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GREAT CRESTED NEWT IMPACT ASSESSMENT

At

Plot 3A

Wrexham Industrial Estate
Bryn Lane
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NGR: SJ 339340 350457

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EXECUTIVE SUMMARY

This report is written by Noah Fulton BSc, Graduate Ecologist for United Environmental Services (UES) Ltd. It provides an assessment of the potential impacts on great crested newts (GCNs) *Triturus cristatus* as a result of a proposed development at Plot 3A, Wrexham Industrial Estate, Wrexham. The development proposals are for the construction of three industrial units with associated parking and access roads. Ponds 1, 2 and 4 will be removed, whereas Ponds 3, 5 and 6 will be retained as part of the proposed development. All onsite ditches will be retained.

A GCN impact assessment of the onsite ponds and ditches was undertaken on 16th February 2022 by Noah Fulton, Alasdair Grubb, Tom Kenwright and Robert Mooney. Further surveys of the accessible offsite ponds and ditches were completed on 23rd March 2022 by Noah Fulton and Tom Kenwright. The objectives of the survey were to establish the suitability of the proposed development site for GCNs, and to provide an assessment of the likely impacts of the development and how they can be mitigated. All ponds and aquatic features on site and within 500m of the site boundary were assessed for their potential to support GCNs using the Habitat Suitability Index (HSI).

The proposed development site comprises a disused industrial estate with a mosaic of habitats that are broadly suitable for breeding GCNs. Terrestrial features within the development footprint with potential to support amphibians consist of areas of dense scrub, semi-improved neutral grassland, and broadleaved semi-natural woodland. Smaller areas of hardstanding with scattered scrub, scattered broadleaved trees and tall ruderal are also present providing less suitable habitats for breeding GCNs, however, could still be used by foraging and commuting newts alongside common amphibian species.

Six ponds and four ditches were identified within the boundaries of the proposed development site. Five ponds and three ditches are located within the development footprint and will be directly affected by the proposals. One pond (Pond 6) and one ditch (Ditch 6) are located within the proposed receptor site, located within the eastern section of the red line boundary. Numerous records of medium sized GCN populations have been recorded in the ponds on the development site; the most recent dating from 2016. Connectivity to the wider landscape is facilitated by good quality terrestrial habitat that provides abundant ground cover with ideal colonisation range between ponds.

A further forty-seven mapped ponds and nine mapped ditches were identified within 500m of the proposed development site. Of the forty-seven mapped offsite ponds present within 500m of the site thirty could not be surveyed as access permission was not granted. Pond 28 had access permission granted, however, it could not be surveyed due to dense scrub preventing access. Ditch 1 was the only ditch within the 500m radius that had enough standing water to achieve a HSI score. A HSI assessment found:

On-site ponds and ditches:

- Ponds 3, 4, 5 and 6 to be of excellent suitability for GCNs.
- Ponds 1 and 2 to be of good suitability for GCNs.
- Ditch 1 to be of good suitability for GCNs.

Off-site ponds:

- Ponds 25, 26, 29, 30, 32a, 33a, 33b, 34, 45, 46 to be of excellent suitability for GCNs.



- Ponds 24 and 47 to be of good suitability for GCNs.
- Ponds 9, 31, 32b, 32c to be of below average suitability for GCNs.

Based on the abundance of suitable amphibian habitat and recent GCN records within the proposed development area it is likely the proposed development will require a European protected species (EPS) mitigation licence from Natural Resources Wales before the works can commence.

Further presence / absence surveys are required to see whether GCN are still present on site. Four survey visits are required for presence / absence surveys of each onsite pond and ditch between mid-March and mid-June. If GCN are confirmed as present during the survey, population size class assessment surveys consisting of a further two site visits will be required during the same time period. However, at least half of the survey visits should be conducted between mid-April and mid-May, although in some cases this period may be extended based on cold weather early in the breeding season.

The report should be read in conjunction with appendices 1 to 5, which give visual representations of the survey results, and the Preliminary Ecological Appraisal also prepared for the site (UES03448/01).



1 INTRODUCTION

1.1 Author, surveyors and qualifications

This report is compiled and written by Noah Fulton BSc, UES Graduate Ecologist.

Other surveyors include:

- Alasdair Grubb BSc ACIEEM, UES Ecologist. Alasdair is licenced by Natural Resources Wales to disturb, take and handle GCN in all counties of Wales under licence number S090926/1.
- Tom Kenwright BSc MSc, UES Senior Ecologist. Tom is licenced by Natural Resources Wales to disturb, take and handle GCN in all counties of Wales under licence number S091022/1.
- Robert Mooney MSc, UES Graduate Ecologist.

All surveyors have the knowledge, skills and experience identified within CIEEM's "Competencies for Species Survey: Great Crested Newt" (2013), or were under the supervision of a surveyor with the required competencies.

1.2 Survey objectives

UES was commissioned in February 2022 to conduct site surveys which include the following activities:

- To assess the potential of the proposed development area for use by GCN
- Conduct an HSI assessment of ponds within 500m of site, where accessible
- Recommend further surveys, mitigation and compensation, where appropriate

1.3 Proposed development

The development proposals are for the construction of three industrial units with associated parking and access roads. Ponds 1, 2 and 4 will be removed, whereas Ponds 3, 5 and 6 will be retained as part of the proposed development.

1.4 Structure of the report

This report sets out the methodology, results, and recommendations in relation to a specific GCN survey. Recommendations are in line with statutory legislation and planning policy objectives.

The report should be read in conjunction with appendices 1 to 5, which give visual representations of the survey results. It should also be read in conjunction with the PEA also prepared for the site (UES03448/01).



2 METHODOLOGY

2.1 Desk study

Aerial photographs and Ordnance Survey maps were used to identify all waterbodies on the site and within a 500m radius of the site boundary.

UES was commissioned to undertake a records search that identified the presence of GCNs within 2km of the proposed development site was undertaken through Cofnod – North Wales Environmental Information Service. Where necessary, the author has used the National Biodiversity Network (NBN) Atlas website to inform the survey.

2.2 Field survey

2.2.1 Habitat suitability index (HSI)

A site visit was undertaken on 16th February 2022 by Noah Fulton, Tom Kenwright, Alasdair Grubb and Robert Mooney to survey the onsite ponds. A further survey was conducted by Noah Fulton and Tom Kenwright on 23rd February 2022 to survey the offsite ponds and ditches. All accessible ponds, ditches, and aquatic features on site and within 500m of the site boundary were assessed for their potential to support GCNs using the HSI. The HSI is a tool used to provide a numerical indication of the quality of a waterbody in terms of GCN breeding and associated habitat requirements on a scale of 0-1 (0 indicating unsuitable habitat, 1 representing optimal habitat).

