District Level Licensing Annual Monitoring Report

2024/25

November 2025

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Further information

This report was created with partial assistance from AI technology. The AI technology was used solely to ensure clarity for the reader. It has not been used for data analysis or for any conclusions drawn from the data. The final content has been reviewed by a human to ensure accuracy and relevance.

Executive summary

This 2024/25 District Level Licensing Annual Monitoring Report (AMR) details monitoring information based on data for the financial year of 2024/25. AMRs are part of the wider District Level Licensing (DLL) evaluation, and the results will feed into a five-yearly National Fixed-Point Evaluation report.

This is the first AMR, covering the financial year of the 1st of April 2024 to 31st March 2025. The first National Fixed-Point Evaluation report will be published in early 2026. Each year, the AMR provides the annual monitoring information detailing the ecological and environmental outcomes as well as DLL licence and financial records.

Summary of findings

DLL scheme uptake

There have been 1005 DLL licences issued from the launch of DLL (2019) until the end of the 2024/25 financial year, comprising 839 new licences, 52 modifications, and 114 renewals. In the 2024/25 financial year alone, 274 licences were issued: including 207 new licences, 24 modifications, and 43 renewals.

Development progression through DLL

Since the launch of DLL, 2391 enquiries have been made for individual development sites. Of these, 1805 (75%) have committed to joining the scheme by signing certificates. So far, 875 of these developments have gone onto submit a DLL licence application, and 839 of these have been issued a licence. The noticeable gap between developments committing to the scheme and submitting a licence application (930 individual developments) is potentially attributed to developments awaiting planning permission before applying for a DLL licence.

Compensation pond delivery

Under Natural England-led DLL, 3770 compensation ponds have been created or restored up until the end of the 2024/25 financial year, excluding a small number of ponds that have failed (120). 586 compensation ponds were delivered in 2024/25.

Licensed impacts on ponds

Under DLL, all ponds on a development site and a proportion of those within 250m of the site are considered to be negatively impacted by the development, no longer suitable for GCN and are classified as lost. Up until the end of the 2024/25 financial year, 581 ponds have been considered lost.174 of these pond losses were licensed in 2024/25.

Since the launch of DLL, of the total ponds considered lost to licensed developments, 251 were estimated to have been occupied by GCN. Of which 57 were lost to developments licensed in 2024/25. The estimated occupancy is based on a combination of survey information provided by applicants and regional occupancy rates based on surveys completed by Natural England to inform DLL where survey information has not been provided.

Compensation pond monitoring results and pond gains

Monitoring surveys undertaken in 2024/25 included habitat suitability index (HSI) and environmental DNA (eDNA) surveys. The results of these indicated that 75% of compensation ponds are of good or excellent suitability for GCN and that 29% returned a positive result for GCN presence.

Due to the natural fluctuation in GCN presence in ponds between years (Ewald and Carter, 2024), DLL defines occupancy as when a pond has received at least one presence record within the previous five-year period. The five-year occupancy of DLL compensation ponds, considering survey results from 2020/21 to 2024/25 is 37%.

The expectation of DLL is not for all compensation ponds to be occupied, but for there to be a net gain in the number of occupied ponds following development. Since the launch of DLL until the end of the 2024/25 financial year, there has been a net gain in the number of ponds estimated to be occupied by GCN of 387 ponds, as a result of developments licensed under DLL. Six compensation ponds have been delivered for every occupied pond lost. Overall, there has been a net gain of 925 ponds following developments licensed through DLL.

Administration

DLL licence turnaround time

Since the launch of DLL, the average time for Natural England to issue a new DLL licence is 15 working days. In the financial year of 2024/25, the average turnaround time was 17 working days. This increase in 2024/25 is attributed to a temporary decrease in staff resource.

Staff input into the DLL Scheme

The results detail the Full-Time Equivalent (FTE) resource used to operate DLL in 2024/25. The FTE only includes core-delivery work within DLL, ensuring an accurate reflection of the FTE required to solely operate the DLL scheme. The core-delivery work includes processing and issuing the licences, as well as operating the wider aspects of the DLL scheme. This includes writing and reviewing the area strategies whilst engaging with Local Planning Authorities, and working with Habitat Delivery Bodies to deliver, monitor and maintain ponds.

Within 2024/25, 19.79FTE were required for the core-delivery work within DLL.

DLL income and expenditure

The total income generated through DLL in 2024/25 was £8,886,143. This figure includes income from enquiry fees, licence fees, conservation payments and Discretionary Advice Service work. The expenditure of DLL within 2024/25 was £5,990,479. This figure includes pond delivery, monitoring, remediation and maintenance, and NE costs for DLL Licensing and Scheme Delivery (including developing strategies and managing habitat delivery). There is also provision of £2,895,664 for long-term DLL obligations covering the next 25-years. Balancing the year expenditure and provision for the long-term at £8,886,143.

Contents

Table of Abbreviations

Phrase	Acronym
Annual Monitoring Report	AMR
District Level Licensing	DLL
Environmental DNA	eDNA
Full-Time Equivalent	FTE
Great Crested Newt	GCN
Habitat Suitability Index	HSI
Impact Assessment and Conservation Payment Certificate	IACPC
Quantitative Polymerase Chain Reaction	PCR/qPCR
Strategic Opportunity Area	SOA

Introduction

Purpose and context of this report

District Level Licensing (DLL) was launched in 2019 to provide a strategic, landscape scale approach to the regulation of the impacts of development on great crested newts (GCN). GCN (*Triturus cristatus*) are a protected species under the Wildlife and Countryside Act (1981) and the Conservation of Habitats and Species Regulations (2017), which means a licence is required for any works that will impact the species and its habitats.

The high-level objective of DLL is to contribute to Favourable Conservation Status (FCS) for GCN and cost-effective development through a strategic licensing system, to:

- Generate positive outcomes for GCN
- Provide efficiency and effectiveness improvements for developers, Local Planning Authorities and Natural England.

As the scheme continues, it is important that a detailed evaluation is undertaken. A monitoring and evaluation framework has been developed and adopted that will determine whether the high-level objectives of the scheme have been met and feed into future scheme improvements. The work will build on the extensive monitoring work that has been completed since the scheme was launched in 2019.

The monitoring and evaluation framework includes an Annual Monitoring Report (AMR) and a National Fixed-Point Evaluation report. The AMR will be released annually and will provide the monitoring information on the following topics from the preceding financial year for Natural England-led scheme areas:

- Uptake of the DLL Scheme
- Compensation pond delivery
- Licensed and projected development impacts on ponds
- Compensation pond monitoring results and pond gains
- Turnaround time from DLL licence application to licence issue
- Staffing requirements
- Income and expenditure of DLL

The National Fixed-Point Evaluation report will be published every five-years and will review the success of DLL schemes from all providers across England over the preceding five financial years. This will consider environmental and ecological outcomes, as well as efficiency and effectiveness improvements when compared with the traditional licensing

approach, for Natural England, developers, and Local Planning Authorities. The National Fixed-Point Evaluation will draw on data from the AMRs and from detailed reviews of individual scheme areas, to provide a national level overview of the DLL scheme.

This report is the first of the AMRs and covers the financial year 1st April 2024 to 31st March 2025. It will feed into the first National Fixed-Point Evaluation report, to be published in 2026.

Background to District Level Licensing

An overview of DLL

DLL is a strategic approach to licensing which assesses and compensates for the impacts of development on populations of GCN at a landscape scale. It differs from traditional mitigation licensing by considering impacts on populations rather than preserving individuals. Developers are not required to establish whether GCN are present on the development site, although this information can be provided if available. Instead, they make a payment to DLL that is in proportion to the impact of their development.

Records of where GCN have been observed are combined with data about the environment, such as types of habitat and soils to create species distribution models, which identify the most important habitats for GCN and predict where GCN are likely to be present. Species distribution modelling conducted by Natural England has identified pond density as the most significant factor in predicting suitable habitat for GCN. For this reason, DLL focuses the delivery of compensation on the creation or restoration of ponds.

These models are also used to create risk zones and strategic opportunity areas. The risk zones identify the likelihood of GCN being present in a location and, combined with the number of ponds on a development site, are used to assess the impact of a particular development where survey information has not been provided.

Strategic opportunity areas identify the best locations to create new habitat by ensuring that:

- they are situated where they have potential to be colonised by GCN,
- they are placed within areas of suitable habitat to aid colonisation and ensure a healthy population can be maintained,
- they provide a positive outcome for the conservation status of GCN.

Strategic opportunity areas are categorised into ‘core’ and ‘fringe’ areas, which both result in ponds being delivered in favourable habitat, where colonisation can occur but contribute to conservation status in different ways. Core areas already have a higher pond density. Delivery in core areas, and pond placement aims to boost GCN populations by increasing the number of occupied ponds. Fringe areas are located on the periphery of existing GCN

populations, where pond density is lower. Delivery in the fringe areas aims to expand the species' natural range and distribution.

Natural England collaborates with not-for-profit environmental organisations, known as Habitat Delivery Bodies, to create or restore ponds suitable for GCN. The ponds are created and restored in line with DLL's Habitat Creation and Restoration Guidance (please refer to Appendix 1) which was approved by Natural England and external freshwater and GCN specialists.

The payment from developers also covers the ongoing operation of the scheme, monitoring, and maintenance of the ponds for a period of 25-years, plus surveys for GCN in the wider landscape.

The benefits of DLL

DLL focuses effort where it will create maximum benefit for GCN, whilst reducing delays, costs, risks, and uncertainty for developers. The main benefits of DLL are listed below:

Benefits for GCN:

- A proactive, landscape wide approach to compensating for the impacts of development on GCN.
- Improving the connectivity between otherwise fragmented populations, increasing the distribution of GCN.
- Strategically planned surveys to monitor where GCN are present.

Benefits for developers:

- Reduced uncertainty as developers are not dependent upon licensing decisions after receiving planning permission (as they are in traditional mitigation licensing).
- Lower risk of delays and associated costs due to a streamlined GCN licensing process.
- The developer has the option to not undertake GCN surveys or provide mitigation on development sites.

Providers of strategic licensing and Natural England-led DLL scheme launch

The DLL scheme operates across different regions, called 'scheme areas'. Each scheme area typically covers one county or, in some cases, a combination of counties. Figure 1 below lists each Natural England-led DLL scheme area and the year it was launched.

Natural England is not the only provider of strategic licensing for GCN, with other schemes being led by the NatureSpace Partnership and individual Local Planning Authorities.

However, the remaining Local Planning Authority led schemes are moving to be led by Natural England or NatureSpace Partnership.

Only data from Natural England led DLL schemes are included in this report. Data on Telford and Wrekin and Dorset will be included in later years once the transition is complete.

