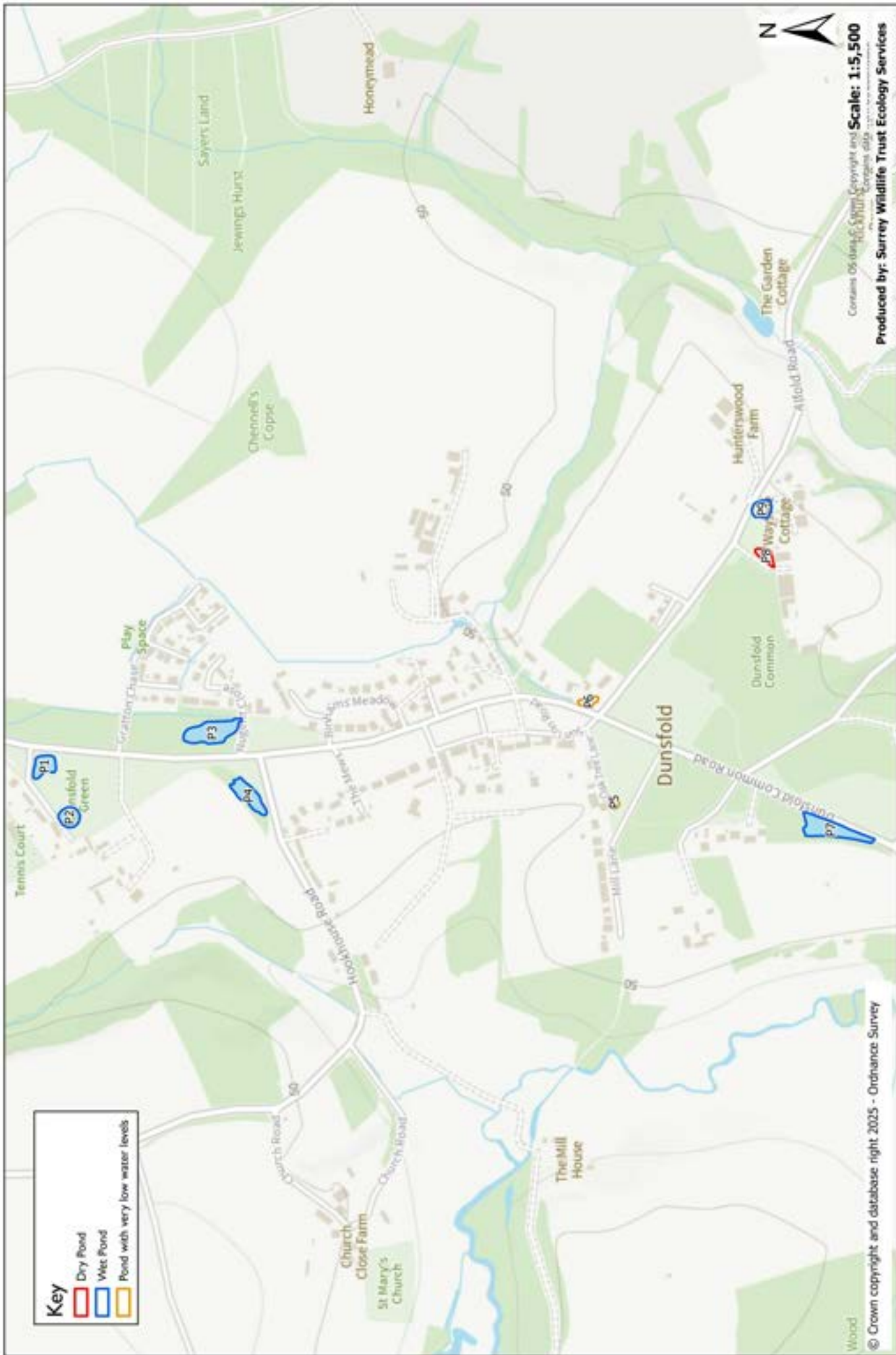


Table 1: Project overview

Project type	Management Plan
Site name	Dunsfold Common Ponds
Landowner	Registered common land owned by Waverley Borough Council
Land manager	Dunsfold Parish Council and Waverley Borough Council's Countryside Section
Responsible person/organisation for creating or enhancing the habitat	Dunsfold Parish Council and Waverley Borough Council's Countryside Section
Period covered by this management plan	Ten-year management plan, with a phased approach, with management of first ponds starting in 2026 and the final ponds in 2029.
Planning authority	Waverley Borough Council
Required consents and licences	Some activities may require consultation with Natural England owing to the presence of great crested newt and Habitats of Principal Importance (HPI) woodlands and HPI pond.

Figure 1: Site context plan



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 Produced by: Surrey Wildlife Trust Ecology Services



Figure 1:
Dunsfold Pounds
Site Context Plan

Created By:JW
 Map Revision Number:1.1
 6301, 08/07/2025

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Figure 2: Ponds 1 and 2

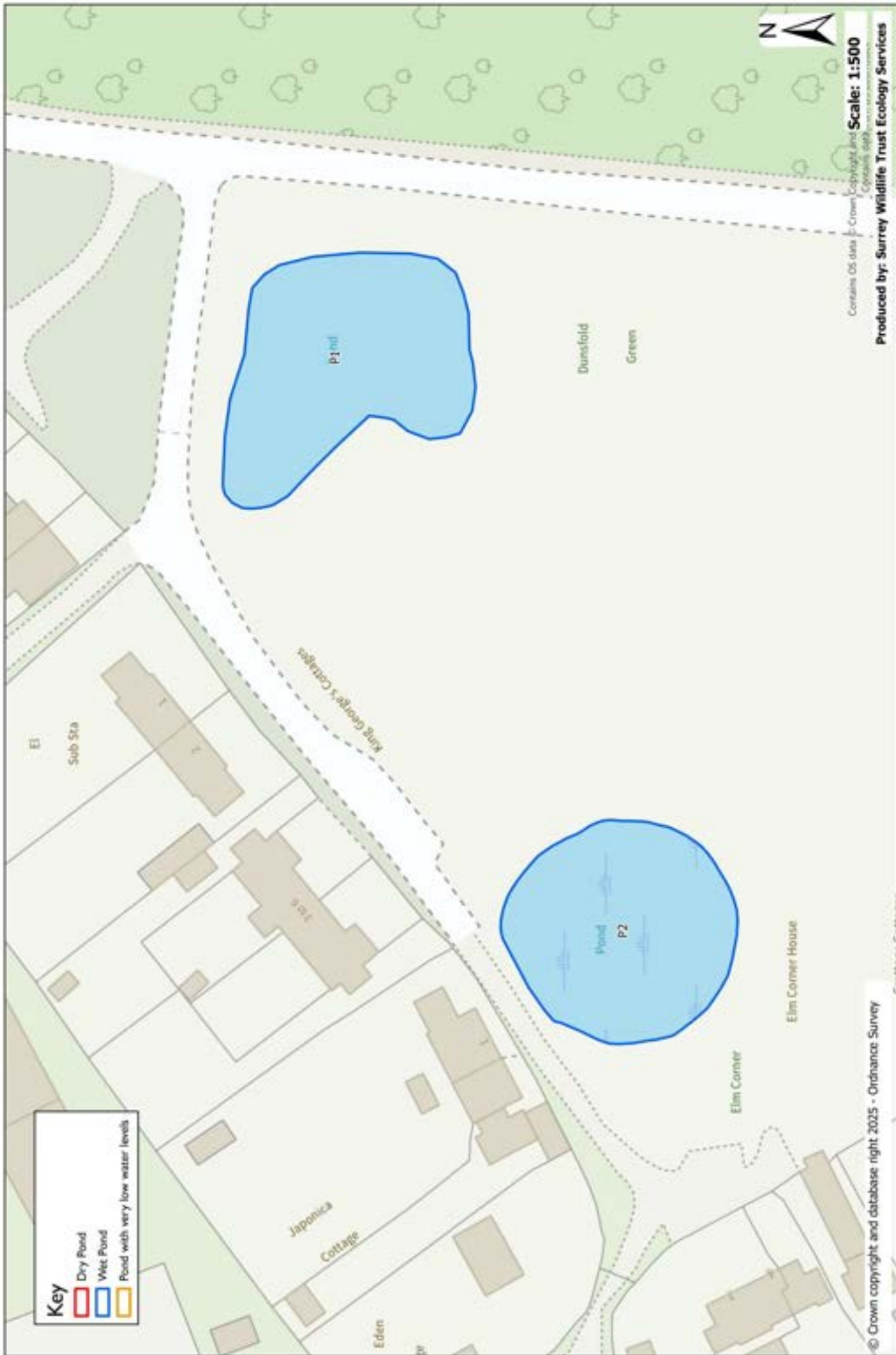


Figure 3: Ponds 3 and 4

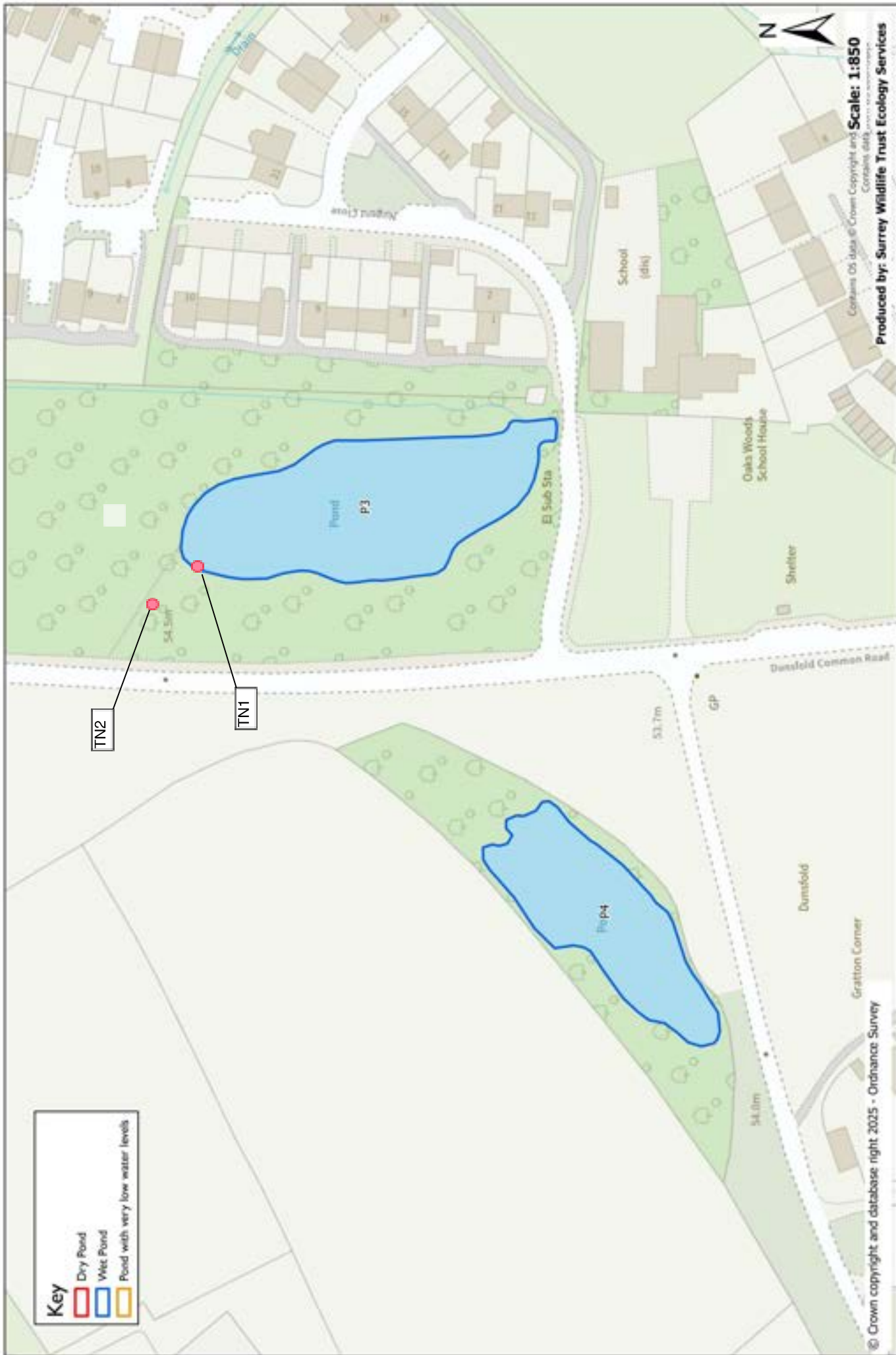


Figure 4: Ponds 5 and 6



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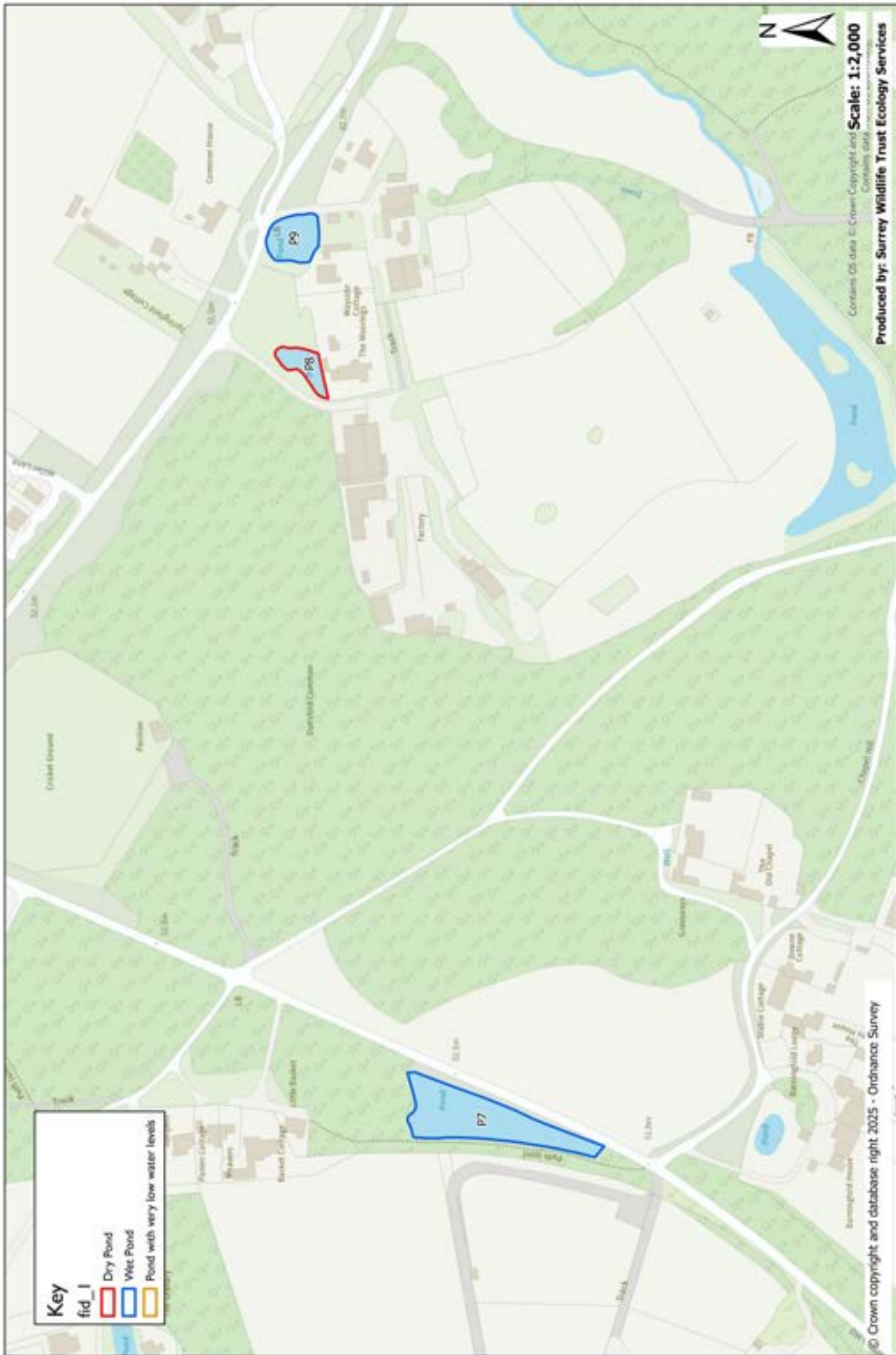