HSI scores incorporate ten Suitability Indices (SIs), all of which are factors thought to affect GCNs, namely:

SI 1: Site location	SI 6: Waterfowl presence
SI 2: Size of pond	SI 7: Fish presence
SI 3: Pond permanence	SI 8: Number of ponds within 1km
SI 4: Water quality	SI 9: Terrestrial habitat
SI 5: Perimeter shading	SI 10: Macrophyte cover

In some cases, a net may be used to assess certain SIs, such as water quality. Once a measurement or category has been given for each SI this can then be converted to a figure between 0 and 1 for use in the HSI calculation. This figure is either translated from an assigned category or measurement or read from a graph in the case of a percentage or number.

The HSI is then calculated from the following formula:

$$HSI = (SI1 \times SI2 \times SI3 \times SI4 \times SI5 \times SI6 \times SI7 \times SI8 \times SI9 \times SI10)^{1/10}$$

This will give a final HSI result between 0 and 1, providing a measure of habitat suitability for GCN.

The information gathered from the survey was used to provide a likelihood of GCNs and other amphibians being present in the area, in both aquatic and terrestrial habitats.

The proposed development, based on the plans provided, was also assessed for the potential to cause harm to GCNs (if present) using the Natural England Rapid Risk Assessment Tool.



All ponds were noted on the pond plan (Appendix 1).

2.3 Survey limitations

Despite the survey being conducted in February, vegetation growth and invertebrate activity were sufficient to provide a robust assessment of aquatic habitats.

Access permission was requested but not granted for thirty ponds and four ditches on third party land and therefore these ponds were not subject to GCN IA. For all ponds that were not accessible, it has been assumed that GCN are present within these ponds and will be assessed as 'worst case scenario'. Therefore, this is not considered to be a significant limitation to this assessment.

Ponds 49 and 50 were mapped after the impact assessment walkover had been undertaken. These ponds were created as part of a compensation strategy for the adjacent development. The ponds are fenced off and are still early in the colonisation of aquatic vegetation so GCN are unlikely to be present. Therefore, it is not considered as a significant limitation.

Pond 28 had access permission granted however, due to the dense scrub vegetation surrounding the pond it was not possible to carry out an impact assessment.

Due to the presence of dense bramble *Rubus fruticosus* agg. scrub surrounding Pond 3 only one third of the pond was accessible on the north and west aspects. However, an impact assessment was able to be achieved.



3 RESULTS

3.1 Desk study

GCNs have been recorded on numerous occasions in the local area, including within the ponds onsite. The records returned are not specific to each pond and detail combined results from previous GCN surveys undertaken between 1992 and 2016. However, it can be determined that GCNs have previously been recorded within some of the six onsite ponds and all records show small to medium sized counts, with a maximum count of 48 adults. Records of common frog *Rana temporaria*, common toad *Bufo bufo* and smooth newt *Lissotriton vulgaris* were also returned from the proposed development site and records of palmate newt *Lissotriton helveticus* were returned from within 2km.

A review of the aerial photographs and Ordnance Survey maps identified fifty-three mapped ponds within 500m of the proposed development site.

3.2 Terrestrial habitat assessment

3.2.1 The proposed development site

The land parcel has an area of approximately 20.9ha and was formerly used for industrial and agricultural purposes, prior to being left unmanaged for several years. The site contains large semi-improved species-rich grassland fields interspersed with ponds, small stands of woodland, hedgerows and scattered trees. Large areas of the site have succeeded into dense scrub and areas of bare ground and ephemeral / short perennial are present on previously developed land within the south-eastern section of the site. The south-western section of the site contains an area of amenity grassland and a large hardstanding compound used to store vehicles. A shallow stream runs along the northern site boundary and wet ditches are present along the western and part of the eastern site boundaries.

Since the initial walkover survey, the site boundary has been amended to incorporate an additional 4.5ha of adjacent land. This land comprises two agricultural grassland fields that are divided and bordered by hedgerows and trees. A dry and unvegetated ditch runs along part of the eastern boundary, and a pond surrounded by willow scrub is present within the northernmost field.

Overall, the habitats on site are broadly suitable for sheltering, foraging and commuting GCN.

3.1.2 Surrounding habitats

The surrounding area is semi-rural, with the agricultural fields bounded with hedgerows in the immediate vicinity, although predominately to the west and south of the site is composed of Wrexham Industrial Estate made up of habitats such as buildings and hardstanding.

There are fifty-three mapped ponds within 500m of the proposed development site. Most of these ponds are situated within areas of woodland, amenity grassland or agricultural land. Some of the ponds (mostly to the north and east) are well connected to the site via agricultural hedgerows and woodland. There are some minor barriers such as large, open pastoral fields and country roads, but these are not considered to be significant enough to prevent amphibian movement. The ponds to the west and south are mostly isolated via the highly active Wrexham Industrial Estate.



In summary, there are six ponds within the proposed development and forty-seven offsite ponds within 500m of the development. There are minor barriers to movement, such as small roads and agricultural pasture to the north and east, but these are not considered to be significant. The ponds are well connected to site via hedgerows and woodland. However, the barriers to the west and south will likely reduce the chance of movement between the offsite and onsite ponds.

3.3 Aquatic habitat assessment

Of the fifty-three mapped ponds, a total of thirty ponds were accessible for some form of aquatic habitat assessment. Forty-seven of these ponds were located within third party land. The remaining ponds could not be surveyed due to access constraints, see Table 1 below for further details. The results of the aquatic assessments for all accessible ponds are detailed in the subsections below (see Appendix 1 – Pond plan for locations of all ponds within 500m). Detailed HSI scores and calculations are included in Appendix 5 – HSI results.

