



# London Water Vole Recovery Programme

Water Vole Recovery Action Plan

**Updated Feb 2026**



## ACKNOWLEDGEMENTS

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We extend our thanks to all the practitioners and stakeholders that expressed an interest and joined the practitioner meetings, programme and contributed to this action plan. Finally, a thanks to all the volunteers that have thus far participated in the water vole surveys and sightings submissions.



SUPPORTED BY

**MAYOR OF LONDON**



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**Image credit:** David Edwards (front cover & above)



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## INTRODUCTION

Water voles (*Arvicola amphibius*) are an iconic species of the British countryside, made famous as the lead character in Kenneth Grahame's *Wind in The Willows*. For many, water voles were synonymous with the rivers, and their characteristic “plop” as they ran to the water was once a familiar sound. This once common species is now protected in the UK under the Wildlife and Countryside Act, 1981<sup>1</sup>. They are a Priority Species under the UK Post-2010 Biodiversity Framework<sup>2</sup>, a London Priority species<sup>3</sup> and listed as Endangered on both the Great Britain and the England IUCN Red List for Mammals<sup>4</sup>.

When the Environment Act came into force in 2021, new legally binding targets were set to “protect and enhance our natural world”. Targets include the halting of species decline and recovering species’ populations by 10% (of 2022 levels) by 2042<sup>5</sup>. Within this framework, the publication of the Environmental Improvement Plan (EIP) 2023 set out a delivery plan on how the Government intends to achieve its goals.

In Goal 1 of the EIP, “Taking targeted actions to restore and manage species”, water voles are one of the initial species for which a pilot Species Conservation Strategy is being developed. This new mechanism aims to safeguard the future of “species at greatest risk”, requiring local planning authorities and public bodies to work with Natural England to adopt the new strategies<sup>6</sup>. As an endangered species within the UK, water voles need targeted conservation action. Natural England is currently piloting a regional strategy to inform the future development of a national strategy for water vole conservation, thus setting the scene for a national recovery of this charismatic species.

Approximately 600km of rivers and waterways flow through London. The city has the potential to play an important part in restoring the fortunes of water voles. The Greater London Authority (GLA), responsible for the Local Nature Recovery Strategy for London, has already shown a great interest in protecting this key species. The Rewild London grant programme, which supported a water vole reintroduction on the Hogsmill, the first stage of the London Water Vole Recovery Programme and has a focus on rewilding throughout the city<sup>7</sup>, has set the stage to see water vole return to its once widespread distribution within London.

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<sup>1</sup>Water voles: advice for making planning decisions. (2022). GOV.UK. Available at: <https://www.gov.uk/guidance/water-voles-advice-for-making-planning-decisions> (Accessed: 04 September 2023).

<sup>2</sup>UK Post-2010 Biodiversity Framework – JNCC. (2012). UK Post-2010 Biodiversity Framework. Available at: <https://data.jncc.gov.uk/data/587024ff-864f-4d1d-a669-f38cb448abdc/UK-Post2010-Biodiversity-Framework-2012.pdf> (Accessed: 04 September 2023).

<sup>3</sup>London Priority Species. (2019). London City Hall. Available at: <https://www.london.gov.uk/programmes-and-strategies/environment-and-climate-change/environment-publications/london-priority-species> (Accessed: 19 September 2023).

<sup>4</sup>Mathews, F. and Harrower, C. (2020). IUCN – compliant Red List for Britain’s Terrestrial Mammals. Assessment by the Mammal Society under contract to Natural England, Natural Resources Wales and Scottish Natural Heritage. Natural England, Peterborough ISBN 978-1-78354-485-1.

<sup>5</sup>Delivering on the Environment Act: new targets announced and ambitious plans for nature recovery. (2022). GOV.UK. Available at: <https://www.gov.uk/government/news/delivering-on-the-environment-act-new-targets-announced-and-ambitious-plans-for-nature-recovery> (Accessed: 20 August 2023).

<sup>6</sup>September 2021: Nature and conservation covenants (parts 6 and 7). (2020). GOV.UK. Available at: <https://www.gov.uk/government/publications/environment-bill-2020/10-march-2020-nature-and-conservation-covenants-parts-6-and-7> (Accessed: 20 August 2023).

<sup>7</sup>Rewilding London, Final Report Of The London Rewilding Taskforce. (2023). London City Hall. Available at: <https://www.london.gov.uk/programmes-strategies/environment-and-climate-change/parks-green-spaces-and-biodiversity/london-rewilding-taskforce> (Accessed: 20 August 2023).

## WATER VOLES IN THE ECOSYSTEM

In functioning river ecosystems, water voles form a substantial part of the diet for many native predators, such as heron, otter and pike<sup>8</sup>. In these habitats, the prolific breeding of water voles allows their populations to be maintained despite high predation levels from these native predators.

Water voles can also alter and affect the surrounding vegetation and habitat structure through their burrowing and feeding behaviours. They have been recorded feeding on 227 different plant species, and graze on both surface and root vegetation, which can alter plant habitat heterogeneity and community diversity. Metapopulation dynamics, including local extinctions and subsequent recolonisation of water vole colonies, ensure a series of patchwork habitats exist across the landscape, creating differences in plant community structures and successional stages<sup>9</sup>. This prevents any one plant species becoming overly dominant and helps to ensure higher levels of biodiversity can be maintained<sup>10</sup>.

## LONDON'S RIVERS

London's water bodies were historically subjected to high levels of modifications, degradation and pollution, leaving much of the approximately 600km of rivers and streams in poor ecological condition. However, as part of the Local Nature Recovery Strategy, and a wider ambition to restore the health of London's waterways, a lot of work and effort has been going on to bring together organisations and work towards the goal of restored nature-rich river corridors.

Since 2000, almost 39km of river has been restored by the River Partnerships in London (RPiL)<sup>11</sup>, improving biodiversity, water quality, flood mitigation and river function. Proposed targets of improving a minimum of 5km annually highlights the wider drive to improve London's rivers and offers opportunities to directly benefit water voles and the ecosystems they exist in.

## WATER VOLES UNDER THREAT

Estimated to once number around 8 million nationally in the 1900s, water voles have since suffered huge declines. By 2002, the population was estimated to be between 200,000-500,000. In 2004, the water vole had the unenviable title of the fastest declining mammal in the UK<sup>12</sup>.

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<sup>8</sup> Reid, E., Morrison, K., Scott, C. and McCafferty, D. (2022). Water voles as prey for grey herons in an urban environment. *Glasgow Naturalist* (online 2022), 28(Part 1).

<sup>9</sup> Bryce, R., Van Der Wal, R., Mitchell, R. and Lambin, X. (2013). Metapopulation dynamics of a burrowing herbivore drive spatio-temporal dynamics of riparian plant communities. *Ecosystems*, 16, pp.1165-1177.

<sup>10</sup> Bryce, R. (2006). The ecosystem engineering and trophic effects of the water vole: species loss and ecosystem processes (Doctoral dissertation, University of Aberdeen).

<sup>11</sup> River restoration in London: A 20-year review. (2020). Catchment Partnerships in London. Available at: <https://www.thames21.org.uk/wp-content/uploads/2020/10/LRW-River-restoration-report-Final.pdf> (Accessed: 30 August 2023).

<sup>12</sup> Strachan, R.. (2004). Conserving water voles: Britain's fastest declining mammal. *Water and Environment Journal*, 18(1), pp.1-4.

A similar pattern was seen in London. Where once widespread populations existed across the capital, by 1997, water voles had disappeared from 72% of the previously occupied sites<sup>13</sup>. Previous work by the London Wildlife Trust (LWT) in 2004 showed that water voles were still clinging on in sites across the city, approximately 11 sites were still providing refuge to water vole populations<sup>14</sup>. Some of these colonies are known to have since disappeared, and the status of this species in London has been unclear since the study. The known remnant populations are small and fragmented, making them vulnerable to the effects of inbreeding and predation by American mink. In this state, London's isolated water vole colonies are highly exposed to the threat of more local extinctions.

Historic water vole declines in the UK were attributed to habitat loss, degradation and agricultural intensification<sup>15</sup>. Following the introduction of the non-native American mink (*Neovison vison*) in the 1920s, hereby termed mink, rapid large-scale declines in water vole populations were observed<sup>16</sup>. These predators are highly efficient hunters and can easily wipe out water vole colonies within short periods of time. The water vole antipredator defences that have allowed them to co-exist with our native predators are rendered useless in the presence of mink.

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<sup>13</sup>Richmond Biodiversity Partnership - Biodiversity Action Plan. (2020). Available at: [https://habitatsandheritage.org.uk/wp-content/uploads/2020/10/Biodiversity-Action-Plan-Richmond\\_compressed.pdf](https://habitatsandheritage.org.uk/wp-content/uploads/2020/10/Biodiversity-Action-Plan-Richmond_compressed.pdf) (Accessed: 25 August 2023).

<sup>14</sup>London Water Vole Project. (2004a). London Biodiversity Partnership. Available at: <https://www.lbp.org.uk/downloads/Publications/Management/watervole.pdf> (Accessed: 04 September 2023).

<sup>15</sup> Gelling, M., Moorhouse, T. and Strachan, R. (2011). Water Vole Conservation Handbook.

<sup>16</sup> Strachan, R., Strachan, C. and Jefferies, D. (2000). Preliminary report on the changes in the water vole population of Britain as shown by the national surveys of 1989–1990 and 1996–1998. The Vincent Wildlife Trust, London, p.18.



## ORIGIN OF THE LONDON WATER VOLE RECOVERY PROGRAMME (LWVRP)

There has been a lot of attention and conservation action within London over many years, to improve the status of water voles within the capital. However, this charismatic species remains under threat both nationally and within London. In September 2022, a kick-starter meeting was initiated to reinvigorate water vole conservation in London. The meeting was held in the Hogsmill Nature Reserve to bring together stakeholders to pick up and continue from the previous work led by the London Wildlife Trust. The founding organisations included the Zoological Society of London (ZSL), London Wildlife Trust (LWT), People's Trust for Endangered Species (PTES), London Borough of Richmond Upon Thames (LBRuT), Wildfowl and Wetlands Trust (WWT), Citizen Zoo, Thames Water, Green Space information for Greater London (GiGL), Lee Valley Park and Royal Parks.

It was agreed that all parties would work together towards the shared goal of water vole recovery, and the necessity to develop a series of initial actions essential for the species recovery in London was recognised. Through this meeting, initial priority steps were identified:

1. Improve the knowledge of the status and distribution of water vole populations in London.
2. Improve the knowledge of the status and distribution of American mink and develop a plan to facilitate their eradication from London.
3. Build a more cohesive approach amongst NGOs and communities to water vole conservation in London.
4. Build greater awareness and skills in London on how to identify and report both water vole and mink sightings.
5. Develop a clear, co-developed pathway for restoring the key species as part of the plan to re-wild London.

The London Water Vole Recovery Programme was created in response to this initial meeting and formed in partnership with ZSL, PTES, LWT and GiGL in March 2023. The first aim of the LWVRP was to address the priorities identified in the kick-starter meeting. This phase of the project was funded by the Mayor of London's Rewild London Fund.



## LONDON WATER VOLE RECOVERY PROGRAMME

### VISION, GOALS AND OBJECTIVES

The vision of the London Water Vole Recovery Programme is,

“The restoration of resilient and self-sustaining water vole populations across Greater London”

### How We Will Work

The London Water Vole Recovery Programme will achieve its vision through open collaborative working with multiple partners at a landscape scale. Partners working within the LWVRP will engage with the many dedicated volunteers and community groups across the capital.