Figure 4:
Ponds 5 & 6

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Figure 5: Ponds 7, 8 and 9



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**Figure 5:
Ponds 7, 8 & 9**

Figure 6: Ponds 1 and 2 Management Measures



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**Figure 6:
Ponds 1 and 2
Management Measures**



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Ecology Services

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Figure 7: Ponds 3 and 4 Management Measures



**Figure 7:
Ponds 3 and 4
Management Measures**

Figure 8: Ponds 5 and 6 Management Measures

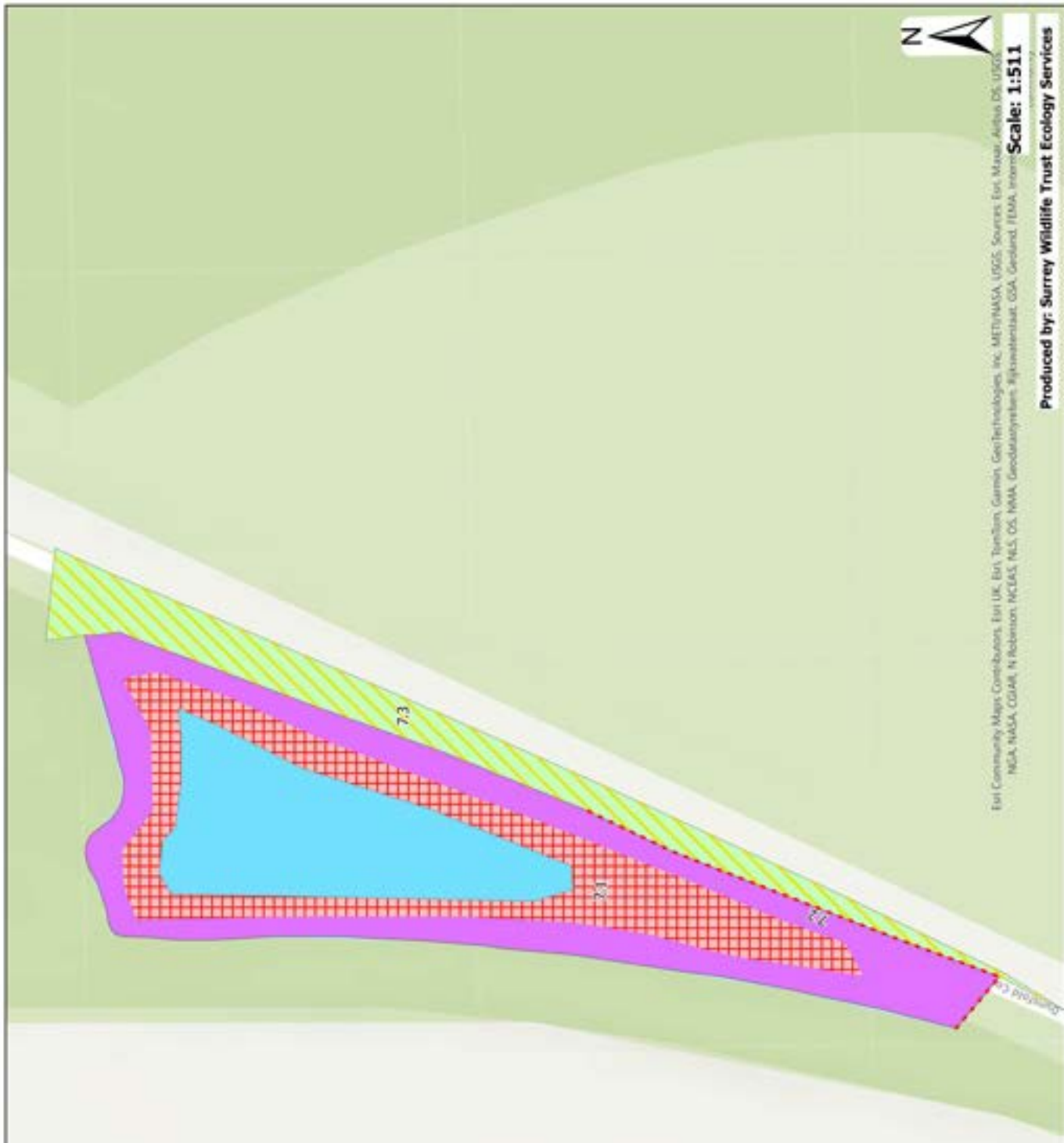


Figure 8:
Ponds 5 and 6
Management Measures

Figure 9: Ponds 7 Management Measures

Key

- Linear Feature
- Reduced mowing regime
- Vegetation removal
- Aquatic Marginal Vegetation
- Open Water



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Figure 9:
Pond 7
Management Measures

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 6301, 11/08/2025

Figure 10: Ponds 9 Management Measures

Introduction

Background

To avoid impacts to ponds that are situated close to each other at the same time, this management plan will be delivered in a phased approach. Recommended phasing is given in Table 2 below.

Table 2: Project overview

Start year	Pond reference*
Year 1	Pond 1 and Pond 5
Year 2	Pond 4 and Pond 7
Year 3	Pond 2 and Pond 6
Year 4	Pond 3 and Pond 9 (fish removal from pond 3 can commence in Year 1, or as soon as is possible)

*Pond 8 is dry and not included

Plan area

The management plan area is presented in Figure 1 and is focused on eight ponds spread across 1.3km within Dunsfold Common. The common lies in the southeast of Surrey approximately 8 km southeast of Godalming in National Character Area 121 Low Weald and Pevensey. It is a linear mosaic of grass, scrub, pond and woodland habitats typical of much common land found in Surrey. The grassland is bordered in many places by tracks, roads and houses and is highly fragmented with patches varying in size from a few square metres to several hectares. The common is notable for having ponds, some of which were probably were historically dug for livestock, brick pits or gravel pits.

Past and existing management

The common was originally owned by the Manor of Wintershall, with commoners' rights for grazing exercised by local residents. The woodlands adjacent to the common were managed by coppicing. Commoners' rights have not been exercised since 1956 and the common has been used as a village green. Further areas of woodland have developed due to the cessation of grazing, evident by the relatively even age and structure of the trees. More recently, habitat management has been carried out by Waverley Borough Council's Countryside staff and by Dunsfold Parish Council, which has a management agreement from the Borough Council. Some woodland understorey thinning has occurred. The grassland was managed for hay cutting. Some of the ponds are managed more intensively than others and as a result each pond has its own character. The ponds which are closer to the village centre have less marginal vegetation than those further away. Dunsfold's Village Design Statement (2001) recommends retaining a rural feeling of open space amongst the common, by controlling tree planting on open areas. It also recommends planting indigenous species only and avoiding inappropriate urbanisation of the area around and including Dunsfold Common.

Roles and responsibilities

Roles responsible for delivering this management plan are detailed below.

Table 3: Roles and responsibilities

Role	Responsibilities	Organisation	Dates responsible
Ecologist	Surveys to inform management plan	SWT Ecology Services/TBC	May – September 2026
Landowner	Ensuring compliance with the relevant environmental legislation and consents, objectives, targets and the management plan	Waverley Borough Council	2026-2039
Land manager or management organisation	Ensuring compliance with the relevant environmental legislation and consents, objectives, targets and the management plan	Dunsfold Parish Council and Waverley Borough Council's Countryside Section	2026-2039

Legislative framework, consent and licences

All projects need to comply with relevant environmental UK legislation, as detailed in Appendix 1. It is the responsibility of the organisation delivering the management plan to ensure they comply all legislation, including non-environmental legislation such as the Health and Safety Act 1974. Appendix 7 provides information on when management measures can be undertaken to minimise impacts on protected species, and species of conservation concern.

The proposed management measures may require specific consent or mitigation licences or to proceed with the management plan lawfully, and consultation with Natural England and Waverley Borough Council may be required for some activities, where this is likely to be required it is highlighted in the management plan (Table 8).

A pond management risk assessment, created by Flagship Ponds was completed for all ponds, with an annotated risk assessment presented in Appendix 6

Baseline environmental information

Methods

The methods and results of the desk study are given in Appendix 2.

The methods and results of the UKHabitat classification survey and habitat condition assessment of the ponds, and the general assessment of surrounding habitats is given in Appendix 3.

The methods and results of the great crested newt Habitat Suitability Index (HSI) assessment, and eDNA surveys are given in Appendix 4.

All surveys have been undertaken by appropriately trained and competent ecologists.

Results

A brief outline of the baseline information considered as part of this management plan is detailed below.

Table 4: Statutory and non-statutory sites to be considered in the Management Plan

Statutory designated sites	None within Zone of Influence (Zol)
Non-statutory designated sites	Dunsfold Common and Green SNCI

Table 5: Habitats of ecological consideration recorded in the desk study

Ancient woodland	None present
Veteran trees	One present within 50m of Pond 5
HPI	HPI deciduous woodland
Waterbodies within 250m	Four ponds and extensive ditch network as well as the eight ponds within the survey area.
Watercourses within 250/500m	Three streams

Table 6: Baseline habitats recorded during the surveys

Broad habitat type	UK habitat classification and code	Pond reference*	Confirmed as HPI¹	Baseline condition
Pond	r1g – 40 (Pond priority habitat)	Pond 1	Yes	Moderate
Pond	r1g – 42 (Pond)	Pond 2	No	Poor
Pond	r1g – 42 (Pond)	Pond 3	No	Poor
Pond	r1g – 42 (Pond)	Pond 4	No	Moderate
Pond	r1g – 42 (Pond)	Pond 5	No	Poor
Pond	r1g – 42 (Pond)	Pond 6	No	Poor
Pond	r1g – 42 (Pond)	Pond 7	No	Moderate
Pond	r1g – 42 (Pond)	Pond 9	No	Poor

*Pond 8 was dry and not included in table

¹ Confirmed through surveys or MAGIC mapping of HPI boundaries

Table 7: Protected species and species of conservation concern considered as part of the Management Plan

Species/Species groups	Summary of desk study and survey results
Invertebrates	All ponds and surrounding habitat have suitable habitat for a range of aquatic and terrestrial invertebrates.
Amphibians	Pond 1 had a positive eDNA result and great crested newt are confirmed present. Ponds 2, 5, 6 and 9 had an inconclusive eDNA results and great crested newt are considered potentially present. Ponds 3, 4 and 7 had a negative eDNA result and great crested newt are considered likely absent. Tadpoles observed in Pond 4 All ponds have suitable aquatic and surrounding terrestrial habitats for common frog, common toad, smooth newt and palmate newt.
Reptiles	All ponds have suitable foraging habitat for grass snake, and surrounding terrestrial habitat suitable for slow worm, common lizard grass snake and adder.
Birds	All ponds have surrounding habitat with suitability for nesting birds. Some of the ponds themselves have aquatic marginal vegetation that could support nesting bird such as moorhen. Pond 1 has swans nesting, and they regularly forage in Ponds 2 and 3.
Bats	Ponds and surrounding habitat are suitable for foraging and commuting bats. Ponds 3, 4 5, 6, 7 and 9 have surrounding trees that could support roosting bats. There is a veteran tree close to Pond 5.
Hazel dormouse	Ponds 3, 4 and 7 have suitable surrounding habitat for hazel dormouse.
Hedgehog	All ponds have surrounding habitat with suitability for hedgehog.
Other mammals	The larger, permanently wet ponds have suitability for water shrew.

Management Plan

Management prescriptions are detailed below for each habitat type and condition targeted by this management plan to deliver improvements for biodiversity. Relevant post-intervention compartment numbers are presented in Figure 1. The habitats included in the plan include:

- Pond
- Grassland
- Woodland
- Scrub

Management measures

The management prescriptions are detailed in Table 9 below. The guidance and management measures given in this document provide suitable instructions for contractors.

Further assessment is advised of the local hydrology and of the pond linings, to further understand the cause of some of the ponds drying out.

'Pond' 8 was dry at the time of the survey and appears to have succeeded into woodland habitat. Re-instating this area as a pond is not considered a priority in this instance, owing to the abundance of ponds in the locality and as the successional woodland is a valuable habitat in its own right, and as such, no management recommendations have been made for 'Pond' 8.