Table 1 - Pond locations and access constraints

Waterbody number	Location	Accessible	HSI survey
1	On site	Yes	Yes
2	On site	Yes	Yes
3	On site	Yes	Yes
4	On site	Yes	Yes
5	On site	Yes	Yes
6	On site	Yes	Yes
7	370m north-west	No	No
8	280m west	No	No
9	20m west	Yes	Yes
10	150m north	No	No
11	350m north	No	No
12	190m north	No	No
13	220m north	No	No
14	330m north-east	No	No
15	390m north-east	No	No
16	110m east	No	No
17	230m east	No	No
18	495m north-west	No	No
19	155m east	No	No
20	160m east	No	No
21	180m south-east	No	No
22	230m south-east	No	No
23	370m south-east	No	No
24	230m south-east	Yes	Yes
25	140m south	Yes	Yes
26	320m south	Yes	Yes
27	490m south-east	No	No
28	220m south	Yes	Yes
29	240m south	Yes	Yes
30	240m south	Yes	Yes
31	90m south	Yes	Yes
32a	30m south	Yes	Yes
32b	25m south	Yes	Yes
32c	25m south	Yes	Yes



33a	490m south-west	Yes	Yes
33b	410m south-west	Yes	Yes
34	355m south	Yes	Yes
35	320m south-west	No	No
36	300m south-west	No	No
37	280m south-west	No	No
38	270m south-west	No	No
39	150m south-west	No	No
40	105m south-west	No	No
41	140m south-west	No	No
42	135m south-west	No	No
43	175m south-west	No	No
44	185m south-west	No	No
45	420m west	Yes	Yes
46	420m west	Yes	Yes
47	440m west	Yes	Yes
48	400m north-east	No	No

3.3.1 Onsite ponds and ditches

Pond 1 – Grid reference: SJ 39177 50299

This pond is located near the centre of the site directly west of the track which runs north to south in the middle of the site (see Appendix 1 – Pond plan). The pond is a large open body of water that is believed to be a man-made fishing pond (as evidenced by the presence of a liner, anecdotal evidence from previous surveys of the site and from talking to adjacent landowners), however the current presence of fish is uncertain. The pond was over 0.5m deep at the time of the survey and is likely over 1m deep within the centre. The pond measures approximately 2600m². No submerged vegetation was observed. The emergent vegetation present consists of reedmace *Typha sp.*, hard rush *Juncus inflexus*, soft rush *Juncus effusus*, Cypress sedge *Carex pseudocyperus*, water forget-me-not *Myosotis scorpioides* and great willowherb *Epilobium hirsutum*. There is also a sparse matt of a waterweed *Elodea sp.* and spiked water milfoil *Myriophyllum spicatum* present on the pond. The banks are comprised scattered broadleaved trees and scrub including pedunculate oak *Quercus robur*, grey willow *Salix cinerea* and hawthorn *Crataegus monogyna*. Within the understory dog rose *Rosa canina* and oxeye daisy *Leucanthemum vulgare* were observed. This pond will be removed as part of the development.

Pond 2 – Grid reference: SJ 39346 50292

This pond is located within the broadleaved woodland in the centre of the site. The pond measures approximately 2050m². The water was at least 0.5m deep at the time of the survey. No submerged vegetation was observed. The emergent vegetation was minimal consisting of small amounts of *Typha sp.* The mature tree canopy consisted of pedunculate oak, silver birch *Betula pendula* and *Populus sp.* The scrub understory comprised dog rose, hawthorn and bramble. The diverse mix of ground flora consisted of lords-and-ladies *Arum maculatum*, cleavers *Galium aparine*, common nettle *Urtica dioica*, broadleaved dock *Rumex obtusifolius*, spurge-laurel *Daphne laureola*, cock's foot *Dactylis glomerata*, spear thistle *Cirsium vulgare*, creeping buttercup *Ranunculus repens*, self-heal *Prunella vulgaris*, common sorrel *Rumex acetosa*, common mouse-ear *Cerastium fontanum* and marsh thistle *Cirsium palustre*. Small quantities of hard rush and great willowherb were observed in the surrounding margins. The emergent and marginal vegetation present provides an abundance of egg-laying opportunities. This pond will be removed as part of the development.



Pond 3 – Grid reference: SJ 39458 50286

This pond is located within the south-eastern section of the site. The pond measures approximately 1600m². There is little open water present which has a maximum depth of approximately 30cm. The pond is a large field pond surrounded by dense willow and bramble scrub. The pond has been completely encroached by swamp vegetation and is lacking areas of open water. The floating vegetation observed includes common duckweed *Lemna minor*. *Typha sp.* is the most dominate species within the vegetation with emergent willow *Salix sp.* in the centre. Species included bittersweet *Solanum dulcamara*, Cypress sedge, lesser water parsnip *Berula erecta*, water horsetail *Equisetum fluviatile*, wild angelica *Angelica sylvestris* and gypsywort *Lycopus europaeus*. The swamp vegetation is similar to that within Pond 4, however, hard rush, fool's watercress *Helosciadium nodiflorum* and water plantain *Alisma plantago-aquatica* were also observed. This pond will be retained as part of the development.

Pond 4 – Grid reference: SJ 39362 50525

This pond is located within the northern section of the site. The pond measures approximately 1100m². The is a large field pond that is surrounded by dense goat willow *Salix caprea*, grey willow, hawthorn, bramble and dog rose scrub. As with Pond 3, this pond is in a late successional stage and is being heavily encroached by swamp vegetation. Minimal submerged vegetation was observed including common duckweed and floating sweet-grass *Glyceria fluitans*. The emergent vegetation present includes *Typha sp.*, soft rush, water plantain, water horsetail, great willowherb and Cypress sedge. The northern and western banks are predominantly of *Salix sp.* scrub with a ground flora composed of *Typha sp.*, hard rush, soft rush, glaucous sedge *Carex flacca*, Cypress sedge, common hogweed *Heracleum sphondylium*, fleabane *Pulicaria dysenterica*, bramble, and clustered dock *Rumex conglomeratus*. This pond will be removed as part of the development.

Pond 5 – Grid reference: SJ 39582 50191

This pond is located within the south-eastern corner of the site. The pond appears to have been created for the previous use of the site and has a steep-sided basin amongst and area of dense scrub. The pond measures approximately 600m² and has a maximum depth of 30cm. No submerged vegetation was observed. Floating vegetation includes common duckweed, stonewort *Charales sp.* and fool's watercress. The emergent vegetation present is composed of *Typha sp.*, hard rush and jointed rush *Juncus articulatus*. The banks of the pond are sloped with marginal vegetation including silver birch, *Salix sp.*, hawthorn, bramble, spear thistle, hard rush, creeping buttercup, jointed rush, sedge *Carex sp.* and broad buckler-fern *Dryopteris dilatata*. The location is secluded with no disturbance. There is an abundance of egg-laying opportunities amongst the emergent and marginal vegetation. This pond will be retained as part of the development.

