Standing Open Water Habitat Action Plan



"A lake is the landscape's most beautiful and expressive feature. It is earth's eye; looking into which the beholder measures the depth of his own nature."

Henry David Thoreau

Aims

- To maintain and enhance the ecological health of existing waterbodies and ensure that management is appropriate.
- To create new areas of standing open water where possible. Any unavoidable loss should be adequately compensated with the securement of a Biodiversity Net Gain.
- To raise the awareness amongst Council Officers and the public of the importance of standing open water to encourage greater appreciation of waterbodies across the borough.

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2 Introduction

Small standing water bodies constitute the most numerous freshwater environments globally and are critical for ecosystem service delivery and freshwater biodiversity (Biggs, Fumetti & Kelly-Quinn, 2017). Standing open water (SOW) also represents one of the most diverse of all ecological habitats in London. Ponds alone can support ²/₃ of all freshwater life. Lakes, ponds, filter beds and ditches can be seen as habitat stepping stones and corridors for urban biodiversity and these habitats will be increasingly important to build species resilience against climate change. According to GiGL data, standing open water and canals comprise approximately 0.4% of the total land area in Kingston (15 hectares).

Between the 19th century and the 1980s, the UK lost around 75% of its ponds (Riley et al. 2018) and although the number of ponds in Great Britain has since increased (11% between 1996 and 2007), their biological state has simultaneously deteriorated (Carey et al. 2008). It is therefore essential that we work to not only restore the quality of existing ponds but proactively work to create new habitat.

There are significant standing open waterbodies across the borough - the largest being Seething Wells Filter Beds (a Grade 1 SINC) at over 3 hectares. The quality of habitat at this site however is identified as being at risk due to current management practices. This has included drainage of the filter beds and the loss of species-rich, calcareous grassland habitat, which supported species that are unique to the borough and quality of wetland habitats present. Given the nature of the site, its relationship with the River Thames and its geological character, Seething Wells is considered to continue to be of notable value. It is expected that the potential to restore the site to its previous quality and value would also be achievable through appropriate management.

Other large bodies of water include Barwell Lake and the lagoon at Thames Water's Hogsmill Nature Reserve. We are also fortunate to have several smaller ponds in our parks and nature reserves including the wetland system at Fishponds Park, and ponds at Tolworth Court Farm, Manor Park, and Jubilee Wood LNR. In recent years there has been the creation of new ponds across the borough at sites including Edith Gardens LNR (2019), The Berrylands Nature Reserve (2018) (formally known as Raeburn Open Space LNR), and Latchmere Recreation Ground (2021), which has set a good precedent for an increase in pond habitats throughout Kingston. Ponds have also been recently restored within the borough such as the restoration of the pond in Claremont Gardens in 2022. The oldest pond in the borough is Plough Pond, which dates back to the 15th Century and has a newly established volunteering group.

According to the 2020 independent Sites of Importance to Nature Conservation review, of the 46 SINC & recommended SINC sites, 20 have some level of standing open water. 6 of the 12 Local Nature Reserves have standing open water of some form and 4 of our parks and recreation grounds host a wildlife pond. However, some of these water bodies are in a poor condition which needs to be addressed. It is hard to assess the status of smaller water bodies such as garden ponds and small ornamental lakes within private landholdings. However, given the nature of some areas of RBK, private gardens are extensive and could number several hundred.



This document is an updated version of the previously published <u>Habitat Management Plan</u> for 'Standing Open Water (lakes and ponds, ditches)' which was created in 2014. This Habitat Action Plan is not intended to provide site specific context and management recommendations, but to provide an overview of the current borough level situation and a framework in which site management interventions can be agreed.

3 Current status

- a. Legal/policy status standing waterbodies themselves are not necessarily legally protected but some of the species that use them are. A survey should be undertaken to check for rare/protected species (particularly great crested newts) before a development can take place and this should not exclude relevant species, such as birds and invertebrates.
- b. Conservation status The JNCC lists 'standing open waters and canals' as UK BAP broad habitats. The priority habitats within this broad habitat type include: oligotrophic and dystrophic lakes, ponds, mesotrophic lakes, eutrophic standing waters and aquifer fed naturally fluctuating water bodies. Additionally, reed beds are listed as a priority habitat under the broad habitat of 'fen, marsh and swamp'. (See Appendix A for SINC sites in RBK).
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c. Distribution

Figure 1 Distribution of waterbodies in RBK with a 500m buffer into neighbouring boroughs.