In-person bi-annual meetings with all partners will help ensure that the collaborative approach is maintained, and help facilitate a coordinated, landscape approach to water vole recovery in London. A London Water Vole Recovery Programme padlet page has been set up for sharing updates and information between all practitioners involved in the programme.

We offer an open invitation to anyone or any organisation that can and wants to be involved in the LWVRP. To get in touch, please email [marineandfreshwater@zsl.org](mailto:marineandfreshwater@zsl.org), referencing the London Water Vole Recovery Programme.

### Goals of the London Water Vole Recovery Programme:

1. Determine the current water vole status.
2. Facilitate the eradication of American mink.
3. Improve the monitoring of water voles.
4. Identify priority sites to protect and restore metapopulations.
5. Raise awareness and increase public engagement in recovering water vole populations.
6. Build the evidence base through research.
7. Unify stakeholders and share best practice.

### GOAL 1: DETERMINE THE CURRENT WATER VOLE STATUS.

After their declines, it is important to set a baseline for the status of water vole in London. This will allow the remaining extant populations to be identified and will enable resources to be directed effectively to facilitate their recovery.

#### Objective: Identify where populations of water vole currently exist in London.

- **Actioned:** Create a data portal for the public to submit water vole (and mink) sightings.

The GiGL data portal (Water Vole Recovery Project - Casual Recording Form) was created in April 2023, and can be found [here](#). In total, 19 water vole sightings were submitted to the data portal, and included water vole records from 2019-23. We encourage that the data portal be advertised widely, both to the public and

other stakeholders, to increase its use and effectiveness as an opportunistic water vole and mink data collection point.

- **Actioned:** Promote the use of the GiGL portal.

A communication campaign was carried out to encourage the public to record and submit sightings of water voles (and mink) to the GiGL portal. This was promoted by journalists and advertised through various online media outlets.

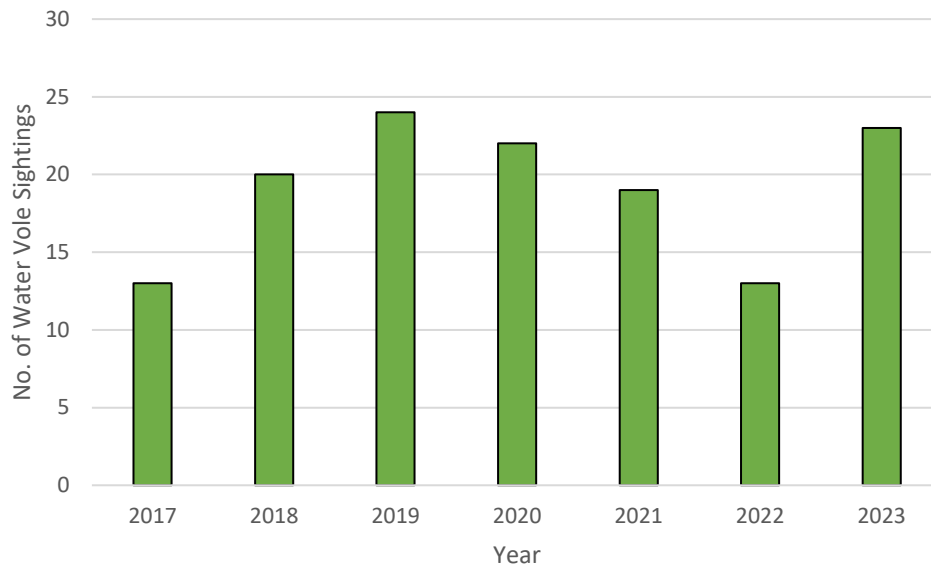
An online session was held on 19<sup>th</sup> April 2023, which attracted 60 members of the public. This webinar launched the project to the public and showed them how to ID and report sightings of water voles and mink.

- **Actioned:** An initial assessment of GiGL's baseline water vole data from the last five years.

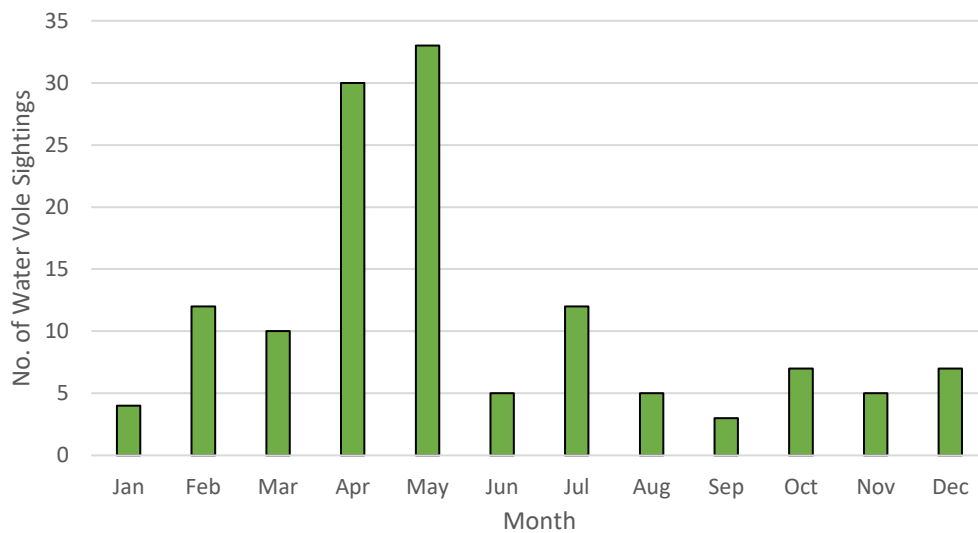
Data obtained from GiGL showed consistent water vole sightings between 2017-23 across the capital, with the highest number of sightings observed in 2019 and 2023 (Figure 1). Cumulatively, sightings peaked between April and May, and dropped considerably for the remaining months (Figure 2). In the absence of systematic presence/absence data collection in the capital, sightings should be used as an indicator of water vole presence. Absence of sightings does not necessarily mean absence of water voles.

Water vole sightings between 2017-23 were distributed across the capital (Figure 3). Regions that had clusters of sightings included the Colne Valley, Crane Valley, Hogsmill River, Lee Valley, River Rom and Beam, River Ingrebourne, Rainham Marshes and Crossness Nature Reserve. However, it is important to consider that for many of the clusters, the records are older and therefore less likely to represent current water vole distribution. For example, the Crane and Hogsmill rivers both saw their populations of water voles go locally extinct between 2017-23.

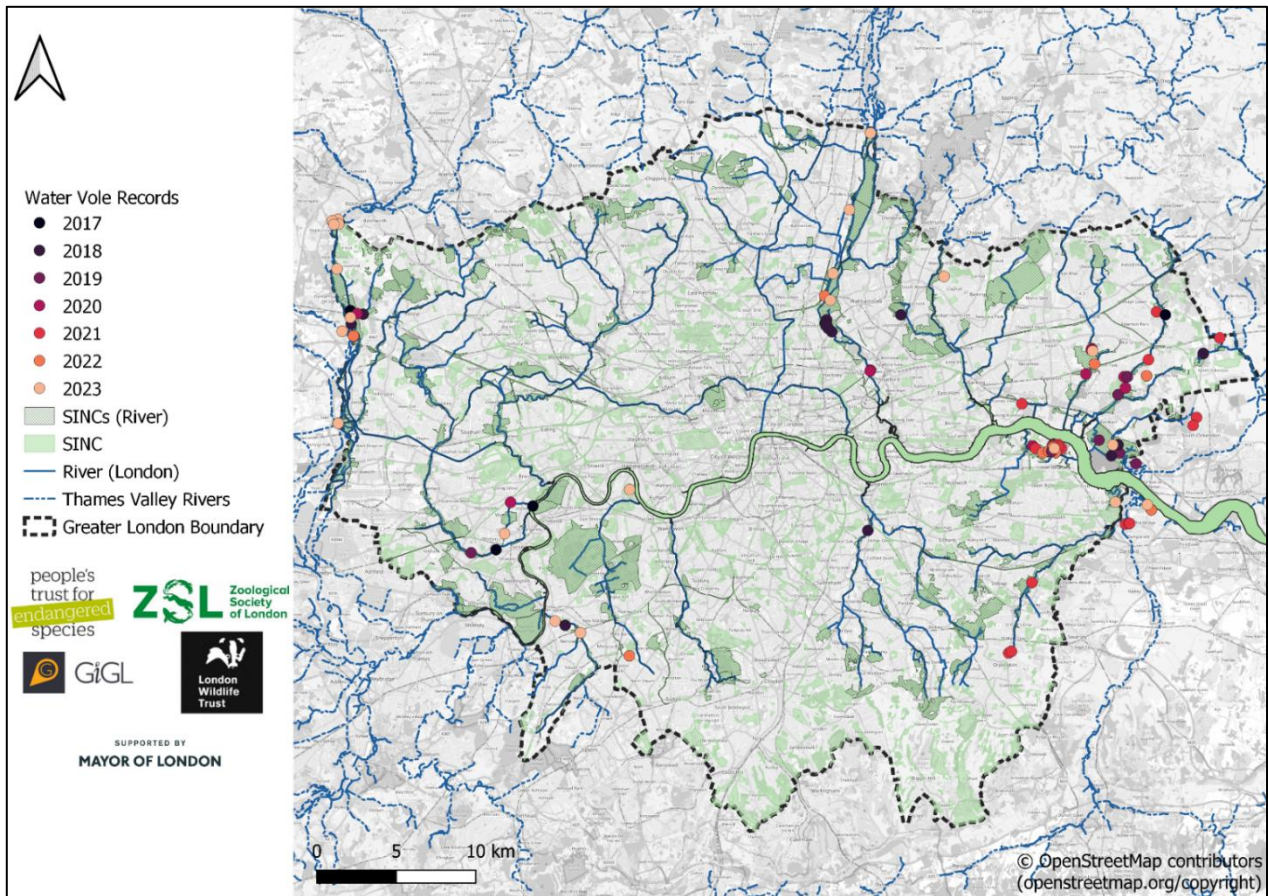
Due to the similarities between water voles and rats, especially when dealing with opportunistic sightings without photographic evidence, accurate water vole sightings can be hard to discern. It is important to consider the number of records when determining if a habitat/region supports water voles. A greater number of sightings would increase the likelihood of having positive water vole IDs from the area in question. Figure 5 shows how the number of sightings differed between regions (records amalgamated into biologically sensible boundaries – see Figure 14 for region designations). Crossness Nature Reserve had the largest number of total sightings, followed by Lee Valley, Colne Valley and Ingrebourne. Considering year, Figure 6 showcases how the number of sightings reported in each region varied between 2017-23. Again, Crossness consistently had the highest number of sightings annually. Regions with fewer and/or older sightings could indicate where water vole colonies have drifted into local extinction, where water vole sightings may have been incorrect or where much data simply did not exist to indicate water vole presence.



