



**PORT WARRINGTON, WARRINGTON COMMERCIAL PARK AND ARPLEY MEADOWS COUNTRY PARK
WARRINGTON WATERFRONT**

**WARRINGTON
BIODIVERSITY NET GAIN REVIEW
NOVEMBER 2021**



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1.0 Executive Summary

- 1.1 TEP were commissioned in 2019 to review the requirements for Biodiversity Net Gain (BNG) in respect of proposals to expand Port Warrington, a new associated commercial park and a new country park (Arpley Meadows) in Warrington.
- 1.2 At the time of the commission, the Environment Bank Biodiversity Impact Assessment Calculator (V2, May 2019) was used to assess the likely change in habitat units across the development as this was the most up to date, fully functional assessment tool available at that time. The information used to inform this calculator was gathered through extensive site survey and assessment.
- 1.3 Between completion of the original BNG assessment and today, the Defra Metric 2.0 beta was released. Upon review this was found to contain glitches which made it unsuitable for use on the scheme.
- 1.4 Biodiversity Metric 3.0 has now been released (in July 2021) and will be used to assess any detailed planning applications submitted for the site, should it be brought forward. This would be supported by updated surveys to collect up to date habitat information and complete the relevant condition assessments.
- 1.5 Beyond the existing commitment from Peel to deliver 10% net gain from these development proposals, the mandatory requirement for 10% net gain will be secured through the Environment Bill which is likely to be written into law in the near future and likely, prior to submission of any planning applications.
- 1.6 Having reviewed the existing works against the requirements of Metric 3.0 there will be a need to update surveys and a requirement to review the 'habitat trading rules' to ensure any habitats of high value are replaced on a like for like basis or as part of a bespoke agreement with the LPA.
- 1.7 Although no detailed assessment can be made of the likely changes to offsetting scores prior to an assessment of the development site and any offsetting locations, we are confident to say that the overall conclusions are unlikely to significantly change.
- 1.8 Where there is a loss of habitats arising from the proposals, these can be offset through the enhancement and creation of new habitats on site. Where this is not possible new habitats can be created off site and, where a net loss still remains, credits can be purchased from a habitat bank or a bespoke agreement for compensation can be agreed with the Council.

2.0 Introduction

- 2.1 Peel Land and Property Holdings (UK) Limited and Peel Ports Group Limited (hereafter referred to as "Peel") are looking to develop a large site in Warrington, which lies between the village of Moore in the south and Penketh in the North.
- 2.2 The proposals for the site include extension of the existing Port Warrington facility, creation of Warrington Commercial Park (WCP) and the creation of Arpley Country Park.
- 2.3 The site was originally identified within the Warrington Draft Local Plan (2019 version), under Policy MD1, for release from the Green Belt. Within this policy there was a requirement to ensure that overall, 10% net gain was achieved by any future development at this site.
- 2.4 To support the commitment to overall no net loss TEP undertook extensive survey of the site, and sites within influencing distance, to establish a baseline Biodiversity Net Gain (BNG) score for the site and identify opportunities for both on and off-site mitigation. This work was undertaken across 2019, however the methodology for undertaking BNG has now advanced. This report reviews the validity of work undertaken previously and identifies any areas which may require additional consideration going forward.

Site Overview

- 2.5 The site is located within the borough of Warrington with a central grid reference of SJ 58401 86246 (Figure 1). The site is immediately bounded to the north by the River Mersey and residential and industrial development associated with the towns of Penketh and Great Sankey. To the east lies arable land and the west coast mainline rail route with industrial and residential development associated with the town of Latchford. To the west lies extensive farmland and the River Mersey estuary and to the south the site is immediately bordered by the Manchester Ship Canal with the village of Moore present on the opposite bank.
- 2.6 Moore Nature Reserve is dominated by woodland with numerous waterbodies and areas of open grassland. The former Arpley Landfill site has been capped and remediated with new areas of woodland and grassland creation.
- 2.7 The development will extend the existing Port Warrington facility, the location of which provides a unique potential to deliver more port land and a more sustainable approach to freight transport by linking movements along the Manchester Ship Canal not only to the strategic road network but also the rail network. This unique location, and the regional significance of the development, provides the reasons why ecological impacts cannot be avoided e.g. by placing the development elsewhere on land of lower ecological value (NPPF 2021, para. 180).