Pond 6 – Grid reference: SJ 39574 50368

This pond is located within the south-eastern section of the site which will be the receptor site for the proposed development. The pond measures approximately 345m². The pond is almost completely shaded by encroaching goat willow and grey willow scrub. The pond is shallow and has a large drawdown zone of emergent vegetation. The pond was completely damp but lacked any standing water at the time of the walkover survey, however the pond is known to hold standing water in the winter. Emergent species present within the drawdown zone include *Typha sp.*, bittersweet, redshank *Persicaria maculosa*, gypsywort, Cypress sedge, soft rush, marsh bedstraw *Galium palustre* and hard rush. A band of marginal vegetation surrounds the



pond, although it is limited where dense willow scrub dominates. Marginal species include great willowherb, silverweed *Argentina anserina*, creeping thistle *Cirsium arvense*, tufted vetch *Vicia cracca*, meadow vetchling *Lathyrus pratensis*, false fox sedge *Carex otrubae*, curled dock *Rumex crispus*, floating sweet-grass, reed canary grass *Phalaris arundinacea* and stinging nettle.

Ditch 1 – Grid reference: SJ 38995 50382

This ditch runs adjacent to the western and northern site boundaries. Observed submergent flora consisted of common duckweed and fool's watercress. Emergent flora consists of *Typha* sp., great willowherb and reed canary grass.

Ditch 2 – Grid reference: SJ 39505 50471

This ditch flows northwards, adjacent to the eastern site boundary and has been divided into three sections. Water levels measure approximately 10cm deep or less with widths ranging from 50cm to 1m.

The southern section measures approximately 221m in length with a depth of 10cm. This section is heavily shaded by dense vegetation; however, the immediate banks are bare. Species present include bramble, hawthorn, *Salix* sp., *Typha* sp., great willowherb, soft rush, cock's foot, alder *Alnus glutinosa*, fool's watercress, marsh-bedstraw *Galium palustre* and lesser celandine *Ficaria verna*.

The central section measures approximately 175m in length with a depth of 8-9cm. The immediate banks are open with limited surrounding scrub. The margins of this section are the same as the southern section; dominated by rushes and grasses with some leaf litter. Additional species include fleabane, common couch *Elymus repens*, false oatgrass *Arrhenatherum elatius* and Yorkshire fog *Holcus lanatus*.

The northern section measures approximately 96m in length with a depth of 10cm. This section is dominated by dense bramble scrub with occasional beech *Fagus sylvatica* saplings. The other species present are the same as both the southern and northern sections.

Ditch 3 – Grid reference: SJ 39240 50606

This ditch flows east, adjacent to the northern site boundary. No submerged vegetation was observed. The only floating vegetation present was common duckweed. The immediate banks are composed of ivy *Hedera helix* with a mature broadleaved woodland canopy. Marginal species include hart's-tongue fern *Asplenium scolopendrium*, lords-and-ladies, scaly male-fern *Dryopteris affinis*, hawthorn, pedunculate oak, ash *Fraxinus excelsior*, elder *Sambucus nigra*, rose *Rosa* sp., bluebell *Hyacinthoides non-scripta*, daffodil *Narcissus* sp., wood avens *Geum urbanum*, lesser celandine and crocus *Crocus* sp. Areas of rock and concrete substrate alongside a concrete culvert are present on the western section from the neighbouring site.

Ditch 6 – Grid reference: SJ 39777 50040

This ditch was previously located outside of the red line boundary; however, due to the inclusion of the receptor site into the red line boundary this ditch is now considered to be on site. The ditch is less than 10cm deep with no marginal or aquatic vegetation present. However, the ditch is surrounded by unmanaged dense scrub and scattered broadleaved trees. The scrub and tree species present include pedunculate oak, hawthorn, bramble, *Rosa*



sp., blackthorn and *Salix* sp. The ground flora includes lords-and-ladies, cleavers, ivy, stinging nettle and false oat-grass.

3.3.2 Offsite ponds and ditches

Pond 9 – Grid reference: SJ 38950 50418

This pond is located approximately 20m west from the site boundary. The pond measures approximately 900m² with a concrete slab lined base. No aquatic or marginal vegetation other than ephemeral and marginal species growing in the concrete cracks are present. Large sections of duckweed blanket the pond.

Pond 24 – Grid reference: SJ 39907 50094

This pond is located approximately 230m south-east from the site boundary. The pond measures approximately 300m². No submerged vegetation was observed. Floating vegetation consisted of small areas of common duckweed. The emergent vegetation consisted of a single crack willow *Salix fragilis*. Marginal vegetation consisted of hard rush, broadleaved dock, pendulous sedge *Carex pendula* and two mature pedunculate oaks.

Pond 25 – Grid reference: SJ 39622 50029

This pond is located approximately 140m south from the site boundary. The pond measures approximately 850m². No submerged or floating vegetation was present. Emergent vegetation consists of *Typha* sp., hard rush and *Salix* sp. Marginal vegetation includes soft rush, bramble, mature crack willows, pedunculate oak, hawthorn, crested dog's-tail *Cynosurus cristatus*, cock's foot, ivy, creeping buttercup, remote sedge *Carex remota*, *Epilobium* sp., broadleaved dock and meadow buttercup *Ranunculus acris*. This pond is fed by Ditch 7b which is less than 5cm deep.

Pond 26 – Grid reference: SJ 39731 49881

This pond is located approximately 320m south from the site boundary. The pond measures approximately 600m². No submerged vegetation was observed. The floating vegetation present includes floating sweet-grass, water starwort *Callitriche palustris* and brooklime *Veronica beccabunga*. Emergent vegetation observed includes hard rush, soft rush, *Typha* sp., *Salix* sp., floating sweet-grass and brooklime. Marginal species include hawthorn, creeping buttercup, jointed rush, bramble, common nettle, spear thistle, *Epilobium* sp., cleavers, ivy, a mature pedunculate oak, broadleaved dock, blackthorn and lords-and-ladies.

Pond 28 – Grid reference: SJ 39459 49928

This pond is located approximately 220m south from the site boundary. The pond measures approximately 7,640m². The pond is within a closed private fishing complex that is inaccessible due to wire fencing surrounding the pond. The presence of fish is highly likely.