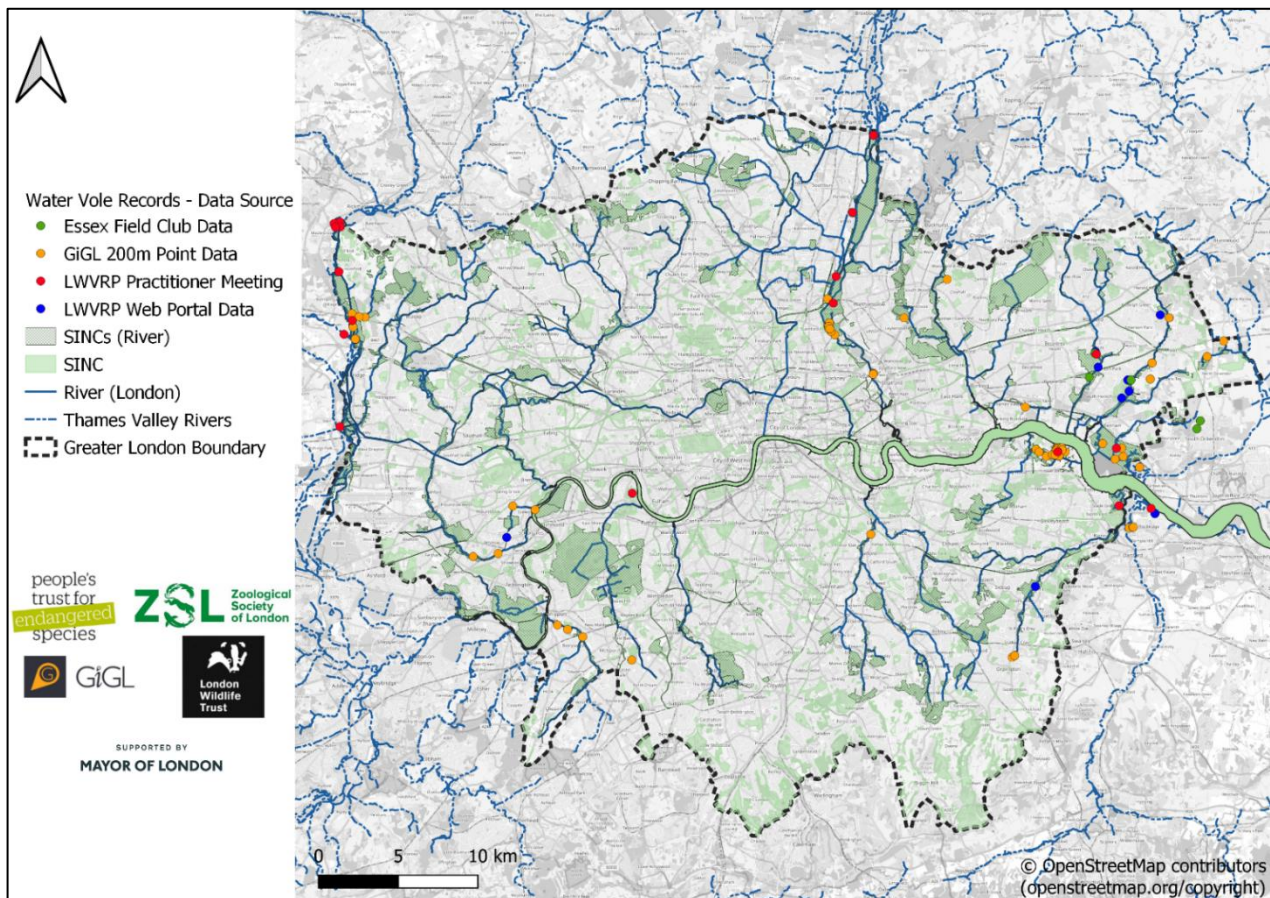
**Figure 1,** Total number of water vole sightings recorded each year between 2017-23.



**Figure 2,** Cumulative water vole sightings grouped by month for combined years 2017-23.



**Figure 3**, Locations of water vole sightings across Greater London between 2017-23.



**Figure 4,** Locations of water vole sightings between 2017-2023, displayed by observation source. Additional records outside the border of Greater London are included for reference.

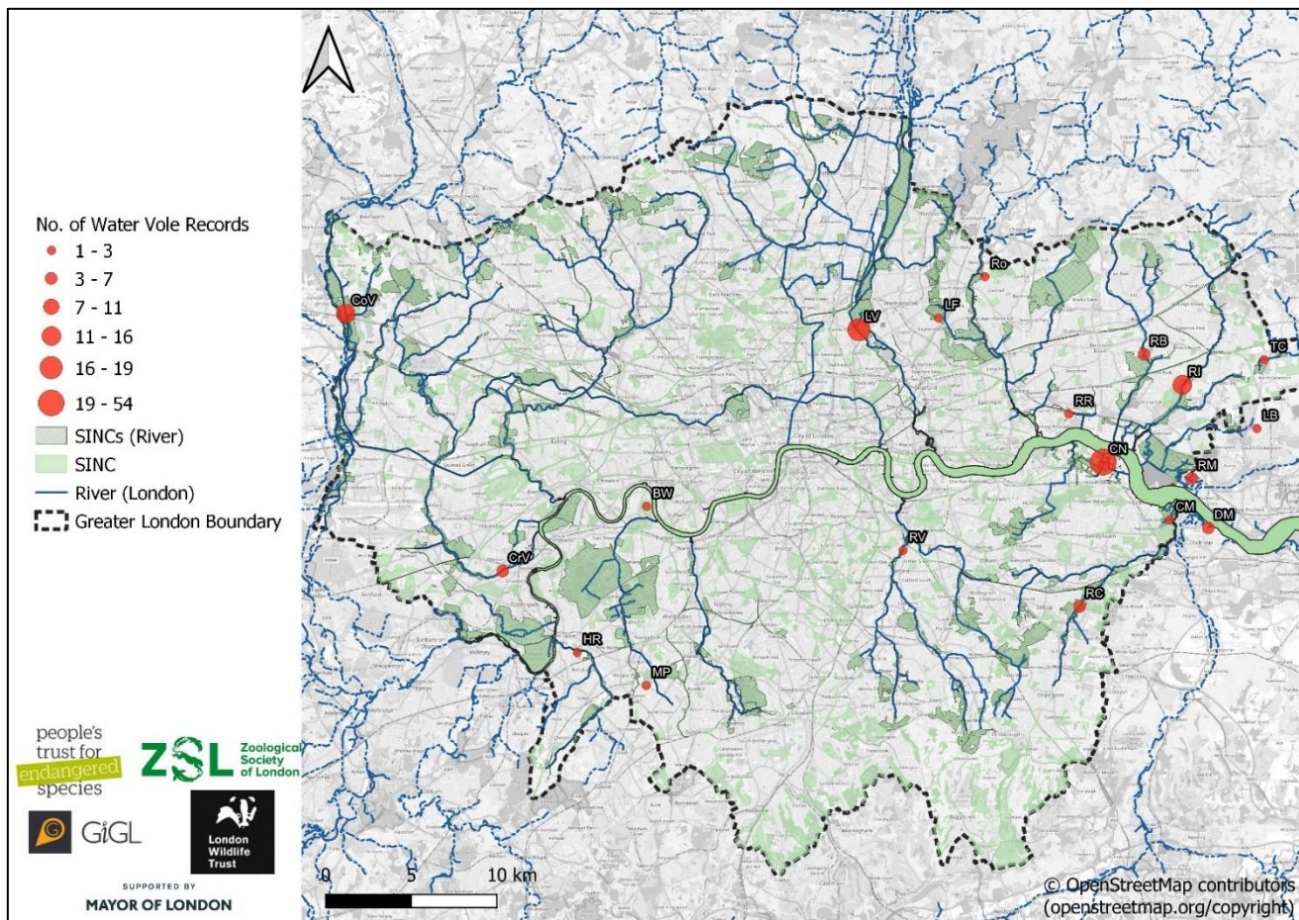
## GOAL 2: FACILITATE THE ERADICATION OF AMERICAN MINK.

### Rationale for a mink eradication programme

Despite long-term mink trapping across the country, mink remain widespread and continue to predate on water vole colonies. In the UK, mink are a damaging, invasive predator and are listed on Schedule 9 of the Wildlife and Countryside Act<sup>17</sup>, meaning a licence is not required to trap and euthanise them. They are, however, protected under the Animal Welfare Act 2006<sup>18</sup>, which ensures that they undergo no unnecessary suffering while being trapped. Floating mink rafts are the most effective form of trapping, but previous methods were hugely labour intensive and time consuming. The requirement to check traps daily when in “trapping mode”, meant that trap numbers were limited by the hours available from staff and volunteers to monitor them.

<sup>17</sup>Guidance on section 14 of the Wildlife and Countryside Act. (2007). DEFRA GOV.UK. Available at: <https://www.gov.uk/government/publications/preventing-the-release-into-the-wild-of-certain-plants-and-animals-guidance/guidance-on-section-14-of-the-wildlife-and-countryside-act> (Accessed: 01 September 2023).

<sup>18</sup>Animal Welfare Act 2006. (2006). Legislation.gov.uk. Available at: <https://www.legislation.gov.uk/ukpga/2006/45/contents> (Accessed: 01 September 2023).



**Figure 5**, Total number of water vole sighting records observed within each region. Colne Valley (CoV), Crane Valley (CrV), Hogsmill River (HR), Barnes Wetland (BW), Mayflower Park (MP), Lee Valley (LV), Ravensbourne (RV), Leyton Flats (LF), Roding (Ro), Renwick Road (RR), Crossness Nature Reserve (CN), River Rom/Beam (RB), River Ingrebourne (RI), Thames Chase (TC), Rainham Marshes (RM), Little Belhus Country Park (LB), Dartford Marshes (DM), Crayford Marshes (CM), River Cray (RC).

A major development in improving mink trapping has been the addition of the Remoti device to create “smart rafts”. This device sends signals to an email or telephone when the trap has been activated, removing the requirement to check the trap daily. Consequently, more traps can be maintained with less effort. Waterlife Recovery Trust (WRT) (more information [here](#)) has successfully shown that, with the deployment of many of these traps over a large area, mink eradication is possible. This is a major development and adoption of their methodology across London offers a chance to aid the recovery of water voles within the capital. London will link with their work in eradicating mink nationally. Initial trapping within London will form part of the “buffer” phase of WRT trapping programme. This will aim to remove mink from within London and prevent further invasion of mink into their “core” region, currently largely free of mink. As the WRT trapping programme expands nationally, so will the buffer and core regions.

### Ethical Considerations

It is important to consider the implications of this programme and ethical considerations that are associated with it. Due to their threat to water voles and other native fauna, two questions in relation to this programme arise: can we allow for the continued decline of our native fauna by ignoring the presence of mink, and can we continue to have small-scale and isolated trapping programmes that prolong the killing of mink without



**Figure 6**, Annual water vole records recorded within each region between 2017-23. See Figure 5 for locations of each region.

any end in sight? Answers to both these questions are unsatisfactory, as they both will prolong the conflict and the number of animals dying. The alternative is a large, landscape scale, intensive trapping programme, to remove the threat of mink completely and allow water voles (and other fauna) to recover. Mink eradication in Greater London is a small piece in the UK puzzle and joins a much larger eradication programme, led by WRT, to remove mink entirely from the UK. This large-scale intensive trapping will result in fewer mink deaths in the long term. It is imperative that best practice is always followed throughout the eradication programme, to ensure the humane treatment of mink. Details on the trapping programme will be made clear later in this document.

**Objective: Determine where and when mink have been sighted in the last five years.**

Mink are territorial, males tend to hold much larger territories compared to females. They are a semi-aquatic predator, living in riparian habitats where they breed and search for prey. During their breeding season, between February and March, males will cover large distances within their territory, as they attempt to find females. Gestation is between 40-75 days and, typically, three-seven kits are born per litter. By late summer/early autumn, the kits are fully independent and disperse from their natal range<sup>19</sup>. Where mink trapping occurs, two peaks in trap captures are often seen in early spring and August/September, corresponding with the male mating behaviour and kit dispersal respectively.