Table 8: Pond management measures

Pond reference	Management reference	Great crested newt present	Objective	Summary of management measures	Other ecological considerations	Timing of works												Management frequency
Pond 1	1.1		To manage encroaching marginal vegetation and maintain extent of standing open water.	Removal of encroaching vegetation on the pond banks, with removal by hand. Pulling up vegetation by the roots where possible and cutting back with hand tools if necessary. Vegetation removal should focus on fast spreading and common "huggish" species such as burfush. Removed vegetation should be left on the pond banks for 24 hours to allow aquatic fauna to return to the pond, before it is removed from the site. Removal should focus on the northern and southern bank, removing around a metre of vegetation from the extent at the time of the survey, then managing this going forward. Cover of water lily should be monitored and cover should not exceed 30% of the pond surface, if water lily cover exceeds 30% then it should be managed in line with the recommendations set out in 2.2.	When removing plants, around 80% of the marginal and emergent vegetation should be retained to ensure that management does not completely remove any single plant species. Bladder sedge, listed as Vulnerable in England's Red List and as scarce on Surrey's plant register, is present and no more than 20% of this species should be removed from the pond margins in any one management cycle. A swan's nest is present on the pond, which is currently active. To avoid impacts to the nesting swans works should not take place within 5m of this nest, and to avoid impacts to the nesting swans and other nesting birds that may be present (such as moorhen) works should be completed outside of the nesting bird season (March to August inclusive). Works should be completed in winter when amphibians are likely to be absent (November to January inclusive). Great crested newt are present within this pond, and works should be completed in winter when great crested newt are likely to be absent (November to January inclusive).												In first year and then every five years (or more frequently if necessary)	
		Yes	Creation of a separate small pond in the historic extent of the pond, south of the main water body in what is now successional wet grassland.	Creating a small pond can be completed by a group of people by hand. Creating a pond of 4m x 4m (16m ²), would be a good target. The pond should have shallow sloping sides (on at least one edge) to allow access and to create an 'ecotone' between the aquatic and terrestrial habitats. The shallow slope will also encourage amphibians to breed in the rapidly warming water. The top layer of turf should be cut away and saved, and the pond dug by hand to a maximum depth of 1.2m. The excavated soil can be used to landscape a mound on the northern edge of the pond, creating a south facing bank. This can be covered with the previously removed turf (any excess soil and turf can be used to create a hibernaculum, see below). Owing to the local soil conditions, hydrology and historic conditions, the pond is likely to naturally hold water. Water levels should fluctuate annually, and it should dry out annually or every year in three. The pond is unlikely to require any planting and should become naturally vegetated within a year or two.	A small ephemeral pond, of the size discussed is unlikely to require planning permission, but the local authority should be contacted to assess if planning permission is required. Great crested newts are present in Pond 1 and excavation works should be completed with hand tools in spring and early summer months (mid-March to mid-June inclusive) when great crested newt (and other amphibians) are breeding and likely to be within ponds. In the unlikely event a great crested newt (or other amphibian or reptile) is found during pond creation, works should stop immediately, and a suitably qualified ecologist contacted. This pond creation is unlikely to require a mitigation license from Natural England, however they should be contacted and provided any proposals prior to make sure this is the case, and to gather further advice. Following pond creation, vegetation cover of the pond should be managed on five yearly rotations with the hand methods given above for 1.1.											Pond creation in year 1. Once pond is established aquatic vegetation to be monitored and managed as necessary on a five yearly rotation.		
		1.2				Stopping topping up with mains water can be trialled over a period of five years. An updated great crested newt eDNA survey could be completed after this period, to determine if they are present or likely absent from this pond. Fluctuations in water levels can be recorded each year. If the pond dried out one in three years, this can be very beneficial for breeding newts. However, it is understood that this pond is frequently used by a breeding pair of swans and their cygnets and maintaining water levels in this pond throughout the year will benefit the swans. In the five-year trial period, if the pond never dries out, then no addition of mains water should continue. After a five-year trial period, consider update great crested newts eDNA survey to determine if the ponds are being used. Based on eDNA results and weather the pond does dry out in some years, a decision should be made on whether to focus management on swans or amphibians. If it is decided to continue to top up pond water levels then consider using rainwater or dichlorination by allowing the water to sit in a bucket or container for 24-48 hours; allowing chlorine to dissipate; using a dechlorinator designed for ponds or by adding water gradually, avoiding sudden temperature or chemical changes in the pond.												Monitor progress for five years and adjust as necessary.
Pond 2	2.1	Potentially present	Cease topping up water levels with mains water	Cease topping up pond with mains water as it often contains fluoride, chlorine and chloramine, which are added to make it safe for drinking by killing bacteria and viruses. However, these chemicals can be toxic to aquatic life in ponds. Fluctuating water levels in wildlife ponds are not of a huge concern, occasional drying out can also be very beneficial to a range of flora and fauna. This pond appears to be relatively unchanged since 1897, and it is likely that topping up with mains water is not necessary.														

Pond reference	Management reference	Great crested new present	Objective	Summary of management measures	Other ecological considerations	Timing of works												Management frequency
						Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	
Pond 2	2.2		Manage cover of white-water lilies	The cover of white-water lilies was around 40% of the pond surface at the time of the survey, and historic aerial imagery indicates that this cover is increasing. Aquatic vegetation cover of at least 50% (including, emergent, submerged and floating plants (excluding duckweed)) is considered beneficial. Cover of water lilies should be managed so that there is 30-40% cover as long as overall cover including, marginal vegetation is a minimum of 50% of pond surface. Cover can be controlled through: Regular pruning: Remove yellowing leaves and spent flowers by cutting them back to the base, ideally below the water line, to prevent rotting and encourage new blooms. Dividing congested plants: When water lilies become overcrowded and over 40% cover, lift them from the pond and rinse of the root stock. Divide the thick rhizome, removing approximately a third of the growth using a sharp knife, ensuring each section has at least one young shoot and plenty of fibrous roots, then return the larger portion to the pond, removing the one-third portion and disposing of it. This should be completed every 4-6 years, or as required, rotating between plants in different years. Manage marginal vegetation around Pond 2 so that there is structural variation, with more open areas 1-1.5m wide maintained on the southern bank, allowing sun exposure. Remove and control the cover of non-native steeple-bush with a targeted and staggered approach: A 2.5m stretch of the marginal vegetation should be targeted to the north, east, south and west. In these stretches the steeple-bush should be pulled out by the roots, or if this is not possible, cut back to ground level. Vegetation should be allowed to recover naturally, with ongoing management to pull/cut back any new growth in these areas. It may be beneficial to encourage some native woody regrowth. Goat willow can be established by pushing a cut goat will branch in the soil of a cleared area and allowing to establish. Only five or six of these should be planted around the pond, so woody shrubs do not dominate. They should be pruned when required so they are maintained as shrubs 3-4 ft high. Each year, four new 2.5 sections of marginal vegetation should be targeted for steeple-bush removal, with ongoing management of previously cut areas, and after 10 years the c.100m perimeter of the pond should be free of this non-native species.	Regular pruning can be completed on an annual basis, though it should be completed outside of the breeding period from March to June inclusive to avoid disturbing breeding newts or eggs. While it is best to divide water lilies in late spring or early summer, to avoid impacts to great crested newts that are potentially present, it should be completed in winter when newts are hibernating and likely absent (November to January inclusive). Whilst it is not the ideal time for division, you can divide water lilies in late winter or early spring while they are dormant, and this is often recommended for maximum flowering in the upcoming season. water lilies which are dormant, meaning they are not actively growing, can make them less stressed by the division process, and you can access the plant easily before new leaves fully develop.												Every 4-6 years depending on vigour, rotating between plants. (November to January inclusive).	
		Potentially present	Marginal vegetation management		To avoid impacts to nesting birds that may be present in the marginal vegetation (such as small passerines or moorhens) works should be completed outside of the nesting bird season (March to August inclusive). Great crested newts are potentially present within this pond, and works should be completed in winter when great crested newts are likely to be absent (November to January inclusive).												Annually targeting four different 2.5 m sections, rotating each year.	
		2.3			Continue the current management of the grassland of 'Dunsfold Green' with a single cut each year. Reduce to a single cut every two years of the grassland under and around the scattered trees to the south of Pond 1. The target would be to allow an area of 'rough' tussocky grassland, with some scattered scrub, to develop habitat that can support great crested newt through their terrestrial and hibernation phase. This would mean there is year-round habitat available on the green for great crested newt and offers some alternative habitat to the woodland across the road.	Grass cut should be completed in the reptile and amphibian active season (March-October inclusive, with August or September cut most beneficial to wildflowers), using habitat manipulation (two-step mowing process) of grassland in suitable weather conditions (warm, dry, clear skies). The grassland should be cut to a minimum height of 150mm, to avoid impacts to reptiles and amphibians. Cuttings should be removed from the grassland following the cut.											Annual cut for majority of grassland. A cut once every two years for the grassland under and around trees.	
Pond 1 and 2	2.5	Present in locality	Scrub creation	Consider creating some areas of scattered dense scrub under and around the trees to the south of Pond 1. This would create a mosaic grassland habitat with benefits for a range of wildlife and would also provide habitat for great crested newt in their terrestrial and hibernation phases, providing year-round habitat for great crested newts on Dunsfold Green as detailed above. Scattered scrub can be created through planting of species such as hawthorn, goat willow, hazel (recommended to avoid blackthorn as this can spread vigorously). When shrubs are established manage with regular pruning and cutting back when required (around every three years) to develop small parcels of dense shrub with a distinct edge. Plant between November and March and choose a wide range of native species that suit the site. Plant in clumps, leaving unplanted gaps, to create open ground. Mix species randomly use hand tools to plant scrub. Alternatively, grass cutting can be stopped in the areas where scrub is desired and, through succession, scrub is likely to establish, however this may take up to ten to fifteen years.	Scrub planting completed in year 1. When scrub established, (after a minimum of two years) start selectively cutting back and pruning scrub when/if required (likely once every three years). Cutting back/pruning should be completed in winter when plants are dormant and timed to avoid the nesting bird season (works to be completed November to February).											Scrub creation in year 1.		
	2.6		Hibernacula creation	Consider creating one to two hibernacula for great crested newt in the vicinity of Pond 1 and 2 and in the area of trees (taking care to avoid tree roots by placing outside of tree root protection areas) the south of Pond 1. This would provide resting and hibernating habitat for great crested newt ensuring year-round habitat for great crested newt on Dunsfold Green, as detailed above. It would also provide benefits for other amphibians, reptiles, small mammals and invertebrate species. The hibernaculum should be created following best practice guidance (Frodlife, 2001)	The ideal time to create a hibernaculum is in the late summer or autumn to provide safe shelter for reptiles and amphibians during the colder winter months. While it can be built anytime of the year, building it in autumn ensures its ready for the animals when they begin their hibernation period (typically October to March)											Hibernaculum creation in year 1.		

Pond reference	Management reference	Great crested new present	Objective	Summary of management measures	Other ecological considerations	Timing of works												Management frequency
						Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	
Pond 2 and 3	2.7	Present in locality	Swan path creation	The swans that nest in Pond 1 are very popular with residents, many of whom observe their behaviour throughout the year and are concerned with their welfare. It has been noted that the swans nest in Pond 1, after hatching the swans then spend their time between Pond 1 and 2, when the chicks are more mature the swans then spend more time travelling between Ponds 2 and 3. The route they usually take is down along stretch of Dunsfold Common Road, and residents are concerned about the potential for road collisions. It may be possible to encourage them to cross the road directly at the start of Pond 3 by maintaining a path in the grassland between Pond 2 and Pond 3.	The path should be laid out when the annual cut of the main grassland is completed, in (months), with a two-stage cut to avoid impacts to great crested newts and reptiles. The path should then be maintained frequently through regular mowing so that a low sward height of (150mm) is maintained. This can be trailed for a period of three years, with its effectiveness at altering the swan behaviour monitored. It is successful this measure can continue, but if it is ineffective then it can be abandoned.												Trial for three years and continue based on effectiveness.	
	3.1		Fish removal	The presence of domestic/non-native fish in a pond is detrimental to aquatic flora and fauna, and their total removal is essential to protect any great crested newt population present. The selection and careful application of appropriate methods and timing for fish removal are important in order to minimise the impact of work on pond wildlife. All methods of fish removal are subject to licensing and/or consents. Methods can include netting, draining down or electrofishing.	Removal of non-native fish would be extremely beneficial to native flora and fauna, especially great crested newt. Works should be completed in winter when amphibians are likely to be absent (November to January inclusive). If fish are removed, signage should be placed around the pond that discourages the dumping of fish in future. The other management measures for this pond assume that no fish removal will take place.											Once in first year.		
	3.2	Likely absent	Increase cover of sub-merged, floating and aquatic marginal vegetation	The presence of fish in the pond has increased turbidity and reduced the cover of floating, submerged and marginal vegetation. The pond would benefit from increased vegetation cover, however re-establishing vegetation will be difficult with the presence of fish, especially carp. Assuming no fish removal takes place, additional planting of the pond with native plants that fish are less likely to eat hornwort, water starwort, willow moss, spiked watermillet, whorled water-milfoil, curled pondweed, water violet, water crowfoot, yellow flag iris, water mint and water lily. When planting use physical barriers such as rocks and pebbles, placing large rocks 9-15cm around the base of rooted plants like water lilies to prevent uprooting and nibbling; use cages to protect plant roots; or use containers planting vulnerable plants in oversized containers and weigh them down with rocks to protect the roots.	The best time to add new plants is from mid-spring to early summer when the water is warming up, allowing them to establish and grow. When planting in a wildlife pond, it is crucial to avoid biohazards by selecting native species only, preventing the introduction of invasive plants or diseases that can harm the ecosystem and surrounding environment. As such, plants should be sourced from a reputable supplier, and checked for damage, disease and pests, and planted to the suppliers' instructions.													Once in first year, monitor results. Supplementary planting in subsequent years if required.
Pond 3	3.3	Potentially present	Scape creation	To the northwest of Pond 3, in an area of woodland, there appears to be a now dry water body located at TQ 00643 36688 (Target note 2). Based on historic OS maps, this area was once part of the larger extent of Pond 3 but has since dried out and is full of leaf litter, mulch, soil and dead wood. It could be beneficial to create a scrape in this area, with the aim of creating a further breeding place for great crested on the newts within the woodland they are now to be present. Low impact measures should be taken to complete this using hand tools. Leaf litter, mulch and loose sediment should be removed from the area (and can be used to create hibernacula) to form a scrape to create a basin up to 1m deep with a circumference of 6m and very shallow margins. Create scrape using best practice guidance (Pond Conservation, 2013).	The woodland is an HPI, and common toad and great crested newts are present in the woodland as well as the pastoral fields and hedgerows to the west of Dunsfold Road. Great crested newt are a schedule 5 species, and as such Natural England should be contacted for guidance prior to any works. Planning permission is unlikely to be required for the creation of a small scrape. Great crested newts are present in the woodland and the accumulated leaf litter could have a range of fauna within it including woodland invertebrates, great crested newts, toads and other amphibians, reptiles, and small mammals. As such, removal of accumulated leaf litter, mulch and sediment should be completed with hand tools spring and early summer months (mid-March to mid-June inclusive) when great crested newt (and other amphibians) are breeding and likely to be within ponds, and when reptiles are active and can escape. Removed vegetation, mulch and sediment should be left within the woodland in piles (placed away from trees, to prevent tree rot) and can be used to create hibernacula. If reptiles, great crested newts or stag beetle larvae are found during works then works should cease immediately and an ecologist contacted.												In year one, with results monitored.	
	3.4	Likely absent	To manage encroaching marginal vegetation and maintain extent of standing open water.	The western and northern margin of pond 3 have an area of tall aquatic marginal vegetation with bullrush, bladder sedge, hemlock water dropwort, and yellow flag iris present, the marginal vegetation grades into an area of tall, species rich other neutral grassland that surrounds the pond. At it's current extent, the marginal vegetation is considered to be very beneficial to the ponds biodiversity. However, if over time this marginal vegetation encroaches into the areas of open water by a significant degree (a further 3-4m) then vegetation management should be considered. Removal of encroaching vegetation on the pond banks, with removal by hand. Pulling up vegetation by the roots where possible and cutting back with hand tools if necessary. Vegetation removal should focus on fast spreading and common "huggish" species such as bullrush. Removed vegetation should be left on the pond banks for 24 hours to allow aquatic fauna to return to the pond, before it is removed from the site. Removal should focus on the northern and western banks, removing around a metre or two of vegetation from the water's edge...	Removal should only commence if the vegetation encroaches onto the open water by a further three to four meters. When removing plants, around 80% of the marginal and emergent vegetation should be retained to ensure that management does not completely remove any single plant species. Bladder sedge, listed as Vulnerable in England's Red List and as scarce on Surrey's plant register, is present and no more than 20% of this species should be removed from the pond margins in any one management cycle. To avoid impacts to the nesting swans and other nesting birds that may be present (such as moorhen) works should be completed outside of the nesting bird season (March to August inclusive). Works should be completed in winter when amphibians are likely to be absent (November to January inclusive).											As required		