Pond 29 – Grid reference: SJ 39330 49953

This pond is located approximately 240m south from the site boundary. The pond measures approximately 700m². The pond has limited accessibility; however, can be viewed in its entirety from the south. No submerged or floating vegetation was observed. The emergent vegetation present includes soft rush, pedunculate oak and *Typha* sp. The marginal vegetation present includes hawthorn, bramble, *Salix* sp., garden privet *Ligustrum ovalifolium*, dandelion



Taraxacum officinale, soft rush, *Typha* sp., common mullein *Verbascum thapsus*, common vetch *Vicia sativa*, common ragwort *Jacobaea vulgaris*, creeping cinquefoil *Potentilla reptans*, foxglove *Digitalis purpurea*, oxeye daisy, wild cherry *Prunus avium*, blackthorn and silver birch.

Pond 30 – Grid reference: SJ 39254 49951

This pond is located approximately 240m south from the site boundary. The pond measures approximately 600m². No submerged or floating vegetation was observed. The emergent vegetation consisted of predominantly reedmace *Typha* sp. The marginal vegetation observed includes bramble, hard rush, silver birch, dogwood *Cornus sanguinea*, *Salix* sp., hawthorn, garden privet, wild cherry, creeping thistle, common knapweed *Centaurea nigra* and tufted hair grass *Deschampsia cespitosa*.

Pond 31 – Grid reference: SJ 39117 50074

This pond is located approximately 90m south from the site boundary. The pond measures approximately 1600m². No submerged vegetation was observed. The only floating vegetation present was a small number of poor-quality water lily *Nymphaea* sp. The emergent vegetation solely composed of *Typha* sp. The marginal and bankside vegetation includes silver birch, hard rush, soft rush, *Salix* sp., bramble, *Epilobium* sp., dogwood, red fescue *Festuca rubra*, fleabane, orchid *Dactylorhiza* sp. and crack willow.

Pond 32a – Grid reference: SJ 39109 50219

This pond is located approximately 30m south from the site boundary. The pond measures approximately 1000m². No submerged vegetation was observed. The only floating vegetation present was large blankets of common duckweed. The emergent vegetation present includes *Typha* sp. and hard rush. The marginal and bankside vegetation includes bramble, *Salix* sp., hard rush, alder, spear thistle, *Epilobium* sp. and fleabane. The pond is surrounded by collapsed newt fencing.

Pond 32b – Grid reference: SJ 38993 50245

This pond is located approximately 25m south from the site boundary. The pond measures less than 50m². Dense scrub is present to the south with a line of crack willow surrounded by intensively managed amenity grassland and areas of hardstanding to the north. No submerged or floating vegetation was observed. The emergent vegetation present includes reed canary grass and *Carex* sp. Marginal vegetation includes crack willow, bramble, broadleaved dock, hard rush, hawthorn, *Salix* sp., soft rush, curled dock, creeping buttercup and cleavers.

Pond 32c – Grid reference: SJ 38987 50244

This pond is located approximately 25m south from the site boundary. The pond measures less than 50m² and is 50% dry with areas of water that are 5cm deep. There is no submerged or floating vegetation present. The emergent vegetation includes *Typha* sp., common nettle, cleavers, great willowherb, cock's foot, Yorkshire fog and hedge bindweed *Calystegia sepium*. No marginal vegetation is present due to the pond being surrounded by stone banks.

Pond 33a – Grid reference: SJ 38865 49774

This pond is located approximately 490m south-west from the site boundary. The pond measures approximately 500m². No aquatic vegetation was recorded. Marginal vegetation is limited to *Typha* sp., soft rush, hard rush, dogwood and a plantation conifer.



Pond 33b – Grid reference: SJ 38899 49844

This pond is located approximately 410m south-west from the site boundary. The pond measures less than 50m². No aquatic vegetation is present. The emergent vegetation is dominated by *Typha* sp. and soft rush.

Pond 34 – Grid reference: SJ 38944 49896

This pond is located approximately 355m south from the site boundary. The pond measures approximately 600m². No aquatic vegetation is present. The emergent vegetation is dominated by *Typha* sp. and yellow iris *Iris pseudacorus*. The marginal vegetation is composed of a thin strip of scrub and trees including brambles, non-native pine *Pinus* sp., *Salix* sp., elder, wild cherry, garden privet, yellow variegated archangel *Lamium galeobdolon*, dogwood, alder and silver birch.

Pond 45/46 – Grid reference: SJ 38560 50195

Both Pond 45 and Pond 46 are connected, with a bridge between the two. The ponds are located approximately 420m west from the site boundary. The ponds measure approximately 1050m² in total. The only submerged vegetation present is lesser water-parsnip *Berola erecta*. The emergent vegetation includes marsh marigold, *Typha* sp., common nettle, soft rush and hard rush. The marginal vegetation comprises weeping willow *Salix babylonica*, silver birch, bramble, *Rosa* sp., dogwood, *Pinus* sp. and crack willow.

Pond 47 – Grid reference: SJ 38539 50205

This pond is located approximately 440m west from the site boundary. The pond measures approximately 150m². No submerged or floating vegetation is present. The emergent vegetation present includes *Typha* sp., hard rush and soft rush. The marginal vegetation has the same composition as Ponds 45/46.

Ditch 7a – Grid reference: SJ 39581 49904

This ditch is located approximately 140m south from the site boundary. The ditch ranges from 10cm to 15cm deep at its deepest point, which transitions into a drier area towards the southern section. It is considered that the northern section of the ditch dries annually. The water quality is poor; therefore, no aquatic or emergent vegetation is present. The marginal and bankside vegetation is predominantly scattered scrub with scattered broadleaved trees. The marginal species present include hawthorn, pedunculate oak, hart's-tongue fern, brooklime, lesser water-parsnip, hard rush and soft rush.

Ditch 7b – Grid reference: SJ 39702 50054

This ditch is located approximately 215m south from the site boundary. The ditch ranges from 15cm to 20cm deep at its deepest point. No submerged or floating vegetation is present. The emergent vegetation includes hard rush and brooklime. Marginal vegetation is composed solely of broadleaved dock *Rumex obtusifolia* and common nettle.

Ditch 8 – Grid reference: SJ 39794 49884

This ditch is located approximately 265m south-east from the site boundary which connects to Ditch 6 at the northernmost point. The ditch runs northward and is less than 5cm deep.



Large dry sections are present along the ditch which is covered by a hedgerow. Multiple mature scattered broadleaved trees are present along the ditch. No submerged or emergent vegetation is present. The species present along the ditch include *Salix sp.*, hawthorn, bramble, *Rosa sp.*, blackthorn, lords-and-ladies, creeping buttercup, broadleaved dock and soft rush.