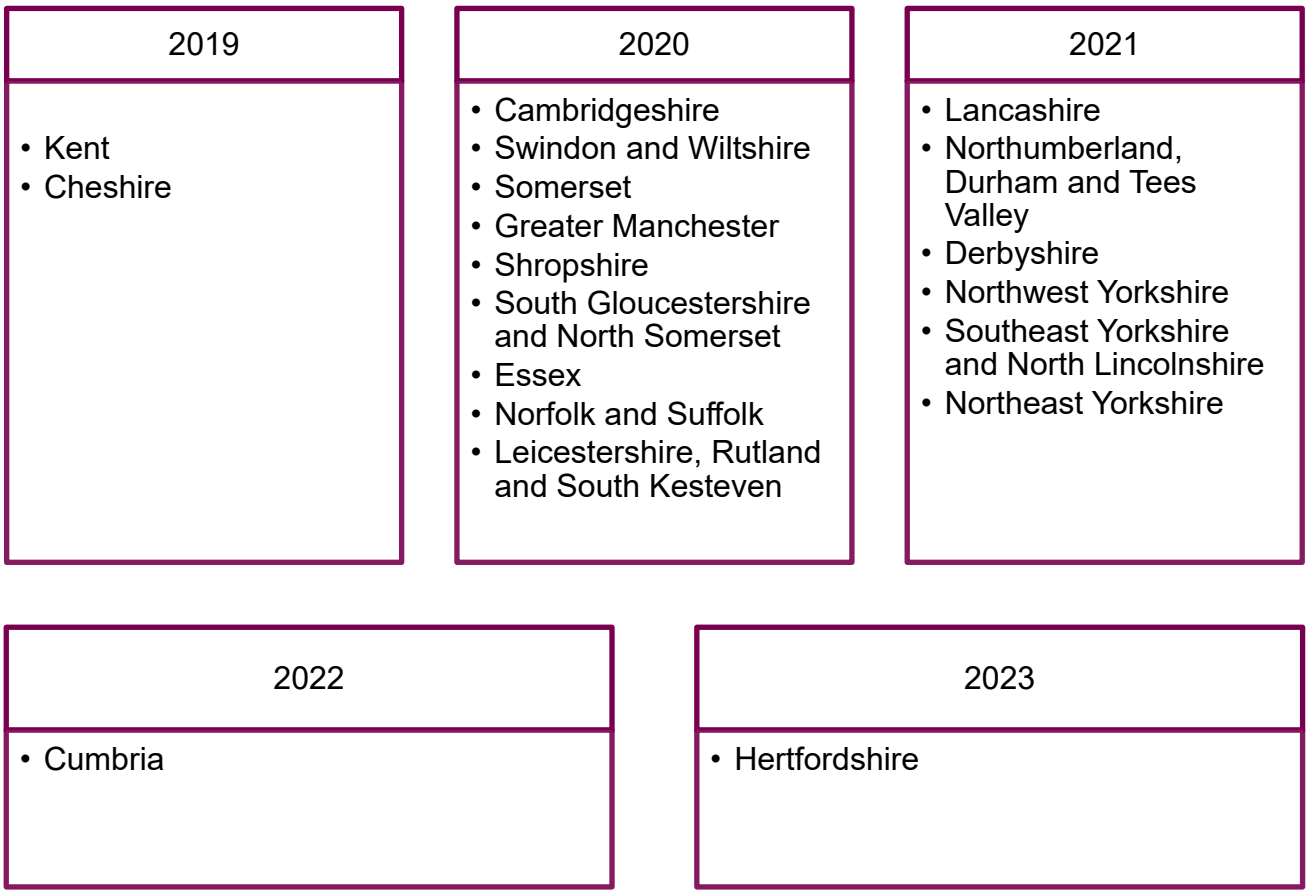

Figure 1. All Natural England-led scheme areas listed by the year they were launched

Further information on the Natural England-led DLL scheme can be found on the Gov.uk website.

Data Collection and Analysis

DLL licence applications

DLL licence uptake

Data has been gathered on the number of licences issued within each financial year since the launch of DLL. This includes the number of ‘new’ licences, modifications, and renewals, defined below:

- New licence: the initial DLL licence that is obtained by a development
- Modification: refers to a change or amendment to an existing licence
- Renewal: renewing a licence after the initial or previous term has expired

Development progression through DLL

The next part of the analysis examined the progression of individual developments through the DLL enquiry and application process. This included the number of individual developments enquiring to DLL, those that progressed to signing an Impact Assessment and Conservation Payment Certificate (IACPC), those that subsequently submitted a licence application, and those that were issued a licence. Where there were multiple enquiries per development, only the enquiry that had progressed the furthest through the process was included in this part of the analysis. The stages analysed are explained in more detail in Figure 2 and in the list of stages below:

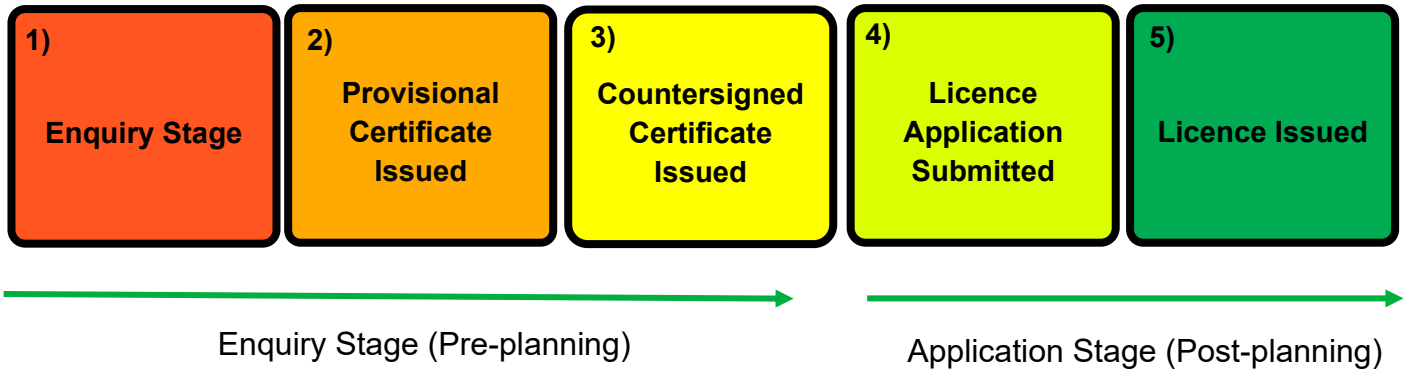

Figure 2. The applicant's journey through DLL, from enquiry to licence issued.

1) Enquiry stage: The applicant submits a DLL enquiry form and details about the site, which Natural England use to assess the impact of the development on GCN and calculate the conservation payment required to compensate for those impacts.
2) Provisional certificate issued: The applicant is sent an Impact Assessment and Conservation Payment Certificate (IACPC) detailing the results of the impact assessment and compensation costs. The applicant must then decide whether to proceed with DLL as their licensing option for GCN. This stage was not included in the analysis.
3) Countersigned certificate issued: If the applicant wishes to proceed, they will sign and return the provisional certificate (the IACPC), which acts as an agreement to join the scheme. Natural England will then countersign the certificate to confirm acceptance into the scheme. The countersigned certificate can then be used to inform the planning application for that development to confirm obligations to GCN can be met via DLL.
4) Licence application submitted: If planning permission is granted, the applicant submits a DLL licence application to Natural England for assessment and pays the conservation payment.
5) Licence issued: Once the assessment is complete and the conservation payment has been received, a licence can be issued.

The number of developments that have withdrawn from using DLL was also calculated. An application is considered withdrawn when either an applicant notifies Natural England if they no longer wish to proceed, or if a provisional certificate is not signed prior to the expiry date.

Ecological and environmental information

Compensation ponds

All data relating to compensation ponds delivered under the DLL scheme have been submitted to Natural England by the Habitat Delivery Bodies who deliver compensation ponds in partnership with Natural England. This includes whether the pond has been

created or restored and the SOA the pond is located, amongst other information. The data relating to pond delivery in this report has been taken from this.

The Habitat Delivery Bodies also confirm if a pond has failed and provide reasons. Pond failures are expected due to a range of factors. Under current criteria, a pond is considered to have failed and is subsequently withdrawn from the scheme if any of the following conditions apply:

- Within the first five years, the Habitat Delivery Body determines that despite interventions, the pond would be unlikely to hold water in the long term.
- The pond is removed from the scheme by the landowner, or access for monitoring is repeatedly refused during the 25-year period.
- The pond is found to have a habitat suitability index (HSI) score of less than 0.7 during scheduled monitoring in years 5 (contingency survey), 9, 14, 19 and 24, such that management and maintenance works would be unable to recover the pond, or it would be more cost effective to create a new pond elsewhere.

Net gain in ponds

The net gain in ponds resulting from developments licensed under DLL has been calculated by subtracting the number of ponds lost to development from the total number of compensation ponds provided for these developments. When considering potential future impacts this calculation includes the ponds projected to be lost to developments with a signed IACPC and the compensation ponds that have been allocated to compensate for these developments. The net gain figure quoted in this report has been rounded to the nearest whole pond.

To calculate the number of compensation ponds delivered per occupied pond lost, the total number of compensation ponds allocated to licensed developments has been divided by the number of occupied ponds lost to those developments.

Monitoring Surveys

The Habitat Delivery Bodies also undertake ongoing monitoring surveys. The monitoring surveys assess pond suitability and occupancy using two methods:

- Habitat Suitability Index (HSI): Ponds are assessed using a range of factors which contribute to the suitability of a pond for GCN and assigned a score (Oldham *et al.*, 2000). The pond is categorised as poor, below average, average, good or excellent. Higher scoring ponds are more suitable for the species and are therefore more likely to be occupied. However, a poor score does not rule out GCN presence.
- Environmental DNA (eDNA): For full details of the eDNA methodology see Biggs *et al.*, 2014. Water samples from ponds are tested for the presence of GCN genetic material. Laboratory analysis conducts 12 quantitative polymerase chain reaction (PCR) tests on each sample. A present result is recorded if any of these tests

identify GCN DNA. If no tests are positive, it is assumed GCN are absent. An inconclusive result may sometimes be returned, indicating that GCN DNA was not detected, but that the sample has been degraded or the PCR inhibited in some way. The cause for inconclusive results is unknown in many cases.

Monitoring surveys are completed in financial years 2-5, 9, 14, 19 and 24 after pond delivery. An additional contingency survey is also available for each pond. The first monitoring survey has been moved back a year from the original to allow more time for compensation ponds to mature. As part of this transition, additional surveys were completed on a small number of ponds that were delivered in 2018/19 to ensure they received a year five survey. These ponds have been included in the analysis in this report.

This report presents the results of HSI and eDNA surveys completed in the 2024 monitoring season, with five-year occupancy rates derived from results collected from the 2020 to 2024 monitoring seasons. GCN presence in ponds is known to fluctuate year on year (Ewald and Carter, 2024), so an absence record in a single year, does not necessarily indicate that the pond is not used by GCN. Therefore, DLL considers a pond occupied if eDNA survey has returned a present result in the past five-years.

Development impacts

Data on ponds impacted by developments that have been licensed or are projected to be impacted by developments with a signed IACPC, are taken from DLL casework records. The number of ponds considered, or projected to be lost, within the red line boundaries or within 250m of development sites is calculated using the information provided by applicants at the enquiry stage, where survey information has been provided. Where survey information has not been provided Natural England use spatial data, including Ordnance Survey data to determine the number and location on ponds within the red line boundary and within 250m.

The DLL impact assessment methodology assumes all ponds within a development boundary are lost as a precautionary worst-case scenario. Where ponds lie within 250m of a development site, a partial loss is calculated based on the proportion of land that lies within 250m of the pond that is within the development site. As a result, pond loss figures may not be whole numbers, but all pond loss figures in this report have been rounded to the nearest whole pond for simplicity.

