

Appendix 11.5 Amphibian/ GCN Survey Results

Legislation and Conservation Status

As a European protected species, great crested newts (GCN) *Triturus cristatus* receive legal protection in England under the Conservation of Habitats and Species Regulations 2017 (as amended) and the Wildlife and Countryside Act 1981 (as amended). In addition, planning policy set out in the National Planning Policy Framework 2019 requires planning authorities to consider GCN when determining planning applications and to ensure that development proposals do not lead to an adverse effect on the conservation of GCN.

GCN are listed on Schedule 2 of the Conservation of Habitats and Species Regulations 2018 as a European Protected Species (EPS). Regulation 41(1) makes it an offence to:

- Deliberately capture, or injure an EPS;
- Deliberately disturb an EPS;
- Deliberately take or destroy the eggs of an EPS; or
- Damage or destroy a breeding site or resting place of an EPS.

Although GCN still maintain a widespread distribution in England, they are in decline, notably through loss of breeding ponds. A greater decline has been noted across the European range of the GCN, and now the UK holds a large proportion of the world population of the species. GCN is listed on the UK and Cheshire local Biodiversity Action Plan (BAP) and is a Species of Principal Importance (SoPI)¹.

Previous Records

The local records centre, Greater Manchester Local Records Centre (GMLRC), were consulted for protected and priority species records within 2km of the Project for Assessment boundary, from within the past 10 years.

GMLRC returned five European Protected Species Licence returns from within 2km of the Project for Assessment boundary, which are listed below in order of proximity:

- 2015-8369-EPS-MIT, 72.4m south of the Assessment Boundary, 16/03/2015- 31/12/2015, the licence allows for the damage and destruction of a resting place.
- 2015-8369-EPS-MIT-1, 72.4m south of the Assessment Boundary, 22/10/2015- 31/05/2016, the licence allows for the damage and destruction of a resting place.
- 2016-26556-EPS-MIT-1, 72.4m south of the Assessment Boundary, 20/07/2017 - 01/04/2018, the licence allows for the damage and destruction of a resting place.
- 2016-26556-EPS-MIT, 72.4m south of the Assessment Boundary, 16/11/2016 - 16/11/2016, the licence allows for the damage and destruction of a resting place.
- 2017-31812-EPS-MIT, 264.8m west of the Assessment Boundary, 19/12/2017 - 31/12/2019, the licence allows the for damage and destruction of a resting place.

¹ UK priority species and habitats are those subject to conservation action and referred to as Species of Principal Importance (SoPIs) or Habitats of Principal Importance (HoPIs). They are listed at Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006. Section 40 of the NERC Act states that local planning authorities must have regard for the conservation of both SoPIs and HoPIs.

GMLRC returned 130 records of GCN within 2km of the Project for Assessment. The nearest and most recent record of GCN was located 0.28km southwest of the Assessment Boundary, recorded in 2022.

GMLRC returned 15 records of other amphibians within the 2km radius of the site, all of which being common toad *Bufo bufo*.

Survey Methodology for eDNA Sampling

Survey Area

Due to the scale of the Project for Assessment and lack of access to large swathes of the Assessment Boundary land, the eDNA surveys focused on accessible land within the Proposed Scheme and within 250m of the Proposed Scheme/ Application Boundary (some of which, by nature, falls within the wider Project for Assessment).

Furthermore, with regards to District Level Licencing scheme, in order to apply to the scheme a planning application is required. Therefore assessing the ponds inside and within 250m of the Application Boundary was deemed to be the most appropriate scope as the Application Boundary and parameters shall be subject to an outline planning application. The ponds within the Amphibian/ GCN survey scope are illustrate on **Figures 11.17-11.21**.

As mentioned in the Limitations section, Ponds P24, P25, P27, P36, P37,P42, P43 and P44 were not accessible during the eDNA surveys and therefore results from these pond were not obtained.

However, P24 and P25 were subject to eDNA sampling by E3P⁶ as part of their South Heywood assessment (report appended for ease of reference; P24 and P25 were named WB9 and WB1 respectively).

Ponds P42 and P43 are stocked with fish, as part of Pilsworth Fishery. Natural England also concluded that Ponds P42, P43 and P45 are considered too large to form part of a District Level Licencing scheme². For ease of reference, descriptions of these ponds are still included within this assessment, but are considered to be unsuitable for GCN due to their size and management (stocked with fish).