Pond reference	Management reference	Great crested new present	Objective	Summary of management measures	Other ecological considerations	Timing of works												Management frequency
						Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	
Pond 4	3.5	Potentially present	Three cornered garlic removal	The schedule 9 non-native invasive species, three cornered garlic, is present within the trees on the eastern edge of Pond 3. Removal of this species is recommended. Removal should use mechanical means, the entire plant, including all bulbs and any bulbils (small secondary bulbs), should be dug up and removed from the soil. This should be completed in spring, when the plant is actively growing and surface vegetation is present, but before the plant sets seeds. Removed plant material should be disposed of as 'controlled waste' in a licensed landfill, as it's considered hazardous.	Chemical control is NOT recommended, as owing to the proximity to the pond. Removal should be completed in spring before flowering and seed setting. Bluebells are present in this area, and any removal should be sure not to remove this species, as they can look similar before flowering. Any personnel carrying out works should be familiarised with each species. Plant material should be disposed off as 'controlled waste' to ensure no further spread into the wild. Thoroughness is key, as missed bulbs and bulbils will lead to regrowth.												Annually until eradication.	
	4.1	Likely absent	Aquatic vegetation management	Removal of encroaching vegetation at the centre of the pond so that an area of open water is maintained, with removal of vegetation completed by hand. Vegetation should be pulled up by the roots where possible and cut back with hand tools if necessary. Removed vegetation should be left on the pond banks for 24 hours to allow aquatic fauna to return to the pond, before it is removed from the site. The high cover of inundated aquatic vegetation around the shallow margins of the ponds are likely to be very beneficial to amphibian larvae, providing shelter and foraging opportunities, and excessive removal of this marginal vegetation is likely to have negative impacts on these amphibian populations.	Bladder sedge, listed as Vulnerable in England's Red List and as scarce on Surrey's plant register, is present and no more than 20% of this species should be removed from the pond margins in any one management cycle. To avoid impacts to nesting birds that may be present in the marginal vegetation (such as moorhens) works should be completed outside of the nesting bird season (March to August inclusive). Works should be completed in winter when amphibians are likely to be absent (November to January inclusive).										Every five years (or more frequently if necessary)			
	4.2		Hibernacula creation	Consider creating one to two hibernacula to benefit great crested newts, other amphibians, reptiles, invertebrates and small mammals. One should be placed to the east and a second could be placed to the west of pond 4, following recommendations given above for 2.6 This pond was almost completely dry at the time of the survey in May, holding only small pockets of water a few cm deep in places. Based on discussions with local residents and a review of historic aerial imagery, this pond has gone from being permanently wet historically, to drying out in late spring/early summer. Some removal of encroaching vegetation and accumulated leaf litter/dead vegetation is recommended to promote the pond holding water for longer into the year, and ideally so it dries out one year in three and not annually, the aim of this management is not to create a permanently wet pond, but to encourage the pond to hold water for longer. This is because ponds that occasionally dry out are extremely valuable for wildlife. Further investigation and monitoring should be carried out to establish the frequency of drying, and if the drying has a direct cause such as a leak in the clay lining. Vegetation removal should focus on fast spreading and common "thuggish" species such as bulrush. When removing plants, a rough rule of thumb is to retain around 80% of the marginal and emergent vegetation in the pond even after management and to ensure that management does not completely remove any single plant species. Vegetation removal should be completed by hand by pulling out the roots or if this is not possible, cutting back with hand tools. Accumulated leaf litter/dead vegetation should be removed using hand tools such as a weed or lake rake. Any removed vegetation/leaf litter/dead vegetation should be left at the pond side for 24hours before being properly disposed of.	As above for management reference 2.6.											Hibernaculum creation in year 1.		
Pond 5	5.1	Potentially present	Removal of aquatic vegetation and accumulated leaf litter/ dead vegetation	This pond has a number of mature and young trees and scrub around its perimeter, notably goat willow and hazel beginning to encroach around the entire pond perimeter and into the centre of the pond. Some selective thinning of scrub is recommended to allow more light to reach the pond, some scrub should be retained as dappled light as shade is very beneficial to ponds. The trees and shrubs are most dominant to the west of the pond, some selective thinning of about 30% of the shrubs is recommended in this area. It is recommended that all woody shrubs are removed from the east side of the pond, allowing sunlight in from the south on this half of the pond. Consider creating a hibernaculum to benefit great crested newts, other amphibians, reptiles, invertebrates and small mammals. It can be placed to the south of Pond 5, following recommendations given above for 2.6	Great crested newts are potentially present within this pond, and works should be completed in winter when great crested newts are likely to be absent (November to January inclusive). These measures should be completed in year one, and the impacts monitored. If the pond continues to dry out in late spring/early summer then some excavation of pond sediments may be beneficial, however, further monitoring/investigation should be completed to establish the frequency of drying and potential causes of the drying, and to ensure no damage to the pond during excavation.											In year one, then monitor impacts over three years. If desired outcome reached, then repeat as required every five or ten years. If management measures not effective, consider further surveys and sediment excavation.		
	5.2		Scrub thinning		To avoid impacts to nesting birds that may be present in the marginal vegetation (such as moorhens) works should be completed outside of the nesting bird season (March to August inclusive).												In year one then every three years as required.	
	5.3		Hibernacula creation		As above for management reference 2.6.													Hibernaculum creation in year 1.

Pond reference	Management reference	Great crested new present	Objective	Summary of management measures	Other ecological considerations	Timing of works												Management frequency				
						Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar					
Pond 6	6.1	Potentially present	Removal of aquatic vegetation and accumulated leaf litter/ dead vegetation	This pond was choked with aquatic vegetation, dominated by a water crowfoot species and holding very little water at the time of the survey in May. Based on discussions with local residents the vegetation cover has increased dramatically in recent years, which is confirmed by aerial imagery which shows an increase in cover from 2021. Removal of encroaching vegetation and accumulated leaf litter/ dead vegetation is recommended to prevent stagnation, shading, succession, and to allow more light to enter the pond, and to maintain some areas of more open water. In the first year a big clean out is recommended, with a target to remove 60% of the submerged aquatic floating vegetation, dominated by water crowfoot. Removal should be focused on the centre of the pond, with vegetation around the margins retained, and such that not all of any one plant species is removed. Results from the first clearance should be monitored, with smaller clearances of 20% of the vegetation completed as needed, with removal of some more 'toughish' marginal species such as bulrush removed as necessary (as advised for ponds 1, 4, and 5).	Water-crowfoot species can be difficult to identify and differentiate owing to variation in the appearance of the plants according to their growing conditions. Some species of this subgenus are nationally rare/scarc, and the exact species present should be established prior to any removal taking place. If the species present is nationally rare/scarc, then further advice on pond management should be sought. Great crested newts are potentially present within this pond, and works should be completed in winter when great crested newts are likely to be absent (November to January inclusive).												Big clearance in first years, with results monitored. Vegetation removal then completed as required every three to five years.					
Pond 7	6.2		Grassland management	The grassland surrounding the pond is currently managed to a short sward, largely to allow visibility across the junction for road users, however it would be beneficial to allow a buffer strip of rough, tall sward grassland to develop for a 1.5m to 3m strip around the pond, by reducing mowing regime to once cut a year, using the two step cut discussed in 2.4. The remaining grassland should have a reduced mowing regime of every 8 weeks if possible.	Grass cut should be completed in the reptile and amphibian active season (March-October inclusive, with August or September cut most beneficial to wildflowers), using habitat manipulation (two-step mowing process) of grassland in suitable weather conditions (warm, dry, clear skies). Comprising a first cut to 150mm, and a second cut to the desired length after 24 hours. Cuttings should be removed from the grassland following the cut. When removing plants, around 80% of the marginal and emergent vegetation should be retained to ensure that management does not completely remove any single plant species. To avoid impacts to nesting birds that may be present in the marginal vegetation or scrub (such as moorhens or small passerines) works should be completed outside of the nesting bird season (March to August inclusive). Great crested newts are likely absent within this pond, however, to avoid impacts to other amphibians are likely to be absent completed in winter when amphibians are likely to be absent (November to January inclusive)												Annual cutoff grassland to create buffer strip around pond.					
Pond 7	7.1	Likely absent	Removal of encroaching aquatic marginal/emergent vegetation/scrub	Removal of encroaching vegetation on the pond banks, largely bulrush and including establishing saplings, with removal by hand. Pulling up vegetation by the roots where possible and cutting back with hand tools if necessary. Removed aquatic vegetation should be left on the pond banks for 24 hours to allow aquatic fauna to return to the pond, before it is removed from the site. Encroachment is most significant in the southern, shallow part of the pond and vegetation removal should be focused on clearing some of this area.	To avoid impacts to nesting birds that may be present in the marginal vegetation or scrub (such as moorhens or small passerines) works should be completed outside of the nesting bird season (March to August inclusive).													Every five years (or more frequently if necessary)				
Pond 7	7.2	Likely absent	Selective thinning of trees and shrubs on eastern and southern edge of pond adjacent to road.	Trees and scrub is establishing along the southeastern edge of the pond, adjacent to the road, it is currently relatively sparse and allows light to reach the southern part of the pond. Some selective thinning of shrubs in this area in the future may be beneficial to allow more sunlight to reach the shallow, southern extent of the pond. However, this scrub also acts as a buffer from the road, and is likely to reduce run-off into the pond, and reduce vehicle strikes to waterfowl if they are present. As such, only small occasional gaps in the scrub of 1 to 2m every 10m should be created when required.	To avoid impacts to nesting birds that may be present in the marginal vegetation or scrub (such as moorhens or small passerines) works should be completed outside of the nesting bird season (March to August inclusive).													Monitor scrub density and manage as required every five years.				
Pond 7	7.3		Grassland management	A thin verge with grassland is present between the road and the pond. This is currently managed so that there is a meter of grassland adjacent to the road maintained to a short sward height, with the remainder left more unmanaged with less frequent cut. It would be beneficial to reduce the mowing regime to allow a large buffer strip as is possible to help minimise road run-off into the pond. Mowing should be reduced to one annual cut.	Grass cut should be completed in the reptile and amphibian active season (March-October inclusive, with August or September cut most beneficial to wildflowers), using habitat manipulation (two-step mowing process) of grassland in suitable weather conditions (warm, dry, clear skies). Comprising a first cut to 150mm, and a second cut to the desired length after 24 hours. Cuttings should be removed from the grassland following the cut. When removing plants, around 20% of the marginal and emergent vegetation should be retained to ensure that management does not completely remove any single plant species. To avoid impacts to nesting birds that may be present in the marginal vegetation or scrub (such as moorhens) works should be completed outside of the nesting bird season (March to August inclusive). Great crested newts are potentially present within this pond and to avoid impacts to them and other amphibian species, works should be completed in winter when amphibians are likely to be absent (November to January inclusive)												Reduce mowing regime to one cut a year for as much of the buffer strip as possible.					
Pond 9	9.1	Potentially present	Removal of encroaching aquatic marginal/emergent vegetation/scrub	Removal of encroaching bulrush and other emergent vegetation, with removal by hand. Pulling up vegetation by the roots where possible and cutting back with hand tools if necessary. Removed aquatic vegetation should be left on the pond banks for 24 hours to allow aquatic fauna to return to the pond, before it is removed from the site.	To avoid impacts to nesting birds that may be present in the marginal vegetation or scrub (such as moorhens) works should be completed outside of the nesting bird season (March to August inclusive). Great crested newts are potentially present within this pond and to avoid impacts to them and other amphibian species, works should be completed in winter when amphibians are likely to be absent (November to January inclusive)													Every five years (or more frequently if necessary)				
Pond 9	9.2		Selective thinning of shrubs on eastern edge of pond adjacent to road.	This pond is surrounded by scattered trees and shrub, which are becoming more dominant on the western and eastern edges of the ponds. The trees and scrub on the northern bank of the pond., adjacent to the road, currently act as a buffer from the road, and is likely to reduce run-off into the pond, and reduce vehicle strikes to waterfowl if they are present and as such should be retained. However, some selective thinning on the eastern and western banks would be beneficial to allow more light to reach the pond. Some removal of young shrubs should be completed to create open areas four to five meters in length.	To avoid impacts to nesting birds that may be present in the marginal vegetation or scrub (such as moorhens or small passerines) works should be completed outside of the nesting bird season (March to August inclusive).													Monitor scrub density and manage as required every five years.				

Pond reference	Management reference	Great crested new present	Objective	Summary of management measures	Other ecological considerations	Timing of works												Management frequency
						Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	
Pond 9	9.3		Removal of duckweed	Manual removal of duckweed by physically scooping the duckweed from the pond surface using a net, rake, or a floating boom can be used to collect the duckweed. This should be completed where blooms occur multiple times a year. If after two years, duckweed persists then consider planting suitable native pollution-tolerant oxygenating plants, which can help manage nutrient levels and create a more balanced pond environment, or adding barley straw pads to the pond can help reduce algae and, by extension, some nutrient issues that contribute to duckweed growth.	The best time to add new plants is from mid-spring to early summer when the water is warming up, allowing them to establish and grow. When planting in a wildlife pond, it is crucial to avoid biohazards by selecting native species only, preventing the introduction of invasive plants or diseases that can harm the ecosystem and surrounding environment. As such, plants should be sourced from a reputable supplier, and checked for damage, disease and pests, and planted to the suppliers' instructions.												When required annually, with further measures adopted if no results achieved after two years.	
	9.4	Potentially present	Grassland management	The current management of the grassland surrounding Pond 9 is not known, however at the time of the survey it had a tall sward. The grassland should be managed with a single cut annually, using the two-step cut discussed in 2.4, with arisings removed.	Grass cut should be completed in the reptile and amphibian active season (March-October inclusive, with August or September cut most beneficial to wildflowers), using habitat manipulation (two-step mowing process) of grassland in suitable weather conditions (warm, dry, clear skies). Comprising a first cut to 150mm, and a second cut to the desired length after 24 hours. Cuttings should be removed from the grassland following the cut.											Annual cut for majority of grassland. Bi-annual cut for grassland under and around trees.		
	9.5		Hibernacula creation	Consider creating a hibernaculum to benefit great crested newts, other amphibians, reptiles, invertebrates and small mammals. It can be placed to the east of the group of trees in the location of the now dry Pond 8, following recommendations given above for 2.6	As above for management reference 2.6.													Hibernaculum creation in year 1.