Ditch 9 – Grid reference: SJ 39668 49797

This ditch is located approximately 335m south from the site boundary and connects to ditch 8 with no intersection. The water levels and vegetation are the same as Ditch 8. The ditch is immediately surrounded by a defunct unmanaged hedgerow with scattered broadleaved trees.



4 IMPACT ASSESSMENT

4.1 HSI results

Six ponds and three ditches are present on site and a further forty-seven ponds and five ditches are present within a 500m radius of the proposed development site. Access was not granted for thirty offsite ponds; therefore, these could not achieve a HSI score. Ditch 1 was the only ditch within the 500m radius that had enough standing water to achieve a HSI score.

4.1.1 Onsite ponds and ditches

Table 2 - HSI results for onsite ponds and ditches

Waterbody number	HSI score	Suitability rating	SIs that decreased the HSI score	SIs that increased the HSI score
P1	0.78	Good	Macrophyte cover & water quality	Pond permanence, lack of shade & pond density
P2	0.70	Good	Macrophyte cover & shading	Pond permanence, excellent terrestrial habitat & pond density
P3	0.95	Excellent	N/A	Pond permanence, absence of waterfowl and fish, macrophyte cover & pond density
P4	0.87	Excellent	Possibility of fish and minor waterfowl & water quality	Macrophyte cover, lack of shade & pond density
P5	0.94	Excellent	Macrophyte cover	All the other SIs
P6	0.86	Excellent	Shading & poor water quality	Pond permanence, absence of waterfowl and fish, excellent terrestrial habitat & pond density
D1	0.62	Average	Macrophyte cover & water quality	Pond permanence, absence of waterfowl & pond density

4.1.2 Offsite ponds and ditches

Table 3 - HSI results for offsite ponds and ditches

Waterbody number	HSI score	Suitability rating	SIs that decreased the HSI score	SIs that increased the HSI score
P9	0.49	Poor	Poor water quality, terrestrial habitat & macrophyte cover	Absence of waterfowl and fish, lack of shade & pond density
P24	0.78	Good	Macrophyte cover & pond area	Absence of waterfowl and fish, lack of shade & pond density
P25	0.82	Excellent	Macrophyte cover	Absence of waterfowl and fish, lack of shade & pond density



P26	0.86	Excellent	Macrophyte cover & water quality	Absence of fish, excellent terrestrial habitat, lack of shade & pond density
P28 (inaccessible)		N/A		
P29	0.81	Excellent	Macrophyte cover & water quality	Absence of waterfowl and fish & pond density
P30	0.88	Excellent	Terrestrial habitat & water quality	Absence of waterfowl and fish & pond density
P31	0.50	Below average	Presence of fish & water quality	Lack of shade & pond density
P32a	0.86	Excellent	Poor water quality	Absence of waterfowl and fish, excellent terrestrial habitat & pond density
P32b	0.54	Good	Pond size, water quality & presence of shading	Absence of waterfowl and fish & pond density
P32c	0.51	Average	Pond size, water quality & pond permanence.	Absence of waterfowl and fish, lack of shade & pond density
P33a	0.81	Excellent	Macrophyte cover & water quality	Absence of waterfowl and fish, lack of shade & pond density
P33b	0.59	Average	Pond size, poor terrestrial habitat & water quality	Absence of waterfowl and fish, lack of shade & pond density
P34	0.81	Excellent	Terrestrial habitat & water quality	Pond permanence, macrophyte cover, absence of waterfowl and fish, lack of shade & pond density
P45/46	0.86	Excellent	Macrophyte cover, terrestrial habitat & water quality	Absence of waterfowl and fish, lack of shade & pond density
P47	0.75	Good	Macrophyte cover & pond area	Absence of waterfowl and fish, lack of shade & pond density

Detailed scores and calculations are included in Appendix 4 – HSI results.

4.2 Impacts

The following rapid risk assessment tool has been developed by Natural England in order to establish whether it is necessary to apply for a licence. It assumes that the pond(s) identified during the site visit are suitable GCN breeding ponds, which in some cases will not be the case.

Component	Likely effect (select one for each component; select the most harmful option if more than one is likely; lists are in order of harm, top to bottom)	Notional offence probability score
Great crested newt breeding pond(s)	Damaged or destroyed	1
Land within 100m of any breeding pond(s)	>1 ha lost or damaged	0.9



Land 100-250m from any breeding pond(s)	5 - 10 ha lost or damaged	0.5
Land >250m from any breeding pond(s)	No effect	0
Individual great crested newts	No effect	0
Maximum:		1
Rapid risk assessment result:	RED: OFFENCE HIGHLY LIKELY	

"Red: offence highly likely" indicates that the development activities are of such a type, scale and location that an offence is highly likely. In this case, you should attempt to re-design the development location, layout, timing, methods or duration in order to avoid impacts (see **Non-licensed avoidance measures tool**), and re-run the risk assessment. You may also wish to run a site-specific risk assessment to check that this is a valid conclusion. If you cannot avoid the offences, then a licence should be applied for

The key components of the risk assessment contributing to the result of 'Red: offence highly likely' are the loss of GCN breeding ponds, the size of the development area and proximity to the ponds. In particular, without sufficient detail as to the development details of all ponds and ditches, a worst-case scenario must be assumed; that the ponds and watercourses will be lost. It should be noted that this rapid risk assessment assumes that each pond is a GCN breeding pond, until information is gathered which proves otherwise.

The habitat surrounding all of the onsite ponds and ditches is broadly suitable for commuting, foraging and sheltering GCN; habitats that will be impacted by the proposals include areas of semi-natural broadleaved woodland and neutral semi-improved grassland that provide excellent terrestrial habitat for GCN. Much of this vegetation will be directly impacted by the development.

It is therefore considered that for the works to proceed, an EPS mitigation is required as GCN are highly likely to be impacted by the proposed works.



5 RECOMMENDATIONS

GCNs have been recorded on numerous occasions in the local area, including within the ponds onsite. The records returned are not specific to each pond and detail combined results from previous GCN surveys undertaken between 1992 and 2016. However, it can be determined that GCNs have previously been recorded within some of the six onsite ponds and all records show small to medium sized counts, with a maximum count of 48 adults. Records of common frog, common toad and smooth newt were also returned from the proposed development site.