For ease of reference, 'onsite ponds' refers to ponds within the Proposed Scheme/ Application Boundary, and 'offsite ponds' refers to ponds which are up to 250m from the Proposed Scheme / Application Boundary.

Extended Phase 1 Habitat Survey

An Extended Phase 1 Habitat survey was initially conducted on 20th April 2022 (surveyor names in **Table 11.5.1** below). This survey identified ponds and recorded their condition (water levels, size, vegetation present etc). 'Offsite' ponds were then assessed during the eDNA surveys (May 2022 and June 2024).

eDNA Sampling Methodology

Survey methodology, as provided by SureScreen Scientifics⁴, are:

² Olly Russell, Natural England, via Email on 10th February 2025 – "Ponds over 2,500sqm should be removed from the pond files, this would include including P43 and P42 which you mention as being fishing ponds. Similarly, any ponds hydraulically connected need to be shown as such, but if their combined size means they exceed 2,500sqm then they can be removed altogether (e.g. P45 as it is connected to P43 which exceeds our size limit)".

- Identify 20 sites around the perimeter of the pond where you plan to collect your subsamples from. To ensure the sampling effort is representative of the site, space these as evenly as possible and include vegetative areas and areas likely to contain Great Crested Newts.
- Gloves should be worn at all times during sample collection to avoid contamination of samples.
- Using the ladle, collect a subsample from at least 5-10cm deep from each of the sites previously identified in step 1 (total 20 samples). Transfer each ladle full of water to the bag provided.
- Once all sites have been sampled, tightly scrunch the bag and shake vigorously for 10 seconds (to mix any DNA within the sample equally).
- Using the pipette, transfer water from the bag to each of the preservative filled tubes. Repeat this step multiple times until 15ml is transferred (tube is filled to the 50ml mark).
- Close the tubes and ensure the lids are tight and not cross threaded. Shake each vigorously for 3 seconds.
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eDNA Survey

Water samples were taken from the all accessible onsite and offsite ponds – refer to definitions above. The water sampling was undertaken across three different dates, as described in **Table 11.5.1**. Water samples for the two 2022 dates were sent to Nature Metrics³, while the 2024 water samples were sent to SureScreen Scientifics⁴ to analysed.

Table 11.5.1: eDNA Dates and Surveyors

Visit	Date	Lead Surveyor
1 (Extended Phase 1 Survey)	20 th April 2022	Sophie Kirk, Nick Bell, Leanne Deighton, Bethany Pythian, Laura Dennis
2	3 rd May 2022	Nick Bell
3	30 th May 2022	Sophie Kirk
4	20 th June 2024	Elliot Grundy

³ <https://www.naturemetrics.com/insights>

⁴ <https://www.surescreenscientifics.com/>

District Level Licencing

District Level Licencing (DLL) offers an alternative approach to licensing whereby more habitat is created than lost to development (at a ratio of four to one), than traditional GCN licencing works. Developers pay for new habitat based on the predicted impact of their development which covers the creation or restoration of ponds in areas modelled to make 'more, bigger, better, more joined up'⁵ great crested newt populations. New habitat is delivered by conservation bodies, like the Wildlife Trusts, and maintained and monitored for 25 years – all funded by the initial payment.

In order to join the scheme, ponds (where accessible) are subject to eDNA sampling. The results of the water sampling are shared with Natural England, who calculate the scale of impacts, based on which 'zone of impact'⁵ the scheme is situated, number of ponds impacted and terrestrial habitat impacted. The three 'Risk Zones' which are factored into the scale of impacts calculation are:

- red zones: have great crested newt populations of regional, national or international importance – these are unsuitable for district level licensing
- amber zones: have great crested newt populations, habitats and dispersal routes – these are suitable for district level licensing
- green zones: have fewer areas with great crested newts – these are suitable for district level licensing

Limitations

Ponds P36, P37, P42, P44, P43 were not accessible during the eDNA surveys and therefore results from these pond were not obtained.