Kind regards

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Appendix 1: Legislation

Conservation of Habitats and Species Regulations 2017 (as amended)

Provides for the protection of Natura 2000 sites (SACs, SPAs and Ramsar sites), European Protected Species and habitats. Species listed under Schedule 2 are protected from:

- Deliberate capture, injury or killing.
- Deliberate disturbance [...], such that it impairs their ability to breed, reproduce or rear their young, hibernate or migrate or significantly affect their local distribution or abundance.
- Deliberate taking or destroy effect.
- Damage or destroying a breeding site or resting place.
- Keeping, transporting, selling or exchanging any live, dead or part.

Species listed under Schedule 2 include, but are not limited to:

- Great crested newt
- Natterjack toad
- Otter
- Smooth snake
- Sand lizard
- All bat species
- Hazel dormouse

The LPA will be aware of its legal duty under Regulation 9(3) of Conservation of Habitats and Species Regulations 2017, as amended, which states that “*a competent authority in exercising any of its functions, must have regard to the requirements of the Directives so far as they may be affected by the exercise of those function*”.

Also, under Regulation 55 (9b) of the above regulations, the LPA must apply the following three tests when deciding whether to grant planning permission where a Protected Species (bats) may be harmed, in line with of the Conservation of Habitats and Species Regulations 2017, as amended.

- The activity must be for imperative reasons of overriding public interest or for public health and safety;
- There must be no satisfactory alternative;
- Favourable conservation status of the species must be maintained.

Natural England has stated that they would expect these three tests to be adequately considered by the LPA before planning permission is granted. Natural England will require evidence from the applicant that the LPA has considered the three tests and how they were met, before a mitigation licence can be issued. Where a mitigation licence is required to avoid breach of legislation, development cannot proceed even where a valid planning permission is granted.

Wildlife and Countryside Act 1981 (as amended)

Key piece of legislation consolidating existing wildlife legislation to incorporate the requirements of the Bern Convention and Birds Directive. It includes additional protection measures for species listed under the Conservation of Habitats and Species Regulations 2017

(as amended) and includes a list of species protected under the Act. It also provides for the designation and protection of Sites of Special Scientific Interest (SSSI).

Development which would adversely affect a SSSI is not acceptable except only in special cases, where the importance of a development outweighs the impact on the SSSI when planning conditions or obligations would be used to mitigate the impact. Developments likely to impact on a SSSI will likely require an Environmental Impact Assessment (EIA).

The Impact Risk Zones dataset is a GIS tool which details zones around each SSSI according to the particular sensitivities of the features for which it is notified and specifies the types of development that have the potential to have adverse impacts. Natural England uses the Impact Risk Zones to make an initial assessment of the likely risk of impacts on SSSIs and to quickly determine which consultations are unlikely to pose risks and which require more detailed consideration. Local Planning Authorities (LPAs) have a duty to consult Natural England before granting planning permission on any development that is in or likely to affect a SSSI.

Further information on specific legislation relating to species protected under the Wildlife and Countryside Act 1981 (as amended) is detailed below, under Protection of Protected Species and Habitats.

Environment Act (2021)

The Environment Act (2021) makes a provision for biodiversity net gain to be a condition of planning permission in England. Planning applications will need to demonstrate a 10% biodiversity net gain can be met. A biodiversity net gain plan must be submitted and must include:

- (a) information about the steps taken or to be taken to minimise the adverse effect of the development on the biodiversity of the onsite habitat and any other habitat
- (b) the pre-development biodiversity value of the onsite habitat,
- (c) the post-development biodiversity value of the onsite habitat,
- (d) any registered offsite biodiversity gain allocated to the development and the biodiversity value of that gain in relation to the development,
- (e) any biodiversity credits purchased for the development,

Countryside and Right of Way Act 2000

Amends and strengthens the Wildlife and Countryside Act 1981 (as amended). It also details habitats and species for which conservation measures should be promoted.

Natural Environment and Rural Communities Act 2006

Section 40 of the Act places a duty on local planning authorities to conserve and enhance biodiversity in England whilst carrying out their normal functions. Section 41 comprises a list of Habitats of Principal Importance (HPIs) and Species of Principal Importance (SPIs) which should be considered.

Section 41 details 56 HPI, including (but not limited to) arable field margins, traditional orchards, hedgerows, eutrophic standing waters, ponds, rivers, lowland calcareous grassland, lowland dry acid grassland, lowland meadows, purple moor-grass and rush pastures, lowland heathland, open mosaic habitats on previously developed land, coastal and floodplain grazing marsh, lowland fens, lowland raised bog, reedbeds, lowland beech and yew woodland, lowland mixed deciduous woodland, wet woodland, and wood-pasture and parkland.

Impacts to HPI are of material planning consideration.

The LPA will need to have particular regard to any relevant local nature recovery strategies, and any relevant species conservation strategy or protected site strategy prepared by Natural England.

Hedgerows Regulations 1997

Under the Hedgerows Regulations 1997 it is against the law to remove or destroy certain hedgerows without permission from the LPA, which are also the enforcement body for offences created by the Regulations. LPA permission is normally required before removing hedges that are at least 20 m in length, more than 30 years old and contain certain plant species. The authority will assess the importance of the hedgerow using criteria set out in the regulations. The regulations **do not** apply to hedgerows within the curtilage of, or marking a boundary of the curtilage of, a dwelling house.

Hedgerow is a HPI.

Management of Hedgerows Regulations 2024

For all hedgerows defined as 'important' in the Regulations:

- It is a requirement to take all reasonable steps to establish and maintain green cover on land within 2m of the centre of an important hedgerow.
- No cultivation or application of fertilisers or pesticides to land within 2m of the centre of an important hedgerow, unless:
- Pesticides are used through spot application to control the spread of broad-leaved dock, creeping thistle, curled dock, giant hogweed, Himalayan balsam, Japanese knotweed, common ragwort, rhododendron or spear thistle.
- The land is being cultivated to establish a green cover where it does not already exist.
- Written permission has been given to cultivate the land in order to enhance the environment, improve public or agricultural access, or for reasons relating to livestock or crop production.
- Without cultivation there is a risk to human or animal health and safety.
- Cultivation, fertilisers or pesticides are being applied to treat a serious cause of harm to plant health or a serious pest or weed infestation, or to prevent the development of any such cause of harm or infestation.

The Regulations define an important hedgerow as any hedgerow growing on land used for agriculture where the hedgerow has a continuous length of 20m or more; or a continuous length of <20m and, at each end, meets (whether by intersection or junction) another hedgerow. It applies to any stretch of hedgerow (even if smaller than 20m) that forms part of a hedgerow meeting the above definition. The exception is if the hedgerow is within the curtilage of, or marking the boundary of the curtilage of, a dwelling.

The requirements of the Regulations do not apply to:

- Land either side of an important hedgerow if the hedgerow is less than five years old.
- Land forming part of a parcel of ≤ 2 ha as measured within permanent boundary features.
- Casting up of a traditional hedgerow bank between September and February (inclusive).

- Land on the side of an important hedgerow facing a dwelling where the hedgerow marks a boundary of the curtilage of the dwelling.
- Land used for an allotment as defined by the Allotments Act 1925.

Wild Mammals (Protection) Act 1996

Under this act wild mammals are protected from the intentional unnecessary suffering by crushing and asphyxiation.

Biodiversity Opportunity Areas (BOAs)

To assist in delivering the government's Biodiversity 2020 strategy, the Surrey Nature Partnership has identified seven BOAs where improved habitat management, habitat restoration and recreation of HPIs is the key focus to enhancing the connectivity of habitats for SPIs to deliver biodiversity objectives at a landscape scale. The location of these is presented in the South East Biodiversity Strategy's website (Surrey Nature Partnership, 2022). The project promotes a collaborative approach across a number of regional and local organisations.

Developments within or adjacent to BOAs should be designed in consideration of the BOA objectives.

Protection of protected species and habitats

Amphibians

Natterjack toad, pool frog and great crested newt are protected under the Conservation of Habitats and Species Regulations 2017 (as amended). They are also afforded additional protection under the Wildlife and Countryside Act 1981 (as amended).

Natterjack toad, common toad, great crested newt and northern pool frog are also SPIs.

Reptiles

Smooth snake and sand lizard are protected under the Conservation of Habitats and Species Regulations 2017 (as amended). They are afforded additional protection under the Wildlife and Countryside Act 1981 (as amended).

Adder, grass snake, common lizard and slow worm are all protected from killing and injury under the Wildlife and Countryside Act 1981 (as amended). All UK reptile species are SPIs.

Birds

All wild birds are protected under the Wildlife and Countryside Act 1981 (as amended). This includes damage and destruction of their nests whilst in use, or construction. Species listed under Schedule 1 of the Act, such as barn owl, are afforded protection from disturbance during the nesting season.

The following 49 bird species are SPIs: lesser redpoll, aquatic warbler, marsh warbler, skylark, white-fronted goose, tree pipit, scaup, bittern, dark-bellied brent goose, stone-curlew, nightjar, hen harrier, northern harrier, hawfinch, corncrake, cuckoo, Bewick's swan, lesser spotted woodpecker, corn bunting, curl bunting, yellowhammer, reed bunting, red grouse, herring gull, black-tailed godwit, linnet, twite, Savi's warbler, grasshopper warbler, woodlark, common scoter, yellow wagtail, spotted flycatcher, curlew, house sparrow, tree sparrow, grey partridge, wood warbler, willow tit, marsh tit, dunnoek, Balearic shearwater, bullfinch, roseate tern, turtle dove, starling, black grouse, song thrush, ring ouzel and lapwing.

Badger

Badger is protected under the Protection of Badgers Act 1992. Under this legislation it is an offence to kill or injure a badger; to damage, destroy or block access to a badger sett; or to disturb badger in its sett. The Act also states the conditions for the Protection of Badgers licence requirements.

Bats

All bat species are protected under the Conservation of Habitats and Species Regulations 2017 (as amended), as detailed above. Bats are further protected under the Wildlife and Countryside Act 1981 (as amended), making it an offence to:

- Deliberately or recklessly damage or destroy any structure or place which bat(s) use for shelter or protection.
- Disturb bat(s) while occupying a structure or place which it uses for shelter or protection.
- Obstruct access to any structure or place which they use for shelter or protection.

Greater horseshoe, lesser horseshoe, Bechstein's bat and barbastelle bats are Annex II species for which Special Areas of Conservation have been designated.

Furthermore, seven bat species are SPIs, covered under Section 41 of the NERC Act 2006. These include barbastelle, Bechstein's bat, noctule, soprano pipistrelle, brown long-eared bat, lesser horseshoe and greater horseshoe.

Beaver

Beaver is provided under Conservation of habitats and Species Regulations 20217 (as amended). Beaver is also afforded additional protection under the Wildlife and Countryside Act 1981, as amended.

Hazel dormouse

Hazel dormouse is protected under the Conservation of Habitats and Species Regulations 2017 (as amended). It is afforded additional protection under the Wildlife and Countryside Act 1981 (as amended), including obstruction to a place of shelter or rest.

Hazel dormouse is also a SPI.

Otter

Otter is protected under the Conservation of Habitats and Species Regulations 2017 (as amended) and is afforded additional protection under the Wildlife and Countryside Act 1981 (as amended). Otter is also a SPI.

Water vole

Water vole is fully protected from capture, killing or injury; damage, destruction or blocking access to a place of shelter; disturbance whilst in a place of shelter or possessing, selling any part of a water vole, dead or alive under the Wildlife and Countryside Act 1981 (as amended).

Water vole is also a SPI.

Other mammals

Hedgehog, brown hare, mountain hare, pine marten, harvest mouse, polecat and red squirrel are all SPIs.

The following mammals are listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended): wildcat, brown hare (Schedule 5A), mountain hare (Schedule 5A), pine marten and red squirrel.

Invertebrates

Seventy invertebrate species are fully or partially listed under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended). These are tentacled lagoon-worm, lagoon sandworm, medicinal leech, trembling sea-mat, Ivell's sea anemone, pink sea-fan, starlet sea anemone, marine hydroid, white-clawed crayfish, fairy shrimp, lagoon sand shrimp, tadpole shrimp, rainbow leaf beetle, mire pill beetle, spangled diving beetle, lesser silver water beetle, Moccas beetle, violet click beetle, stag beetle, Bembridge beetle, purple emperor, northern brown argus, pearl-bordered fritillary, chequered skipper, large heath, small blue, mountain ringlet, marsh fritillary, high brown fritillary, Duke of Burgundy, silver-spotted skipper, wood white, large copper, heath fritillary, Glanville fritillary, large tortoiseshell, swallowtail, large blue, silver-studded blue, adonis blue, chalkhill blue, black hairstreak, white-letter hairstreak, brown hairstreak, Lulworth skipper, Norfolk hawk, southern damselfly, reddish buff, Fisher's estuarine moth, barberry carpet, fiery clearwing, black-veined moth, Sussex emerald, Talisker burnet moth, Slender scotch burnet, New Forest burnet, wart-biter grasshopper, mole cricket, field cricket, New Forest cicada, fan mussel, Defolin's lagoon snail, Roman snail, freshwater pearl mussel, glutinous snail, sandbowl snail, lagoon sea-slug, northern hatchet-shell, fen raft spider, and ladybird spider.

A total of 398 (excluding molluscs) invertebrates are Species of Principal Importance. These include: beetles (including stag beetle), butterflies (high brown fritillary, large heath, small blue, white-letter hairstreak, brown hairstreak, damselflies (southern damselfly), moths (marsh moth), ants, bees etc. Impacts to SPI must be considered by the LPA when assessing planning applications.

Higher and lower plants (rare/notable species)

Creeping marshwort, Lady's-slipper orchid, Early gentian, Killarney fern Fen orchid, Floating water-plantain, Slender naiad, Shore dock and Yellow marsh-saxifrage are listed under Schedule 5 of the Conservation of Habitats and Species Regulations 2017 (as amended) making it illegal to be in position or control, transport, sell or exchange or offer to sell or exchange any live or dead plant, or part of a plant.

One hundred and eighty-three plant species are listed under Schedule 8 of the Wildlife and Countryside Act 1981, as amended which makes it illegal for a person to intentionally pick, uproot or destroy any wild plant listed under Schedule 8.

One hundred and fifty-one higher plant species are listed as Species of Principal Importance.