- **Actioned:** Use data portal to determine the locations of latest mink sightings.

In total, 8 mink records were submitted to the data portal, originating between 2020 and 2023. Additional mink records were available, resulting in a total of 31 mink sightings between 2017-23 from within London. Though a relatively low number of sightings were recorded, mink were consistently present between 2017-

<sup>19</sup> Species – American Mink. (2023). The Mammal Society. Available at: <https://www.mammal.org.uk/species-hub/full-species-hub/discovermammals/species-american-mink/> (Accessed: 01 September 2023).

23 (Figure 7), with sightings largely occurring in the summer months (Figure 8). Mink sightings were concentrated in the south-west and north-east regions of London (Figure 9). It is important to note that large dispersal and uneven recording effort means that mink are likely to be more widespread than the data implies.

- **Actioned:** Promote the use of the Waterlife Recovery Trust portal on social media for mink sightings.

Waterlife Recovery Trust have a dedicated sightings portal for American mink, which can be found here: [Report a Sighting - Waterlife Recovery Trust](#). This is the preferred destination for American mink sightings, as Waterlife Recovery Trust will be able to rapidly respond and adjust traps if required.

### **Objective: Facilitate a London mink trapping programme**

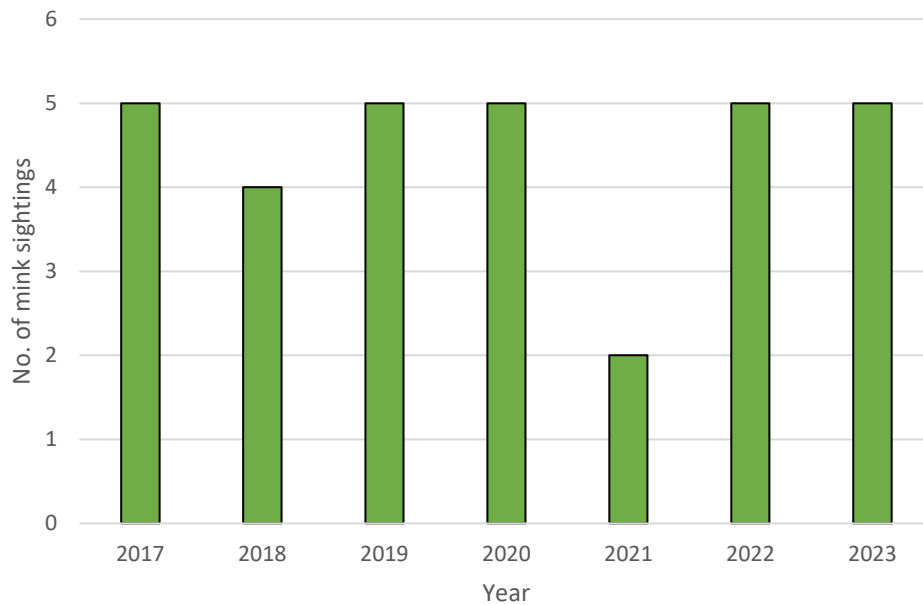
- **Actioned:** Define basic trapping structure and roles.

The trapping plan to be adopted in London will be based upon the proven structure used by WRT and their successful eradication programme. The use of Remoti rafts has dramatically reduced the hours required to maintain and monitor traps and, consequently, many traps can be maintained by a few individuals.

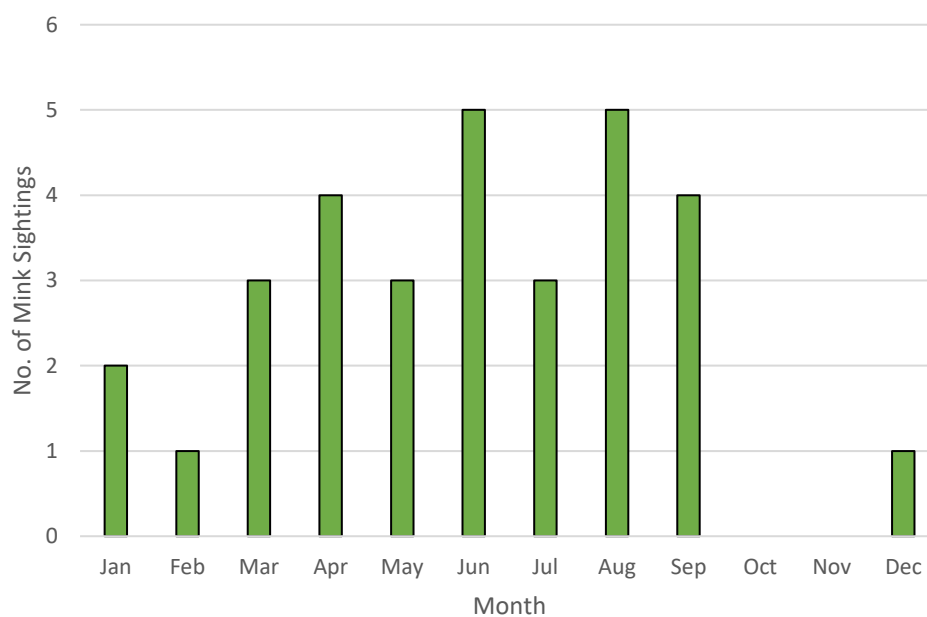
### **Mink rafts and Remoti traps**

Floating mink rafts, fitted with a live trap, a [Remoti](#) device and lure, form the most basic unit of the trapping structure. These traps, placed in waterways, attract mink and when activated, cause the Remoti device to send an activation signal to designated number/email address.

This negates the requirement for daily checking of traps, dramatically reducing the hours required to monitor them and allows them to be left for long periods of time. An error/lost signal feature allows for coordinators and first responders to see when traps may have malfunctioned or require checking. As they are live traps, any non-target animals can be safely released with minimal disturbance, in a short timeframe.



**Figure 7,** Total number of mink sightings recorded each year between 2017-23.



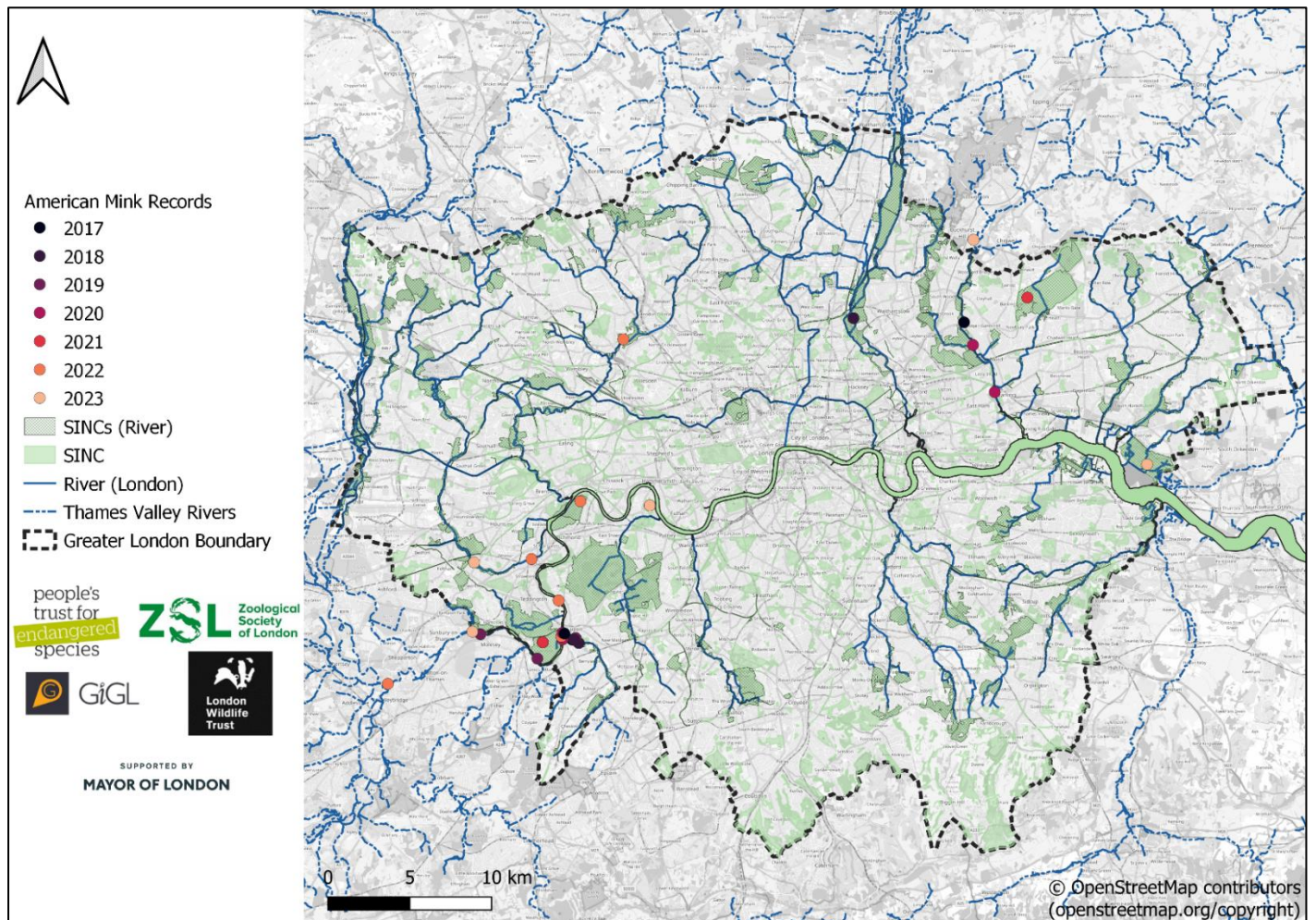
**Figure 8,** Cumulative mink sightings for 2017-23 displayed by month.

The basic trapping structure consists of a first and secondary responder, and a trap coordinator (Figure 10). Roles and responsibilities of the basic trapping structure are defined below:

**Trap coordinator:**

- Aware of trap activations and error notifications.
- Ensures trap has been visited by first responder.
- Safety contact for first responder.
- Responsible for data entry.
- Ensures traps operated in a humane way.

- Trap maintenance.
- Can have multiple First Responders under their management.



**Figure 9,** Locations of mink sightings between 2017-2023, within Greater London. Additional records outside the border of Greater London are included for reference.