The number of ponds occupied by GCN is estimated as part of the impact assessment by applying an occupancy rate. Where survey data is provided by the applicant, this is used. Where there are ponds that could not be surveyed a site occupancy rate is calculated based on the number of ponds surveyed and the number where GCN were recorded and this is applied to non-surveyed ponds.

When estimating occupied ponds lost to developments where survey information has not been provided, the background GCN occupancy for the area (based on surveys that were

undertaken across England to inform DLL) is used. All predicted pond impacts for a development are multiplied by the background occupancy rate for the area to estimate the number of occupied ponds lost.

Compensation and pond allocation

The number of compensation ponds required per development calculated using the predicted impacts of the development and a series of multipliers. The multipliers used will depend on whether survey information was supplied with the enquiry, pond occupancy and the age of available compensation ponds. As pond impacts are often not whole numbers, the same is true of the number of compensation ponds required. The number of ponds required is then used to calculate the conservation payment. The figures for the number of ponds compensating for developments in this report have been rounded to the nearest whole pond for simplicity.

Ponds are allocated to developments when an IACPC has been signed to ensure that sufficient compensation is available when a licence is applied for and that compensation is delivered ahead of the impacts occurring. Ponds are not allocated to specific developments, instead pond allocation is undertaken at a scheme level. The number of ponds allocated to developments at each stage and the number of ponds remaining to allocate is constantly updated and reviewed.

Net gain in occupied ponds

To calculate the net gain in occupied ponds resulting from developments licensed under DLL, the number of compensation ponds allocated to licensed developments that are occupied must be calculated. This has been calculated for each scheme area separately, and the combined results presented in this report. Although compensation ponds are not allocated to specific developments, for the purposes of this analysis, it has been assumed that the oldest compensation ponds have been allocated. To begin, the number of ponds allocated to compensate for the impacts of licensed developments in each area was calculated. This number was rounded up to the next whole pond and the number of occupied ponds out of the oldest compensation ponds in the scheme area up to this number was found. For example, if 30 compensation ponds had been allocated, the 30 oldest compensation ponds were reviewed and the number of those that have been occupied in the past five-years is the number of occupied ponds that have been allocated to licensed developments. The number of occupied ponds lost to development is then subtracted from this estimate to determine the net gain in occupied ponds. The figure for the net gain in occupied ponds has been rounded to the nearest whole pond for simplicity.

Administration

DLL licence turnaround time

The turnaround time is defined as the number of working days between Natural England receiving the full licence application and the licence being issued, excluding the time it takes for an applicant to pay the invoice.

The analysis of turnaround time for DLL Licence applications was based on 'new' applications within the financial year of 2024/25 (1st April 2024-31st March 2025), and since the launch of DLL (February 2019) to 31st March 2025. The mean and median turnaround times were calculated for both scenarios.

Only new applications that have been issued with a licence were included in the analysis. Licence modifications and licence renewals were not included as the processing times for these types of licences would not present an accurate reflection of the standard processing time of a DLL licence.

Limitations to the data on turnaround time

Applications take longer to process when Natural England need to request further information from the applicant before a licence can be issued. This therefore leads to longer turnaround times. These few applications were included in the analysis to avoid introducing bias.

The calculations do not account for bank holidays, the Christmas shutdown period etc. Therefore, the small number of applications that extended over these periods consequently had longer turnaround times, impacting the overall turnaround figures.

A small proportion of data (5%) has been omitted from the analysis for exceptional reasons. On occasion, a licence has been issued outside of the normal parameters. This data was therefore removed from the analysis to accurately reflect the standard processing time of a DLL licence.

Staff input into the DLL scheme

The Full-Time Equivalent (FTE) required to operate the DLL Scheme within the financial year of 2024/25 was calculated. The FTE was obtained from DLL Business Planning Records.

The FTE required to support work regarding NatureSpace Partnership (a third-party provider of strategic licensing for GCN), as well as work relating to line management, DLL leadership, and associated overheads, were not included in the final calculations as this work does not reflect the core-delivery FTE required to specifically operate the Natural England-led DLL Scheme.

DLL is an operational scheme, and therefore, the roles of staff include processing and issuing the licences, alongside operating the wider aspects of the scheme, including the development of DLL area strategies and habitat delivery. Specific areas of work, considered to be 'core-delivery' are outlined below:

- Processing DLL applications and issuing the licences.
- Working on complex cases and engaging with larger developers.
- Writing and reviewing strategies for each scheme area to detail how DLL operates and the impact assessment for Favourable Conservation Status (FCS).
- Producing species distribution modelling and analysis to feed into these strategies.
- Working with Habitat Delivery Bodies to monitor existing DLL ponds and deliver new ponds to meet forecast demand.
- Engaging with DLL Steering Groups (made up of Habitat Delivery Bodies, Local Planning Authorities and Natural England Area Teams).
- A Discretionary Advice Service (DAS) for complex cases.

DLL financial records

Financial records have been analysed to understand the income and expenditure of DLL in the financial year of 2024/25. This information was obtained from Natural England's financial management records.

Natural England generates income to fund DLL, including the operation of the scheme, creation/restoration, maintenance, and monitoring of compensation ponds for 25-years i.e. provision is made for long-term obligations, and licensing costs. The income is generated by fees charged to developers. There are three fees charged at different times through the DLL process. The fees, and how they have been used in analysing the DLL income, are detailed below. Additionally, income is generated for discretionary advice provided to facilitate some, more complex, DLL licence applications, also detailed below.

- Enquiry Fee: Is charged on receipt of an enquiry from a developer. In 2024/25 the DLL enquiry fee was £570 + VAT per enquiry. The total enquiry fee was generated by multiplying the number of enquiry applications by the fixed fee.
- Licence Fee: Is charged when a licence has been issued. In 2024/25 the DLL licence fee was £690 (VAT exempt). Householder applications and licences issued under a Public Health and Safety Purpose, are exempt from this fee. In more recent years, Licence Modifications have also been exempt from the Licence Fee, as costs are recovered through re-charging the Enquiry Fee.
- Conservation Payment: This payment charged to developers depends on the number of compensation ponds required to offset the impact of the development on great crested newts. In 2024/25 the fixed cost for a compensation pond was £20,200. This fixed cost includes delivering a compensation pond, maintenance, and monitoring of the pond for 25-years, contribution towards the operation of the scheme and a contingency to fund the replacement of failed ponds. The total

compensation income is the received income from the ponds allocated against development.
- Discretionary Advice Service work: DLL utilises Natural England's chargeable discretionary advice to provide a bespoke service for some developments, notably for complex cases. Natural England charges £110 an hour for its discretionary advice service work. The total income is the number of chargeable hours worked multiplied by the chargeable rate.

Natural England procures the delivery, maintenance, monitoring, and remediation of compensation ponds from Habitat Delivery Bodies. Standard payments are made per pond delivered, monitored and maintained at the rates set out below in 2024/25. Based on previous demand and known future development needs, the number of ponds forecast to be required in each scheme area are commissioned. Habitat Delivery Bodies invoice Natural England on completion of works. The total expenditure figures analysed are the actual invoiced figures and represent the actual number of ponds delivered/ monitored multiplied by the relevant standard payment.

- Pond delivery: £5,135 per pond
- Pond Maintenance: £1,365 per pond
- Pond monitoring: £235 per pond

To understand wider trends in GCN populations, Natural England also procures annual baseline monitoring of ponds that are not DLL compensation ponds. This expenditure is included within the total monitoring expenditure costs.

Costs incurred by Natural England to process and issue the licences (Licensing Delivery) as well as operating the wider aspects of the DLL scheme, such as developing and reviewing the DLL area strategies and managing habitat delivery (Scheme Delivery) are included within the expenditure. Organisational costs, attributable to the operation of DLL are also included within the expenditure analysis.

Results and discussion

DLL licence applications

DLL scheme uptake

There have been 1005 licences issued since the launch of DLL. Table 1 and Figure 3 below further detail the total number of licences issued within each financial year since the launch.

Table 1. The number of DLL licences (new, modifications and renewals) issued within each financial year since the launch of DLL.

	New licences	Modifications	Renewals	Total (new, modifications and renewals)
2019/2020	14	0	0	14
2020/2021	52	1	0	53
2021/2022	185	4	5	194
2022/2023	168	7	10	185
2023/2024	213	16	56	285
2024/2025	207	24	43	274
Total across financial years	839	52	114	1005

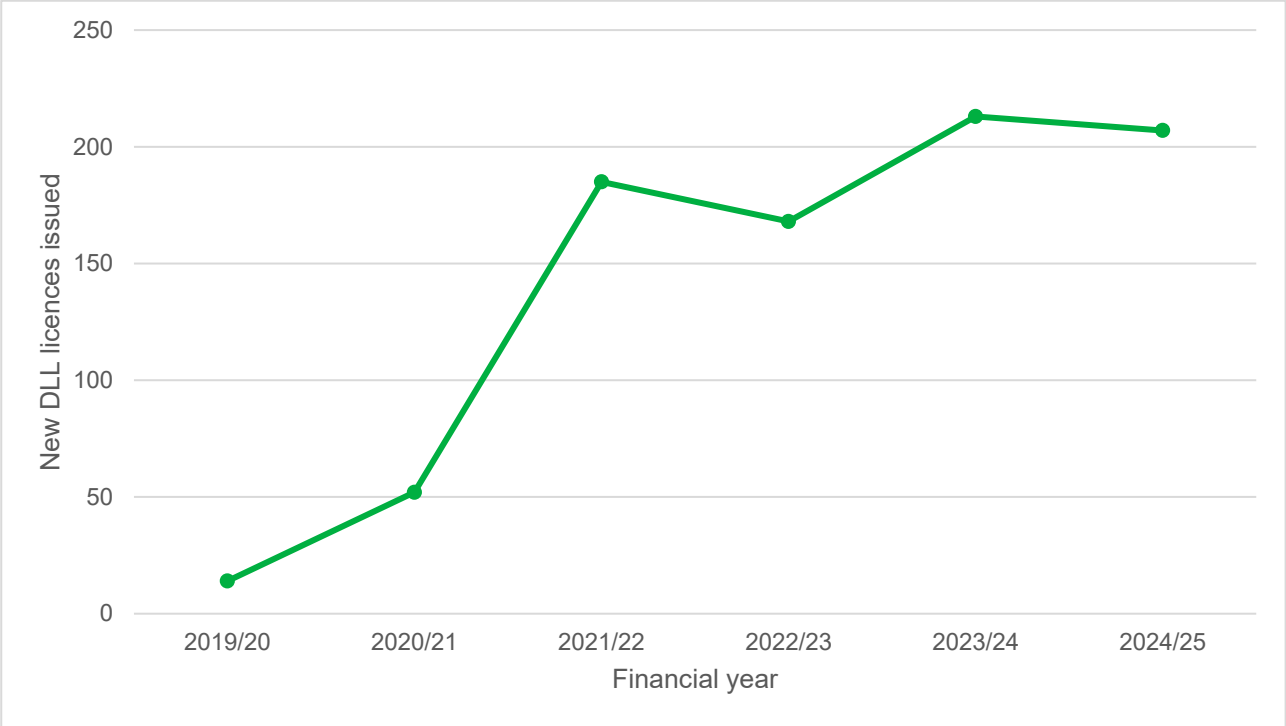

Figure 3. The number of new DLL licences issued within each financial year since the launch of DLL.

