

The Licence application is being applied-for to

The following application takes into account all guidance kindly provided by Natural England.

The previous licence amendment (2016-21449-EPS-MIT - April 2016), was obtained in order to 'legalise the retention and maintenance of the existing fencing and update the restoration proposals.'

Surface Mining works have taken place on the site under two different Licences (EPSM2009-1095, EPSM2011-3163B and 2016-21449-EPS-MIT) as part of a Phased Masterplan approach (Phases 1, 2 and 3 respectively). The working of the site **has now finished** and all mitigation (trapping and translocation, habitat creation etc.) has taken place **including** enhancements as provided by the restoration scheme.

The proposals approved under the extant Licence included the retention of a semi-circular northern portion of the site which was to be enclosed and kept newt-free until development plans for the northern area had been finalised.

However, following the publication of the Consultation of the new Licensing Policies last year a number of discussions were held with [REDACTED] (Senior Wildlife Advisor - now left) and it was determined that the scheme would likely meet and be appropriate for the now-approved Policy 3 rather than implementing the proposed complete encirclement of the site as per the intended application.

The scheme has already provided extensive areas of terrestrial and aquatic habitats for GCN (full details provided in this application) and it was considered that the conservation benefits of allowing GCN to access temporary habitats (over 26 ha of recently-sown grassland) that will be developed at a later date, would far-outweigh any subsequent killing/injury/loss of places of rest/shelter that could result from subsequent proposed development.

No aquatic GCN habitats are to be affected under this licence and the following document outlines the measures to be taken with respect to the Policy (as discussed with [REDACTED] under the DAS the details of the works undertaken under the previous phases have been included for clarity with any alterations associated with this application emboldened).

C3.3

Pond P1 was lost to agriculture between 2005 and 2008. This was not surveyed in 2011 or 2012.

Pond P2 was marshy grassland with pools of standing open water and an associated ephemeral ditch - varying water levels in 2011 and 2012 and subject to aquatic surveys.

Pond P3 was a linear feature on the western edge of the site and subject to aquatic survey in 2011 and 2012.

Pond P4 was a silt trap containing coal and shale debris with low water levels - no longer present (drained under Phase 1 proposals). P4 was subject to aquatic surveys in 2011 and 2012.

Pond P5 comprised series of four water treatment lagoons (P5) dug into boulder clay but containing a substantial amount of a coal ash substrate. P5 subject to aquatic surveys in 2011 and 2012

Pond P6 was a marshy reedbed with a deepend area enhanced under Phase 1. P6 was subject to aquatic surveys in 2011 and 2012

Ponds P7 and P8 were damp depression grassland areas but often lacked any standing water during the survey period and were therefore not surveyed during every year. P7 not aquatically surveyed in 2011 due to water levels but P8 surveyed in 2011 and 2012.

Pond P9 was an overshadowed field pond to the rear of a private allotment - access denied in 2011 (same ownership and hence reasoning as P12 below). Last survey data from 2008, included for context.

Pond P10 was situated in the centre of semi-improved fields - dry in 2011. No longer present.

Pond P11 (double silt trap which contains coal debris) was similar to pond P4 in construction - no longer present (drained under Phase 1 proposals).

Pond P12 poached field pond in area of wet grassland - access denied in 2011. Last aquatic survey data was 2008.

The presence of ponds P13 and P14 was noted for the first time in March 2009. P13 was a heavily poached hollow with no vegetation present (P13) whilst P14 comprised a shallow hollow with semi-improved grassland (P14) - both dry in 2011/12.

Ditch 1 had steep-sided banks approximately 2 m deep. Shallow (~5 cm), flowing water was observed. Not aquatically surveyed.

All other ditches were dry (Figure C3.2(a)) and none were aquatically surveyed.

Pond A - ditch with areas widened to provide areas of open water under Phase 1 of the Licence. This was surveyed in 2011 and 2012 as part of monitoring.