- 2.8 The creation of the new multi modal port will be partly undertaken within Moore Nature Reserve which is an existing Local Wildlife Site (LWS), whilst a new commercial park is to be built on land formerly managed as part of Arpley Landfill site. The loss of habitats within these sites is to be mitigated through the creation and long-term management of a new country park (Arpley Country Park) and through enhancement of retained sections of the existing Moore Nature Reserve LWS.
- 2.9 The proposed port facility and WCP will result in the loss of approximately 44ha of habitats and the proposed commercial park will result in the loss of approximately 31ha of habitats.
- 2.10 As a result of these losses, there is a requirement to develop a strategy for delivery of BNG. This will include habitat creation within the new country park which is approximately 136ha, significant enhancement of the remaining 46ha of the retained Moore Nature Reserve and retained green buffers and options for off-site compensation.

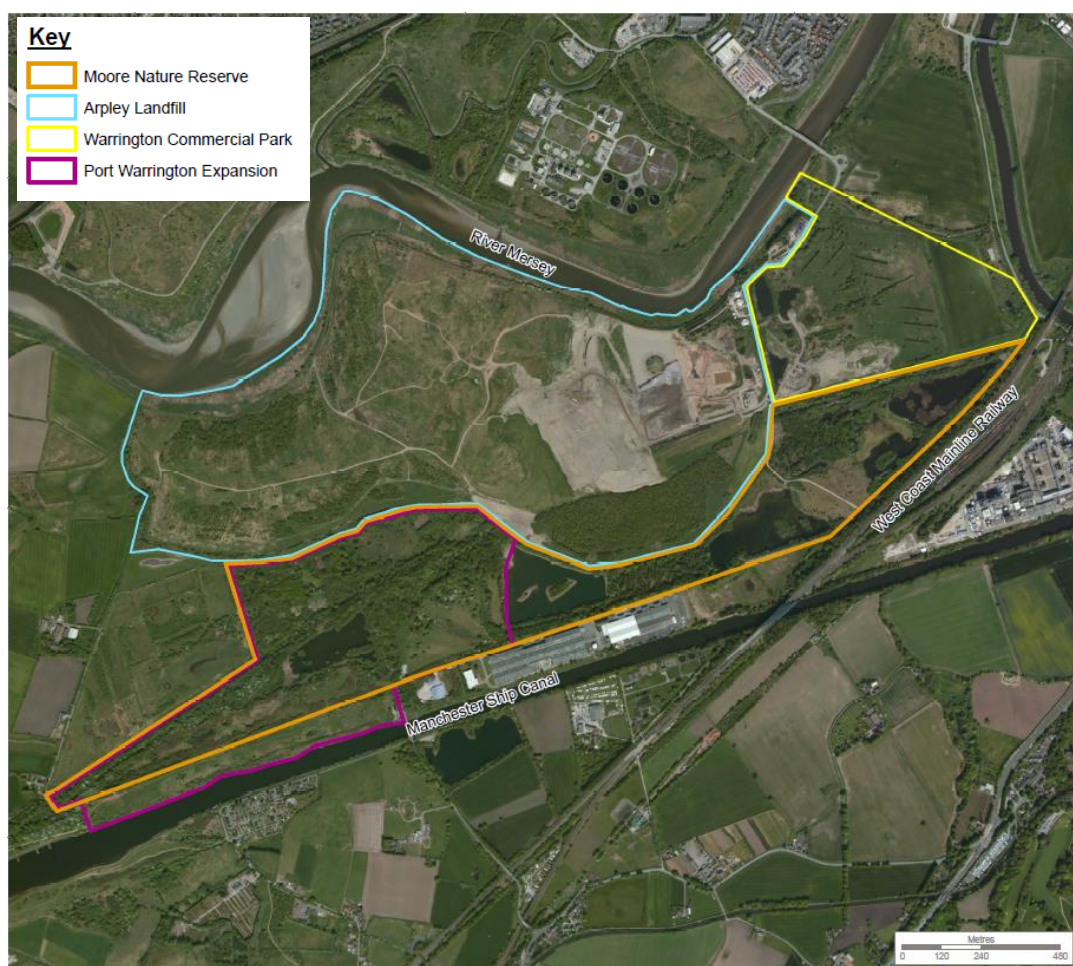


Figure 1. Site Location

Source; Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

3.0 Baseline Survey Data

- 3.1 An extended Phase 1 Habitat survey (TEP Ref: 6929.01.001 V3.0) was completed by suitably qualified ecologists across March and April 2018 and across May to August 2019 using the standard JNCC Phase 1 habitat assessment method (2010)¹. This method records the habitat types present in and immediately surrounding the site, based on the JNCC descriptions. Plant species are identified in accordance with Stace (2010)² and recorded as target notes using the DAFOR³ scale.
- 3.2 The survey method was extended through the additional recording of specific features indicating the presence, or potential presence, of protected species or other species of nature conservation significance, including invasive species, with due consideration for current best practice guidance from CIEEM (CIEEM 2017⁴). Weather conditions during the survey varied from wet and cold to hot and dry across the survey period.
- 3.3 This was followed up by a number of detailed protected species surveys including those in relation to bats, wintering/breeding birds, water vole and otter. The results of which are included within the extended Phase 1 habitat survey report (TEP Ref: 6929.01.001 V3.0).
- 3.4 The Phase 1 habitat survey identified acid grassland and woodland present on site which appeared to have good floristic diversity. In order to identify the grassland and woodland community/ communities present and to determine their biodiversity value further, a detailed vegetation survey following National Vegetation Classification (NVC) methods was undertaken (TEP Ref: 6929.01.023 and 6929.01.024). The survey was undertaken by a suitably qualified botanist (FISC Level 5, MCIEEM) during May - July 2019 and followed standard methods outlined by Rodwell (2006) using quadrats of 2m x 2m.
- 3.5 An arboricultural survey and assessment was undertaken in September 2019 by qualified arboriculturalists (TEP Report 7815.01.001).