Based on the current development proposals, Ponds 3, 5 and 6 will be retained. However, land within 100m will be lost or damaged, and Ponds 1, 2 and 4 will be removed. Therefore, GCNs will be directly impacted by the proposed development if they are still present on site. Further presence / absence surveys will be required of the ponds on site and in the local area in order to see whether GCN are still presence. Four survey visits are required for presence / absence surveys of each onsite pond and ditch between mid-March and mid-June. If GCN are confirmed as present during the survey, population size class assessment surveys consisting of a further two visits will be required during the same time period. However, at least half of the survey visits should be conducted between mid-April and mid-May, although in some cases this period may be extended based on cold weather early in the breeding season.

If GCNs are found to be present onsite or within the immediate vicinity, a European protected species mitigation licence will need to be granted by Natural Resources Wales. This EPS licence can only be granted once planning permission has been secured, and will need to be in place prior to the start of any works on site. Natural Resources Wales aim to process licence applications within 30 working days. As part of a licence, a suite of mitigation measures will be required, including the installation of newt fencing and a period of trapping and translocation to an established receptor site.



6 CONCLUSION

The development proposals are for the construction of three industrial units with associated parking and access roads.

The terrestrial habitats within the development footprint are broadly suitable for GCNs. The areas of woodland, hedgerows, tall ruderal, scrub and species-rich grassland habitats provide an array of moderate to high quality opportunities for foraging and commuting amphibians. Additionally, there are potential hibernation opportunities in the exposed tree root systems, mammal burrows and dense vegetation / leaf litter within the areas of scrub and woodland.

There are fifty-three ponds located onsite and offsite within 500m of the proposed development boundary. There are also four onsite and ten offsite ditches within 500m of the proposed development boundary. A large proportion of the offsite ponds and ditches (especially to the north and east) are well connected via hedgerows, treelines and ditches, providing suitable commuting opportunities for GCN.

Based on the number of good or excellent quality waterbodies within the site boundary, the surrounding high-quality habitat, and known GCN records locally, the proposed development will require a EPS mitigation licence from Natural Resources Wales before the works can commence.



7 REFERENCES

Anon. (2001). *Great Crested Newt Mitigation Guidelines*. English Nature.

Chartered Institute of Ecology and Environmental Management (2013). *Competencies for Species Survey: Great Crested Newts*.

Department for Communities and Local Government (2021). *National Planning Policy Framework*.

Oldham R.S., Keeble J., Swan M.J.S. & Jeffcote M. (2000). *Evaluating the suitability of habitat for the Great Crested Newt (Triturus cristatus)*. Herpetological Journal 10 (4), 143-155.



APPENDICES

Appendix 1 – Pond plan



Pond Plan - 500m

Site: Plot 3a, Wrexham Industrial Estate
 Author: Tom Kenwright
 Date: 24/02/2022



KEY:
 Pond
 Ditch
 Survey boundary
 500m buffer

THIS PLAN IS BASED UPON MAP DATA © 2022 GOOGLE, IMAGERY © 2022 GOOGLE

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Appendix 2 – Aerial photographs



Plot 3a – Wrexham Industrial Estate

Close aerial photograph

— Site boundary



Plot 3a – Wrexham Industrial Estate

Wide aerial photograph

 Site location





Appendix 3 – Photographs



Photograph 1 – Pond 1.



Photograph 2 – Pond 2.



Photograph 3 – Pond 3.



Photograph 4 – Pond 4.



Photograph 5 – Pond 6.



Photograph 6 – Ditch 1.



Photograph 7 – Ditch 2.



Photograph 8 – Ditch 3.



Photograph 9 – Pond 9.



Photograph 10 – Pond 24.



Photograph 11 – Pond 25.



Photograph 12 – Ditch 7a present to the west of Pond 25, flowing east and connecting to Ditch 6.



Photograph 13 – Pond 26.



Photograph 14 – Inaccessible Pond 28.



Photograph 15 – Pond 29.



Photograph 16 – Pond 30.



Photograph 17 – Pond 31.



Photograph 18 – Pond 32a.



Photograph 19 – Pond 32b.



Photograph 20 – Pond 32c.



Photograph 21 – Pond 33a.



Photograph 22 – Pond 33b.



Photograph 23 – Pond 34.



Photograph 24 – Pond 45.



Photograph 25 – Pond 46.



Photograph 26 – Pond 47.



Appendix 4 – HSI results

GCN HSI Calculations

ONSITE PONDS & DITCHES

	Pond number	P1	P2	P3	P4	P5	P6	D1
	Grid reference	SJ 39177 50299	SJ 39346 50292	SJ 39458 50286	SJ 39362 50525	SJ 39582 50191	SJ 39574 50368	SJ 38995 50382
SI number	SI description	SI values						
1	Geographic location	1	1	1	1	1	1	1
2	Pond area	0.8	0.86	0.86	0.95	1	0.7	0.4
3	Pond permanence	0.9	0.9	0.9	0.9	0.9	1	1
4	Water quality	0.67	0.67	1	0.67	1	0.67	0.33
5	Shade	1	0.4	0.8	1	1	0.6	0.4
6	Water fowl	0.67	0.67	1	0.67	1	1	1
7	Fish	0.67	0.67	1	0.67	1	1	0.67
8	Pond density	1	1	1	1	1	1	1
9	Terrestrial habitat	0.67	1	1	1	1	1	0.67
10	Macrophyte cover	0.55	0.3	1	1	0.6	0.9	0.35
HSI score:		0.78	0.70	0.95	0.87	0.94	0.87	0.62
Pond suitability:		Good	Good	Excellent	Excellent	Excellent	Excellent	Average

HSI Score	Pond Suitability
< 0.50	Poor
0.50 - 0.59	Below average
0.60 - 0.69	Average
0.70 - 0.79	Good
> 0.80	Excellent