Ponds B to F - GCN mitigation ponds created under Phase 1 of the Licence. These were surveyed in 2011 and 2012 as part of licence monitoring.

Pond ref	Distance (m)	Surveyed for great crested newts?
P11	40	No - other reason (state in box above)
P12	90	Yes (2008 and 2010 only) - however only two surveys were undertaken. Highly-inquisitive livestock were introduced into the field prior to the third survey resulting in its abandonment. Requests to the landowner to move the animals resulted in the land owner describing how he was 'fed-up with GCN' (restrictions on the movement of his livestock due to GCN-Licensable works on other parts of his landworks were ongoing) and, as a result, he refused to allow access back onto the land for the final surveys.
P13	0	No - other reason (state in box above)
P14	0	No - other reason (state in box above)
D1	50	No - other reason (state in box above)
D2	50	No - other reason (state in box above)
D3	0	No - other reason (state in box above)
Pond A	80	Yes
Ponds B to F	80	Yes

C3.4

Prior to the previous licence works being undertaken on site between 2010 and **2016**, the habitats on the site were as detailed in the below table. In 2015, after completion of surface mining the majority of the site (92+ ha) comprised bare ground habitat, with the rest made up of scrub, grassland, retained waterbodies and areas of plantation (predominantly in association with boundary features and the site compound area). This figure does not include the off-site receptor site constructed to the east of the site as part of the Phase 1 works. **During the 2016 re-survey of the site, it was noted that many of the proposed restoration features were under creation/had been created and other habitats had been cleared ready for restoration or development. Therefore at this stage, the below table has not been altered.**

Site Habitats Prior to the Commencement of Works

Habitat	Area (ha)	Description
Hard standing/Coal Workings	34.6	Large areas of the site comprised hardstanding and the previously worked coal area)
Scattered scrub	0.5	Across the site.
Dense deciduous scrub	1.8	Within the southern site area
Ephemeral/ short perennial	6	In association with bare ground, railway lines, ditches and other features
Amenity grassland	3	Around on-site buildings
Conifer plantation woodland	4	In eastern half of site
Semi-improved grassland	25.5	Within the southern site area
Marshy grassland	3	To the east in association with dry ditches
Arable fields	15.64	To south of site.
Ponds	1	Includes a number of ponds, some of which were drained under previous licence but included for context
Other habitats, buildings etc.	0.53	Buildings in complex of offices etc.
Total	95.57	

C3.5

Pond ref	P14	D1	D2	D3	Pond A
SI1 - Location	1	1	1	1	1
SI2 - Pond area	1	0.1	0.05	0.1	0.1
SI3 - Pond drying	0.1	0.9	0.1	0.1	0.67
SI4 - Water quality	0.01	0.67	0.33	0.01	0.67
SI4 - Shade	1	1	1	1	0.4
SI6 - Fowl	1	1	1	1	0.67
SI7 - Fish	1	1	1	1	0.01
SI8 - Ponds	0.95	0.95	0.95	0.95	1
SI9 - Terr'l habitat	0.67	0.33	0.33	0.01	1
SI10 - Macrophytes	0.3	0.5	0.6	0.4	0.9
HSI	0.42	0.63	0.45	0.23	0.40

Pond ref	Pond B	Pond C	Pond D	Pond E	Pond F
SI1 - Location	1	1	1	1	1
SI2 - Pond area	0.15	0.05	0.2	0.05	0.1
SI3 - Pond drying	0.67	0.5	1	1	1
SI4 - Water quality	0.67	0.67	0.67	0.67	0.67
SI4 - Shade	1	1	1	1	1
SI6 - Fowl	0.67	0.67	0.67	0.67	0.67
SI7 - Fish	0.33	1	0.33	0.33	1
SI8 - Ponds	1	1	1	1	1
SI9 - Terr'l habitat	1	1	1	1	1
SI10 - Macrophytes	0.45	0.45	0.45	0.45	0.45
HSI	0.61	0.59	0.65	0.57	0.68

