works changes from that described above, the project manager must contact the local Natural Resources Management/Environment Team to confirm whether a revised determination is required.
- The project manager is responsible for ensuring the follow up actions are undertaken to ensure the environmental risk is managed.

Annex 1: constraints plans



Annex 2: parties consulted in the screening

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