**First Responder:**

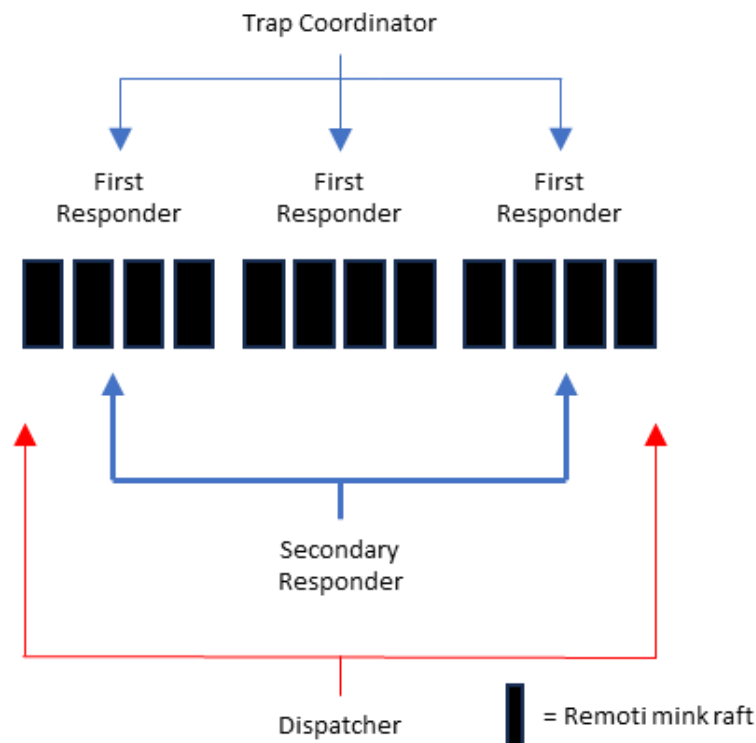
- Receives alerts of trap activation.
- Alerts coordinator of trap inspection.
- Responds to alert at the earliest convenience, and no longer than 24 hours.
- Releases non-target animals.
- If trained, dispatches mink in accordance with protocol.
- Reactivates trap.
- Can have multiple traps under their supervision.

**Secondary Responder:**

- To cover first responder duties in the event of temporary absence.

**Dispatcher:**

- On the books “pest control”, trained in the correct euthanasia procedure.
- To cover any traps under their area of operation when/if required.
- On call to dispatch mink where first responders are not willing to.



**Figure 10**, Basic trapping structure to be adopted for London, based on the structure currently utilised by WRT.

**Actioned:** Creating a trapping plan.

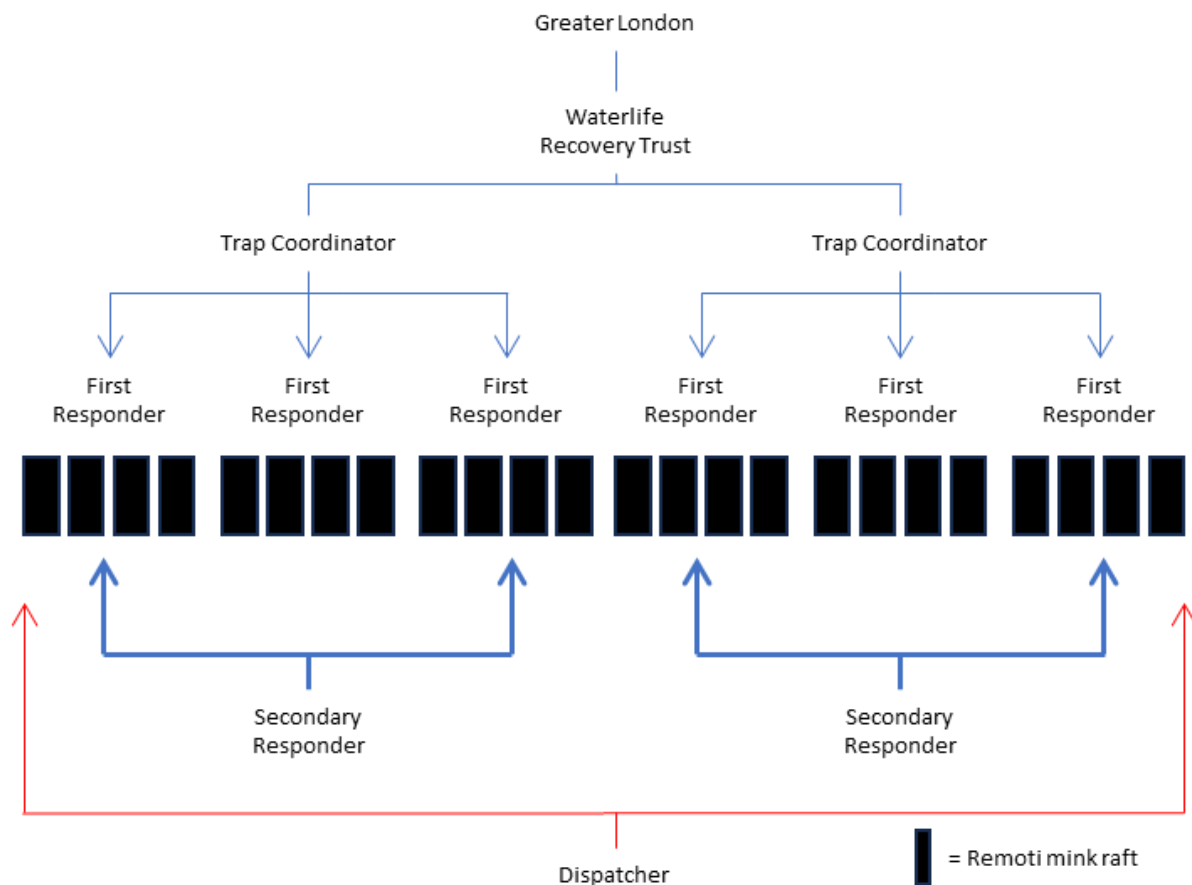
The trapping plan aims to make sure all traps have responders, dispatchers and a means of storing the carcass ready for supplying to affiliated research programmes. The basic trapping structure will form the core unit of the eradication programme. Multiples of these units will operate at a catchment/regional level and will be overseen by a WRT project officer (Figure 11). No traps will be deployed without the support structures in place.

- WRT responsible for trap management:
  - o Ensure that there is sufficient coverage of traps across the water bodies within the operational area.
  - o Oversee trap maintenance and organise replacements from damage/theft.
- WRT provide training on:
  - o Mink euthanasia to ensure high standards in those volunteers/staff taking part.
  - o Setting up and maintaining traps, and release protocols for non-target species.
- Freezers:
  - o WRT will have freezer collection points for the carcasses of dispatched, to store before they are brought up to Cambridge in batches.

Within each trapping region, there will be multiple partners and many volunteers involved.

- Partner organisations:
  - o Provide access to their private land for trap placements.
  - o Be involved in the basic trapping structure of mink control.

- Local volunteers:
  - Provide access to their private land for trap placements.
  - Be involved in the basic trapping structure of mink control.



**Figure 11,** Trapping structure to be adopted for London, based on the structure currently utilised by WRT.

- **Actioned:** Define protocols for euthanasia, data gathering and sharing.

### How will mink be euthanised?

The procedure to be adopted in London will be the same currently used by WRT and based on best practice guidelines recommended by the Game & Wildlife Conservation Trust. It is considered the most effective and humane method. Full details on the methodology can be found [here](#).

### Who will euthanise mink?

Training will be mandatory to anyone; volunteer, partner organisation or external pest controller, who will be undertaking mink euthanasia, to ensure that they are trained to the standards set by the best practice guidelines and WRT. Each mink raft will have a designated individual responsible for euthanising any trapped mink. This will ensure that mink are trapped for a minimal amount of time. One designated individual may cover multiple traps within a hub.

### What happens to mink carcasses?

Freezers will be designated to partners for the storage of euthanised mink. Mink carcasses will be sent in batches up to the University of Cambridge for genetic analysis, sex and age determination, to help inform population structure, where individuals are originating/migrating from and population demography. This will help determine how successfully the eradication programme is progressing, as well as confirm whether mink are still breeding within London and/or where they may be emigrating from. From each carcass, scent lures will be extracted and used on the mink rafts, to increase their attractiveness to mink and consequently their effectiveness.

### How will trapping data be managed?

Waterlife Recovery Trust host a database to support their trapping programme. They will be responsible for the Remoti account, ensuring that the correct trap coordinator and first responders are registered to receive alerts. WRT will also host the database collecting the trap location and catch data. For organisations currently trapping mink using Remoti smart rafts, they should ensure they register their traps with the WRT database. If using older traps which require daily checks, these should be swapped out with WRT traps.

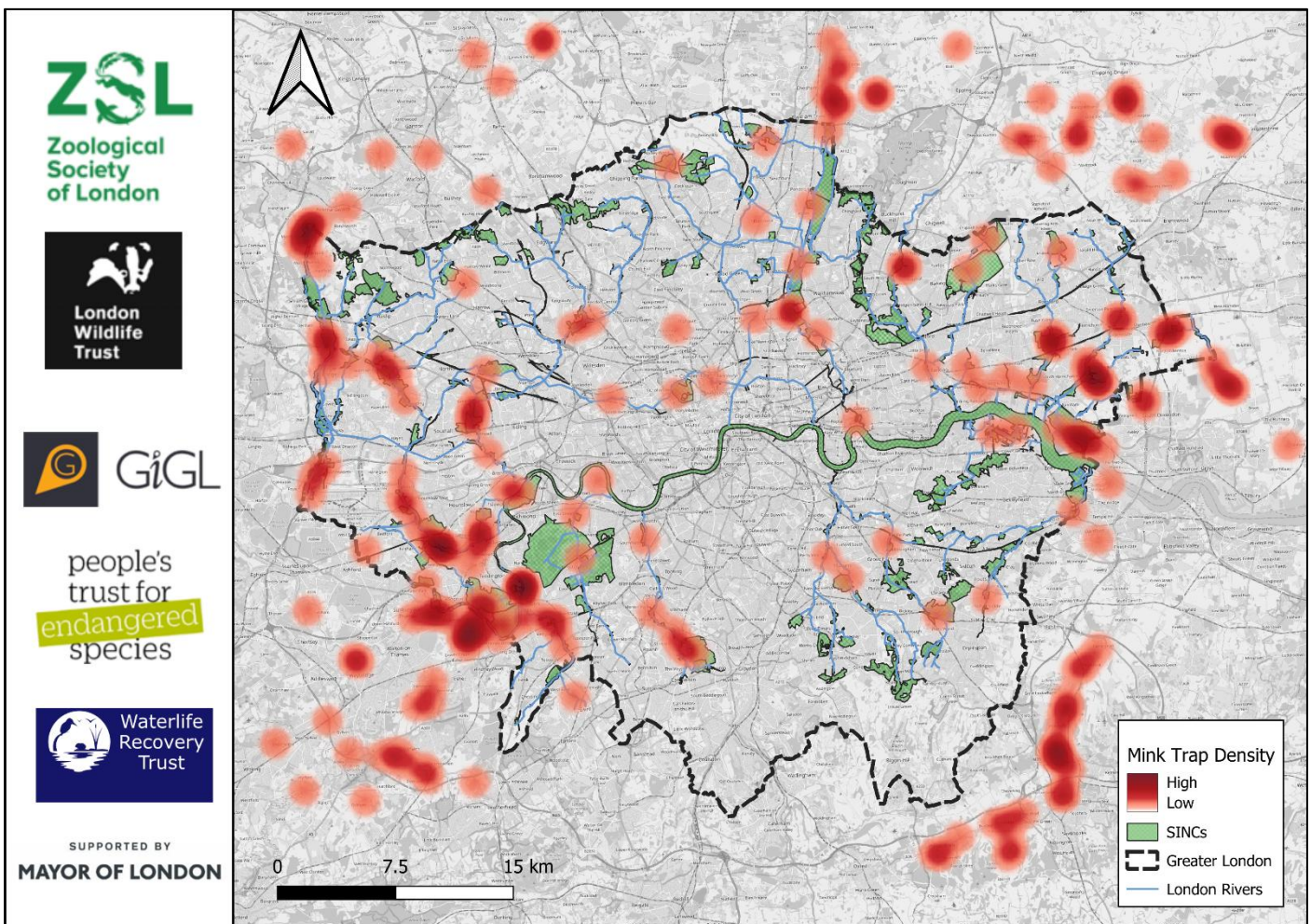
- **Actioned:** Deploy smart mink rafts in London.