Table 1 and Figure 3 show that there has been an overall increase in the number of DLL licences issued since the launch, due to the increased awareness and expansion of the DLL scheme over time. The significant increase in DLL licences issued within 2021/22 is likely due to the rapid expansion of DLL, with the launch of nine scheme areas in 2020 and a further six scheme areas in 2021 (please refer to Figure 1 for a list of these scheme areas).

Development progression through DLL

Table 2 shows the number of individual development sites that have progressed through the DLL enquiry and application process, from the initial enquiry to the point where a DLL licence is issued.

Table 2. The total number of developments progressing through the DLL enquiry and application process (from the launch of DLL to 31st March 2025), including the proportion of those who progress from the previous stage, and the overall progression from the enquiry stage. This is a snapshot and there will be developments still progressing through the process.

Type of measure	Enquiries received	Countersigned IACPC issued	Applications received	Licences issued
Total number of developments	2391	1805	875	839
Proportion of developments that have progressed from the previous stage	N/A	75%	48%	96%
The progression of developments, as a proportion of the enquiries	N/A	75%	37%	35%

The figures in Table 2 show that 75% of developments that enquire go onto sign the IACPC, meaning that these applicants demonstrate a commitment to using DLL. Further analysis shows that only 35% of developments enquiring into DLL have so far been issued with a licence. There is a significant gap in progression between the developments committing to the scheme (receiving a countersigned IACPC) and submitting their licence application. This difference can potentially be attributed to the fact that many of the developments are moving through the planning process before applying for a DLL licence. It is important to note that these figures provide a snapshot in time and future AMR analysis is expected to capture further progress as developments continue through stages of the application process.

Other reasons for developments to not progress through from enquiry to licence issue stage include; applicants withdrawing their application, developments that cannot be serviced (this would only be the case in the enquiry stage), and if the applicant's planning application is declined. Since the launch, there have been 439 individual developments that have withdrawn from the application process. A further 50 developments could not be serviced. An enquiry would be unserviceable if the impact assessment identified that the criteria for a DLL licence could not be met, such as if a site is in a red risk zone where DLL

is not available due to the presence of a GCN population that is deemed to be of significance.

Ecological and environmental outcomes

Since its launch, DLL has created significant numbers of ponds that have contributed to the conservation of GCN populations and the creation of new suitable habitats for the species. The following key findings highlight the impact of DLL and the outcome of the monitoring efforts.

Compensation pond delivery

Since the scheme launched, a total 3,770 ponds have been delivered (excluding failed ponds as noted below), comprising 2,132 pond creations (57%) and 1,638 restorations (43%). As shown in Figure 4, pond delivery peaked in 2021/22 with 933 ponds delivered. This reflects the launch of several scheme areas around this time and the requirement to deliver a bank of ponds to support each area early on.

Figure 4 also shows that created ponds outnumbered restorations in most years. However, in 2024/25 restorations accounted for 59% of total delivery. This is due to the introduction of other nature-based solutions, which has made pond creation more challenging. Solutions to these challenges are being explored to increase pond creation opportunities going forwards.

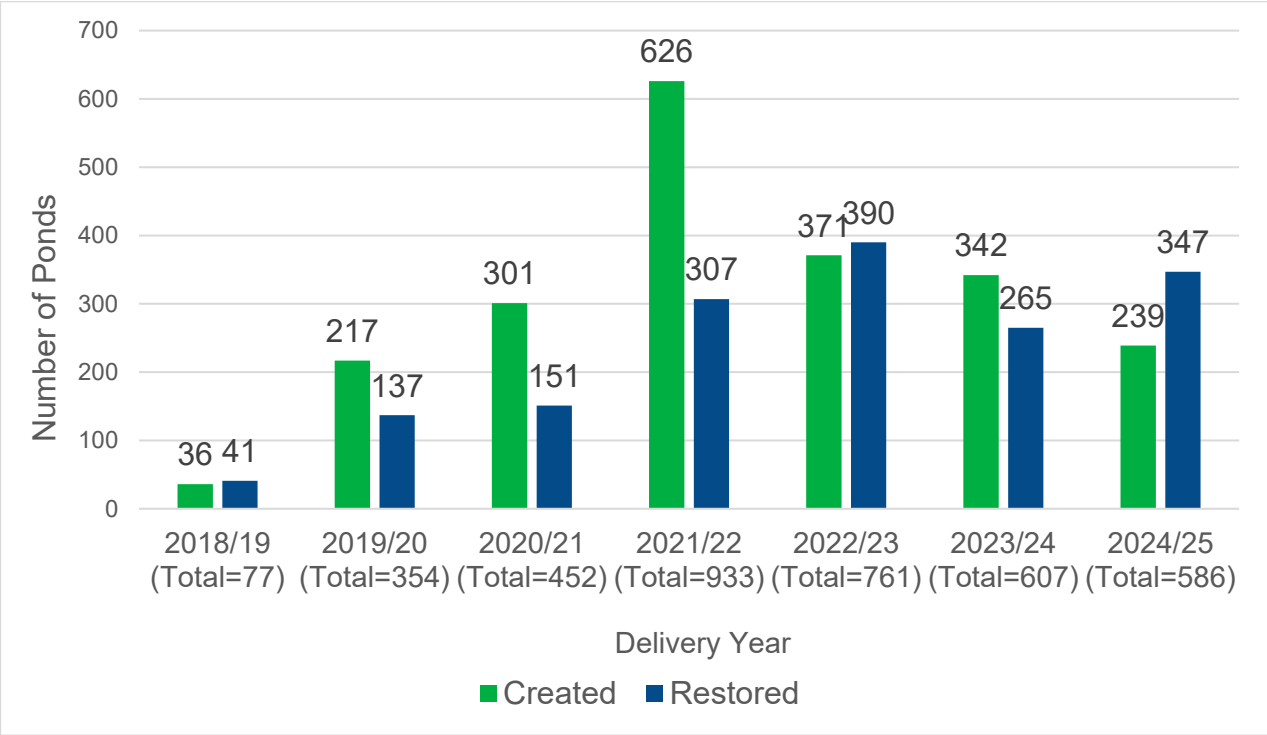

Figure 4. Annual delivery of compensation ponds under the DLL scheme, showing the number of ponds created and restored per financial year since scheme inception.

Table 3 below details the distribution of compensation ponds across all Natural England-led scheme areas overall and for the 2024/25 financial year. Pond delivery varies across scheme areas, reflecting the differing demand for ponds and length of time that the scheme has been live in each area.

Table 3. Number of compensation ponds created and restored across all Natural England-led scheme areas in the financial year 2024/25 and since the launch of DLL.

	2024/25			Overall		
Scheme Area	**Created**	**Restored**	**Total**	**Created**	**Restored**	**Total**
Cambridgeshire	6	14	20	104	59	163
Cheshire	30	27	57	367	147	514
Cumbria	9	0	9	50	8	58
Derbyshire	22	6	28	56	19	75

	2024/25			Overall		
Essex	53	48	101	256	207	463
Greater Manchester	9	35	44	79	86	165
Hertfordshire	4	6	10	17	45	62
Kent	13	30	43	150	212	362
Lancashire	4	5	9	110	42	152
Leicestershire, Rutland and South Kesteven	23	9	32	93	63	156
Northeast Yorkshire	9	19	28	82	36	118
Norfolk and Suffolk	5	86	91	70	376	446
Northumberland. Durham and Tees Valley	28	12	40	168	16	184
Northwest Yorkshire	7	10	17	83	26	109
Southeast Yorkshire and North Lincolnshire	4	8	12	121	52	173
South Gloucestershire and North Somerset	9	2	11	83	31	114
Shropshire	1	12	13	37	112	149

	2024/25			Overall		
Somerset	3	8	11	124	29	153
Swindon and Wiltshire	0	10	10	82	72	154
Total	**239**	**347**	**586**	**2132**	**1638**	**3770**

Pond failure

The overall pond failure rate remains low. To date, 120 ponds (3.1% of the total 3,903 ponds delivered) have been withdrawn from the scheme. The reasons given for pond failures to date include landowners withdrawing their ponds from the scheme or land being sold and ponds not considered suitable for GCN where remediation is not viable. Failed ponds are excluded from the pond delivery totals elsewhere in this section.

Pond delivery in strategic opportunity areas (SOAs)

Each DLL strategy for an area sets a bespoke requirement for the proportion of ponds that should be delivered in core or fringe areas. In general, this is at least 25% in core and in fringe. Additionally, there is a cap of 10% for ponds to be placed outside of SOAs, with a small number of exceptions.

Table 4 summarises the distribution of compensation ponds delivered across SOA categories. Overall, 11% of ponds have been delivered outside of SOAs, which is slightly above the cap. However, this includes Greater Manchester, where the cap of ponds that can be placed outside of SOAs is 20% due to the areas highly urban nature. This allows greater flexibility to deliver ponds which connect relatively isolated populations in urban and suburban areas. When Greater Manchester is excluded from the calculation, the proportion of ponds placed outside of SOAs across all other scheme areas is 10%. In Greater Manchester, 19% of ponds have been placed outside of SOAs.

Table 4. Compensation ponds delivered across all Natural England-led DLL schemes, broken down by strategic opportunity area, for the lifetime of the scheme

SOA	Percentage of Ponds Delivered	Number of ponds
Core	43%	1631
Fringe	46%	1735
Outside	11%	404
Total		**3770**

Pond allocation status

Ponds are allocated to the development at the point where an IACPC is countersigned to ensure that sufficient compensation is available at the time of licence application. However, the ponds are not considered to be compensating for impacts until a licence has been granted.

From DLL launch to the end of the 2024/25 financial year a total of 1506 compensation ponds have been allocated to licensed developments. A further 1589 ponds have been allocated to developments with a countersigned IACPC.

At the end of 2024/25, 675 compensation ponds are available to allocate to new developments requiring licences through DLL. This figure includes contingency ponds to replace any allocated ponds that later fail. These unallocated ponds are spread across all scheme areas. Ponds must be allocated in the same scheme area in which impacts occur and availability of ponds can vary between areas depending on local delivery and demand.

Licensed pond losses

Since the launch of DLL, a total of 342 ponds have been considered lost within licensed site red line boundaries. Of these, 141 were identified as being occupied by GCN. Figure 5 illustrates the number of ponds recorded as lost within licensed redline development boundaries across all Natural England-led DLL areas over the lifetime of the scheme, along with the number considered occupied by GCN. The number of ponds lost increases year on year, from a single pond lost in 2019/20 and 92 ponds lost in 2024/25. The number of occupied ponds follows a similar trend, increasing to 43 occupied ponds lost in 2023/24. However, the number falls to 26 in 2024/25, but at present a reason for this is not clear and future results may provide further insights.