4 Associated Indicator Species

Our larger water bodies (>2 ha) have a pivotal role in supporting wintering wildfowl and in the spring and summer, they support breeding wildfowl, terns and waders. Within a single large waterbody there might be several types of micro-habitats, such as deep open water, shallow open water with abundant submerged vegetation, emergent vegetation (i.e. reed, bulrush) as well as carr woodland and wet woodland. Maintaining the presence of each of the above features is a management challenge, but crucial for maintaining biodiversity value. Species such as lapwing are a good indicator species for the quality of these wetland environments. Seething Wells for instance once supported large numbers. However, in 2020 only one individual was recorded, which is unfortunately to be expected in line with the habitat degradation the site has experienced.

Ponds and small lakes are particularly important for amphibians and reptiles such as frogs, toads, newts and grass snakes. These smaller, often sheltered water bodies hold a huge variety of invertebrates. Most spectacular are damselflies, dragonflies and water beetles. Standing water generally supports a larger variety of insects compared to dry habitats which are important food sources for birds and bats, especially during prolonged dry weather conditions in late spring and summer.

Species found will highly depend on the physical, chemical and biological conditions of the site. The specialist requirement of each species differs, but generally falls into four broad categories:

- Those that spend their entire lives in water or moisture laden soil conditions. Examples are fish, ramshorn snails, and freshwater mussels.
- Those that must spend part of their life-cycle in water or moisture laden soil conditions. Examples are dragonflies and damselflies, frogs, toads and newts
- Those dependent upon wetland habitats as a specialist source of food and/or breeding grounds. Examples are water fowl, reed bunting, water vole and Daubenton's bats.
- Those animals that visit water to bathe or drink. Examples are deer, foxes, hedgehogs and badgers

Group	Indicator Species
Bird	Waterfowl: mallard, teal, coot, moorhen, tufted duck, common pochard, goosander, great crested grebe, little grebe.
	Wet meadow species: curlew, lapwing, little egret, mute swan redshank, snipe, yellow wagtail.
	Other water and wetland species: grey heron, kingfisher, oystercatcher, sand martin.

 Table 1
 Associated indicators of standing open water habitats



Mammal	Water vole, water shrew.
	Most bat species will utilise standing open water habitats for foraging although a particular indicator of wetlands is the Daubenton's bat.
Reptile	Grass snake.
Amphibian	Palmate newt, great crested newt, toads, frogs.
Invertebrate	Snails, dragonflies, damselflies, water beetles, freshwater bivalves.
Plant	Macrophytes such as water crowfoot, hornwort, marsh marigold, flag iris, purple loosestrife, common reed etc.
	Trees: willow, birch, alder.
	Other groups: ferns, mosses, liverworts, algae, lichen, flowering plants.

5 Ecosystem Functionality and Services (Role in the Climate Emergency)

There is a growing awareness surrounding the importance of freshwater biodiversity and its contribution to ecosystem services, as well as their sensitivity to environmental and anthropogenic stressors. In addition to providing habitat for aquatic species, standing water bodies are often important for terrestrial organisms, such as bats (Freshwater Habitats Trust, 2012), birds, and pollinating insects (Lewis-Phillips, 2019; Stewart *et al.*, 2017). The continual presence and quality of these freshwater resources will be vital in ensuring the provision of ecosystem services for both humans and nature.

5.1 Carbon Cycling

Standing open waters are active constituents of the global carbon cycle. They transform both organic and inorganic carbon from terrestrial sources, capture carbon dioxide from the atmosphere, bury this carbon in sediments and can act as a significant carbon sink. Research by Taylor et al. (2008) suggests that ponds have the potential to be a very useful tool in mitigating carbon emissions and may have carbon burial rates 20-30 times higher than rates estimated for other habitats such as woodlands and grasslands. Nevertheless, it is currently unclear whether burial of carbon in small standing waters compensates for the high rates of greenhouse gases that ponds produce through mineralisation and degassing on a global scale (Cole *et al.,* 2007; Biggs, Fumetti & Kelly-Quinn, 2017). Appropriate management can help to ensure that standing waterbodies remain a carbon sink.

5.2 Water Supply

With a rapidly growing global population the demand for reliable water sources is set to increase. Furthermore, the exploitation of freshwater ecosystems and the generation of waste water in the urban sector create pressures on water security



(Maurya *et al.*, 2020). Standing open waters provide a number of services including water storage, the recharge of groundwater and the transformation of nutrients from unavailable to available forms, as well as the transformation of heavy metals and pesticides into less toxic forms. They have therefore been created and utilised for centuries across Eurasia for the purpose of water supply (Biggs, Fumetti & Kelly-Quinn, 2017).