In 2023, WRT expanded their national mink trapping programme with the help of Natural England Species Recovery Funding. The resulting trapping programme will span from mid-Lincolnshire down to north London and will result in ~18.5% of England being under a WRT mink control programme.

Over the span of the two practitioner meetings, stakeholders were introduced to the concept of landscape scale mink eradication and the expansion of the Waterlife Recovery Trust programme. Considering WRT's success, their expansion and the ongoing support they will provide, stakeholders were willing to participate in the mink eradication scheme.

Within north London, WRT have allocated 60 traps to be distributed to partners of the LWVRP and any other stakeholders willing and able to host a trap. Throughout 2023/2024, a WRT project officer has been working with stakeholders to set up traps at suitable locations and ensure that they are supported by a network of individuals able to monitor and appropriately respond to trap activations. As of October 2025, 86 traps have been deployed across the capital (WRT, 2025).

It is particularly important to ensure that in regions where water vole had been consistently reported (see Figure 6), mink rafts are deployed to protect any remnant water vole populations. Due to sensitivities with trap placement and participation in the programme, exact locations of traps remain anonymous. Figure 12 highlights the regions where trapping is occurring.



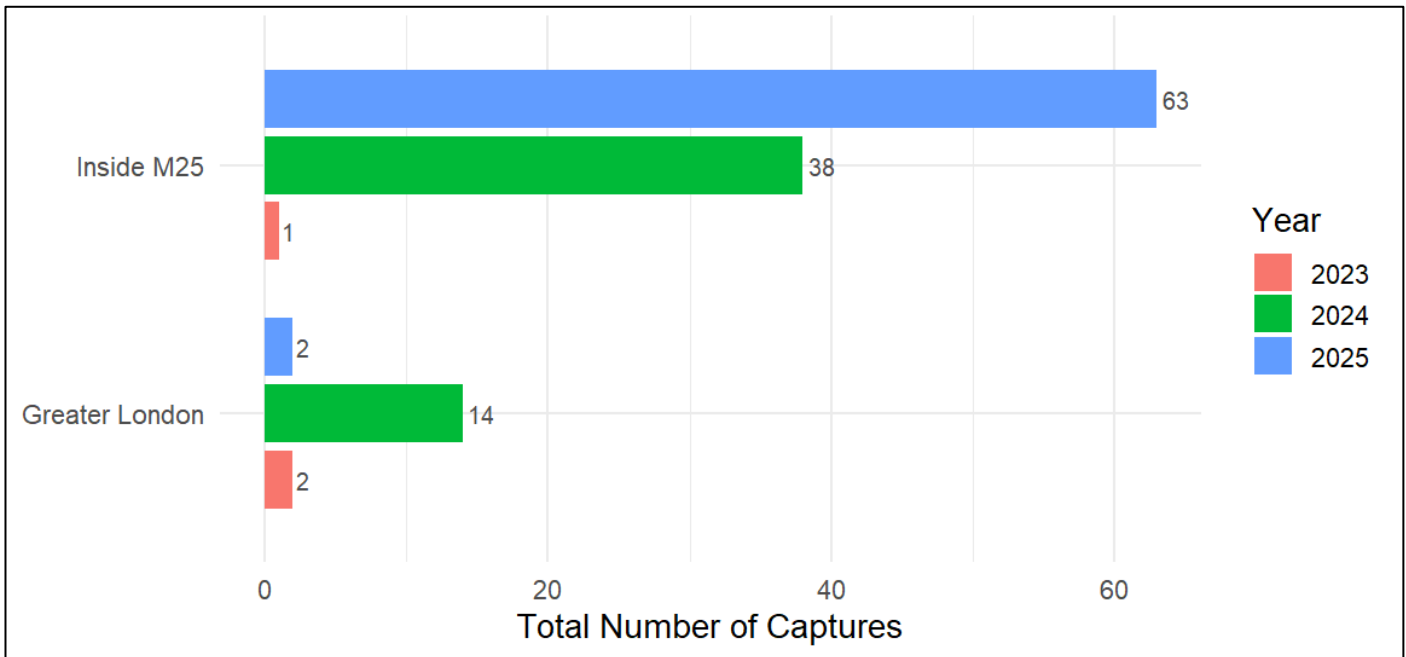
**Figure 12, Regional densities of deployed mink traps across London and the immediate border – updated October 2025.**

Objective: Monitor the effectiveness of the London mink trapping programme.

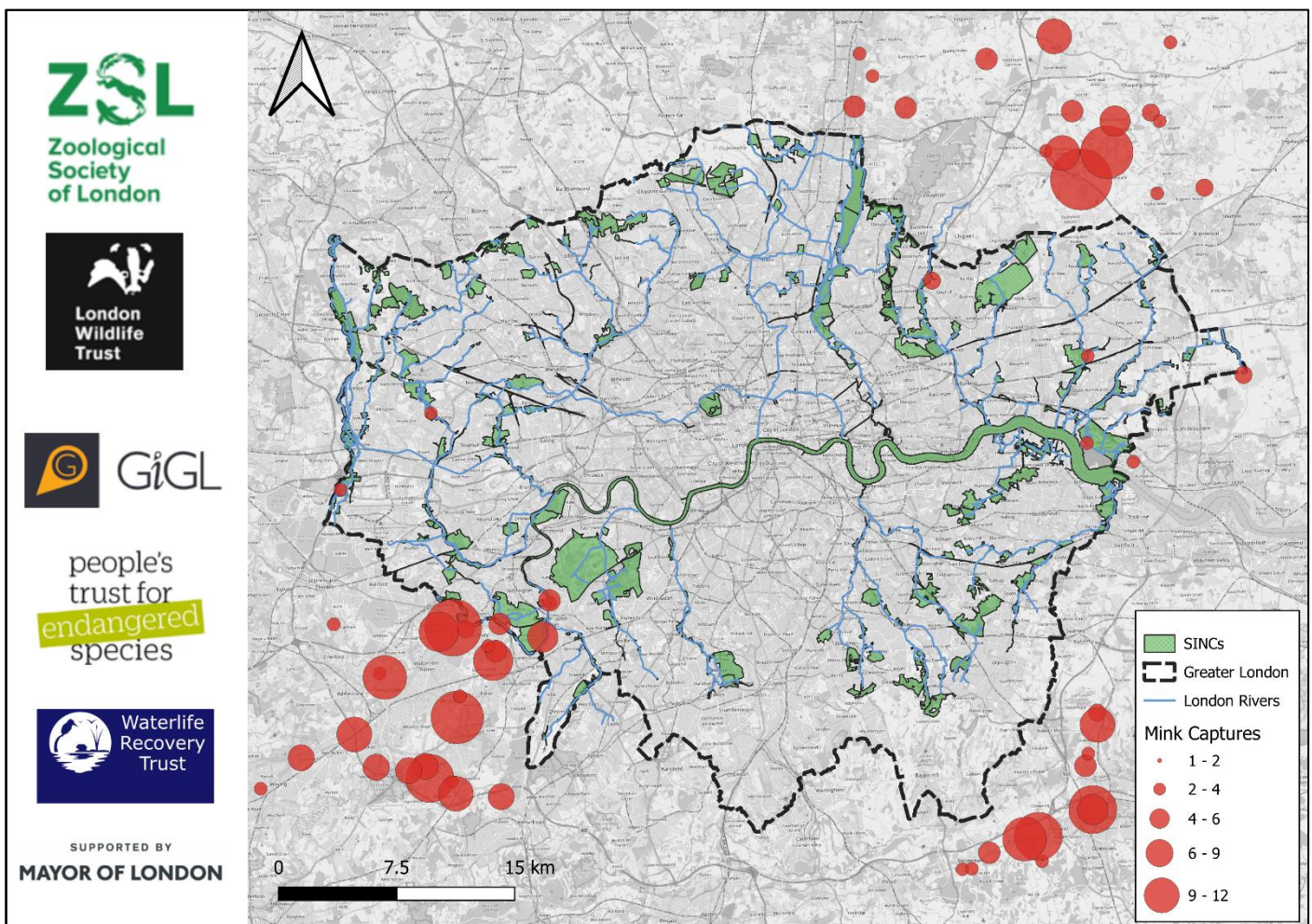
- **Actioned:** Monitor Catch Per Unit Effort (CPUE) to see where highest mink activity is.

Waterlife Recovery Trust will continually monitor the database to assess mink trapping hotspots and CPUE. This data will be used to assess the effectiveness of the trapping programme and determine if the CPUE follows the expected downward trend, indicative of a reducing mink population. Where CPUE remains high, additional traps may be deployed. River corridors into London will need particular attention, to ensure that there are sufficient traps to catch immigrating mink.

Within Greater London, mink caught dropped significantly, despite an increased trapping effort, suggesting very few if any mink are still present within the capital (Figure 13 - 15). South-west London, within the M25 border has proven to be a mink hotspot, with large numbers caught along the Mole and Ember especially. This represents the frontline of the current mink trapping array, and therefore high mink numbers were likely. It is expected the number of mink caught will start to decline.



**Figure 13**, Annual mink captures within Greater London and the area between the Greater London boundary and the M25 (2023-2025)