Non-native invasive species

1.1.1 Schedule 9 of the Wildlife and Countryside Act 1981 (as amended) is a list of non-native plant and animal species for which Section 14 of the Act applies. It is an offence to release or allow to escape any animal listed under Schedule 9 Part I of the Act. These include, but are not limited to:

- Chinese mitten crab
- American signal crayfish
- Muntjac

- Edible dormouse
- Marsh frog
- Canada goose
- Egyptian goose
- Mink
- Ring-necked parakeet
- Grey squirrel
- European pond terrapin

Appendix 2: Desk study

Methods

The desk study comprised:

- A review of historical OS maps using publicly available data on the National Library of Scotland Website (National Library of Scotland , Accessed 08/07/2025), and historical aerial imagery publicly available on Google Earth (Google Earth, Accessed 08/07/2025), and a review of Environment Agency LIDAR accessed using Landapp (Landapp, Accessed 08/07/2025)
- DEFRA mapping (DEFRA, n.d.) specifically looking at:
 - Statutory designated sites within 1km of the pond boundaries.
 - Non-statutory designated sites within 250m of the pond boundaries.
 - Biodiversity Opportunity Areas within 1 km of the survey area.
 - Parcels of Habitats of Principal Importance parcels of ancient woodland within 50m of the pond boundaries
 - European protected species licences that have been issued within 2km of the survey area
 - Impact Risk Zones for statutory designated sites
 - Important Bird Areas
- A search of the Woodland Trusts ancient woodland inventory for ancient trees within 50m of the ponds (Woodland Trust, Accessed 08/07/2025)
- A review of waterbodies and watercourses within 250m/500m of the survey area using aerial imagery and publicly available information.
- The Landis Soilscape Viewer for information on soil type, drainage and water table (Landis, Accessed 09/07/2025)

Limitations

No Limitations were recorded in the desk study

Results

The following tables present assessment results:

- Table 10 for historical context of the ponds
- Table 11 for the statutory and non-statutory designated sites
- Table 12 for habitats
- Table 13 for protected species and species of conservation concern

The survey area is within:

- Chiddingfold and West Weald Woodlands Biodiversity opportunity area

The soil scape and drainage are:

- Soilscape 22: Loamy soils with naturally high groundwater
- Drainage: Naturally wet

Table 9: Historical context

Pond ref	Historical context
Pond 1	This pond is present on an OS maps published from 1897 to 1961; it has a much larger extent than it does presently, extending further to the south. The former extent of the pond is visible with LIDAR imagery. There is also an additional pond no longer present around 30m to the west of Pond 1 (TQ 00577 36854) present on OS maps from 1897-1961. This former pond is not visible in satellite imagery from 1999, and its extent is not visible via Lidar imagery, but a dark flush of vegetation visible on satellite imagery indicates continued wet conditions. Aerial imagery dating from 1999 to 2025 indicates that the water levels of this pond fluctuate widely seasonally and in differing years, however there is an overall trend of increasing vegetation cover and decreasing water surface area.
Pond 2	This pond is present on an OS maps published from 1897 to 1961; and the shape and extent of the pond has changed little to the present day. Aerial imagery dating from 1999 to 2025 indicates that the water levels and vegetation cover stay relatively consistent both seasonally and in differing years, however the marginal vegetation appears to have become more established and structured, and the cover of water lily has increased.
Pond 3	This pond is mapped as an old gravel pit in an OS map published in 1897 and appears as a pond in an OS maps published from 1916, to 1961 with a different slightly smaller and differing perimeter as it does currently. Aerial imagery dating from 1999 to 2025 indicates that there are little fluctuations in water levels of this pond seasonally or across years, there appears to be a trend towards reduced aquatic vegetation cover from 2001.
Pond 4	This pond is present on an OS maps published from 1897 to 1961; it is mapped with a slightly larger extent than it does presently. There is also an additional pond no longer present around 30m to the south of Pond 4 (TQ 00546 36504) present on OS maps from 1897-1961. This former pond is not visible in satellite imagery from 1999, but its former extent is visible via Lidar imagery. Aerial imagery dating from 1999 to 2025 indicates that the water levels and vegetation cover of this pond fluctuate widely seasonally and in differing years, however there is an overall trend of increasing vegetation cover and decreasing water surface area.
Pond 5	This pond is present on an OS maps published from 1897 to 1961 it is mapped with a slightly larger extent than it does presently. Aerial imagery dating from 1999 to 2025 indicates that the water levels and vegetation cover of this pond fluctuate widely seasonally and in differing years, however there is an overall trend of increasing vegetation cover and decreasing water surface area however, owing to dense tree cover assessment is difficult.
Pond 6	This pond is present on an OS map published in 1897; it is mapped with a slightly larger extent than it does presently. There is also an additional pond no longer present around 30m to the west of Pond 6 (TQ 00689 36043) present on OS maps from 1897-1961 its former extent is not visible via LIDAR or satellite imagery. Aerial imagery dating from 1999 to 2025 indicates that the water levels and vegetation cover of this pond fluctuate widely seasonally and in differing years, however there is an overall trend of increasing vegetation cover and decreasing water surface area which appears to have accelerated from 2021 onwards.
Pond 7	This pond is not mapped on OS maps published in 1897 and appears as a pond in an OS maps published from 1917 to 1961 where it has a very similar extent as it does presently. Aerial imagery dating from 1999 to 2025 indicates that water levels remain relatively consistent seasonally and across seasons, although there appears to be fluctuations in water quality/turbidity and aquatic vegetation cover fluctuates however, assessment is difficult owing to dense tree cover.
Pond 8	This pond is present on an OS maps published from 1897 to 1961; it is mapped with a very similar extent as it does on current OS maps, however this pond appeared absent during the survey, having developed into woodland. Aerial imagery dating from 1999 to 2025 does not show any evidence of this pond holding water in these years, however owing to dense tree cover assessment is difficult.
Pond 9	This pond is present on an OS maps published from 1897 to 1961; it is mapped with a very similar extent as it does presently. Aerial imagery dating from 1999 to 2025 indicates that the water levels and vegetation cover stay relatively consistent both seasonally and in differing years.

Table 10: Statutory and non-statutory designated sites desk study results

Type of designation	Site name	Reasons for designation	Distance from survey area (km)	Within impact risk zone	Scope in for further assessment
Statutory		No statutory designated sites within 1km of the survey area.			
SSSI Impact Risk Zones	Chiddingfold Forest SSSI	Chiddingfold Forest is of special conservation interest as, together with additional areas outside the SSSI boundary, it is one of the largest continuous areas of ancient woodland remaining in southeast England. It supports a number of associated species and assemblages which add to this interest. The Impact Risk Zones for Sites of Special Scientific Interest (SSSI IRZs) was consulted (Natural England, Accessed 08/07/2025), and indicates consultation with Natural England will not be required for the management measures prescribed in this report with regards to Chiddingfold Forest SSSI.	1.15km SE at nearest	No	No
Non-statutory	Dunsfold Common and Green SNCI	Dunsfold common is registered common land and supports a good diversity of habitats including woodland, grassland, scrub and ponds. The interlinked habitat mosaic is of high local wildlife value for which the Common was designated a Site of Nature Conservation Interest (SNCI) by Surrey County Council in 1998, designated for the presence of great crested newt and camomile. The management measures prescribed in this report have been designed to enhance the ecological value of the ponds and surrounding habitat with a holistic approach, and no detrimental impacts are anticipated for the wider SNCI.	Ponds fall within SNCI	Yes	Yes

Table 11: Habitats of ecological consideration identified in the desk study

Habitat type	Description	Situated within impact risk zone	Scope in for further assessment?	Justification
Ancient woodland	No ancient woodland within 50m of any of the ponds. The closest ancient woodland is located 150m south of Pond 9.	No	No	None within 50m.
Veteran trees	There is one ancient tree within 50m of any of the ponds. An ancient pedunculate oak located 40m west of Pond 5. No impacts are anticipated to this tree from prescribed management measures owing to the distance from the ponds.	No	No	Owing to the distance from the pond.
HPI Pond	Pond 1 is considered to be an HPI pond owing to the confirmed presence of great crested newts.	Yes	Yes	Yes, management recommendation incorporates measures to account for the presence of great crested newts.
HPI deciduous woodland	Ponds 1, 3, 5, 6, 7 and 9 all fall within 50m of HPI deciduous woodland. No impacts are considered likely from management measures for Ponds 1, 5, 6 and 9 as the ponds are separated from the woodlands by roads or access tracks or owing to the distance of the ponds from the woodlands. In both cases, the management measures will not extend into the HPI woodlands, and impacts are not anticipated. Ponds 3 and 7, lie directly within or adjacent to ancient woodlands, and measures have been incorporated to prevent impacts to the woodland.	Yes	Yes	Yes, management recommendations for ponds 3 and 7 incorporate management measures to account for the HPI status of the woodlands.
Waterbodies within 250m of the survey area	There is an extensive ditch network in the area surrounding Dunsfold common, and the drainage system of this area is complex. Four other waterbodies were identified using aerial and OS mapping within 250m of the ponds, these are located at Grid Reference: TQ 00956 35481; TQ 01313 35754; TQ 00508 35488 and TQ 00837 36212.	No	No	Management measures are limited to the pond perimeters and immediately surrounding areas and are not

				anticipated to have negative impacts on other waterbodies within 250m.
Watercourses within 250m of the survey area	A stream is present to the west of Dunsfold that is within 250m of the ponds for part of its course, it flows eastwards then southwards to flow eventually into the River Arun. These streams are joined by two smaller streams flowing from the north, one emerging in the region of Hookhouse Hanger, and the other near Pratts Corner. The latter continues southwards and is interrupted by a dam to create School Pond. It then joins another small stream flowing from High Loxley and continues south-eastwards past Pound Farm.	No	No	Management measures are limited to the pond perimeters and immediately surrounding areas and are not anticipated to have negative impacts on the surrounding hydrology or other watercourses within 250m.

Table 12: Protected or notable species recorded in the desk study and for which suitable habitat occurs in the survey area

Species / Species groups	Mitigation licences recorded within 1km of the survey area	Scope in for further assessment	Justification
Invertebrate	No	Yes	All ponds and surrounding habitat have suitable habitat for a range of aquatic and terrestrial invertebrates.
Amphibian	Yes, one mitigation license for Great Crested Newts returned within 1km of the ponds.	Yes	Pond 1 has confirmed population of great crested newt, and they may be potentially present in Ponds 2, 5, 6 and 9. All other ponds have aquatic and terrestrial habitat suitable for other amphibian species.
Reptiles	No	Yes	All other ponds have surrounding terrestrial habitat suitable for common lizard, slow worm and grass snake.
Birds	No	Yes	All ponds have surrounding habitat with suitability for nesting birds.
Badger	No	No	No suitable habitat for badger setts, considered likely absent.
Bats	Yes, five mitigation licenses returned within 1km of the ponds.	Yes	Ponds and surrounding habitat are suitable for foraging and commuting bats. Ponds 3, 4, 5, 6, 7, and 9 have surrounding trees that could support roosting bats.
Hazel dormouse	No	Yes	Ponds 3, 4 and 7 have suitable surrounding habitat for hazel dormouse.
Otter	No	No	No recent records of otter in Surrey, and these are considered likely absent.
Water vole	No	No	No recent records of water vole in Surrey, and these are considered likely absent.
Hedgehog	No	Yes	All ponds have surrounding habitat with suitability for hedgehog
Other mammals	No	Yes	The larger, permanently wet ponds have suitability for water shrew.
Higher and lower plants	No	Yes	The ponds have the potential to support a number of rare/notable aquatic and marginal plant species. To avoid impacts to these species, and pond vegetation clearance should remove only 20% of this vegetation in a year, unless stated otherwise in the management plan. Bladder sedge is present in Ponds 1, 3 and 4. Bladder sedge is listed as Vulnerable in England's Red List and as scarce on Surrey's plant register and no more than 20% of this species should be removed from the pond margins in any one management cycle. Water-crowfoot species can be difficult to identify and differentiate owing to variation in the appearance of the plants according to their growing conditions. Some species of this subgenus are nationally rare/scarce, and the exact species present should be established prior to any removal taking place. If the species present is nationally rare/scarce, then further advice on pond management should be sought.
Invasive non-native plant species	No	Yes	No non-native invasive plant species were recorded during the survey. If invasive plant species are identified, such as Himalayan balsam, expert advice should be sought to remove the species and control the spread. Where new planting is recommended, native species appropriate for the region, should be used. Plants should be sourced from a reputable supplier, and checked for damage, disease and pests. Then planted to the suppliers' instructions.

Appendix 3: Habitat survey

Methods

UK habitat classification survey of ponds

The ponds in the survey area were mapped using the UK habitat classification survey methodology (UKHab Ltd, 2023).

UK habitat classification survey is a comprehensive system for classifying and mapping habitats within the UK. The aim of the survey is to identify and map habitats using aerial imagery and ground-truthing the information in a consistent and unified way such that this can be used for ecological impact assessment and habitat metrics.

Each pond area was walked by an experienced ecologist with a record of the vascular plant species made and an assessment of their abundance recorded. A full species list is presented in Appendix 5. Abundances of each vascular plant species within each habitat type are based on the DAFOR scale, presented below.

- D – Dominant
- A – Abundant
- F – Frequent
- O – Occasional
- R – Rare

A high-level assessment was made of the habitats surrounding the ponds, and they were classified by broad habitat type with general notes of there species composition, structure and condition.

The survey included an assessment of the ponds and surrounding habitat to determine their suitability for protected species and species of conservation concern. A record was made of any signs of protected species, or species of conservation concern, such as runs, droppings and/or foraging remains.

A record was also made of any fauna that was incidentally recorded.

The presence of any non-native invasive species was noted, and their location and distribution mapped.

Notable observations were recorded during the survey as target notes.

Fauna and flora species mentioned in this report will be referred to by their common name.

The date and weather conditions are detailed in the table below. The survey was undertaken by Daniel Lock BSc (Hons) MSc – Ecologist and Sean Stone BSc (Hons) Assistant Ecologist.

Table 13: Survey dates and weather conditions

Date	Time	Temp °C	Cloud (%)	Rain	Wind ³
20.05.25	10:00	18	10%	No rain	2 - Light breeze

Habitat Condition Assessment

The habitat condition assessment of the ponds was undertaken at the same time as the habitat survey by Daniel Lock BSc (Hons) MSc – Ecologist and Sean Stone BSc (Hons) Assistant

³ Beaufort scale

Ecologist., who have the relevant skills and knowledge to assess condition for the habitats encountered.

The habitat condition assessment involved completing the habitat condition forms in line with best practice guidance (DEFRA, 2024b). Habitat condition assessment forms were completed and the condition assigned based on the number of criteria passed for the habitat type. For some habitat types, the condition has been pre-determined, such as rhododendron and bramble scrub.

The habitat condition forms accompany this report.