5.3 Biodiversity

Small standing waterbodies such as ponds and small lakes often represent the best remaining examples of intact freshwater habitat (Biggs, Fumetti & Kelly-Quinn, 2017). Historically their ability to support biodiversity can be attributed to a number of factors. namely their distribution over the freshwater landscape which allows organisms to move between them over time, their physio-chemical heterogeneity which is typically greater than in larger waterbodies (Williams et al., 2004; Lischeid & Kalettka, 2012) and in relation to the modern environment, a more frequent preservation of near-natural conditions compared to that of larger waterbodies (Biggs, Fumetti & Kelly-Quinn, 2017). Additionally, their patchy, isolated nature and high variation between local conditions has been suggested to account for higher rates of speciation, thus providing an important contribution to evolution and genetic diversity (Wiens, 2015).

Ditches, unlike ponds and lakes, are solely manmade environments often found on the boundaries of agricultural fields and drained wetlands. They are nevertheless critical freshwater habitats that can support a range of species of conservation concern (Graham & Hammond, 2015). They provide similar ecosystem services to that of ponds and wetlands (Dollinger *et al.*, 2015) and may be important dispersal corridors, facilitating gene flow for species otherwise restricted to nature reserves (Favre-Bac *et al.*, 2016). At present, Alric Avenue Allotments, Manor Park, Coombe Wood Golf Course and Coombe Hill Golf Course are all SINC sites in the borough that contain at least seasonally wet ditches, alongside Riverhill in Worcester Park, which is not a SINC but does have a seasonally wet ditch as a boundary feature.

5.4 Mitigating the Urban Heat Island Effect

As the world's population continues to increase, so does the rate of urbanisation and climate warming. While most strategies focus on green infrastructure as a nature-based solution to mitigate the UHI effect, waterbodies and blue infrastructure provide a significant cooling service (Yang *et al.*, 2020). This effect results from the high heat capacity of waterbodies, alongside evaporation and heat transfer between air and water which allows cool air to circulate in the surrounding environment (Wang & Ouyang, 2021).

Urban ponds tend to have warmer waters than larger waterbodies and rural ponds. As a result, they currently support species which are adapted to those conditions. There is therefore, potential for urban ponds to contribute to climate change adaptation by acting as source populations for the colonisation of ponds elsewhere (Oertli & Parris, 2019).

5.5 Recreation

Blue features in urban spaces, especially those of natural origin, provide an important and highly valued source of recreation to urban dwellers (Grunewald & Bastian, 2017). Not only do they have direct benefits on physical and mental wellbeing, natural environments have been linked to social cohesion, life enrichment and spiritual experience (Lindgren & Elmqvist, 2017). Kaplan & Kaplan (1989) hypothesise that the preference for a water element in the landscape originates from a human evolutionary perspective.

There can be conflicts between recreation and ecology in urban environments due to pressures of pollution, bankside poaching and disturbance for example. Measures should therefore be taken to alleviate such pressures. This might be achieved by increasing the number and diversity of standing open water in the borough that is vital for all of the other benefits outside of recreation, to allow some ponds to be isolated from people to help preserve wildlife. There should also be benefits through flood alleviation where SuDS are used to create standing open water. Some of these SuDS may reside in areas that are compromised from a water quality standpoint, so could also be used as sacrificial ponds for recreation purposes while isolating ponds with higher ecological value from physical access to people and pets.

5.6 Monitoring the Impacts of Climate Change

Due to their relatively small size, sensitivity to environmental changes and easily defined boundaries, it is easier to measure the species richness in ponds than in other freshwater ecosystems. They are therefore considered to be ideal early warning systems, as they can be used for monitoring long-term changes in freshwater ecosystems caused by climate change at the local level (Rosset, Lehmann & Oertli, 2010).

6 Threats to habitat

While standing open waters represent a closed system, they are not unchanging. All show changes in populations and diversity over time, but the fluctuations become greater as the volume of water becomes smaller. A small pond is subject to great fluctuations, hot summers can significantly reduce the water levels, a heavy rainstorm floods it, and oxygen can easily fall to a critical level. Animal populations change rapidly, not only from season to season but also from one year to the next. An algal bloom can appear overnight if conditions are right. The higher plants in general have a greater tolerance to these fluctuations, but any permanent change in conditions will be followed by a change in community composition. To determine appropriate management actions, it is important to know which threats are affecting freshwater habitats in the borough.