C4.2

Species:	<i>L. vulgaris</i>	<i>L. helveticus</i>	<i>R. temporaria</i>	<i>B. bufo</i>	<i>E. calamita</i>
Pond ref PD	1-10 adults; no eggs or larvae	Not found	1-10 adults + eggs and/or larvae	Not found	Not found
Pond ref PE	1-10 adults; no eggs or larvae	Not found	1-10 adults + eggs and/or larvae	Not found	Not found
Pond ref PF	1-10 adults; no eggs or larvae	Not found	1-10 adults + eggs and/or larvae	Not found	Not found
Pond ref P12	1-10 adults; no eggs or larvae	Not found	1-10 adults + eggs and/or larvae	Not found	Not found

C5a

The minimum distance as the crow flies between the waterbodies on the western side of the site (P3) and those previously present within the eastern side of the site (P11) is approximately 570m, however this was directly across hostile terrestrial habitat (coal stocking area). A route through suitable habitat for this species between these two ponds (either via the rail line running along the northern site boundary or through arable fields/grassland to the south) is greater than 1 km in both cases. It is therefore considered that two separate populations exist within 500 m of the site boundary both of which are of a small population size class.

Monitoring is being undertaken in GCN survey season 2017 as part of the extant application.

C5b

Only four aquatic surveys were undertaken in 2011, however the population size class agrees with the data for 2005 and 2008 when 6 surveys were undertaken, it is therefore considered that the data presented within this application is an accurate assessment of the GCN population in the local area.

Due to the extremely dry nature of spring in Northumberland a number of the waterbodies were dry during the survey period (P2, P7, P8, P10, P13 & P14) however all these ponds were surveyed in 2008 with the majority surveyed in 2005. The pond in which GCN were observed previously (P2) is near to other GCN-suitable ponds and it is anticipated that breeding has shifted accordingly. The three ponds on site (P10, P13 & P14) are approximately 650, 300 and 650m away from the nearest GCN pond. The latter two are both highly-ephemeral hollows (only observed during a visit in 2009 with no aquatic vegetation and are considered to be highly unsuitable for GCN. The terrestrial habitat between P10 and the nearest GCN pond has remained unchanged since 2005 and it is considered highly unlikely that the waterbody (also ephemeral) has become colonised since the 2008 surveys (during which a single female smooth newt was observed on a single occasion (6 visits to the waterbody were made).

The two off-site ponds for which access could not be gained (P9 and P12 - reasons detailed previously) were surveyed in 2005 and 2008 (P9) and 2010 (P12) with no GCN observed. P9 is approximately 50m from the site boundary, however is approximately 475m from the nearest GCN pond and during the 2005 and 2008 surveys only a single male smooth newt was observed on a single occasion. The terrestrial habitat around this pond has remained unchanged since 2005 and it is considered extremely unlikely that the waterbody has been colonised since the 2008 surveys.

A single off-site waterbody (P12) was only partially surveyed in 2010 due to access issues, however the two surveys were undertaken in the peak survey season with no GCN observed (the turbidity did cause a 'Caution' warning however, bottle trapping and egg-searching found no evidence of GCN).

During the 2008 survey season only two of the six surveys were completed within the peak survey season (mid-April to mid-May). However, the peak counts across all ponds were almost identical to the survey results from 2005 when four of the six surveys were undertaken between April 27th and 18th May (Appendix H3).

Bearing in mind the findings of the terrestrial trapping period (118 GCN) (the majority of which were found in close proximity to P5 and P6) and the consistent survey findings across 6 years (2005 to 2011) it is considered that the population size assessment and the location of the breeding population is fully understood and that the impacts and subsequent mitigation can be accurately determined. **The existing information will be supplemented with additional survey in 2017 as part of monitoring under the extant application.**

The Phase 1 and Phase 2 Licensable works have resulted in clearance of the land and as such all impacts (except those associated with removal of some sections of existing TAF) have been incurred under previously issued licence applications. At the request of Natural England in their DAS response the impacts under the previous Phases are duplicated below. Whilst the new form requests Figures in this section the previous versions did not (however, Figures are provided in D5.1 (to follow)).