Limitations

Habitat surveys can be undertaken at any time of year, with the optimal season being between March and September, when most plant species are visible. Where feasible, all efforts were made to schedule the habitat survey in optimal weather conditions and time of year. Nevertheless, field surveys usually fail to record all species present for various reasons, including the seasonal absence of some species, and short survey duration. Rare or cryptic species are often missed in short surveys.

Based on the above, the survey was conducted within the optimal timeframe and a full appraisal of the plant species and habitats present could be undertaken at the time of the survey

Habitat condition assessments should be undertaken at the optimal time of year for the habitat. The habitat condition assessment was undertaken in May which is considered to be optimal.

Results

UK habitat classification

The UK habitat classification survey and habitat condition assessment results are detailed in the table below. Habitat condition forms and a completed biodiversity net gain metric, detailing the baseline conditions, accompanies this report and must be read in conjunction with this report.

Table 14: UK habitat classification survey results

Pond reference	Description	Condition	HPI	eDNA Results	Photograph
Pond 1	This is a large L-shaped pond to the north of Dunsfold, approximately 0.09 ha based on the OS pond extent. Waterfowl are present with swans nesting annually in dense vegetation on the northeastern pond margin, mallard and moorhen were observed during the survey. Fish are considered likely absent from the pond. The water was very turbid at the time of the survey and of moderate quality. Aquatic vegetation includes white water lilies; with bulrush, yellow flag iris, goat willow, soft rush, gypsywort, bladder sedge and water mint growing on the margins. There is significant encroachment of bulrush and bladder sedge, especially on the northern pond margin. This pond had a positive great tested newt eDNA result and has been assessed as an HPI pond owing to the presence of great crested newts. The pond is surrounded by species rich other neutral grassland with a high sward, that also proved habitat connectivity to P2. Dunsfold common road lies to the east of the pond and separates the pond from an area of HPI deciduous woodland which is likely to be important terrestrial habitat for great crested newt. To the south of the pond are a group of trees with pedunculate oak, hawthorn and silver birch. Species include: • White water lily f • Bulrush f • Yellow iris f • Goat willow o • Bittersweet o • Soft rush f • Water mint f • Gypsywort f • Creeping Jenny a • Water plantain o • Rosebay willowherb f • Bladder sedge a • Compact rush f • Hemlock water dropwort f • Cuckoo flower f	Moderate	Yes	Positive	

Pond reference	Description	Condition	HPI	eDNA Results	Photograph
Pond 2	Large circular pond approximately 0.08ha. A submerged island is present with a small crack willow which has extensive crown die back. The water was very turbid and of moderate water quality. Pond water levels were high, and a local resident is known to top up water levels with mains water when they are low (this is likely to have led to the inconclusive great crested newt eDNA results). Waterfowl use the pond, with a family of swans regularly using this pond. A heron, swans, moorhen and mallard were seen during the survey. Fish are understood to be absent. White water lilies are the only floating vegetation present, and it is understood their cover is increasing year on year. The pond margins have emergent vegetation including yellow iris, soft-rush, water mint and rosebay willowherb. Rose spirea shrubs were present around the entirety of the pond perimeter. The pond is surrounded by a species rich, tall sward area of other neutral garden to the south and east, that connects it to Pond 1. There are residential properties to the west and north, and an access track to the north. Notable species within the grassland include compact rush, cut-leaf crane's-bill, cuckoo flower, hemlock water-dropwort and lesser stitchwort. Species include: • White water lily f • Yellow flag iris f • Soft rush a • Rosebay willowherb o • Goat willow o • Hemlock water dropwort a • Meadow buttercup f • Cuckoo flower o • Rose spirea a • Lesser spearwort o • Water mint o • Compact rush f • Soft rush f • Pendulous sedge o • Hedge bindweed o	Poor	No	Inconclusive	

Pond reference	Description	Condition	HPI	eDNA Results	Photograph
Pond 3	This is a large pond approximately 0.23 ha. The water was very turbid at the time of the survey, and of moderate quality. Waterfowl use the pond with mallard, swans and moorhen present during the survey. Fish are present with a large carp and smaller goldfish seen during the survey. (Target note 1) Damself and dragon flies were abundant. A small goat willow is present in the centre of the pond. Owing to the turbidity, submerged vegetation could not be seen, and no floating vegetation was observed. The pond margins have emergent vegetation including bulrush, compact rush, bladder sedge, horsetail, yellow flag iris, gypsy wort and rosebay willowherb. The pond has an area of species rich, tall sward other neutral grassland present to the west with notable species including hemlock water dropwort, meadow buttercup, hairy sedge and common vetch. A small area of open woodland dominated by mature oaks is present to the south. A line of trees runs along the eastern pond edge with oak, hawthorn, hazel, goat willow, field maple, foxglove and bluebells. The schedule 9 invasive three-cornered garlic also present. This line of trees connects to a HPI deciduous woodland to the north of the pond, which is understood to provide habitat for a local population of great crested newt in their terrestrial phase. Dunstfold common road lies to the west of the pond, with a residential development further to the east. The pond is fed by a ditch that enters to the north. To then northwest of the pond, in the woodland, was evidence of a historic, dried out pond or ditch. Species include: • Bulrush f • Water mint f • Compact rush o • Bladder sedge a • Soft rush a, • Horsetail sp. o • Hemlock water dropwort a • Red clover o • Gypsywort f • Rosebay willowherb f • Bittersweet o • Pendulous sedge o • Yellow flag iris o • Broad leaved dock o • Wood dock r • Goat willow o	Poor	No	Negative	

Pond reference	Description	Condition	HPI	eDNA Results	Photograph
Pond 4	This is a large pond approximately 0.14 ha based on the OS pond boundary however, there has been a lot of encroachment by aquatic vegetation (dominated by bladder sedge) and little open standing water is now visible. Water quality was good, and largely clear with abundant daphnia and a large number of tadpoles seen, with this pond likely to be important from breeding common frog and common toad. Waterfowl and fish are likely absent. The ditch is connected to a dry ditch to the west. It is surrounded by a species rich, tall sward other neutral grassland to the south and east with notable species including cuckoo flower, cut leaf cranesbill, common sorrel, hairy sedge and birds foot trefoil. On the northern pond bank is a hedgerow with hawthorn, hazel and goat willow which connects to a small woodland to the northeast with goat willow, hazel, pedunculate oak, bramble, elder, ash, honey suckle, male fern and wood avens. There are roads to the south and east of the pond, whereas to the north is a mosaic of pastoral fields, hedgerows and woodlands. Species include: • Bladder sedge d • Cuckoo flower o • Cow parsley o • Hemlock water dropwort o • Creeping Jenny o • Soft rush o • Water mint f	Moderate	No	Negative	
Pond 5	This smaller pond is approximately 0.02ha based on the OS pond boundary, however water levels were very low at the time of survey, with standing open water only present in a few paces a couple of centimetres in depth (and low water levels are likely to be the reason for the inconclusive eDNA results). There is an island within the pond with goat willow, crack willow and hazel trees/shrubs, and weeping, crack and goat willow trees along the southern bank and the pond is heavily shaded and filled with leaf litter. The pond is being colonised by grassland species including Yorkshire fog, cocks' foot and false oat grass with common nettle, creeping buttercup and curled dock abundant. Aquatic marginal vegetation is present with bulrush, common reed, soft rush, gypsy wort and yellow flag iris. The pond is surrounded by other neutral grassland with a tall sward which is surrounded by a road and access tracks, there are residential properties to the north and a HPI deciduous woodland to the south. Species include: • Soft rush a • Bulrush o • Yellow flag iris f • Gypsywort f • Common reed o • Common nettle a • Yorkshire-fog a • Cocks foot f • False oat-grass o • Curled dock f • Goat willow f	Poor	No	Inconclusive	

Pond reference	Description	Condition	HPI	eDNA Results	Photograph
Pond 6	This smaller pond is approximately 0.03ha based on the OS pond boundary, however there is significant encroachment by aquatic vegetation with a thick matt of vegetation (dominated by water crowfoot sp.) lying over stagnant and turbid water of very low levels (and low water levels are likely to be the reason for the inconclusive eDNA results). Aquatic emergent/marginal vegetation is present and includes water crowfoot sp., hemlock water-dropwort, yellow iris, bull rush, rosebay willowherb, and soft rush. There is a mature oak on the northeastern edge of the pond, a mature horse-chestnut on the western bank and a semi-mature crack willow on the eastern bank. The pond is surrounded by an area of other neutral grassland managed to a low sward height to the northwest and south, with a hedgerow on the eastern boundary behind which lies a residential property. The pond sits on a road junction with roads present to the south and west. Species include: - Water crowfoot sp. d - Soft rush a - Yellow flag iris f - Bulrush o - Rosebay willowherb o - Goat willow o - Cow parsley o - Creeping buttercup o - Yorkshire-fog f - False oat grass o - Hemlock water dropwort f	Poor	No	Inconclusive	
Pond 7	This is a large woodland pond approximately 0.22 ha that lies within a parcel of HPI deciduous woodland. It is present to the west of Dunsfold Common Road, with a grassland strip one to two meters in width between the road and the water. The pond is heavily shaded by trees, although there is slightly less tree cover by the roadside, especially to the south, which allows some light penetration. There is a lot of vegetation encroachment the southern area of the pond, which is likely to be very shallow, dominated by bulrush with common reed, yellow flag iris, water mint, common nettle, bramble, gypsy wort and goat willow also present. The water was turbid and of low quality, and there is likely to be a lot of surface run-off from the road as well as inundation of leaf litter, no floating or submerged vegetation was observed. The pond is immediately surrounded by woodland extending to the north and south; with pastoral and arable fields to the west; and Dunsfold common road to the east beyond which is a mosaic of grassland, woodland and residences. Species include: - Bulrush d - Common reed o - Yellow flag iris o - Water mint a - Common nettle f - Bramble f - Gypsywort f - Goat willow f - Soft rush o - Pendulous sedge o - Curled dock o	Moderate	No	Negative	

Pond reference	Description	Condition	HPI	eDNA Results	Photograph
Pond 8	This pond was completely dry at the time of the survey, with no evidence of water, and has succeeded into a small woodland. Further management of this area to return it to a pond habitat, whilst feasible, is not considered to be a realistic target if this management plan and this pond has been excluded from the management plan.	Not applicable	No	Not applicable	
Pond 9	This is a larger pond approximately 0.07ha. The pond backs on to private properties to the south, and is surrounded by trees, shrubs and scrubs for the majority of its perimeter, and was only accessible at two points, one to the southwest and one to the northeast, which may limit future management. The pond was completely covered in duckweed and was very turbid with low water quality. The pond is heavily shaded by trees with around 70% of the pond shaded pedunculate oak, goat willow, ash, crack willow and hazel are present. Excluding duck weed, no floating or submerged vegetation was visible. Emergent vegetation was present at the pond margins with bull rush, common reed, yellow flag iris and hemlock water dropwort. Bull rush appears to be increasing encroachment across the pond. A distinct bank is present around the pond which has bramble, common nettle, curled dock, ivy, ash saplings and cow parsley present. The pond is surrounded by an area of other neutral grassland with a varied sward to the west, with residential properties to the south, deciduous woodland to the east and a road and the residence to the north. Species include: • Duckweed d • Bulrush a • Yellow flag iris f • Common reed o • Hemlock water dropwort o • Goat willow o • Hazel o • Bramble f • Common nettle f	Poor	No	Inconclusive	

Table 15: Target Notes recorded during the survey

Pond reference	Target note reference	Description	
Pond 3	TN1	Carp seen in Pond 3	
	TN2	Dried out waterbody north of Pond 3 located at Grid reference: TQ 00643 36688. This is located in an area of HPI woodland where great crested newts are present. Historic OS maps indicate that this area once formed part of Pond 3 (National Library of Scotland, Accessed 08/072025). Re-instating this area as an ephemeral pond with the aim of creating a new breeding pond for great crested newts would be very beneficial for the local population.	

Appendix 4: Amphibian survey

Methods

Habitat Suitability Index Assessment

The HSI assessment was undertaken following the National Amphibian and Reptile Recording Scheme methodology (NARRS, 2008) (Oldham, Keeble, Swan, & Jeffcote, 2000).

The GCN HSI methodology uses ten suitability indices. In general ponds with high HSI scores are more likely to support GCN than those with low scores. The suitability criteria are as follows:

- SI_1 = geographic location
- SI_2 = pond area
- SI_3 = pond drying
- SI_4 = water quality
- SI_5 = shade
- SI_6 = waterfowl
- SI_7 = fish
- SI_8 = pond density
- SI_9 = terrestrial habitat
- SI_{10} = macrophytes

Of these, SI_2 , SI_3 , SI_5 , SI_6 , SI_8 , SI_9 and SI_{10} are assessed using objective measures, whilst SI_1 , SI_4 and SI_7 are assessed qualitatively. The HSI score for each pond is then derived using the following equation:

$$HSI = (SI_1 \times SI_2 \times SI_3 \times SI_4 \times SI_5 \times SI_6 \times SI_7 \times SI_8 \times SI_9 \times SI_{10})^{1/10}$$

The HSI is a numerical index between 0 and 1, where 0 indicates unsuitable habitat, and 1 represents optimal habitat. The results of the HSI calculation were compared to categorised HSI scores (based on NARRS 2008) to assess the habitat quality and likelihood of GCN presence. The five categories are presented in the table below.

Table 16: HSI assessment scores

Pond suitability	HSI score
Poor	<0.5
Below average	0.5 – 0.59
Average	0.6 – 0.69
Good	0.7 – 0.79
Excellent	>0.8

Survey dates and weather conditions are presented in the table below.

Table 17: Survey dates and weather conditions

Date	Time	Temp °C	Cloud (%)	Rain	Wind ⁴
20.05.25	10:45	19	10%	No rain	2 - Light breeze

⁴ Beaufort scale

To inform the HSI assessment DEFRA mapping (DEFRA, n.d.) was used to identify publicly available great crested newt pond survey results of from Natural England Class Survey Licence Returns (Natural England, Accessed 08/07/2025) and Great Crested Newt eDNA Habitat Suitability Index Pond Surveys for District Level Licensing 2017, 2018, 2019 (Natural England, Accessed 08/07/2025)

Presence/likely absence using eDNA

The GCN eDNA field sampling and laboratory analysis was undertaken in line with best practice (Biggs, et al., 2014).

The survey visit was undertaken on 20/05/2025 by Daniel Lock BSc (Hons) MSc – Ecologist (Level 1 License reference: 2022-10355-CL08-GCN) and Sean Stone BSc (Hons) Assistant Ecologist.

The samples were delivered to Nature Metrics⁵ for laboratory analysis on 22/05/2025.

Results were received on 23/05/2025.

Limitations

The survey was undertaken in the most optimal conditions and the results can be relied upon to inform the impact assessment.