Survey Results and Summary

Impact Risk Zone

A review of Natural England's GCN Risk Zone Spatial Mapping (for Greater Manchester), confirmed that the Proposed Scheme and 250m buffer fall within both Green and Amber risk zones; meaning the Proposed Scheme is in a suitable location for DLL. See **Figure 11.5.1** below:

⁵ District Level Licencing: Natural England [online]: <https://www.gov.uk/government/publications/great-crested-newts-district-level-licensing-schemes-for-developers/developers-how-to-join-the-great-crested-newt-district-level-licensing-scheme>

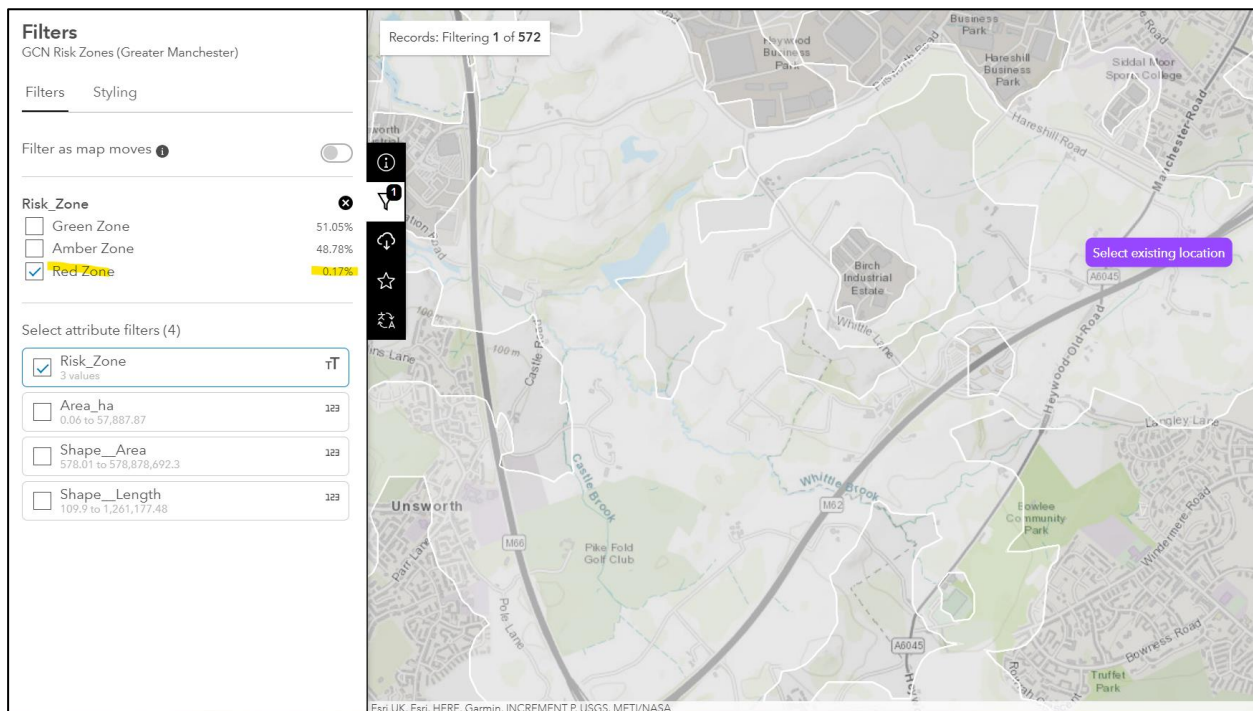


Figure 11.5.1: Showing no 'Red Zones' within the Proposed Scheme and beyond.

eDNA Results

Detailed descriptions of each pond and eDNA results for each of the accessible ponds can be found in Tables 11.5.2 – 11.5.19 below. The results of the eDNA surveys, as provided by Nature Metrics and SureScreen Scientifics are appended to this report.

Pond 24 was not accessible by Tyler Grange, however it was included in an assessment undertaken by E3P in 2022⁶. P24 was found to have a negative result for GCN.

During the eDNA sampling, some of the pond numbers were given different numbers to that described within this report. Where the number differs, the number used during the eDNA sampling is also provided within the tables below (for example Pond 28 was named "Offsite P1" by the surveyors). This means that the appended eDNA report also has the ponds named as the surveyors have named them.

It should also be noted that two ponds of which eDNA samples were collected from, are no longer within 250m of the Proposed Scheme boundary, these ponds are:

- "Offsite Pond 1" on the Nature Metrics eDNA report; and,
- P1 on the SureScreen Scientific eDNA report.

Anecdotally, both ponds returned negative GCN presence.