6.1 Development

While large numbers of ponds, lakes and ditches have been created, it is likely that a similar or even greater number of these natural habitats have been destroyed or degraded (Biggs, Fumetti & Kelly-Quinn, 2017). Even more natural sights may suffer from the effects of development at their fringes, such as pollution and fragmentation. Development proposals have historically threatened Seething Wells, the largest site in the borough, despite being designated as a Site of Important for Nature Conservation



(Borough Grade 1) as well as Metropolitan Open Land.

6.2 Invasive Species

Non-native species are characteristic of urban waterbodies, particularly urban ponds which have been stocked with nonnative plants and fish (Oertli, 2018). Several species are able to establish in large populations, can disperse successfully over the regional scale and can become invasive, the occurrence of which is continuously increasing (Hussner, Nehring & Hilt, 2014). These pose a massive threat to ecosystem services and economy as they displace native species, carry diseases that kill fish, block up waterways causing floods, damage boats and have been estimated to cost the UK economy over £1.7 billion per annum (Williams et al., 2010).

An example in Kingston is Crassula helmsii (New Zealand Pigmyweed) which is an aggressively invasive plant that can be found inhabiting the margins and shallow waters of freshwater lakes and ponds. Once an old garden favourite, the sale of C. helmsii is now banned in the UK alongside several other invasive and nonnative species. These form dense smothering mats of vegetation which are extremely difficult to eradicate.

As New Zealand pygmyweed is present at sites with free public access such as Alexandra Millenium Green and Jubilee Ponds, there is a risk of introduction to uninfected/isolated ponds elsewhere in the borough. In this case, biosecurity protocols and on-going public awareness campaigns for visitors are essential for preventing further spread. Ponds containing Crassula helmsii should be cordoned off from public access to minimise dogs carrying fragments on their fur from pond to river and wider afield. This might be achieved through fencing and appropriate public education.

6.3 Litter & Recreation

The presence of microplastics in the natural environment is widely increasing, yet information regarding their impact is lacking in comparison to marine environments (Vaughan, Turner & Rose, 2017). Given that microplastics are a relatively novel threat, impacts such as ingestion by organisms and the chemical transfer of toxicants are largely unquantified. More research is required on their presence in the freshwater environment, the modes of distribution, the extent of their impacts on aquatic life and their potential impact on human health (Eerkes-Medrano, Thompson & Aldridge, 2015).

Fishponds and Alexandra Millennium Green are two SINC sites in the borough with SOW that suffer from litter and also dog fouling.

6.4 Pollution

Urban wetlands are typically subject to a wide range of pollutants, especially when exposed to surface runoff from impervious materials in the built-up environment. Important examples include salts and metals from roads, fertilisers and chemical treatments from household and industry. Eutrophication is of particular concern, as nutrient enrichment can lead to harmful algal blooms and the proliferation of toxic cyanobacteria. In any case, pollutants have the potential to bioaccumulate and affect the entire trophic cascade (van Meter, Swan & Snodgrass, 2011; Straka *et al.*, 2016; Jones *et al.*, 2017).

Waterbodies most affected in RBK include Plough Pond, Alexander Recreation



Ground, and those which are situated on farmland. Old Malden Pond is situated next to a busy road and is therefore vulnerable to pollution events.

6.5 Isolation from Surrounding Habitats On one hand, isolation can be of benefit to smaller catchments by reducing exposure to pollutants (Biggs, Fumetti & Kelly-Quinn, 2017). On the other hand, urban waterbodies are likely to be embedded in a largely hostile matrix and are therefore isolated from a network of physical and biological processes (Hassall, Hill & Gledhill, 2016).

On a species level, the destruction and fragmentation of freshwater habitat for development has created barriers to dispersal, impacting metapopulations on the landscape scale. This in turn, decreases resilience and the probability that freshwater species will be saved from extinction from nearby source populations (Semlitsch, 2000). The effects of isolation can be felt at Plough Pond, which is situated alongside a busy road.

6.6 Poor Management

Urban waterbodies tend to be highly managed, whereby certain vegetation types are promoted based on their aesthetic value or a specific functional service, rather than ecological function (Oertli & Parris, 2019). They are also unlikely to resemble natural conditions due to artificial structures, pollution and exotic species. If not managed properly, urban waterbodies have been shown to act as ecological traps which increase the extinction risk of some species (Hale *et al.*, 2015; Sievers *et al.*, 2019).