Residual Limitations (Non manageable limitations)

Ponds 5 and 6) were almost completely dry at the time of survey holding very little water making the sampling selection limited to these small areas where water was present

Pond 2) During the summertime it was noted that this pond is occasionally topped with tap water. It should be noted even small amounts of treated tap water can affect the presence of the detectability of GCN e DNA, this will be dependent on timing and volume of the waterbody

Pond 9) The temperature and sunlight at the time at which the final sample (Pond 9) was taken, may of have influenced the detectability of GCN eDNA. The sample taken at the h completed during a time of high temperatures, and this may have impacted the detectability of eDNA of the sample..

Results

Habitat Suitability Index Assessment

The results of the HSI assessments are summarised in the table below.

⁵ The laboratory follows Natural England's approved protocol (WC1067), which ensures that the test meets regulatory requirements and participates in the proficiency testing which they passed with 100%.

Table 18: GCN HSI assessment results

Pond reference	HSI Score	HSI Result	DEFRA mapping (DEFRA, n.d.) historical Great Crested Newt P/LA survey results
Pond 1	0.57	Below Average	License return for TQ006368 may refer to this pond. Survey completed with positive result, great crested newt present
Pond 2	0.49	Poor	Survey completed, inconclusive result
Pond 3	0.49	Poor	No data present
Pond 4	0.63	Average	License return for TQ005365 may refer to this pond. Survey completed with positive result, great crested newt present (2015/2017)
Pond 5	0.69	Average	No data present
Pond 6	0.67	Average	No data present
Pond 7	0.76	Good	No data present
Pond 9	0.83	Excellent	Survey completed with negative result; great crested newt likely absent (2019).

Presence/likely absence using eDNA

The table below presents the results of the eDNA surveys.

Table 19: GCN presence/likely absence survey results

Pond reference	eDNA survey results
Pond 1	Positive
Pond 2	Inconclusive
Pond 3	Negative
Pond 4	Negative
Pond 5	Inconclusive
Pond 6	Inconclusive
Pond 7	Negative
Pond 9	Inconclusive

Appendix 5: Plant species recorded during the survey

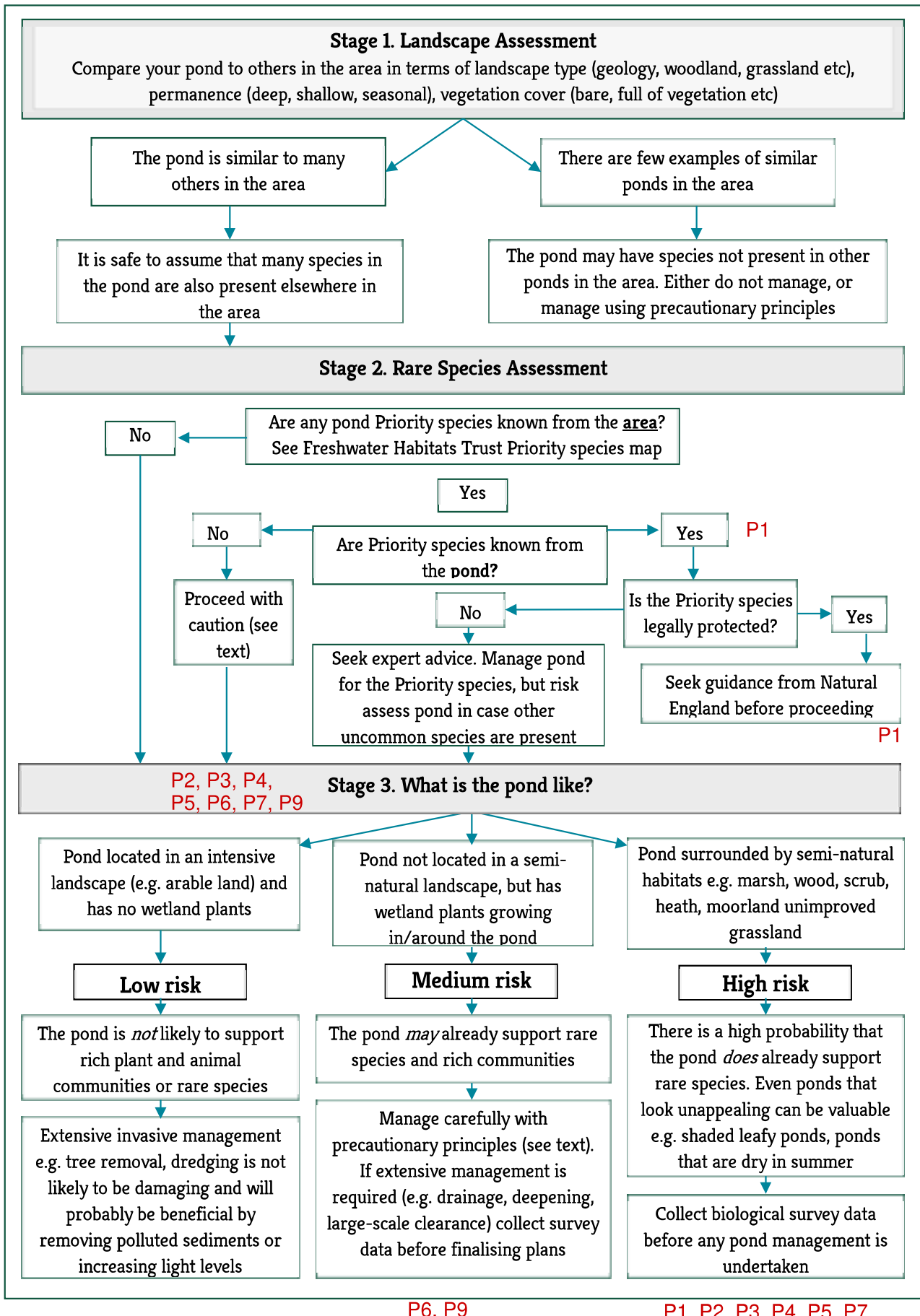
Pond ID	Scientific name	Common name	Status	Other Notations	GB Notable Plant Register 2020	Surrey Plant Register
Pond 1	<i>Nymphaea alba</i>	White Water-lily		AX		
	<i>Typha latifolia</i>	Bulrush				
	<i>Iris pseudacorus</i>	Yellow Iris		AX		
	<i>Salix caprea</i>	Goat Willow				
	<i>Solanum dulcamara</i>	Bittersweet				
	<i>Juncus effusus</i>	Soft-rush				
	<i>Mentha aquatica</i>	Water Mint				
	<i>Lycopus europaeus</i>	Gypsywort				
	<i>Lysimachia nummularia</i>	Creeping Jenny		GCI AX		
	<i>Alisma plantago-aquatica</i>	Water-plantain		GCI AX		
	<i>Chamaenerion angustifolium</i>	Rosebay Willowherb				
	<i>Carex vesicaria</i>	Bladder-sedge		GCI AX		VC17 Scarce
	<i>Juncus conglomeratus</i>	Compact Rush		GCI AX		
Pond 2	<i>Oenanthe crocata</i>	Hemlock Water-dropwort				
	<i>Cardamine pratensis</i>	Cuckooflower		GCI AX		
	<i>Nymphaea alba</i>	White Water-lily		AX		
	<i>Iris pseudacorus</i>	Yellow Iris		AX		
	<i>Juncus effusus</i>	Soft-rush				
	<i>Chamaenerion angustifolium</i>	Rosebay Willowherb				
	<i>Salix caprea</i>	Goat Willow				
	<i>Oenanthe crocata</i>	Hemlock Water-dropwort				
	<i>Ranunculus acris</i>	Meadow Buttercup				
	<i>Cardamine pratensis</i>	Cuckooflower		GCI AX		
	<i>Spiraea douglasii</i>	Steeple-bush				
	<i>Ranunculus flammula</i>	Lesser Spearwort		AX		
	<i>Mentha aquatica</i>	Water Mint				
Pond 3	<i>Juncus conglomeratus</i>	Compact Rush		GCI AX		
	<i>Juncus effusus</i>	Soft-rush				
	<i>Carex pendula</i>	Pendulous Sedge		AWI AX		
	<i>Calystegia sepium</i>	Hedge Bindweed				
	<i>Allium triquetrum</i>	Three-cornered garlic		Sch9		
	<i>Typha latifolia</i>	Bulrush				
	<i>Citrullus lanatus</i>	Water Melon				
	<i>Juncus conglomeratus</i>	Compact Rush		GCI AX		
	<i>Carex vesicaria</i>	Bladder-sedge		GCI AX		VC17 Scarce
	<i>Juncus effusus</i>	Soft-rush				
	<i>Equisetum sp.</i>	Horsetail sp.				
	<i>Oenanthe crocata</i>	Hemlock Water-dropwort				
	<i>Trifolium pratense</i>	Red Clover				
Pond 4	<i>Lycopus europaeus</i>	Gypsywort				
	<i>Chamaenerion angustifolium</i>	Rosebay Willowherb				
	<i>Solanum dulcamara</i>	Bittersweet				
	<i>Carex pendula</i>	Pendulous Sedge		AWI AX		
	<i>Iris pseudacorus</i>	Yellow Iris		AX		
	<i>Rumex obtusifolius</i>	Broad-leaved Dock				
	<i>Rumex sanguineus</i>	Wood Dock				
	<i>Salix caprea</i>	Goat Willow				
	<i>Carex vesicaria</i>	Bladder-sedge		GCI AX		VC17 Scarce
	<i>Cardamine pratensis</i>	Cuckooflower		GCI AX		
	<i>Anthriscus sylvestris</i>	Cow Parsley				
	<i>Oenanthe crocata</i>	Hemlock Water-dropwort				
	<i>Lysimachia nummularia</i>	Creeping Jenny		GCI AX		
Pond 4	<i>Juncus effusus</i>	Soft-rush				
Pond 4	<i>Mentha aquatica</i>	Water Mint				
Pond 5	<i>Juncus effusus</i>	Soft-rush				
Pond 5	<i>Typha latifolia</i>	Bulrush				
Pond 5	<i>Iris pseudacorus</i>	Yellow Iris		AX		
Pond 5	<i>Lycopus europaeus</i>	Gypsywort				
Pond 5	<i>Phragmites australis</i>	Common Reed				
Pond 5	<i>Urtica dioica</i>	Common Nettle				
Pond 5	<i>Holcus lanatus</i>	Yorkshire-fog				
Pond 5	<i>Dactylis glomerata</i>	Cock's-foot				
Pond 5	<i>Arrhenatherum elatius</i>	False Oat-grass				
Pond 5	<i>Rumex crispus</i>	Curled Dock				
Pond 5	<i>Salix caprea</i>	Goat Willow				
Pond 6	<i>Ranunculus sp.</i>	Water crowfoot sp.				
Pond 6	<i>Juncus effusus</i>	Soft-rush				
Pond 6	<i>Iris pseudacorus</i>	Yellow Iris		AX		
Pond 6	<i>Typha latifolia</i>	Bulrush				
Pond 6	<i>Chamaenerion angustifolium</i>	Rosebay Willowherb				
Pond 6	<i>Salix caprea</i>	Goat Willow				
Pond 6	<i>Anthriscus sylvestris</i>	Cow Parsley				
Pond 6	<i>Ranunculus repens</i>	Creeping Buttercup				
Pond 6	<i>Holcus lanatus</i>	Yorkshire-fog				
Pond 6	<i>Arrhenatherum elatius</i>	False Oat-grass				
Pond 6	<i>Oenanthe crocata</i>	Hemlock Water-dropwort				
Pond 7	<i>Typha latifolia</i>	Bulrush				
Pond 7	<i>Phragmites australis</i>	Common Reed				
Pond 7	<i>Iris pseudacorus</i>	Yellow Iris		AX		
Pond 7	<i>Mentha aquatica</i>	Water Mint				
Pond 7	<i>Urtica dioica</i>	Common Nettle				

Pond ID	Scientific name	Common name	Status	Other Notations	GB Notable Plant Register 2020	Surrey Plant Register
Pond 7	<i>Rubus fruticosus agg.</i>	Bramble				
Pond 7	<i>Lycopus europaeus</i>	Gypsywort				
Pond 7	<i>Salix caprea</i>	Goat Willow				
Pond 7	<i>Juncus effusus</i>	Soft-rush				
Pond 7	<i>Carex pendula</i>	Pendulous Sedge		AWI AX		
Pond 7	<i>Rumex crispus</i>	Curled Dock				
Pond 9	<i>Lemna minor</i>	Common Duckweed				
Pond 9	<i>Typha latifolia</i>	Bulrush				
Pond 9	<i>Iris pseudacorus</i>	Yellow Iris		AX		
Pond 9	<i>Phragmites australis</i>	Common Reed				
Pond 9	<i>Oenanthe crocata</i>	Hemlock Water-dropwort				
Pond 9	<i>Salix caprea</i>	Goat Willow				
Pond 9	<i>Corylus avellana</i>	Hazel				
Pond 9	<i>Rubus fruticosus agg.</i>	Bramble				
Pond 9	<i>Urtica dioica</i>	Common Nettle				

Key		
Sch9	Schedule 9 Wildlife and Countryside Act	
Sch8	Schedule 8 Wildlife and Countryside Act	
LISI	London Invasive Species Initiative	
AWI	Ancient Woodland Indicator	
GCI	Species typical of Grasslands of Conservation Interest (taken from the Surrey SNCI criteria)	
AX	Axiophytes in Surrey. Axiophytes are "worthy plants" - the 40% or so of species that arouse interest and praise from botanists when they are seen. They are indicators of habitat that is considered important for conservation, such as ancient woodlands, clear water and species-rich meadows.	
	GB Notable Plant Register 2020	
	Surrey Rare Plant Register (2013)	

Appendix 6: Pond management risk assessment

Pond management risk assessment



P6, P9

P1, P2, P3, P4, P5, P7

Appendix 7: Survey calendar

This survey calendar should be used as guidance only and is based on current industry best-practice.

Survey type	January	February	March	April	May	June	July	August	September	October	November	December		
Habitat				UK habitat classification survey and National Vegetation Classification (habitat dependant for specific survey months)										
				Habitat condition assessment (habitat specific suitable month)										
Invertebrate														
Amphibian (including great crested newt)				Habitat suitability index										
				eDNA presence/absence										
				Presence/absence and population size class assessment										
Reptiles														
Birds	Wintering birds			Migratory/b reeding birds			Breeding birds			Migratory birds			Wintering birds	
Badger				Bait marking and sett search						Bait marking and sett search				
Bats	Preliminary Roost Assessment (all year); Preliminary Ground Level Tree Roost Assessment (optimal between November and March)													
	Winter roost presence/likely absence						Presence/likely absence summer survey and activity survey						Winter roost presence/likely absence	
Hazel Dormouse				Nest tube (nut search from September to December)									Nut search	
Otter				Preferable survey season										
Water Vole														
Rare/notable plant or invasive species														
Survey sub-optimal	Survey optimal		Survey outside acceptable season											