⁶ Great Crested Newt Surveys, South Heywood, Link Road. Ref: 80-001-L5-1

HSI and eDNA Survey Results Tables

Table A11.5.1 – Pond Description and eDNA result

Pond 1	
Indices	
Grid Reference	SD 82830 07788
Description	Located adjacent to Thurston Fold Farm within agricultural modified grassland. 15x15m, mud/silt, heavily poached by cows, drying out during April 2022, bulrush and rushes dominant.
Distance to Site	Approx. 60m from Proposed Scheme Boundary
Photo	
eDNA Result	Photo taken in April 2022. Pond found to be dry during eDNA survey in May 2022. No water sample collected.

Table A11.5.2 – Pond Description and eDNA result

Pond 2	
Indices	
Grid Reference	SD 82718 07764
Description	Located adjacent to the south Thurston Fold Farm within agricultural modified grassland. 10x15m, mud/silt, heavily poached, 50% open water, floating sweet grass <i>Glyceria fluitans</i> . Rushes, bulrush & yellow flag iris <i>Iris pseudacorus</i> .
Distance to Site	Approx. 170m from Proposed Scheme Boundary

Photo		
eDNA Result	Negative	

Table A11.5.3 – Pond Description and eDNA result

Pond 5		
Indices		
Grid Reference	SD 83486 08381	
Description	Large, rectangular pond. 50x12m, little emergent or submerged vegetation with some yellow flag iris and hard rush on banks <i>Juncus inflexus</i> . Considered to be a permanently wet, deep pond.	
Distance to Site	Within Proposed Scheme	
Photo		
eDNA Result	Negative	

Table A11.5.4 – Pond Description and eDNA result

Pond 6

Indices	
Grid Reference	SD 83642 08371
Description	Small, oval shaped pond. 12x7m, mud/ silt substrate, yellow flar iris being heavily dominant with very low water levels. Considered to be only seasonally/ temporarily wet.
Distance to Site	Within Proposed Scheme
Photo	
eDNA Result	Negative

Table A11.5.5 – Pond Description and eDNA result

Pond 12	
Indices	
Grid Reference	SD 84200 07856
Description	A small circular pond. 17x12m, common reed <i>Phragmites australis</i> dominant, containing low/ fluctuating levels of water
Distance to Site	Within Proposed Scheme

Photo		
eDNA Result	Positive	

Table A11.5.6 – Pond Description and eDNA result

Pond 13	
Indices	
Grid Reference	SD 83956 07554
Description	A large open pond within agricultural field. 25x20m, with hard rush <i>Juncus inflexus</i> dominant and common grasses on the pond borders. Floating sweetgrass present within the pond,
Distance to Site	Within Proposed Scheme
Photo	
eDNA Result	Positive

Table A11.5.7 – Pond Description and eDNA result

Pond 14	
Indices	
Grid Reference	SD 83866 07591
Description	Small inundation within the bottom of a large agricultural field. Only seasonally wet. Bulrush <i>Typha latifolia</i> dominant pond.
Distance to Site	Within Proposed Scheme
Photo	
eDNA Result	Negative

Table A11.5.8 – Pond Description and eDNA result

Pond 15	
Indices	
Grid Reference	SD 83685 07643
Description	Moderate sized, circular pond. 23x17m, set within a steep depression, with dense bramble <i>Rubus fruticosus</i> scrub, hawthorn and rosebay willowherb <i>Chamaenerion angustifolium</i> on the embankments. The pond itself had limited submerged vegetation, with some yellow flag iris emerging from the southern portion of the pond.
Distance to Site	Within Proposed Scheme

Photo		
eDNA Result	Positive	

Table A11.5.9 – Pond Description and eDNA result

Pond 17a and 17b	
Indices	
Grid Reference	SD 83433 07737
Description	17a is Large manmade/ altered pond, with a series of pipes feeding in run-off from the northern fields. Mud/ silt substrate with little submerged or emergent vegetation. 17b was found to be largely dry, only holding water after periods of heavy rainfall.
Distance to Site	Within Proposed Scheme

Photo	
	
eDNA Result	Negative

Table A11.5.10 – Pond Description and eDNA result

Pond 18	
Indices	
Grid Reference	SD 83508 07884
Description	Medium sized pond, 27x17m; bordering land use is modified grassland to the north, with neutral grassland to the east and south. The embankments largely comprise hard rush and bramble.
Distance to Site	Within Proposed Scheme