- 3.6 A Biodiversity Net Gain report for the site was produced in October 2019 (reference: 6929.01.037, Version 3.0) and was supported by a detailed Biodiversity Mitigation Strategy (TEP Report Ref: 6929.01.039) and Landscape and Habitat Management Plan (TEP Report Ref: 6929.01.040). This assessed the on site habitats at each of the areas identified in Figure 1 and also took into account potential offsite enhancement areas including:
 - Gatewarth Landfill;
 - Wigg Island;
 - Paddington Meadows;
 - New Cut Woolston; and
 - Land at Rixton.

¹ JNCC (2010) Handbook for Phase 1 Habitat Survey: A technique for environmental audit. Joint Nature Conservation Committee, Peterborough

² Stace, C. (2010) New Flora of the British Isles. 3rd Ed. Cambridge University Press

³ DAFOR = Dominant, Abundant, Frequent, Occasional & Rare

⁴ CIEEM (2017) Guidelines for Preliminary Ecological Appraisal, 2nd Edition. Chartered Institute of Ecology & Environmental Management

4.0 Changes in Biodiversity Net Gain Assessment

Previous Assessment

- 4.1 The areas and condition (following DEFRA 2005⁵ and ecologists/arborists professional opinion) of habitats to be lost and retained, along with those to be enhanced and created was assessed in the 2019 report using the Environment Bank Biodiversity Impact Assessment Calculator (V2, May 2019).

Updated metrics

Defra Biodiversity metric 2.0

- 4.2 The Defra Biodiversity Metric 2.0 was released in July 2019. Although available at the time the BNG assessment was completed it was only available as a beta test spreadsheet and was found to contain a number of errors which would result in an incorrect assessment of the number of habitat units present on site pre and post development. Therefore, the decision was made to use the existing Environment Bank Biodiversity Impact Assessment Calculator.

Biodiversity Metric 3.0

- 4.3 Biodiversity Metric 3 was released in July 2021, after completion of the submission for the original local plan release.
- 4.4 Biodiversity Metric 3.0 is a tool designed to enable developers to measure the change in biodiversity across their site. It determines if there will be net gain, net loss or no net loss of biodiversity following completion of their development and any subsequent management regime.
- 4.5 To calculate the change in biodiversity across the site, a site survey is undertaken by a suitably qualified ecologist to determine the habitats present on site, their location, size, and condition. This information is then digitised and the resulting information fed into Biodiversity Metric 3.0.
- 4.6 The changes between assessment using Defra Metric 2.0 and the Biodiversity Metric 3.0 are set out in the *Summary of Changes from Biodiversity Metric 2.0 to Metric 3.0 document*⁶ but largely involve an update to the excel form used to assess the scheme, removal of sections found not to work (such as connectivity), and reassessment of the conditions and values afforded to certain habitats in order to improve the useability of the metric.
- 4.7 There are also a number of changes between the Environment Bank Biodiversity Impact Assessment Calculator (V2, May 2019) and the Biodiversity Metric 3.0 t. The Environment Bank Calculator took account of habitat distinctiveness and habitat condition only, whilst Biodiversity metric 3.0 considers a wider range of parameters both in the pre and post development calculations.