**Figure 14**, Mink capture clusters across London and its immediate border (2023-2025).

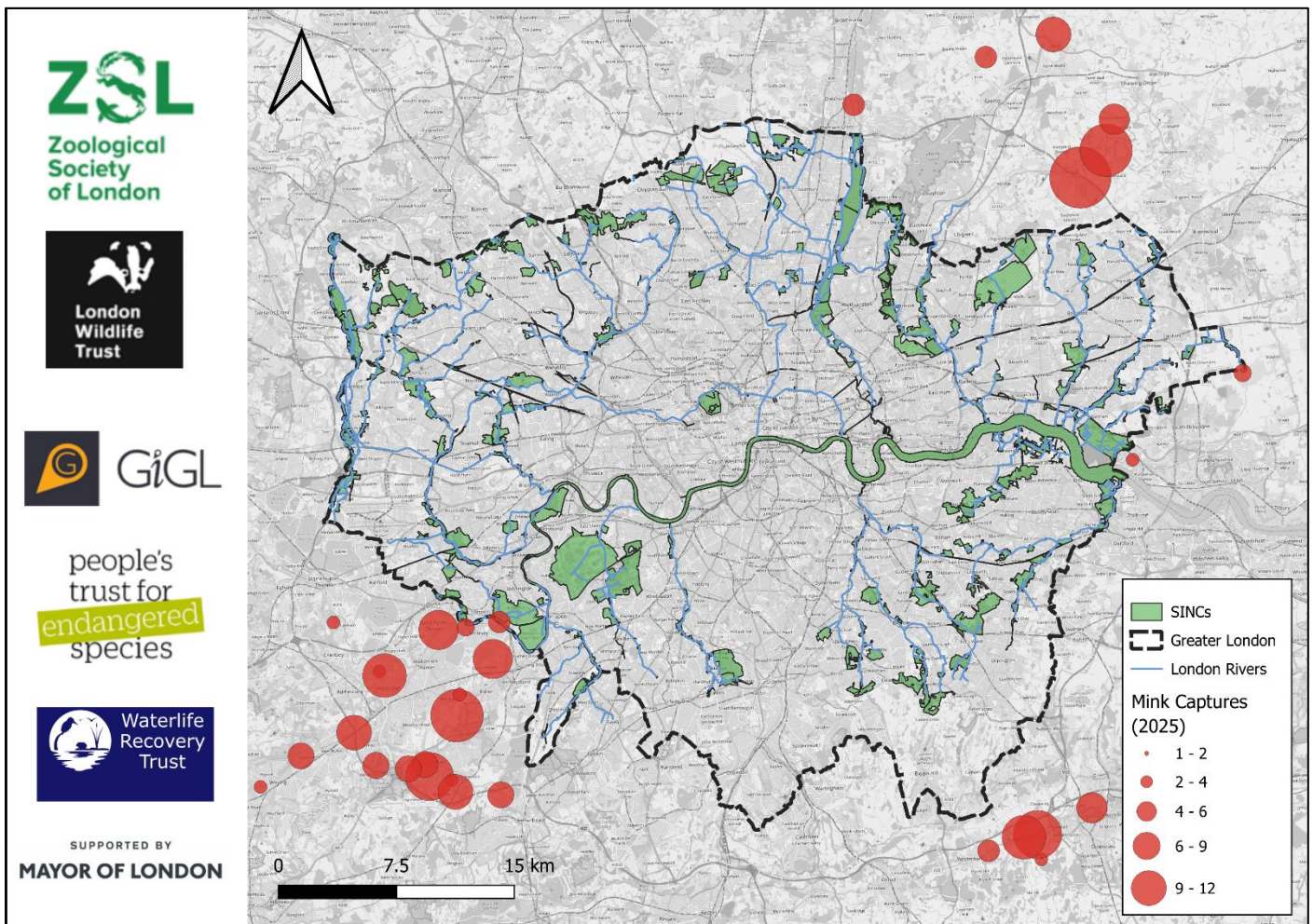


Figure 15, Mink capture clusters across London and its immediate borders (2025)

**Objective: Link trapping in London with neighbouring trapping schemes.**

**- Actioned: Create trapping steering groups with neighbouring counties – WRT led.**

As of February 2026, WRT have expanded their trapping programme so that the the majority of the area surrounding London, except the borders in the west, are covered within the mink eradication programme. WRT are currently looking to expand their trapping programme, which would close the gap in the west, and reduce future mink incursions into west London. A WRT led steering group exists to ensure that efforts are coordinated, gaps minimised and coverage is sufficient to ensure mink eradication.

## LONDON WATER VOLE RECOVERY PROGRAMME NEXT STEPS

### GOAL 3: IMPROVE THE MONITORING OF WATER VOLES.

Making sure that relevant stakeholders/catchment partnerships are aware of extant water vole populations within their catchment is essential. This will assist the coordination of water vole surveys, mink management and volunteers, so that the landscape scale action required is more coordinated and effective. Monitoring water vole populations is vital to build an accurate understanding of the status and trends of extant populations and see how they respond to mink eradication and other conservation action.

#### Objective: Increase the use of the PTES National Water Vole Monitoring Programme (NWVMP) surveys.

- **Actioned:** Offer training to volunteers from new NWVMP survey sites coming on board.

In 2023, two sites including Rainham Marsh (RSPB) and Grenfell Park, Romford (Thames Chase), were added to the PTES NWVMP. Training was provided on site by PTES, training 14 and 9 volunteers respectively. An additional online training session was held, targeting practitioners already involved in the LWVRP. In total, 12 attendees received training on how to set up PTES NWVMP sites.

- **Action:** Ensure sites registered with PTES NWVMP continue to conduct annual surveys.
- **Action:** Add more sites to the NWVMP within London.

The bi-annual practitioner meetings will continue to highlight water vole population monitoring as a priority and help ensure that PTES NWVMP surveys are repeated. PTES will continue to work with partners of the LWVRP to set up new sites across London.

#### Objective: Increase data collection through the public sightings portal.

- **Action:** Continue promoting GiGL water vole portal annually as priority site for record submissions.
- **Action:** Ensure that all partners link the portal to their websites/communications.
- **Action:** Advertise data portal to local community and social media groups.

Outside of systematic monitoring, opportunistic sightings can be a useful tool to identify new colonies or increase our understanding of water vole distribution. Within London exist many thousands of wildlife enthusiasts, who could contribute a significant amount of data. Additionally, many sightings exist on local social media platforms, without the information being added to regional databases. Awareness of the data recording portal needs to be increased to achieve higher uptake of the GiGL platform and capture the data that is often already being collected.

### GOAL 4: IDENTIFY PRIORITY SITES TO PROTECT AND RESTORE METAPOPOPULATIONS.

Water voles exist in a series of metapopulations; groups of smaller colonies that cycle through extinction and recolonisation, but at a population level, remain relatively stable. Protecting remnant populations, reintroducing new colonies and facilitating their spread is essential to allow stable metapopulations to form.

### **Objective: Identify water vole recovery opportunities across London.**

Urban riparian environments offer a whole range of habitats, many of which are unsuitable for or limit water vole populations. Good habitat can be defined by the presence of large riparian borders of vegetation, easily penetrable banks for burrowing, and slow flowing, deep water channels<sup>20</sup>.

The type of opportunities to promote and restore water voles across the capital will vary and could range from removing the predation pressure from mink and allowing natural water vole recolonisation, to reintroducing water voles into catchments with suitable habitat, or improving habitat patches and increasing connectivity. All should aim to promote long term water vole persistence and natural population dynamics.

#### **- Ongoing: Identify opportunities across London where water vole recovery is feasible**

With mink eradication underway in London and the surrounding areas, there will be increased opportunities for water vole recovery within the capital. This exists in two broad categories; natural recolonisation from connected, surviving colonies, or through reintroduction of captive bred individuals, where natural recolonisation isn't feasible due to the urban constraints of some tributaries.

In 2024, a small working group within the LWVRP, created a habitat prioritisation protocol, using key water vole habitat features and other important considerations to help assess and prioritise recovery opportunities. Through partners within the LWVRP network, sites were put forward and assessed against the criteria. A number of opportunities for water vole recovery are now being developed.

### **Objective: Support the restoration of water vole populations through reintroductions or translocations.**

It is important that remnant water vole populations be given sufficient time, in the absence of mink, to allow for populations to recover and recolonise regions naturally. The hierarchy of action should follow natural recolonisation >> translocation (wild individuals) >> reintroduction (captive bred). This allows for the preservation of the local genetic diversity where possible.

In some circumstances, water voles will have disappeared completely, or remnant populations reduced to such low numbers that they would likely go locally extinct without intervention. In these situations, reintroduction or population reinforcements would be required to allow for the establishment of self-sustaining water vole colonies.

- **Action:** Use the Defra Reintroduction and Conservation Translocation Guidance, itself based on the IUCN Conservation Translocation Guidelines, to help inform the suitability of reintroductions.

The guidance provided by Defra ([Reintroductions and conservation translocations in England: code, guidance and forms - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/publications/reintroductions-and-conservation-translocations-in-england-code-guidance-and-forms)) sets out a series of principles to be adopted to help plan and implement a successful water vole reintroduction. Where any reintroductions are considered, Defra principles and guidance will be followed.

- **Action:** Explore options for sourcing/breeding water voles.

Currently, water voles released in reintroduction programmes across the UK come from a single supplier. Due to high demand and variations in captive breeding success, the numbers of water voles supplied and

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<sup>20</sup> Gelling, M., Moorhouse, T. and Strachan, R. (2011). Water Vole Conservation Handbook.

their time of arrival can vary and be sub-optimal, decreasing the likelihood of the establishment of resilient self-sustaining populations. In addition, there is little information available on the genetic structure of the captive bred individuals that are released in reintroductions. It is essential that high genetic variation is maintained within the captive population, to prevent the effects of low genetic diversity within a founding population.

- **Action:** Update reintroduction protocol based on recommendations from Spires Ecology water vole reintroduction review.

Spires Ecology and MD Ecology carried a review of “Water vole releases and conservation translocations” (final report due in 2026), commissioned by PTES and Natural England. The aim was to review previous water vole reintroductions to produce good practice guidelines. The review will produce an evidence-based guide to best practice and address any inappropriate conservation translocations techniques. Recommendations from the best practice document will be incorporated into future LWVRP water vole reintroduction decision making and undertakings.

## **GOAL 5. RAISE AWARENESS AND INCREASE PUBLIC ENGAGEMENT IN RECOVERING WATER VOLE POPULATIONS.**

Working towards the recovery of a charismatic species within London offers a great opportunity to engage the public with nature and recruit volunteers to increase the capacity of the LWVRP.

### **Objective: Increase the number of volunteers that engage with water voles in London.**

- **Action:** Train more volunteers to participate in the annual PTES NWVMP surveys.

On the back of the action to increase the number of sites added to the PTES NWVMP surveys, there will be more opportunities for volunteers to get directly involved with water vole monitoring.

- **Action:** Promote use of sightings portal at community out-reach events.

Within the LWVRP partnerships, many of the stakeholders are involved with multiple community outreach projects and have the potential to reach a large target audience to increase awareness of the data portal. As such, an agreement between partners needs to ensure that efforts are made to incorporate advertising the data portal at these events where possible.

### **Objective: Promote water vole coexistence with landowners and the public.**

- **Action:** Engage with dog walkers to reduce disturbance.

High footfall from dogs at specific areas along water bodies can cause significant damage to the habitat, either directly or indirectly negatively affecting water voles. Citizen Zoo have developed a “Nature Friendly Dog Walk” programme to help mitigate the conflict on site along the Hogsmill. This programme, or variations of, could be adopted at other sites in London.

- **Action:** Reduce predation by domestic animals.

Domestic animals, specifically cats and dogs, have the potential to artificially increase the mortality rates of water vole populations. It would be beneficial to promote specific conflict mitigation measures that pet owners could take to help reduce the threat from their pets in water vole sensitive areas.

- **Action:** Promote water vole friendly habitat management.

Public footfall, overgrazing and poor vegetation management near water bodies can severely damage water vole habitat. When working with practitioners, landowners and within Sites of Importance for Nature Conservation (SINCS), a series of best practice guidelines will help protect and increase the value of the habitat for water voles.

## **GOAL 6. BUILD THE EVIDENCE BASE THROUGH RESEARCH.**

It is important to collect and generate evidence on the effectiveness of reintroductions and population establishment and increase our understanding of water voles within urban areas.

### **Objective: Study water vole reintroductions to assess their effectiveness as a conservation tool.**

- **Ongoing:** Develop a monitoring programme for reintroduced water vole populations.

A water vole monitoring programme has been developed by ZSL to help understand how the reintroduction carried out in 2024 within Crane Park Island is progressing. This programme had a number of key objectives and indicators for each year, which were based on the life history traits of water vole and outputs of the draft water vole release and conservation translocations report developed by Spires Ecology and MD Ecology.

The monitoring programme along the Crane is ongoing; the latest version of the report is available from ZSL. All ZSL led and ZSL affiliated water vole reintroductions will have post release monitoring, to evidence the outcome and progress of the water vole reintroductions.

### **Objective: Increase our understanding of water voles in urban environments.**

Beyond mink and habitat loss, there are many threats, especially within urban areas, that have the potential to negatively affect water vole populations. Water pollution, rodenticides and predation from pets could have significant negative effects and contribute towards increased mortality in water vole populations.

- **Action:** Work with partners of the LWVRP to identify other known anthropogenic threats to water vole populations in London.