Phase 1

Potential impacts to great crested newts will arise from the loss of two waterbodies (P4 and P11) this is considered to potentially have a moderate negative impact upon a small population. There is potential for mortality to GCN as a result of the relocation of overburden, removal of raised road section and site preparation works. Impacts could also occur as a result of increased site activities, in the form of deaths from increased site traffic. The loss of small areas of sub-optimal terrestrial habitat and a smaller area of optimal habitat will also result from the proposed works; this loss is considered to be a minor negative impact (Figure D). In the event that individuals cross the existing site from east to west (considered extremely unlikely) linkage could be disrupted by the works. This is considered to be a minor impact.

Phase 2

There is potential for mortality to GCN as a result of site clearance, relocation of overburden and site preparation works. Impacts could also occur as a result of increased site activities, in the form of deaths from site traffic. The loss of areas of sub-optimal terrestrial habitat (horse-grazed semi-improved grassland) will also result from the proposed works; this loss is considered to be a minor negative impact (Figure D). In the event that individuals cross the existing site from east to west (considered extremely unlikely) linkage could be disrupted by the works. This is considered to be a minor impact.

Phase 3

Impacts resulted purely from the potential loss of places of rest or shelter associated with the installation of TAF. It was considered that these proposals would have a negligible impact upon the FCS.

This licence application

As a result of the works impacts will result purely from the potential loss of places of rest or shelter associated with the removal of existing TAF. It was considered that these proposals will have a negligible impact upon the FCS.

The Phase 1 and Phase 2 Licensable works have resulted in clearance of the land and as such all impacts (except those associated with removal of some sections of existing TAF) have been incurred under previously issued licence applications. At the request of Natural England in their DAS response the impacts under the previous Phases are duplicated below.

Phase 1

The proposed works will cause permanent loss of some potential aquatic habitat (approximately 0.12 ha) and limited GCN-suitable habitat in the form of 3 ha of amenity grassland, 0.5 ha of semi-improved grassland, 1.2 ha of scrub, 0.05 ha bare ground with scattered ephemeral vegetation, 0.3 ha of ephemeral/perennial vegetation and 2 ha of conifer plantation. This is considered to have a minor negative impact.

Phase 2

The proposed works will cause permanent loss of limited GCN-suitable habitat in the form of 17.5 ha of semi-improved grassland (8.75 ha within 50-250 m and 8.75 ha within 250-500 m of known GCN ponds). Approximately 0.5 ha of bare ground with ephemeral vegetation between 250-500 m of known GCN ponds will also be lost (none of this vegetation type is nearer the GCN ponds), as will approximately 0.2 ha of arable land. This is considered to have a minor negative impact. Please note that these figures are based upon the Impact Zones as shown in the Phase 1 Licence application for clarity which assumed the potential presence of GCN within P4 and P11 (a total of 8 GCN were trapped during Phase 1 works around P4 and 3 around P11). Three ephemeral waterbodies (0.04 ha) are to be lost to the proposals however it is considered that none provide breeding or foraging habitat for GCN.

The remaining site areas comprised a mix of SI grassland, scrub, bare ground with scattered ephemeral vegetation and arable planting within the southern site area.

Phase 3

The works **covered under this licence have restored the site** with the provision of 3 extra ponds (0.12ha), woodland (6.69ha), rough grassland (2.85ha) and agricultural grassland (50.1ha).

This Application

The future proposals for the site (unmitigated) would likely result in the loss of suitable places of rest or shelter within the northern part of the site (no timeframe) and potential killing and injury to GCN. However, in the absence of mitigation it is considered that such impacts will be positive as the potential benefits to the local population of GCN resulting from being allowed access into the grassland area (for foraging etc. and with associated potential places of rest or shelter) will far outweigh any impacts from the subsequent development of the site.