Photo		
eDNA Result	Positive	

Table A11.5.11 – Pond Description and eDNA result

Pond 19		
Indices		
Grid Reference	SD 83100 07485	
Description	Located within modified grassland fields. 27x16m, small oval shaped pond with dense overhanging trees cover and bramble. No submerged or emergent vegetation.	
Distance to Site	Approx. 117m south from Proposed Scheme Boundary	
Photo		
eDNA Result	Negative	

Table A11.5.12 – Pond Description and eDNA result

Pond 23 - DRY	
Indices	
Grid Reference	SD 83100 07485
Description	Dry Pond
Distance to Site	Approx. 40m south from Proposed Scheme Boundary
Photo	
eDNA Result	N/A

Table A11.5.13 – Pond Description and eDNA result

Pond 32 (Offsite P2)	
Indices	
Grid Reference	SD 84407 08406
Description	Largely circular pond, 38x34m. The northern border comprised a large metal retaining wall. Assumed to be deep towards the northern end. There was evidence of litter/pollution (wagon tyres, oil) within the pond.
Distance to Site	20m south of the Proposed Scheme boundary
Photo	No Photo Available
eDNA Result	Positive

Table A11.5.14 – Pond Description and eDNA result

Pond 33 (Offsite P3)	
Indices	

Grid Reference	SD 84179 08678	
Description	Roughly rectangular shape pond; 44x24m, set within willow scrub. The pond was fenced off with palisade fencing from a large area of earth-works. Waterfowl present. Emergent vegetation was restricted to hard rush and tree/ scrub species.	
Distance to Site	14m north of the Proposed Scheme boundary.	
Photo	No Photo Available	
eDNA Result		Negative

Table A11.5.15 – Pond Description and eDNA result

Pond 38 - DRY		
Indices		
Grid Reference	SD 83914 08632	
Description	Possibly a former pond/ marl pit. Now completely dry with willow scrub along the eastern edge of the former pond.	
Distance to Site	Within the Proposed Scheme boundary.	
Photo		
eDNA Result		N/A

Table A11.5.16 – Pond Description and eDNA result

Pond 39 - (P3 on Sure Screen eDNA Report)	
Indices	
Grid Reference	SD 83461 08813

Description	A stone-lined, steep banked reservoir. No bankside, emergent or submerged vegetation	
Distance to Site	Within Proposed Scheme	
Photo		
eDNA Result	Negative	

Table A11.5.17 – Pond Description and eDNA result

Pond 40 - DRY	
Indices	
Grid Reference	SD 82783 08076
Description	A dry depression at the bottom of a small valley.
Distance to Site	Within Proposed Scheme

Photo	
eDNA Result	N/A

Table A11.5.18 – Pond Description and eDNA result

Pond 45 – (P7 on Sure Screen eDNA Report)	
Indices	
Grid Reference	SD 82642 08355
Description	A long waterbody, connected to Pilsworth Lake via a series of pipes and down-falls.
Distance to Site	50m north of the Proposed Scheme boundary.
Photo	
eDNA Result	Negative

Table A11.5.19 – Pond Description and eDNA result

Pond 46	
Indices	
Grid Reference	SD 82670 08162
Description	A dry depression within a woodland block.
Distance to Site	Within Proposed Scheme
Photo	
eDNA Result	N/A

In summary, the following ponds returned positive results for GCN:

P12, P13, P15, P18 and P32

Anecdotally, during the reptile surveys, common toad and GCN were found to be present. These results are described in **Table A11.5.21** and illustrated on **Figures 11.17-11.21**.

Table A11.5.21: Amphibians records from Reptile Survey

Date	Species and Number	Approx. Location
5 th June 2024	Common toad, X5	SD 83429 07468
7 th August 2024	GCN, X2; Common toad, X4	SD 83429 07468
17 th September 2024	GCN, X4	SD 83525 07779
28 th October 2024	GCN, X4	SD 84087 07811

Both the eDNA results and incidental sightings during the reptiles surveys, show that there is a population of GCN within the central-eastern portion of the Survey Area. To the east of the likely GCN

range/ territory is the substantial barrier of the M62 Motorway, so it is likely that this population does not extend beyond that to the east. It is also considered the Whittle Brook could form a barrier for dispersal to the south, as it was often found to be fast flowing, with steep banks. GCN presence was not detected in any other ponds further west of P18; it is therefore considered likely that this population's range is fairly limited to the group of ponds and terrestrial habitat from P12 in the northeast to P18 in the west.

A DLL application is currently underway, with reference number: **DLL-ENQ-GMAN-00038-1**.