## **GOAL 7. UNIFY STAKEHOLDERS AND SHARE BEST PRACTICE.**

To help achieve success on a landscape scale, collaboration between multiple organisations is key to accomplishing the intended footprint of the programme, whilst helping ensure resources are pooled and best practices adopted by all parties involved.

### **Objective: Build a collaborative programme and promote sharing of expertise.**

- **Ongoing:** Bi-annually bring together LWVRP stakeholders to facilitate discussions on future objectives and methodologies.

Since the conception of the LWVRP in 2023, biannual practitioner meetings have been held to help bring partners together, share learnings, information and opportunities and assists with project development.

Two in-person practitioner meetings were held at ZSL London Zoo during 2023, on May 16th and October 26th. A total of 71 people attended either or both meetings, representing 41 organisations across London. Further meetings were held in 2024 – London Wetland Centre and Morden Hall, and 2025 – online. Additional practitioner meetings will continue into 2026.

- **Actioned:** Create a platform where all stakeholders can communicate and share information.

A padlet page was created to have a central location where all practitioners involved could communicate and share information and opportunities. All new stakeholders involved with water vole recovery will be invited to join the Padlet.

- **Actioned:** Provide an open invitation for new stakeholders to join.

In total, 41 organisations across London have joined/expressed an interest in the LWVRP since its formation. We are aiming to expand the network across London as the programme develops and new stakeholders and practitioners are invited to join the LWVRP. Within London, excluding those that weren't landowners, there were 31 stakeholders that could participate in the mink eradication or support water vole population recoveries/monitoring (Figure 13, Table 1).

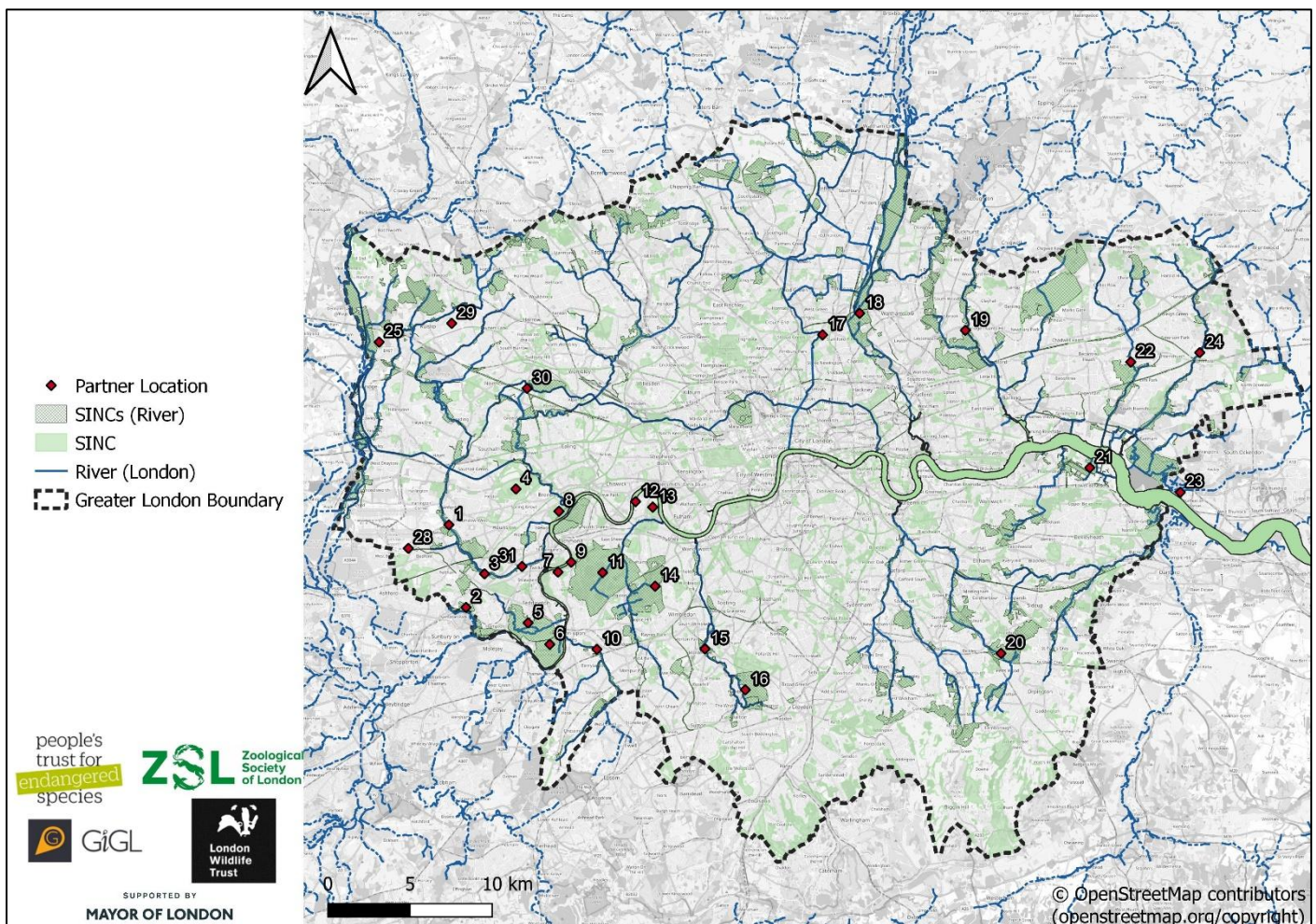


Figure 16, Locations of partners who have expressed an interest in participating in the LWVRP.

**Table 1,** Organisations who have expressed interest in participating in the LWVRP and mink control, dated from September 2023.

ID	ORGANISATION	LOCATION
1	Lampton 360	Hounslow
2	Thames Water	Kempton/Hogsmill
3	London Borough of Richmon upon Thames	Crane Park
4	National Trust	Osterley Park
5	Royal Parks	Bushy Parks
6	Historic Royal Palaces	Hampton Court (Home Park)
7	National Trust	Ham House
8	Syon Park	Syon Park
9	National Trust	Petersham Meadows
10	Citizen Zoo	Hogsmill
11	Royal Parks	Richmond Park (Beverley)
12	Barnes Common	Leg o'Mutton NR
13	Wildfowl and Wetlands Trust	London Wetland Centre
14	Wimbledon & Putney Commons.	Wimbledon Common
15	National Trust	Morden Hall Park
16	Beddington Farmlands Nature Reserve	Beddington Farmlands
17	Thames Water/London Wildlife Trust	Woodberry Wetlands
18	Lee Valley Regional Park Authority	Lee Valley
19	Vison RCL	Redbridge Area
20	National Trust	Petts Wood and Hawkwood
21	Thames Water	Crossness
22	Barking and Dagenham	River Rom
23	RSPB	Rainham Marsh
24	Thames Chase	River Ingrebourne
25	Berkshire, Buckinghamshire and Oxfordshire Wildlife Trust	Colne Valley
26	Thames21	River Roding

27	Richmond and Wandsworth Gov	Wandle
28	Heathrow Airport Limited	Heathrow Airport Limited
29	Hillingdon Council	River Pinn/Yeading Brook
30	Ealing Wildlife Group	Ealing
31	Friends of the River Crane Environment /Crane Valley CIC	Crane Catchment

## GET IN TOUCH.

The London Water Vole Recovery Programme would like to work with any volunteer and organisation looking to be involved in water vole conservation. We offer an open invitation for willing participants to get involved and work towards water vole recovery in London.

To get involved, please email [marineandfreshwater@zsl.org](mailto:marineandfreshwater@zsl.org), referencing the London Water Vole Recovery Programme.



## APPENDIX

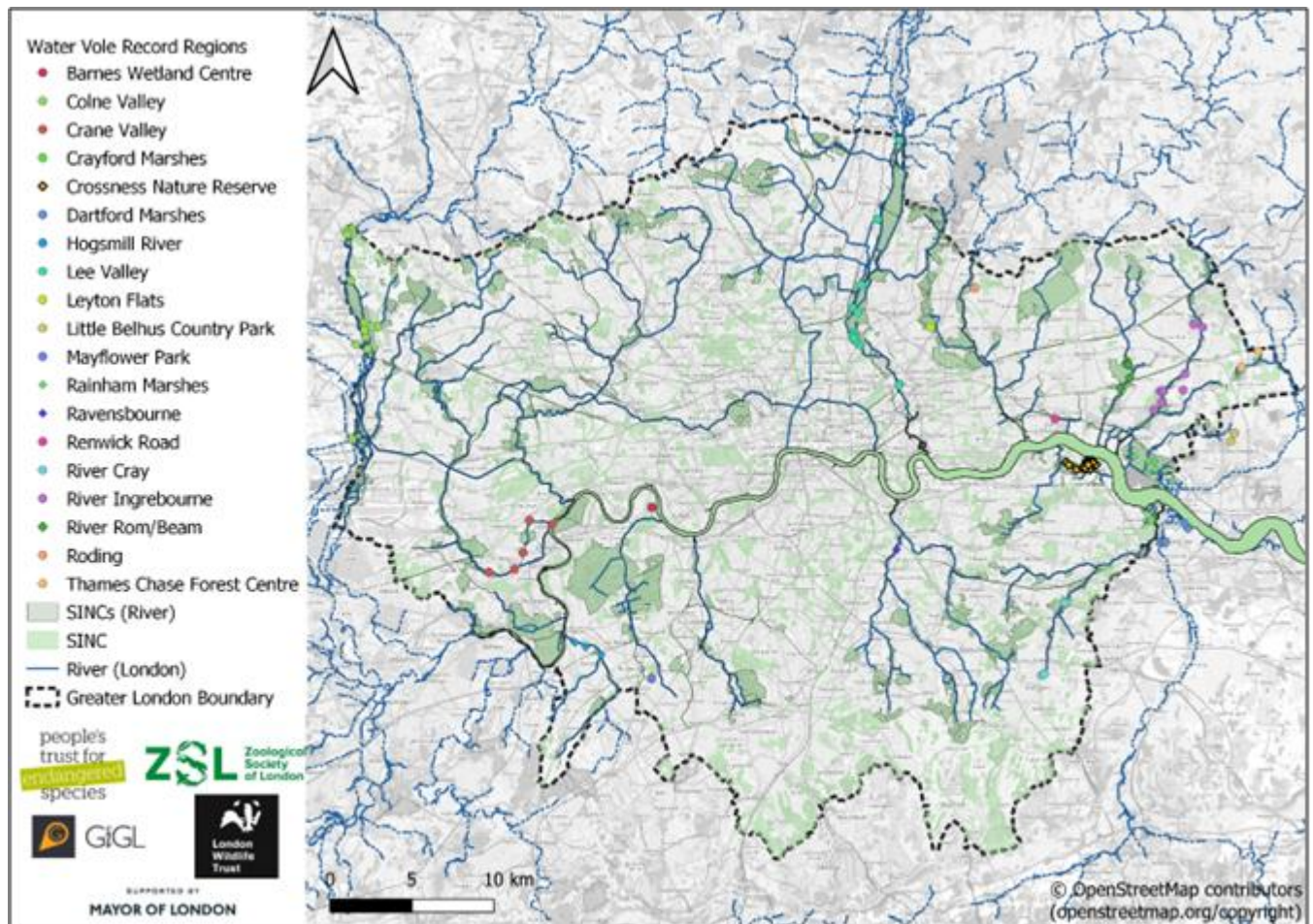


Figure 17, Regional designations of water vole sightings.



**Estuaries & Wetlands Conservation Programme**  
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