The Phase 1 and Phase 2 Licensable works have resulted in clearance of the land and as such all impacts (except those associated with removal of some sections of existing TAF) have been incurred under previously issued licence applications. At the request of Natural England in their DAS response the impacts under the previous Phases are duplicated below.

Phase 1 and Phase 2

The relocation of mounds of overburden and loss of small areas of suitable GCN habitat will form an increased barrier to dispersal in the highly unlikely event that individuals of this species wish to cross the site (known GCN populations to the east and west). This is considered to have a minor negative impact.

Phase 3

As a result of the **phase 3 works** it is considered that there will be no post-development interference impacts.

This development

The current licence application will involve removal of TAF with no GCN ponds affected, allowing colonisation of the site by GCN. The future development of the northern portion would likely use good practice with relation to hydrology and all considerations listed under the long-term management plan (until 2026) would employ good practice with relation to ground works. Limited impacts may result on GCN in the event that they inadvertently enter the site and come into conflict with drainage/vehicles etc.

D5.1

The Phase 1 and Phase 2 Licensable works have resulted in clearance of the land and as such all impacts (except those associated with removal of some sections of existing TAF) have been incurred under previously issued licence applications. At the request of Natural England in their DAS response the impacts under the previous Phases are duplicated below.

Phase 1

Pond ref	HSI / peak count / presence	Effect on pond	Effect on immediate terrestrial habitat (<50m from pond)	Effect on intermediate terr'l habitat (50-250m from pond)	Effect on distant terrestrial habitat (>250m from pond)	Fragmentation effect	Interference and other effects
P2	Peak count 1-10	No effect	No effect	Moderate -ve effect	Minor -ve effect	Medium fragmentation	No effect
P3	Peak count 1-10	No effect	Moderate -ve effect	Moderate -ve effect	Minor -ve effect	Medium fragmentation	No effect
P5	HSI <0.5 ("poor")	No effect	Moderate -ve effect	Moderate -ve effect	Minor -ve effect	Minor fragmentation	No effect
P6	Peak count 1-10	No effect	No effect	Minor -ve effect	Minor -ve effect	Medium fragmentation	No effect
P7	Peak count 1-10	No effect	No effect	Minor -ve effect	Minor -ve effect	Minor fragmentation	No effect
P8	HSI 0.5-0.59 ("below average")	No effect	No effect	Minor -ve effect	Minor -ve effect	Minor fragmentation	No effect
P9	HSI 0.6-0.69 ("average")	No effect	No effect	Minor -ve effect	Minor -ve effect	Minor fragmentation	No effect
PA	HSI <0.5 ("poor")	No effect	No effect	Minor -ve effect	Minor -ve effect	Minor fragmentation	No effect
PB	HSI 0.6-0.69 ("average")	No effect	No effect	Minor -ve effect	Minor -ve effect	Minor fragmentation	No effect
PC	HSI 0.5-0.59 ("below average")	No effect	No effect	Minor -ve effect	Minor -ve effect	Minor fragmentation	No effect