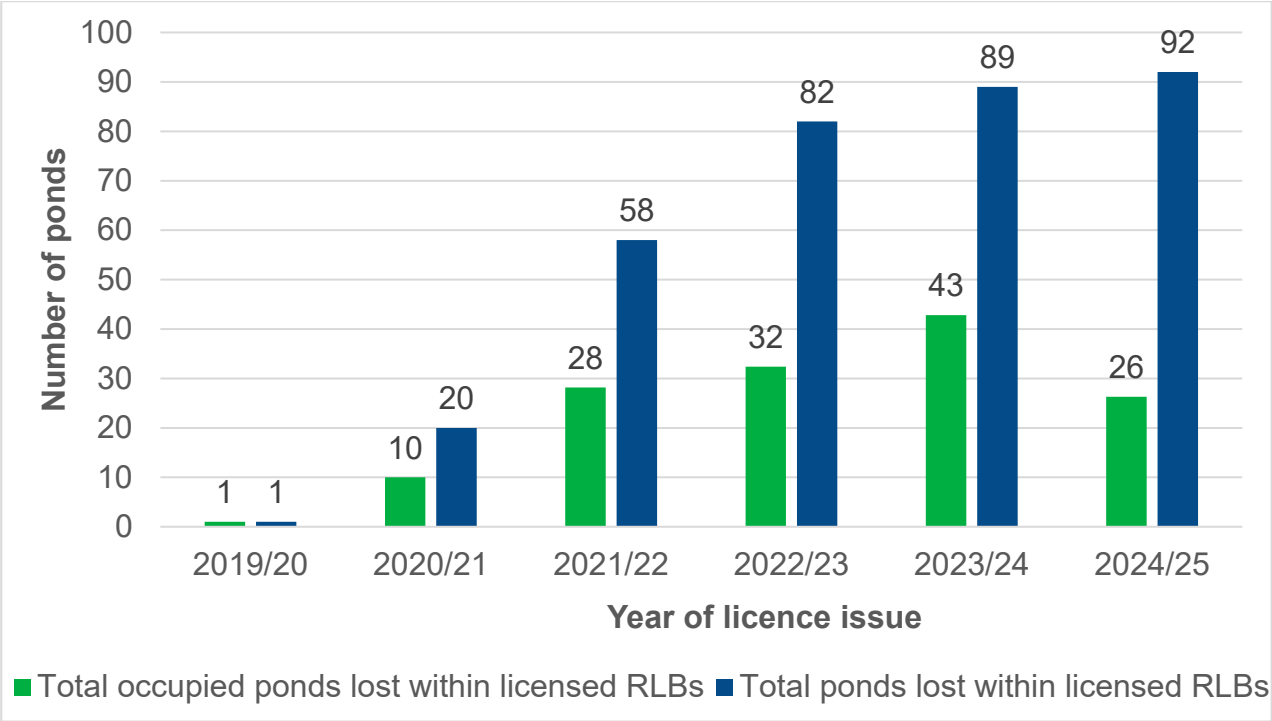

Figure 5. Total ponds lost, and occupied ponds lost within red line boundaries of licensed developments per financial year

In addition to onsite losses, DLL also accounts for potential indirect impacts on offsite ponds within 250m.

When both direct onsite and proportional offsite losses are considered, the total number of ponds impacted by licensed developments over the lifetime of DLL is 581, of which 251 are estimated to have been occupied. In 2024/25 alone, 174 ponds were considered lost, with 57 of these estimated to be occupied. These figures are shown in Figure 6. The trends are similar to those for onsite pond losses, with an overall increase in both figures between 2019/20 and 2024/25. As with onsite impacts, there is a decrease in occupied ponds lost in 2024/25 to 57 ponds, compared to 70 occupied ponds lost in 2023/24.

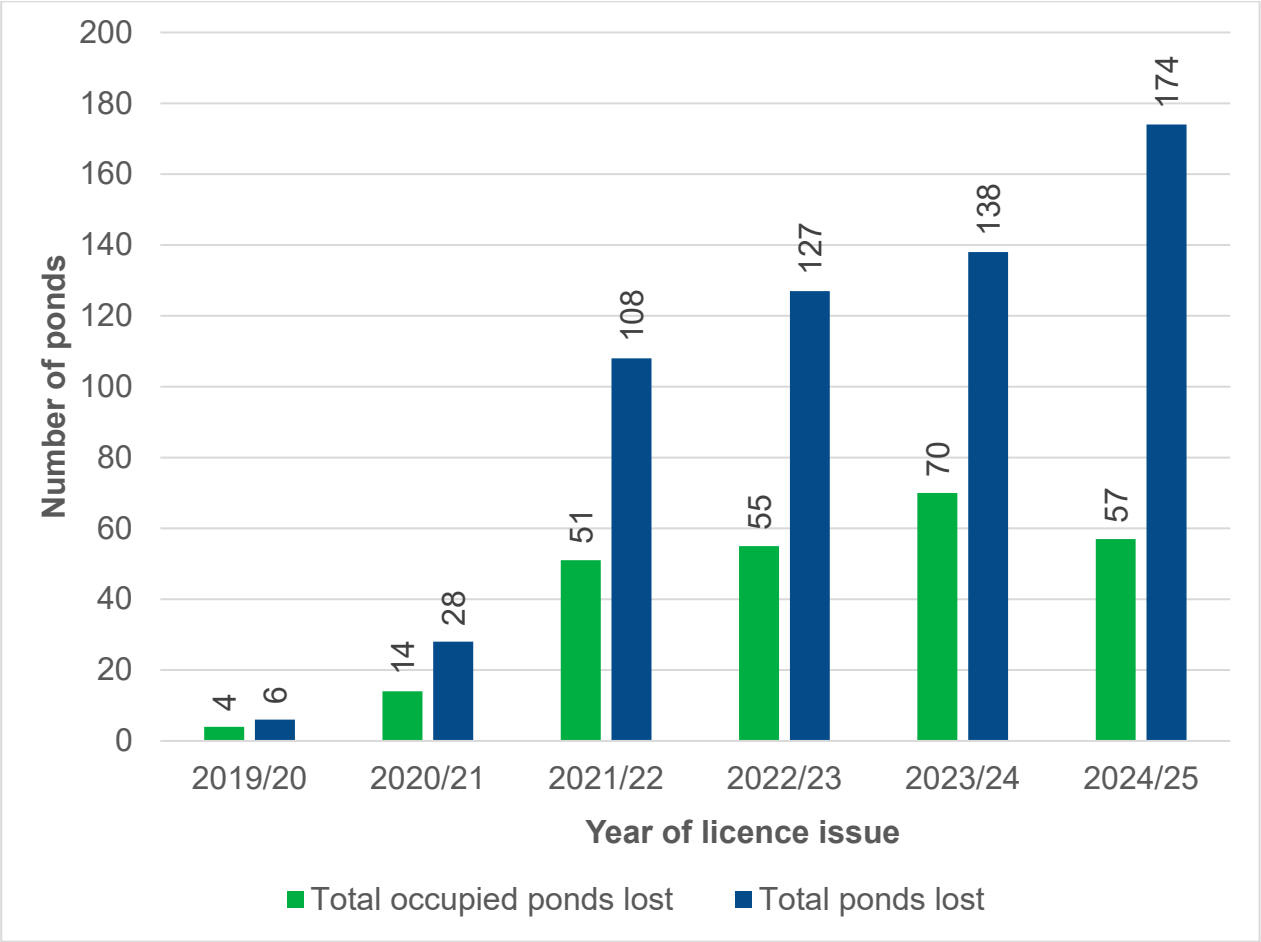

Figure 6. Total ponds lost, and occupied ponds lost, including proportional losses from offsite impacts, per financial year. Pond figures have been rounded down to the nearest whole pond.

Figures 5 and 6 show an increase in the number of ponds impacted year on year. This is likely attributable to several factors; the expansion of DLL into new scheme areas, the increased awareness and uptake of the DLL scheme (see Table 2) and the time lag between initial enquiries and subsequent licence applications, which means enquiries do not appear in impact data until later years.

Net Gain in Ponds

Based on licensed development losses only and using compensation ponds that have been allocated to these developments, there is a net gain of 925 ponds. This is calculated by subtracting 581 licensed on-site pond losses from the 1506 ponds compensating for licensed impacts. The actual net increase is likely to be higher, as in practice it is unlikely that all ponds within red line boundaries are lost, and off-site ponds are not directly impacted and therefore remain in the landscape.

Overall, six compensation ponds have been provided for every occupied pond that has been lost to developments licensed under DLL until the end of the 2024/25 financial year.

When developments with a countersigned IACPC are included (i.e. developments that are committed to enter the scheme) the projected net gain in ponds is 1877.

These figures reflect the benefit delivered by the DLL scheme in contributing to the wider pondscape.

Monitoring Survey Results

Monitoring surveys completed in 2024 comprised Habitat Suitability Index (HSI) surveys and environmental DNA (eDNA) surveys. Across all Natural England-led scheme areas, 2366 ponds were eligible for monitoring, in line with the monitoring schedule.

HSI Survey Results

Of the 2366 eligible ponds, HSI surveys were successfully completed on 2342 in 2024. The remainder were either dry at the time of survey or inaccessible at the time of survey. Of the surveyed ponds, 75% achieved a HSI score of 0.7 or above, indicating good or excellent suitability for GCN.

Figure 7 below shows the HSI survey results broken down by the year in which the pond was delivered. It shows that most ponds achieve high suitability within two years and that this suitability is maintained over time. The proportion of good or excellent ponds is over 70% in all delivery years, except for 2018/19. However, the sample size of ponds delivered in this year is small at only 16 ponds, which limits the conclusions that can be drawn from it.

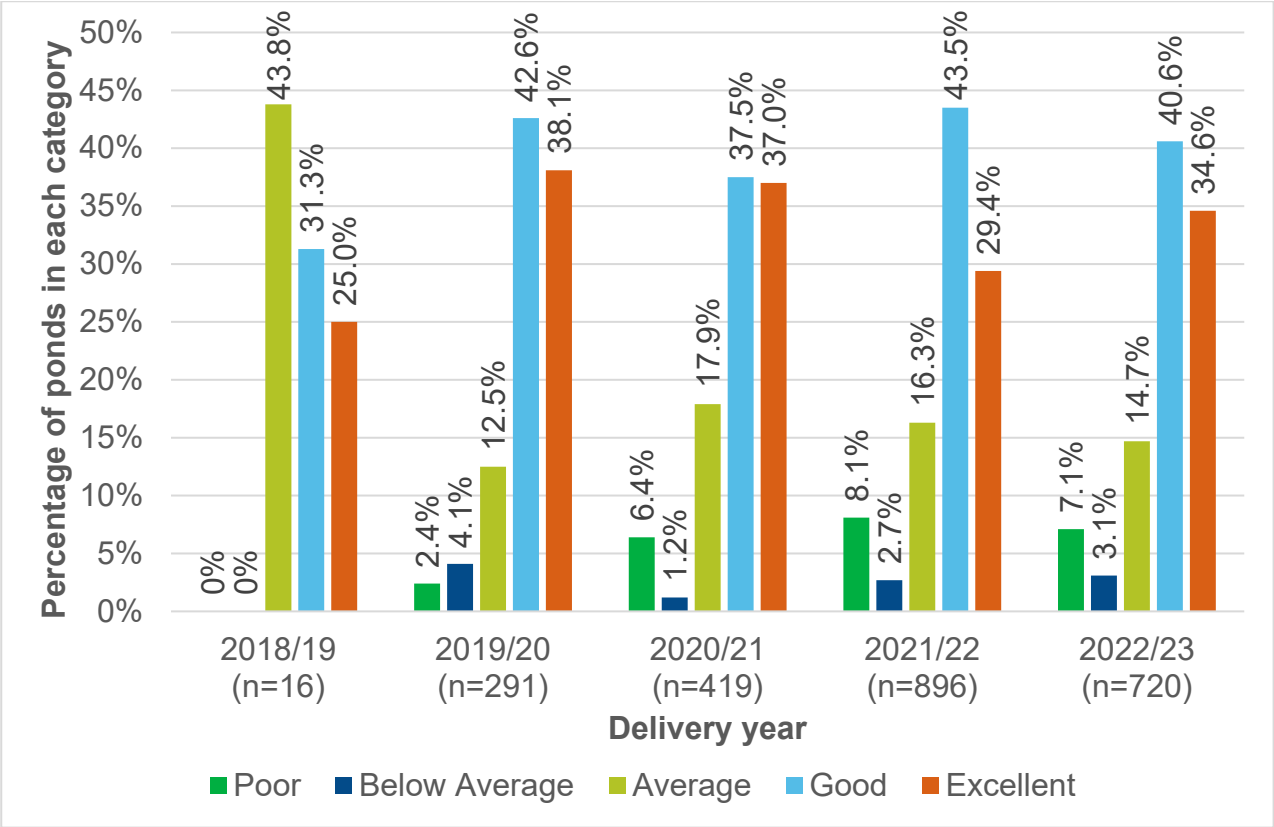

Figure 7. The HSI categories of compensation ponds, split by year of delivery

84% of restored ponds are of high suitability, verses 69% of created ponds. This is expected as vegetation is likely to become established more quickly in restored ponds due to existing seedbanks, which will positively impact the score.