The Surbiton Fishponds are now designed to take stormwater run-off from the local road network. Kingston Council has allowed this process to alleviate flooding of the sewage works. There was an agreement to plant the ponds with phragmite reeds to cleanse the water. However, this and other remedial works were never carried out and consequently the ponds are in a poor state. This issue is due to be addressed in 2022 along with restoration of the wetland system.

Popular but unfavourable urban management techniques include:

- Hydroperiod modification (managing water levels or draining)
- Mowing marginal aquatic vegetation
- Feeding birds or fish
- Introducing non-native species
- Chemical control
- Dredging at inappropriate times of the year

6.7 Climate Change

Smaller waterbodies such as ponds, ditches and small lakes, are subject to higher rates of fluctuations in regards to temperature and water levels, which are considered to be important variables that determine the suitability of a habitat for amphibian breeding (Babbitt, Veysey & Tanner, 2010). However, relatively little information has been collated regarding the relationship between the length of that time there is standing water in a location and biodiversity in urban environments, which may hinder the effective management of smaller waterbodies (Oertli & Parris, 2019).

In fact, the seasonal 'drawdown zone' where the water table fluctuates is an exceptionally rich habitat that is utilised by invertebrates and plants, as well as birds and small mammals for feeding. It comprises one of the most important



areas of a pond but is typically limited to a narrow strip at the waters' edge and is rarely considered in waterbody design. This zone can be extended to create a patchwork of small-scale habitats such as undulating pools, spits and marshy areas surrounding the waters' edge. For more guidance, see <u>Freshwater Habitats Trust</u>.

6.8 Lowering of the Water Table

Outside of natural processes such as prolonged periods of drought, the urban heat island effect and the abstraction of water for human use are factors which affect the water table. This can be particularly detrimental to spring-fed waterbodies that rely on groundwater discharge.

6.9 Lack of Knowledge

There is currently a recognised lack of knowledge regarding the physical and biological functioning of standing open waters, with which to effectively inform policy and water management planning. Despite almost all aspects lacking longterm investigation, the role of connectivity between sites has been identified as a major area of uncertainty (Oertli & Parris, 2019). A database of information regarding the state of all standing open waterbodies and their connection to terrestrial habitats in the borough is vital for evaluating the extent to which water quality and aquatic assemblages change over time and informing management.

6.10 Artificial Lighting

Since primary producers, such as plants and cyanobacteria, make up the base of the aquatic community and light is a key factor which influences their growth, artificial light at night has the potential to influence the functioning of the entire ecosystem (Grubisic, 2018).

Many invertebrates depend on the natural rhythms of seasonal day and night. Artificial lighting has the potential to impact a wide range of invertebrates by disrupting their feeding, breeding and movement patterns, which may reduce and fragment populations. For example, light pollution at night, alongside shiny architectural features such as glass which mimics the waters' surface, draws insects (including egg laying females) away from water (Bruce-White & Shardlow, 2011). This impacts not only the invertebrate populations directly, but also species higher on the food chain such as bats.

Action	Timeframe	Lead	Partners	Evidence base
SW01 - All standing open waterbodies owned by RBK to have active conservation management plans.	2022 - 2027	RBK		Maintain and Enhance Ponds and Lakes - GOV.UK Tolworth Court Farm Moated Manor Management Plan - RBK

Conservation actions (Tabulated)



				Example of Management Plan - Hatchet Pond, New Forest
SW02 – Create a database of information regarding the ecological status of standing open waterbodies in RBK, including changes in water quality and aquatic assemblages over time.	2022 - 2027	RBK	GiGL	<u>National Pond</u> <u>Monitoring Network –</u> <u>Freshwater Habitats</u>
SW03 - Create standing open water habitats in parks and recreation grounds, aim for at least one pond creation project annually.	2022 – Ongoing (Until all suitable parks and recreation grounds have ponds)	RBK		Create Ponds and Lakes - GOV.UKPond Creation & Enhancement For Landowners - Sussex Wildlife TrustWoodland Pond Creation - Freshwater Habitats TrustCreate and Manage Ditches for Wildlife - GOV.UKCreating Pond Complexes - Freshwater Habitats
SW04 - Undertake investigations as necessary to inform restoration actions for RBK owned waterbodies.	2022 - Ongoing	RBK		Pond Restoration Guide - Norfolk Wildlife Trust Manchester Urban Pond Restoration Programme Overview