Phase 2

Pond ref	HSI / peak count / presence	Effect on pond	Effect on immediate terrestrial habitat (<50m from pond)	Effect on intermediate terr'l habitat (50-250m from pond)	Effect on distant terrestrial habitat (>250m from pond)	Fragmentation effect	Interference and other effects
P3	Peak count 1-10	No effect	No effect	No effect	Minor -ve effect	No fragmentation	No effect
P5	Presence confirmed only	No effect	No effect	Moderate -ve effect	Minor -ve effect	Minor fragmentation	No effect
P6	Peak count 1-10	No effect	No effect	Minor -ve effect	Minor -ve effect	Minor fragmentation	No effect
Pond A	HSI 0.5-0.59 ("below average")	No effect	No effect	Minor -ve effect	Minor -ve effect	Minor fragmentation	No effect
Pond B	HSI 0.6-0.69 ("average")	No effect	No effect	Minor -ve effect	Minor -ve effect	Minor fragmentation	No effect
Pond C	HSI 0.7-0.79 ("good")	No effect	No effect	Minor -ve effect	Minor -ve effect	Minor fragmentation	No effect
Pond D	HSI 0.7-0.79 ("good")	No effect	No effect	Minor -ve effect	Minor -ve effect	Minor fragmentation	No effect
Pond E	HSI 0.6-0.69 ("average")	No effect	No effect	Minor -ve effect	Minor -ve effect	Minor fragmentation	No effect
Pond F	HSI 0.5-0.59 ("below average")	No effect	No effect	Minor -ve effect	Minor -ve effect	Minor fragmentation	No effect
0							

Pond ref	HSI / peak count / presence	Effect on pond	Effect on immediate terrestrial habitat (<50m from pond)	Effect on intermediate terr'l habitat (50-250m from pond)	Effect on distant terrestrial habitat (>250m from pond)	Fragmentation effect	Interference and other effects
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			(Sum from pond)	from pond)			
P2 (2008)	Peak count 1-10	No effect	No effect	No effect	No effect	No fragmentation	No effect
P7	HSI 0.5-0.59 ("below average")	No effect	No effect	No effect	Minor -ve effect	Minor fragmentation	No effect
P8	HSI 0.5-0.59 ("below average")	No effect	No effect	No effect	Minor -ve effect	Minor fragmentation	No effect
P12	HSI 0.6-0.69 ("average")	No effect	No effect	Minor -ve effect	Minor -ve effect	Minor fragmentation	No effect

Above table includes 'all known or suspected breeding ponds, plus any that are likely to be used by GCN for foraging'. Where the ponds were dry in 2011 the 2008 data is presented. P4 and P11 no longer present. All ditches not considered to provide suitable GCN habitat and their loss (where applicable) is covered by the Phase 1 Licence. Ponds P7 and P8 highly ephemeral but may be utilised for foraging on occasion. P12 may rarely be used for foraging. P9, P10, P13 & P14 do not provide breeding habitat for GCN and are considered too far from the known breeding population to provide foraging habitat. They are therefore not included in table D5.1 or D5.2.

This Licence application

It is considered that in the absence of mitigation the potential impacts on all the existing waterbodies and the terrestrial habitats at all distances as a result of these proposals will be either negligible or positive.

The Phase 1 and Phase 2 Licensable works have resulted in clearance of the land and as such all impacts (except those associated with removal of some sections of existing TAF) have been incurred under previously issued licence applications. At the request of Natural England in their DAS response the impacts under the previous Phases are duplicated below.

The calculations provided in table D5.2 are a combination of the impacts resulting from Phases 1 and 2.

Phase 1

A small population of great crested newts has been recorded within ponds surveyed within 500 m of the site boundary. Two permanent waterbodies potentially used by GCN (P4 & P11) are to be lost. One extremely ephemeral waterbody (D3 - present for the first time in 2009) is also to be lost. Approximately 7.05 ha (see Additional Text 1.8a for additional information) of terrestrial habitat within 500 m of the ponds is also to be lost. Of this ~2.5 ha is within 50 m of the ponds, which, whilst not all is considered optimal habitat for GCN (i.e. amenity grassland) could be used for dispersal/foraging and is therefore included in the calculations. The proposals are considered to have a moderate effect upon a small population of GCN. The figures for hardstanding/buildings (2.5 ha) are not included within the above table as they are more than 50 m away from the nearest potential GCN pond (P4) and over 100 m from the nearest confirmed GCN pond (P5). Please see additional B1.8a for a breakdown of all habitat areas.