eDNA Survey Results

Of the 2366 ponds eligible for survey in 2024, 127 (5.4%) could not be surveyed as they were either dry or inaccessible. These ponds are listed as having unknown occupancy in Table 6 and included in the overall calculations. The surveys indicate that 28% of DLL compensation ponds that were eligible for survey returned a positive result for GCN presence in the 2024 survey season. Inconclusive results were returned for 3.8% of ponds (89 in total), the reasons for which are unknown.

Table 5 below shows eDNA results split by pond delivery year and therefore the age of the pond, with the youngest ponds at the top.

Table 5. eDNA results from 2024 monitoring surveys grouped by year of pond delivery

Financial Year of Pond Delivered	Present	Absent	Inconclusive	Unknown	Total ponds surveyed
2022/23	26.2%	63.1%	6.2%	4.4%	724
2021/22	28.7%	62.9%	1.8%	6.6%	905
2020/21	31.0%	60.3%	1.9%	6.8%	426
2019/20	28.8%	63.1%	6.1%	2.0%	295
2018/19	25.0%	62.5%	12.5%	0%	16
Total	28.4%	62.5%	3.8%	5.4%	2366

Figure 8 below shows the distribution of presence records from the 2024 surveys by delivery year and SOA. Colonisation rates are higher in core SOAs for ponds delivered in the three most recent years. In ponds that were delivered prior to this and are therefore older, the difference in colonisation rates becomes smaller. This is as expected, as ponds placed in the core are closer to existing populations and therefore colonisation is likely to occur more quickly.

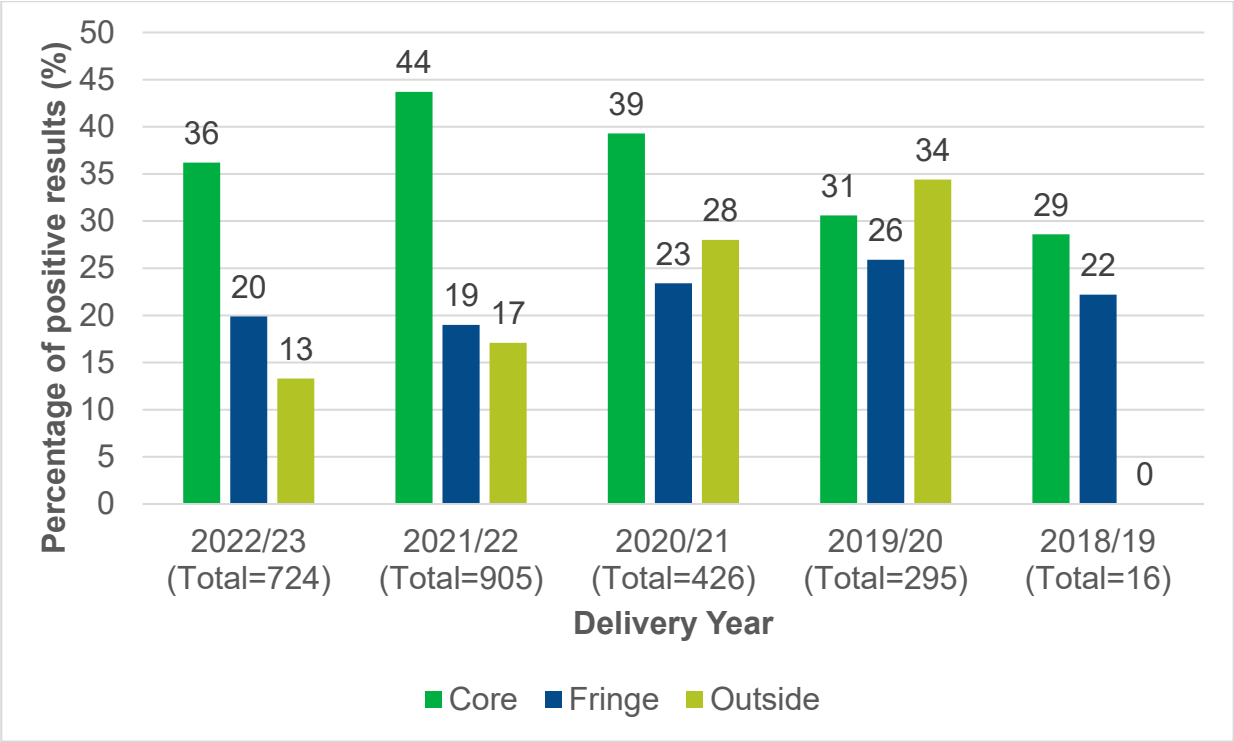

Figure 8. Positive GCN survey results from the 2024 survey season split by the SOA area in which the pond is located and the year of pond delivery

Figure 9 shows the positive records from the 2024 eDNA results split between whether the pond was created or restored and by delivery year. Restored ponds show higher colonisation than created ponds. This is potentially due to the existence of remnant GCN populations in the area, as the species is long-lived, and ponds becoming highly suitable more quickly, as demonstrated by the HSI results. It is expected that over time, the occupancy rate of created ponds will increase, with a general overall increase with pond age shown in the data.

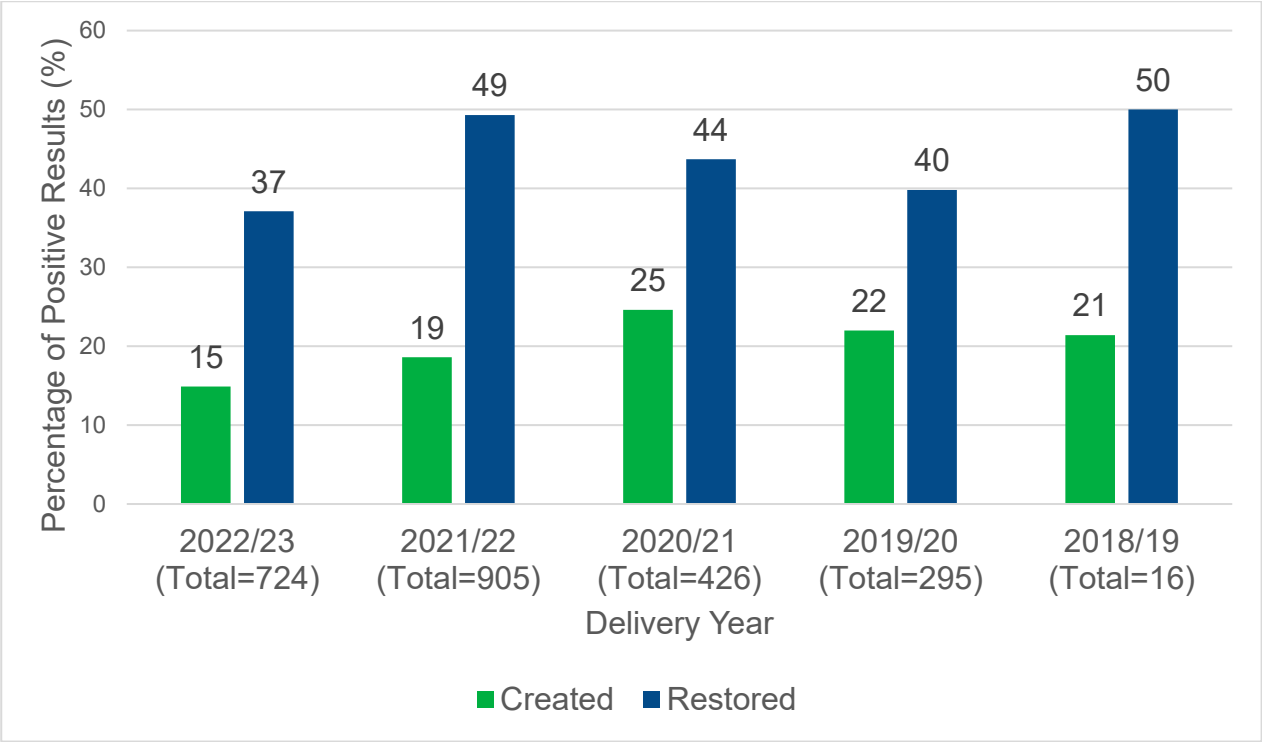

Figure 9. Positive GCN survey results from the 2024 survey season split by whether the pond was created or restored and the year of pond delivery

Pond occupancy and occupied pond gains

The figures above only show the eDNA results of ponds during the 2024 survey season. Due to natural variation in GCN pond occupancy between years (Ewald and Carter, 2024), DLL defines a pond as occupied if it has a positive eDNA record from the last five years. As many ponds have not yet reached their fifth monitoring year, current figures are based on fewer than five-years of data.

Using this definition, 37% of DLL compensation ponds are considered occupied to date. Table 6 compares the 2024 eDNA survey results, background occupancy levels from the baseline surveys to inform the DLL scheme and the five-year occupancy for each scheme area.

Table 6. Comparison of the background occupancy, 2024 compensation pond survey results and five-year occupancy by scheme area. All figures have been rounded to the nearest whole number. * Note: only two ponds in Cumbria had reached their first monitoring year in 2024.

Scheme Area	Background Occupancy	2024 Survey Results	5-year pond occupancy
Cambridgeshire	33%	28%	32%
Cheshire	34%	31%	44%
Cumbria	14%	0%*	0%*
Derbyshire	40%	19%	40%
Essex	47%	27%	36%
Greater Manchester	28%	22%	27%
Hertfordshire	50%	37%	46%
Kent	33%	43%	62%
Lancashire	12%	10%	14%
Leicestershire	39%	30%	35%
Norfolk and Suffolk	32%	45%	49%
Northeast Yorkshire	26%	17%	19%
Northwest Yorkshire	17%	12%	13%
Northumberland	18%	10%	10%
Shropshire	40%	31%	34%
Somerset	32%	13%	19%

Scheme Area	Background Occupancy	2024 Survey Results	5-year pond occupancy
Southeast Yorkshire and North Lincolnshire	33%	15%	21%
South Gloucestershire and North Somerset	32%	45%	48%
Swindon and Wiltshire	32%	32%	38%

*Only two ponds had reached their first monitoring survey at the time of the 2024 monitoring season.