OFFSITE PONDS & DITCHES

	Pond number	P9	P24	P25	P26	P28	P29	P30	P31
	Grid reference	SJ 38950 50418	SJ 39907 50094	SJ 39622 50029	SJ 39731 49881	SJ 39459 49928	SJ 39330 49953	SJ 39254 49951	SJ 39117 50074
SI number	SI description								
1	Geographic location	1	1	1	1	N/A	1	1	1
2	Pond area	0.97	0.6	0.98	1	N/A	1	1	0.87
3	Pond permanence	0.9	0.9	0.9	0.9	N/A	0.9	0.9	0.9
4	Water quality	0.33	0.67	0.67	0.67	N/A	0.67	0.67	0.67
5	Shade	1	1	1	1	N/A	0.8	0.8	1
6	Water fowl	1	1	0.67	0.67	N/A	1	1	0.67
7	Fish	1	1	1	1	N/A	1	1	0.01
8	Pond density	1	1	1	1	N/A	1	1	1
9	Terrestrial habitat	0.01	0.67	1	1	N/A	0.67	0.67	0.67
10	Macrophyte cover	0.3	0.35	0.35	0.55	N/A	0.4	0.9	0.4
HSI score:		0.49	0.78	0.82	0.86	N/A	0.81	0.88	0.50
Pond suitability:		Below average	Good	Excellent	Excellent	N/A	Excellent	Excellent	Below average

	Pond number	P32 a	P32 b	P32 c	P33a	P33b	P34	P45/46	P47
	Grid reference	SJ 39109 50219	SJ 38993 50245	SJ 38987 50244	SJ 38865 49774	SJ 38899 49844	SJ 38944 49896	SJ 38560 50195	SJ 38539 50205
SI number	SI description								
1	Geographic location	1	1	1	1	1	1	1	1
2	Pond area	0.95	0.05	0.05	1	0.05	1	0.94	0.3
3	Pond permanence	0.9	1	0.1	0.9	1	0.9	0.9	0.9
4	Water quality	0.33	0.33	0.33	0.67	0.33	0.67	0.67	0.67
5	Shade	0.9	0.4	1	1	1	1	1	1
6	Water fowl	1	1	1	1	1	1	1	1
7	Fish	1	1	1	1	1	1	1	1
8	Pond density	1	1	1	1	1	1	1	1
9	Terrestrial habitat	1	0.67	0.67	0.67	0.33	0.33	0.67	0.67
10	Macrophyte cover	0.9	0.45	1	0.3	1	0.6	0.6	0.45
HSI score:		0.86	0.54	0.51	0.81	0.59	0.81	0.86	0.75
Pond suitability:		Excellent	Below average	Below average	Excellent	Below average	Excellent	Excellent	Good



Appendix 5 – Statutory and planning context

STATUTORY AND PLANNING CONTEXT

Ecological assessments

Ecological assessments play an important part within the planning context; they include an initial assessment which highlights any specific interests of a site. From the initial site assessment, the surveyor assesses the suitability of habitats within the site to support protected species and makes recommendations for further survey works if required. The following paragraphs provide a brief interpretation of the legislative protection that is relevant to the findings of this report.

Habitats

Section 7 of the Environment Act (Wales) places a duty on Welsh Ministers to publish, review and revise lists of types of habitats and species in Wales which they consider are of key significance to sustain and improve biodiversity. The Welsh Ministers must also take all reasonable steps to maintain and enhance the habitats published in these lists, and encourage others to take such steps.

Amphibians

Great crested newts

Great crested newts (GCN) *Triturus cristatus* and their habitat (aquatic and terrestrial) are afforded full protection by the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017. If both national and international legislation are taken together, it is an offence to:

- Deliberately, intentionally or recklessly kill, injure or capture GCN
- Deliberately, intentionally or recklessly disturb GCN in such a way to be likely to significantly affect:
 - their ability to survive, breed, reproduce, rear or nurture their young
 - their ability to hibernate or migrate
 - their local distribution or abundance
- Deliberately, intentionally or recklessly take or destroy the eggs of GCN
- Damage or destroy breeding sites or resting places of GCN
- Intentionally or recklessly disturb sheltering GCN, or obstruct access to their resting place
- Keep, transport, sell or exchange, or offer for sale or exchange any live or dead GCN, any part of GCN or anything derived from GCN

Penalties for offences include fines of up to £5000, plus up to six months imprisonment, for each offence committed.

GCN are also protected by the Protection of Animals Act 1911, which prohibits cruelty and mistreatment. Releasing a GCN in such a way as to cause undue suffering may be an offence under the Abandonment of Animals Act 1960.

In addition to the above, there are various statutory provisions relating to the transport of animals, designed to ensure their welfare. GCN are also listed under Section 7 of the Environment (Wales) Act 2016.

It is important to identify the presence of GCN individuals and also to identify suitable habitat on sites so that legal obligations regarding this species can be observed. If a survey identifies the presence of GCN on the site, an assessment of the population size class is required. This can then inform a mitigation scheme, which would need to be developed in liaison with the local Natural Resources Wales (NRW) team, and which minimises direct threats to newts and compensates for any loss of habitat. A licence issued by NRW is required for the legal implementation of a mitigation scheme.

An NRW mitigation licence application requires a Mitigation Method Statement and a Reasoned Statement of Application. The Mitigation Method Statement contains details of the proposed mitigation works. The Reasoned Statement needs to provide a rational and reasoned justification as to why the proposed development meets the requirements of the Conservation (National Habitats & c.) regulations 1994, namely Regulations 44(2)(e), (f) or (g), and 44(3)(a).

Other amphibians

More common British amphibians, such as common frog *Rana temporaria*, common toad *Bufo bufo*, smooth newt *Triturus vulgaris* and palmate newt *Triturus helveticus* are protected only by Section 9(5) of the Wildlife and Countryside Act 1981 (as amended). This section prohibits sale, barter, exchange, transporting for sale and advertising to sell or to buy.

The above named species are also listed as UK Species of Conservation Concern. Due to general declines in most British amphibian species in recent years, many local authorities require amphibian surveys as a planning condition, or as part of environmental information submitted as part of a planning application, even where the presence of GCN is ruled out.

Natterjack toad *Bufo calamita* and pool frog *Pelophylax lessonae* are also offered the same level of protection as GCN, through the Wildlife and Countryside Act 1981 (as amended) and the Conservation of Habitats and Species Regulations 2017.

Natterjack and common toad are also listed under Section 7 of the Environment (Wales) Act 2016.

Water bodies that support all five (more common) species of British amphibians in high numbers, may be afforded protection in local plans, as Sites of Importance for Nature Conservation (SINC), or a similar equivalent, for sites of local importance. A site may require statutory protection as a Site of Special Scientific Interest (SSSI).

Planning Policy

National planning guidance is issued in the form of Planning Policy Wales (PPW - 2018). The most relevant sections are included in Chapter 6: Distinctive and Natural Places. This chapter details the policies on issues such as the protection of trees, woodlands, species, and designated sites. The document is free and available to view online