Please note - the above figures do not include the additional land areas temporarily damaged/lost as a result of the additional works in the west of the extended site (the impacts upon P2 in table D5.1 however, have been increased accordingly (unfortunately changes cannot be highlighted). NB The extension of the works into the western section of the site does not bring the area of works within 500 m of any additional waterbodies.

To allow a considered assessment of this additional area the figures for P2 only are below:

Area of immediate terrestrial habitat (<50m from pond) to be lost - 0
 Area of immediate terrestrial habitat (<50m from pond) to be damaged - 0
 Area of intermediate terrestrial habitat (50-250m from pond) to be lost - 1.2 ha
 Area of intermediate terrestrial habitat (50-250m from pond) to be damaged - 0.18 ha
 (0.06 ha of which is currently hardstanding)
 Area of distant terrestrial habitat (<250 from pond) to be lost - 0
 Area of distant terrestrial habitat (<250 from pond) to be damaged - 0.8 ha
 (0.06 ha of which is currently hardstanding)

Phase 2

A small population of great crested newts has been recorded within ponds surveyed within 500 m of the site boundary. Approximately 18 ha of GCN-suitable habitat within 500 m of known GCN breeding ponds is to be lost (the vast majority of which is grazed semi-improved grassland). The proposals are considered to have a minor effect upon a small population of GCN. The 0.04 ha of pond to be lost (P10, P13 and P14) are not GCN breeding ponds and not within 500 m of the known breeding ponds and are therefore also not considered to be used for foraging.

Phase 3

As a result of phase 3 works, no aquatic or terrestrial habitats were lost or damaged.

This development

The current application will involve removal of TAF fencing to allow GCN to colonise the northern area under Policy 3 of recent guidance. The future development of this area (predicted in 2021) will destroy some of this habitat, however no ponds are to be affected and in the absence of mitigation it is considered that the scheme would be of overall conservation benefit.

The majority of the site was cleared under two previous licence applications (Phases 1 and 2) and all trapping was undertaken during those periods with a receptor site created adjacent to the east of the site within Wildlife Trust owned land which included a mosaic of grassland, ponds and shrubs. A further receptor site was created within the western site boundary associated with the retained pond P3. The restoration of the remaining site has included the provision of extensive areas of new woodland, ponds, rough grassland and hedges as well as some areas of less value but still usable by GCN (agricultural land).

The current licence application will remove the remaining TAF fence on site allowing GCN to fully access habitats within the northern half of the site in the short/medium-term. The previously-approved Phase 3 Licence accepted the ultimate loss of these habitats and confirmed that in their absence the FCS of the local GCN population would still be maintained. In the long-term, the northern compartment (previously trapped-out and confirmed 'GCN-free') will be lost to development at some point in the future (predicted 2021).

However, as part of the enhancements for the site this Licence application will allow GCN to access over 26 ha of rough grassland (the proposed future development area) under Policy 3 guidance resulting in an overall conservation benefit to GCN (rather than preventing them utilising this area for foraging etc. as approved under the previous application).

E2.2

Surveys conducted within permanent waterbodies to the south of R1 (P6 and P7) in 2008 had a peak survey count of 1 GCN (although 2 juveniles were observed within P6 during the last survey). New ponds and hibernacula were provided within R1 in 2010. The receptor site R2 includes pond P3 in which a peak count of 10 GCN were observed (survey results shown in section C) (Figure E2). P2 (north of R3) had a peak count of 1 in 2008. **Any GCN observed during the fencing removal will be translocated to the nearest receptor site.**

E2.5

The receptor site R1 is approximately 1.5 ha in size and comprises marshy grassland, with 6 new ponds (PA-F) created in 2010 under the Phase 1 Licence application. Pond margins are shallow to maximise productivity and the potential for wildlife, with shelves of low gradients, gently shelving to a depth in excess of 1.5m. The largest pond is approximately 25m long and 12m wide, whilst the smallest is 9m by 11m. The ephemeral scrapes are approximately 5m by 5m. In order to increase the amount of egg-laying substrate available within the first year (2011) artificial egg-laying strips were incorporated as small sections of boulders/rubble within the base of the pond in order to provide additional shelter for amphibians. An infrequently used access road was to the south of the site, whilst a rail line separated the western boundary from the proposed mining site. Adjacent land use comprised a very large waterbody to the east, a wooded area to the north west and a marshy area with some standing water (P6 (now enhanced) and P7) to the south. Farm land forms the rest of the surrounding area.