The DLL scheme is not designed to achieve 100% occupancy across all compensation ponds, as this would not be a realistic target. Instead, DLL is designed to ensure that the favourable conservation status of GCN is maintained following development. DLL therefore aims to ensure that there is no net loss in the number of occupied ponds because of the impact of developments that use the scheme.

The principals underpinning DLL mean that there will never be a net loss of ponds overall as both occupied and unoccupied ponds lost through development are compensated for. Occupancy in isolation is therefore not a reliable measure of how well the DLL scheme is performing. A more meaningful measure is the net gain in occupied ponds achieved through the scheme.

Up to the end of the 2024/25 financial year, the estimated number of occupied ponds lost to licensed developments, including proportional offsite impacts, is 251. Currently, 638 of the 1506 ponds that have been allocated to compensate for the impacts of licensed developments are occupied. This assumes that the oldest compensation ponds have been allocated first, and ponds are occupied if they have received a positive eDNA result in the past five-years. This equates to a net gain of 387 occupied ponds across England, indicating that the DLL scheme has been successful to date delivering this objective.

Administration

DLL licence turnaround time

The mean and median turnaround times from licence application to licence issue for DLL are shown in Table 7. This includes turnaround times in the financial year of 2024/25 as well as since the launch of DLL.

Table 7. The mean and median turnaround times (from application received to licence issue, excluding the invoicing time) for new applications within the financial year of 2024/25 (n=180) and new applications from the launch of DLL to the 31st of March 2025 (n=795)

Time period	Mean turnaround time (working days)	Median turnaround time (working days)
DLL launch (February 2019) to 31st March 2025	15	13
2024/25 financial year	17	16

This increase in turnaround time in 2024/25 can be attributable to reasons such as an unavoidable temporary decrease in staff resource (e.g. sickness/phased returns, staff turnover), an increased number of complex cases and an increase in time spent on DLL scheme improvement.

Staff input into the DLL Scheme

Table 8 below provides the Full-Time Equivalent (FTE) required to operate DLL in 2024/25. To note, and as further detailed in the methodology, the FTE detailed in Table 8 only includes core-delivery work within DLL. The FTE therefore does not include all work carried out by the DLL team, as this ensures an accurate reflection of the FTE required only to operate the DLL scheme.

As DLL is an operational scheme, the core-delivery work includes processing and issuing the licences as well as operating the wider aspects of the DLL scheme, such as writing and reviewing the DLL scheme area strategies and managing habitat delivery.

Table 8. The FTE relating to 'core-delivery' work within DLL, for the financial year of 2024/25.

DLL work area	FTE required
DLL core-delivery FTE	19.79

DLL income and expenditure

Table 9 below details the total income of DLL from the enquiry fees, licence fees, conservation payments and Discretionary Advice Services in the financial year of 2024/25. Furthermore, Table 10 below provides the total expenditure on pond delivery, monitoring, maintenance, remediation, NE costs for DLL licensing and scheme delivery, and organisational oncosts in the financial year of 2024/25. Table 10 also includes a row for the provision of long-term DLL obligations; this includes pond monitoring, maintenance and any remediation work required across the next 25-years, future scheme area strategy reviews and impact assessments, and evaluation. It should be noted that although most of the expenditure and income is based on fixed payments or fees, there are occasions when the DLL team engage in bespoke arrangements such as buying a bulk number of ponds, this results in a difference in the expenditure compared to the number of ponds created.

Table 9. A breakdown of the elements that are included within the income of DLL, as well as the total income of DLL, within the financial year of 2024/25

Stage	2024/25 Income exclusive of VAT
Enquiry Fee	£289,932
Licence Fee	£116,290
Conservation payment	£8,478,293
Discretionary Advice Service	£1,628
Total income 2024/25	**£8,886,143**

Table 10. A breakdown of the elements that are included within the expenditure of DLL, as well as the total expenditure of DLL, within the financial year of 2024/25

Work	2024/25 Expenditure exclusive of VAT
Pond delivery	£3,210,355
Pond monitoring	£780,499
Pond remediation	£65,021
Pond maintenance	£12,747
NE costs for DLL Licensing and Scheme Delivery	£1,458,285
Organisational oncosts	£463,572
Total expenditure 2024/25	**£5,990,479**
Provision for long-term DLL obligations	£2,895,664
Total expenditure 2024/25 + provision for long-term DLL obligation	**£8,886,143**

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Biggs J., Ewald N., Valentini A., Gaboriaud C., Griffiths R.A., Foster J., Wilkinson J., Arnett A., Williams P., and Dunn F. 2014. Analytical and methodological development for improved surveillance of the Great Crested Newt. Appendix 5. Technical advice note for field and laboratory sampling of great crested newt (Triturus cristatus) environmental DNA. Freshwater Habitats Trust, Oxford.

Ewald N. and Carter A. 2024. Monitoring background trends in great crested newt conservation status in England: Survey Results 2015-2023. Freshwater Habitats Trust, Oxford.

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Glossary

Term	Meaning used in this document
Background Occupancy	The likelihood that a species is present in an area, independent of any conservation measures
Compensation pond	Habitat created or restored in advance of development, to support GCN, within targeted Strategic Opportunity Areas (SOAs).
Developer	Customers who make an enquiry or application through DLL, such as housebuilders, and utility and transport infrastructure operators.
District Licensing (DL)	A strategic licensing scheme for GCN operated by NatureSpace Partnership and regulated by Natural England.
District Level Licensing (DLL)	A Natural England-led scheme taking a landscape-scale approach to GCN licensing, targeting habitat creation and restoration where it will be of most benefit to the species.
DLL/DL Provider	Natural England, NatureSpace Partnership, Local Planning Authorities, or other organisations who implement a DLL/DL scheme.
eDNA	The genetic material released into the environment by living organisms.
Evaluation	A point-in-time assessment typically to assess the achievement of the high-level objectives of a programme.

Term	Meaning used in this document
Full-Time Equivalent (FTE)	A unit of measurement that is standardised to equal the number of hours worked by the typical full-time employee (37 hours).
Habitat Delivery Body (HDB)	Not-for-profit organisations which create, restore, monitor and maintain the DLL ponds.
Habitat Suitability Index (HSI)	A numerical scoring system to determine habitat suitability. In this case, it is evaluating the general suitability of a pond, as a potential habitat for GCN.
Impact Assessment and Conservation Payment Certificate (IACPC)	The certificate issued by Natural England that is signed and countersigned to confirm acceptance of a development for licence through DLL.
Landowner agreement	An agreement with landowners who offer land for the creation/restoration of ponds, allowing Natural England to have periodic access to the ponds for 25-years of future monitoring and maintenance.
Monitoring	The ongoing collection of project or programme data, to fulfil a defined purpose.
Net gain	A measurable overall increase.
Polymerase Chain Reaction (PCR)	A laboratory technique for making many copies of a specific segment of DNA.
Risk Zones	Mapped areas that indicate likely impact of development on great crested newts. They are used in the calculation of compensation and eligibility to enter DLL.

Term	Meaning used in this document
Scheme Area	An area of England where DLL is currently operating.
Species Distribution Modelling	A geospatial analysis approach to estimating GCN distribution and habitat.
Strategic Opportunity Areas	Mapped areas identified as having potential for new ponds to be colonised by great crested newt ponds.
Strategy	Strategies for each 'scheme area' are developed through assessing the impacts of proposed developments on the distribution and colonisation of GCN and outline any specific compensation requirements.

Appendices

Appendix 1: Habitat Creation and Restoration Guidance

Appendix 1

Habitat Creation and Restoration Guidance - District Level Licensing for great crested newts

Delivering habitat compensation through pond creation and restoration
Optimal habitat can be delivered through a combination of creating new ponds and restoring existing ponds. Only ponds which are currently unsuitable for great crested newts (GCNs) are eligible for restoration under District Level Licensing (see 'Restoring Suitable Ponds' below). Pond creation/restoration will be targeted within Strategic Opportunity Areas (SOAs) which will maximise their potential for colonisation by GCNs.

Characteristics of ponds suitable to support GCN
GCNs prefer small to medium sized breeding ponds, with smaller ponds especially used where they occur in clusters. Breeding ponds should support aquatic vegetation for egg laying, but there should be open, less vegetated areas within the pond to allow adult males to display in clear view of females. In addition, ponds that lack significant shade on the southern margin are preferred.

Ponds will be created/ restored to achieve the following characteristics:

- Surface area between 150m^2 and 1000m^2;
- Maximum central depth of 1m (exceptionally up to 2.5m for the largest ponds);
- Variable bank gradients of 1:10, or ideally 1:20;
- A range of depths across the pond;
- Occasional drying out is not a problem, however the pond must hold water throughout at least one summer in every three years;
- Substantial cover of submerged and marginal vegetation (about 66% submerged plant cover and 25% to 50% emergent/floating vegetation cover);
- Areas of open water to facilitate courtship behaviour;
- Located in areas of good quality terrestrial habitat;
- Terrestrial buffer zone of *at least* 3m around each pond (see below);
- Abundance of invertebrate prey;
- Ponds in clusters (within 250m generally), rather than in isolation;
- Absence of shading on the south side;
- Absence of fish;
- Absence or low density of waterfowl;
- Good water quality, with negligible run-off from agriculture and roads.

Buffer zones
Terrestrial buffer zones of ***at least*** three metres are required around both created and restored ponds. In addition, suitable habitat such as woodland, hedgerows or rough grassland must be present within close proximity (approx.50m) to ponds. Connectivity features must be present between the pond and suitable habitat to allow GCN to move freely and safely through the landscape. Defunct hedgerows should rarely be considered suitable connecting features but wide, intact hedgerows may be considered suitable.

The buffer must be expanded where there is a risk of nutrient run-off and/ or where a larger buffer is required to provide habitat features not present in close proximity to the pond. Where not directly adjacent to suitable terrestrial habitat, an additional grassland

margin (ideally at least 10m) should be allowed to establish around the pond. A mosaic of habitats should be allowed to develop within the buffer around ponds, including a proportion of scrub and diverse grassland with tall grasses. Buffers zones will:

i) Ensure suitable terrestrial habitat surrounds every pond (to increase the suitability of each pond for GCNs and encourage colonisation);
ii) Buffer and reduce nutrient run-off to each pond (an important consideration, especially where ponds are sited within arable farmland);
iii) Be expected to contain at least two GCN hibernacula comprising combinations of piles of uncontaminated rubble, rocks, logs and pond arisings that include plenty of fissures within the sediment. Such features must be created following appropriate guidelines, for example the Great Crested Newt Mitigation Guidelines (English Nature, 2001).

Buffer zones must be fenced if ponds are in areas subject to one of the following:

i) Heavy grazing (to avoid the impacts of uncontrolled grazing or poaching by livestock. Light grazing is acceptable and can be the optimum management for GCN ponds);
ii) Public access or likely impacts by dogs;
iii) Potential encroachment from agricultural practises (fencing demarcates each pond and its buffer to avoid cultivation up to pond banks).

The Habitat Delivery Body will make an evidence-based decision on whether to fence the buffer zone subsequent to discussing the aforementioned with the landowner. This will consider both current land use and also potential for future change in use which may impact requirements.