SW05 - Implement biosecurity protocols in for invasive species at relevant sites.	2023 - 2028	RBK		N/A
Engagement & Awareness	Timeframe	Lead	Partners	Evidence base
SW06 – Develop an annual programme of SOW focussed events and activities across RBK.	2022-2027	RBK		N/A
SW07 – Publish promotional resources on the key SOW sites in RBK that would benefit from public access.	2023	RBK		N/A
SW08 – Promote the potential for introduction / recovery programmes for future flagship species, which utilise larger SOW sites, but are now rare or extinct in RBK.	2022-2027	RBK		Returning Water Voles to the Hogsmill Great Manchester Wetland Species Reintroduction Project

Planning Context - Biodiversity Net Gain

In the UK, a planning condition is defined as 'a constraint placed on the granting of planning permission which allows development to go ahead only if the conditions are satisfied'. When used properly, conditions can enhance the quality of development and enable it to proceed where it would have otherwise been necessary to refuse, by mitigating the adverse effects. As an automatic condition of the Environment Act 2021, applicants will need to measure the existing and proposed biodiversity values of their sites before development begins in order for permissions to be granted.

8



As priority habitat for the borough, standing open waterbodies such as ponds, lakes and ditches should be protected through the planning system and, where possible, habitat creation and enhancement is encouraged. As part of the new conditions, if the loss of a habitat cannot be avoided appropriate mitigation and compensation actions must be taken, with a minimum of 10% biodiversity net gain (calculated using The Biodiversity Metric 3.0). Additionally, these biodiversity enhancements must be secured for a minimum of 30 years. Reaches of adjoining priority habitats, such as grassland, rivers and streams and woodlands may form an integral part of freshwater conservation management.

The new Biodiversity Net Gain (BNG) policy does not trump other environmental policies, meaning locally important and irreplaceable habitats (defined by Natural England) should remain protected from development and are not to be insufficiently replaced with newly created habitats. The delivery of BNG through landscaping and green infrastructure is preferred onsite. Where onsite improvements are not possible measurements must be delivered off site on land holdings or via habitat banks, or as a last resort, through the purchase of statutory biodiversity credits.

Metric	Process of Monitoring	Timeframe	Lead	Partners
SW01, SW05 – Number of active management plans.	Annual report	2023 - ongoing	RBK	
SW02, SW04 - Number of monitoring programmes supported / undertaken.	Annual report	2023 - ongoing	RBK	
SW03 – Number of habitat creation or enhancement projects supported / undertaken.	Annual report	2023 - ongoing	RBK	
SW06 - Number of events, number of attendees and collation of materials used.	Ad hoc	2023 – 2028	RBK	
SW07, SW08 – Collation of resources created.	Ad hoc, annual account	2023 - 2028	RBK	

Monitoring



10 Other relevant HAPs/ SAPs

- a) Grassland
- b) Rivers & Streams
- c) Woodland
- d) Hedgerow
- e) Amphibians
- f) Bats
- g) Reptiles
- h) Water Vole

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12 Abbreviations

SOW – Standing Open Water RBK – Royal Borough of Kingston

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14 Appendix

Appendix A. SINC designation status of RBK standing open water sites (2021).

Site	SOW Habitat	SINC designation
Alexandra Millennium Green	Pond	Proposed Local SINC
Alric Avenue Allotments	Seasonally Wet Ditch	Proposed Local SINC
Barwell Estate Lake	Lake	Borough (Grade 1)
Edith Gardens Allotments	Ponds	Local
Fishponds	Ponds	Borough (Grade 2)
Hogsmill Valley Sewage Works and River	Standing Water (TBC)	Borough (Grade 1)



Kingston University; Kingston Hill	Pond	Borough (Grade 1)
Knollmead Allotments	Mini Ponds	Proposed Local SINC
Malden Golf Course and Thames Water Pipe Track	Ornamental Ponds	Borough (Grade 1)
Old Malden Pond	Pond	Local
Raeburn Open Space	Pond	Borough (Grade 2)
Seething Wells	Filter Beds	Borough (Grade 1)
Tolworth Court Farm Fields and Medieval Moated Manor	Pond, Wetland and Wet Woodland	Borough (Grade 1)
Winey Hill	Pond	Borough (Grade 1)