⁵ DEFRA 2005, Higher Level Stewardship: Farm Environmental Plan Guidance Handbook

⁶ <http://publications.naturalengland.org.uk/file/6511288110022656>

- 4.8 The calculator considers the area (ha) or length (km), distinctiveness, condition, and strategic significance of all habitats in the pre-development baseline, and the area or length of each habitat to be retained, enhanced, and lost post-development, based on detailed landscape and development plans. The calculator includes a weighting for the 'trading in distinctiveness' of habitats on site e.g. replacement of a low distinctiveness habitat with a medium distinctiveness habitat. A negative or positive score is then generated to demonstrate a net loss or gain as a percentage and in terms of the number and types of units.
- 4.9 Biodiversity Metric 3.0 requires the completion of a 30 year management plan to ensure habitats created and retained on site are appropriately managed. TEP have produced an Interim Landscape and Habitat Management plan for the site (6929.01.040)
- 4.10 Under Biodiversity Metric 3.0 it is recommended that habitat surveys are undertaken using the UKHAB assessment for habitats.
- 4.11 Completion of the Biodiversity Metric 3.0 is undertaken using information provided in both the Biodiversity Metric 3.0 user guide⁷ and Technical Supplement⁸.

The Environment Bill

- 4.12 The Environment Bill⁹ is a new government bill which aims to set out in law, amongst other things, the requirement for biodiversity net gain on new development sites. The bill has passed through the House of Commons, the House of Lords and is currently undergoing consideration of amendments prior to Royal Assent.
- 4.13 It is currently anticipated that the bill will include a requirement for all developments to achieve at least a 10% net gain in biodiversity and it is likely that the bill would be written into law prior to commencement of any detailed planning application(s) for the proposals.

⁷ STEPHEN PANKS A, NICK WHITE A, AMANDA NEWSOME A, JACK POTTER A, MATT HEYDON A, EDWARD MAYHEW A, MARIA ALVAREZ A, TRUDY RUSSELL A, SARAH J. SCOTT B, MAX HEAVER C, SARAH H. SCOTT C, JO TREWEEK D, BILL BUTCHER E and DAVE STONE A 2021. Biodiversity metric 3.0: Auditing and accounting for biodiversity – User Guide. Natural England.

⁸ STEPHEN PANKS A, NICK WHITE A, AMANDA NEWSOME A, JACK POTTER A, MATT HEYDON A, EDWARD MAYHEW A, MARIA ALVAREZ A, TRUDY RUSSELL A, SARAH J. SCOTT B, MAX HEAVER C, SARAH H. SCOTT C, JO TREWEEK D, BILL BUTCHER E and DAVE STONE A 2021. Biodiversity metric 3.0: Auditing and accounting for biodiversity – Technical Supplement. Natural England.

⁹ <https://bills.parliament.uk/bills/2593>

5.0 Conclusions and Recommendations

- 5.1 To date TEP have carried out a comprehensive evidence base which shows that under the Environment Bank Biodiversity Impact Assessment Calculator (V2, May 2019) biodiversity net gain is possible using a combination of both on and off-site enhancements.
- 5.2 Peel have committed to achieving at least 10% net gain for the development proposals. The evidence demonstrate that within the current BNG assessment the proposals will, in line with the latest legislation, confirm that 10% gain is still possible using Biodiversity Metric 3.0. No updated assessment is currently to be completed; however, the assessment would be undertaken in full, in support of any future detailed planning applications for the site.
- 5.3 Biodiversity Metric 3.0 will require an update of the following surveys in order for sufficient data to be collected:
 - An updated habitat survey using the UKHAB assessment method; and
 - An updated condition assessment of all habitats on site using the condition assessments set out in Biodiversity Metric 3.0.
- 5.4 The most significant impact from the change in Biodiversity Metric 3.0 will be the 'habitat trading rules'. These rules within the metric state that habitats of high value must be replaced on a like for like basis or where this is not possible a bespoke compensation package must be agreed with the LPA.
- 5.5 Although no detailed assessment can be made of the likely changes to offsetting scores prior to these surveys we are confident to conclude that the overall conclusions are unlikely to significantly change.
- 5.6 Where there is a loss of habitats on the Warrington Waterfront scheme these can be offset through the enhancement and creation of new habitats on site. Where this is not possible new habitats can be created off site and, where a net loss still remains, credits can be purchased from a habitat bank or a bespoke agreement for compensation can be agreed with the council.



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