Where to create or restore ponds

Ponds must be located where they can be quickly colonised by GCN and with good connective features to enable this. Ponds must be located within 250m (if in a core zone) or 500m (if in a fringe zone) of each other, or of an existing pond, with no barriers to prevent GCN dispersing between the ponds. Barriers can include major roads, rivers, canals, or built up areas without gardens/green space. Creation and restoration of ponds must be targeted within SOAs, and a review of existing GCN records can inform the targeting of ponds in close proximity to known populations.

Ponds must be created/restored within areas of existing good quality terrestrial habitat e.g. woodlands, hedgerows, scrub or rough grassland. High levels of human or animal disturbance, agricultural or road run-off and significant shading from surrounding trees must be avoided. Light grazing can be beneficial, as it can prevent trees and dense emergent vegetation invading and shading the pond. However, grazing must be closely monitored to prevent overgrazing of surrounding terrestrial habitat, livestock stirring up sediments, increasing nutrient loads, preventing macrophyte growth and disturbing breeding GCN. Public access is best avoided, as it increases the risk of introduction of unwanted species, in particular fish, which are a significant threat. Areas which flood should also be avoided as this risks the introduction of fish to the pond.

Ponds will be created/restored in close proximity to existing ponds and will therefore likely be colonized quickly by aquatic vegetation. Plants or any other species should not be introduced to ponds as this risks the arrival of invasive species. Non-native plants and fish must not be introduced to ponds and use of ponds by wildfowl must not be encouraged by feeding etc.

Ponds creates or restored on/ near Sites of Special Scientific Interest (SSSI), Special Protection Areas (SPA) or Special Areas of Conservation (SAC) must receive necessary consents and/ or be subject to Habitats Regulations Assessment (HRA) screening where necessary.

The SOAs identified for delivery of compensation ponds exclude and buffer all European sites: SACs and Ramsar sites are buffered by 100m and SPAs are buffered by 500m. These buffers demarcate the zones of influence for the protected sites. No pond compensation works will occur on these protected sites, or within their buffers, unless in exceptional circumstance (see above).

Creating new ponds

Pond creation should be undertaken in areas where ground conditions are suitable to hold water and where ponds will not receive polluted run-off. Ponds filled by rain or ground water are preferable and test holes may be used to determine the potential of a site to hold water. Ponds should be designed to have gently sloping sides, an irregular shape and a range of depths.

Excavation of spoil may be undertaken via use of a tracked 360 excavator or similar and the base and sides of the pond should be left with a rough surface following excavation. The subsoil arising from digging new ponds can be used to level up pond edges on sloping ground. Where the pond is reliant on surface water to remain wet, any spoil mounds must allow surface water to flow into and fill the pond. Any spoil must be carefully placed to avoid subsidence and sediment run-off into the pond.

Excess spoil may be combined with other materials such as clean rubble to create shelter/ hibernation sites for GCN, with cracks, fissures and, in time, small mammal burrows and a habitat mosaic. Topsoil *must not* be added to or placed at the edge of ponds or their banks to avoid compromising water quality.

Where ponds are created in areas with public access, a sloping profile which avoids any sudden changes in depth is recommended. However, it is advisable to prevent or constrain public access to ponds (see Pond Creation Toolkit – reference at end).

Pond creation can be undertaken at any time of year, but particular care must be taken to avoid impacts on protected species. For example, in many situations pond creation may be most suitable in spring/ summer when the land is drier for access and great crested newts are likely to be in nearby ponds. However, each situation will have its own constraints and therefore timings and methods of works should be considered on a case by case basis.

Pond creation works must not be undertaken in areas which support invasive non-native plant species. Works must avoid impacting protected habitats and species, or those listed under Section 41 of the NERC Act 2006 (Priority species & habitats).

Restoring existing ponds

Selecting ponds for restoration

Overgrown and silted-up ponds that are *no longer suitable for GCN* are eligible to be restored. Ponds eligible for restoration must:

- NOT currently be suitable to support GCN;
- Be either overgrown with scrub and trees, or;
- Be entirely dominated by plants such as reedmace *Typha latifolia* and common reed *Phragmites australis* with no or minimal water;
- Have a base of thick black anaerobic sediment covered by no or minimal water;
- Be located close to existing suitable terrestrial habitat;
- NOT be fed by pipes and ditches that drain arable fields. In this respect spring-fed ponds with no inflows, or ponds fed by ditches that drain non-improved meadow land or woodland are ideal;
- NOT support highly valuable trees or protected/ priority habitats or species;
- NOT support invasive non-native species.

Silted-up ponds may no longer be obvious and may be entirely dominated by scrub or trees growing within and around them. Those with black anaerobic sediment may be covered by a layer of leaf litter and dead tree branches. A thorough investigation of a pond is necessary before restoration so that any works avoid the destruction of valuable trees and interesting plant communities. For example, a pond with mature oak or elm trees on its south side is highly unsuitable for restoration. Where it is suitable to fell trees, a check to ensure they are not subject to a tree preservation order should be made. The overall strategic aim in selecting ponds to restore is to have a landscape of ponds that are at different successional stages including open ponds with few trees and lots of aquatic plants, some more overgrown ponds and some ponds in-between. Thus, not all ponds should be restored within a landscape.

Undertaking restoration works

The optimal timing for pond restoration is between the *start of September and the end of January* as this period avoids the breeding seasons for amphibians and scrub nesting birds. September and October are the ideal pond restoration months due to low water levels and dry ground conditions that allow ease of working. Ponds restored earlier in the autumn also benefit from subsequent rain over the winter, which re-fills the pond. Another consideration with regards to the timing of restoration works is to minimise impact on surrounding farmland. Close and thorough liaison with the landowner and farmer will ensure works are undertaken at the most appropriate time. Key considerations for different stages of the pond restoration process are given below:

- **Tree and scrub removal** - Ideally trees and scrub should be cleared from the south and west sides of a pond with some tree and scrub cover left to the north and east. This mimics old pond management practices and allows a newly restored pond to receive sunlight, thus stimulating the growth of aquatic plants. Exceptions should be made to this rule, however, where the north side of a pond is an existing hedge, or where this approach would damage existing high-quality habitats. Mature oaks and other valuable trees and important plants should not be removed. Do not pull out tree stumps that are embedded in the slopes that make up the banks of the pond. This destroys the banks and exposes subsoil. Do not remove all trees and scrub from the pond. In particular it is desirable to leave some patches of scrub such as bramble which provides good cover and foraging habitat next to ponds. The use of

herbicides to control aquatic plants and bankside vegetation will only be allowed in exceptional circumstances and with prior approval.

- **Tree and scrub disposal** - Piles of brash and larger cut wood pieces should be retained on site to provide cover and over-wintering habitat for amphibians.
- **Sediment removal** - removal of sediment from a pond is necessary if the pond bed is dominated by organic sediments (eg. rotting leaves) making it inhospitable to aquatic plants. Sediment can be removed using a tracked 360 excavator or similar. To have a major beneficial effect, aim to remove sediment from at least 1/3 to 2/3 of the pond's area. Avoid removal of underlying clay and do not cut deeper into the bed or banks of the pond or change the natural dimensions of the pond. Note that many ponds are very old and so need to be treated as valuable historic features. It is good practice to contact your local Historic Monuments officer prior to restoration to check for any known archaeological interest at your pond site. Excavated surfaces should be left rough which improves plant colonisation. If silt layers rich in plant debris and/or water snails are revealed this is often a good time to stop as it means that old seedbanks have been located – the seeds of many aquatic plant species will still be alive and can often bring important species back into the ponds, especially stoneworts and pondweeds.
- **Sediment disposal** - The ideal place to put the sediment is on a nearby field where it can be subsequently spread (but will not lead to nutrient enrichment/ sedimentation of the pond). Dredgings and spoil must not be used to fill in or level adjacent wet areas or be placed on top of any areas of archaeological or ecological importance such as agri-environment margins, or wildflower-rich areas. Before disposing of silt excavated from ponds please refer to 'Waste exemption: U10 spreading waste to benefit agricultural land' on the www.gov.uk website.

Note: For further guidance on the restoration of lowland farmland ponds based on University College London research please refer to the 'Restoring Norfolk Ponds' guidance leaflet on the Norfolk Ponds Project website. In addition, to help judge whether a pond is suitable for restoration, please refer to the 'Restoring Ponds decision tree' on the *Freshwater Habitats Trust*'s Flagship Ponds website.

Other considerations for pond restoration/creation works

Pond creation/ restoration must avoid damage to existing priority habitats/ species. Existing habitats should be enhanced and not replaced by the creation of new ponds and impacts may be reduced by locating ponds within large single species stands or uniform habitats.

Habitat creation or enhancement for GCN does not override other environmental legislation, and due care must be exercised in order to avoid breaching legislation or impacting protected or priority species and habitats during works. This may mean using reasonable avoidance measures, sensitive working practices or re-designing the scheme. Further advice as to the likely presence/ absence of protected or priority species and mitigation/ licensing requirements should be sought if required.

Works which may result in adverse impacts on archaeological sites, historic features or designated landscapes must not be undertaken without prior consultation with a relevant specialist.

Careful consideration should be given to ensure run-off of silt or other pollutants does not occur as a result of the proposed works, including from any spoil deposits.

Be aware that permissions from various bodies may be required before ponds can be created, for example:

- Environment Agency – please consult if the site is within close proximity to a main river, drain or floodplain, and/or if a waste transfer note (licence) is needed to remove spoil from the site.
- Natural England and/ or Rural Payments Agency – It is possible for a pond to be sited on land that is in an Agri-Environment Scheme (Countryside Stewardship or Environmental Stewardship Schemes) or on land within the Basic Payment Scheme. However, it remains the responsibility of the Agreement holder to check what effect, if any, pond creation/ restoration may have on their schemes.

Do not allow land under an environmental agreement to be levelled, infilled, used for the storage or dumping of materials or used by motor vehicles or machinery (except where necessary for the management of the land), if this is likely to cause long-term damage from rutting or compaction of the soil, or otherwise damage areas being managed under the scheme.

A check may also be required in relation to Basic Payment Scheme claims and ineligible areas.

- Planning authorities – enquire with the local planning authority as planning permission may be required for new ponds.
- AONB's – Areas of Outstanding Natural Beauty and landscape character should be considered with further consultation undertaken if required.
- Utility providers - An inspection for the presence of overhead and buried services such as cables or pipelines should be undertaken to ensure these are not be impacted as part of the proposed works. A further check with the relevant providers should be undertaken if there is any doubt.

Further information

For further advice on pond creation and restoration, please refer to:

- The website of the UCL Pond Restoration Research Group - https://www.geog.ucl.ac.uk/research/research-centres/pond-restoration-research
- Froglife's GCN Conservation Handbook – http://www.froglife.org/wphttp://www.froglife.org/wp-content/uploads/2013/06/GCN-Conservation-Handbook_compressed.pdfcontent/uploads/2013/06/GCN-Conservation-Handbook_compressed.pdf. In particular *Table 1 Pond restoration and construction: some common factors to consider* may be useful to review when planning pond works.
- ARC's Amphibian Habitat Management Handbook – https://www.arc-trust.org/habitathttps://www.arc-trust.org/habitat-management-handbooksmanagement-handbooks
- Pond creation toolkit - https://freshwaterhabitats.org.uk/projects/million-ponds/pondhttps://freshwaterhabitats.org.uk/projects/million-ponds/pond-creation-toolkit/creation-toolkit/

www.gov.uk/natural-england