The receptor site R2 is approximately 2 ha and comprises pond P3, a small length of rail line, approximately 1 ha of ephemeral/short perennial vegetation and 0.7 ha of scrub and unmanaged semi-improved grassland. Directly to the east and south is a large expanse of coal stocking yard whilst an additional rail line forms the western boundary across which is farm land.

E3.1b

The creation of 6 new ponds was undertaken between September to November 2010 (during suitable weather conditions) within the NWT reserve area. Margins are shallow to maximise productivity and the potential for wildlife, and have shelves of low gradients, gently shelving to a depth in excess of 1.5 m. The largest pond is approximately 25 m long and 12 m wide, whilst the smallest is 9 m by 11 m. The ephemeral scrapes shall all be approximately 5 m by 5 m (Figure E3.1a). Three of the ponds were planted-up partly with vegetation removed, by hand and under ecological supervision, from pond 6 and partly with mature vegetation of local provenance. In order to increase the amount of egg-laying substrate available within the first year (2011) artificial egg-laying strips were incorporated as shall small sections of boulders/rubble within the base of the pond in order to provide additional shelter for amphibians. At the end of 2011 the artificial strips were removed by an ecologist having first ensured no eggs (of any species) are present. The ponds were refurbished in September 2015 by representatives from the client supervised by WT ecologists. This comprised removal of leaf litter and excavation to their original size with as much vegetation retained as possible ready for breeding season 2016.

The two remaining ponds were allowed to be naturally colonised (at the request of the Local Wildlife Trust). The existing waterbody (P6) was enhanced during November 2009 (during suitable weather conditions) to the same design as above. No amphibians were captured at any stage of the works.

E3.2

E3.2

The above excludes the c.51ha of agricultural land created as part of restoration as although the areas will supply some opportunities for limited GCN occupation (dependant localised conditions such as grazing, crops, etc) it will not be managed specifically for GCN (the table below provides a breakdown of the habitats being created along with their location).

Proposed Habitats on site (excluding hardstanding) - all measurements ha unless stated					
	Total for site	50m of GCN ponds	50-250m of GCN ponds	250m-500m of GCN ponds	500m plus
New woodland	7.4828	0.8956	3.6213	2.18	0.7859
Rough grassland (considered as 'enhancements' with GCN access to be allowed in the short/medium-term)	26.7	2	15.8	8.9	0
Rough grassland within swale area	2.8546	0	1.048	1.18	0.6266
Agricultural field	50.9566	0	0.5836	16.783	33.59
Scrapes	1.7807	0	0	0.1259	1.6548
Hedge (length in m)	0	0	0	229m	1723m
Existing woodland	3.4283	0	2.8752	0.5531	0
New woodland edge habitat	1.2238	0.6648	0.015	0.544	0
Total	94.4268	3.5604	23.9431	30.266	36.6573

Please note that as part of previous Phase 1 licence, a reserve area (R1) and other receptor site (R2) were created off-site. These areas are detailed below

No. ponds to be created - 0

No. ponds to be restored or enhanced - 0

Total area of ponds to be created - 0

Total area of ponds to be restored or enhanced - 0 ha

Area of habitat within 50m of breeding pond to be created or enhanced - 0 ha

Area of habitat 50-250m of breeding pond to be created or enhanced - 0.18 ha

Area of habitat <250m of breeding pond to be created or enhanced - 0.8 ha

The created habitat comprises scrub within 250 m of P2 (to the east of the extended section) and woodland planting <250 m of P2 (to the west of the extended section).