SNAV's Recommendations for Nature Recovery In Southwark 27 February 2024

One thing we have learned painfully through the development of the ecological crisis is that we cannot take for granted the richness of existing biodiversity. Once-common species, such as sparrows, starlings, dunnock and song thrushes, are now in severe decline in the UK and are considered priority species for conservation, on the IUCN red list. Even those species not on the list, such as various tits, blackbirds and robins, seemingly highly adaptable and resilient species, need us to protect or provide their natural nesting habitat and food resources in order to thrive.

The case for enhancing biodiversity has been comprehensively made at a global, national and local level. This paper sets out a vision local to Southwark and a summary of the actions that Southwark could take to play its part in stopping biodiversity declines and restoring wildlife in the heart of London.

SNAV's vision for Southwark is that a person, living anywhere in the borough, should be able to walk or wheel safely to anywhere else in the borough -- amid a chorus of birdsong increasing through the winter and spring, past fluttering butterflies and buzzing grasshoppers in the summer, and picking edible fruits along the way in the autumn. And for some of Southwark's many non-human residents:

- A dragonfly, damselfly, frog or toad should be able to safely and easily travel from one healthy pond to another to another, with grassy verges and safe hiding places along the way.
- A sparrow, dunnock, or blue tit should be able to find plentiful insect, fruit, and seed forage to feed her family within an easy 50m of her family nest.[1]
- Southwark's more specialised invertebrates should be able to find their native partner plants, survive and thrive. A brimstone butterfly should be able to find a healthy buckthorn shrub on which to lay her eggs, and a common blue should be able to find birdsfoot trefoil, etc.
- Bats, of all nine different species known to be living in Southwark, should be able to navigate treelines and waterways easily, forage on plentiful insects, and have safe, undisturbed summer and winter roosting places[2].

[1] https://bou.org.uk/blog-havlicek-house-sparrows/
[2] Bats can live in manmade structures, under the right conditions. More information about bat roosting needs: https://www.bats.org.uk/our-work/buildings-planning-and-development/bats-in-buildings#:~:text=Hibernation%20roosts%20are%20often%20a,of%206%20%2D%2010%C2%B0C

In 2010, Professor Sir John Lawton reported to government on wildlife sites in Making Space for Nature[3]. Its central recommendation was that we needed space for nature that was "bigger, better and more joined-up". This applies to urban areas as much as rural areas, and we propose actions for Southwark under each theme below, with an added theme of "more exciting" to reflect the importance of engaging urban society in nature and wildlife.

Bigger

To increase the small areas of habitats available to biodiversity in the borough, Southwark should:

- Increase our greenspaces by de-paving[4] the many unused areas of existing hardstanding to make room for 'pocket parks', new street trees, new hedgerows (which can contribute to air quality improvements), and other forms of new planting.[5]
- Look to use development and redevelopment opportunities to extend and link existing greenspaces and parks.
- Consider the full range of semi-natural habitats needed by wildlife, identify gaps (e.g. ponds, in many areas of Southwark) and develop plans to address these gaps.
- Recognise that, whilst some play important amenity roles, many green spaces such as heavily-managed grass areas and amenity-planted bark chip beds do not support biodiversity. More space could be made for the semi-natural habitats and native vegetation that do support a wide array of our wildlife species.
- Reconsider other open space, such as estate lands, schools, and sports field borders, as places for wildlife.
- Encourage the installation (including retrofitting) of well-designed, wildlife-friendly green roof systems on structures less than 4 stories in height, especially along strategic SINC connection routes. Projects vary, but on average green roof systems have many of the ecological benefits of de-paving, at approximately half the cost per m2-- sometimes less.
- Recognise a buffer zone around SINC boundaries, with attention to reducing lighting, noise, height limits (overshadowing), and traffic.

Better

To ensure that they contribute to enhancing biodiversity, Southwark's green spaces should be:

- Landscaped and managed to incorporate more native vegetation in mosaics (see Box 1) with other habitats and, where appropriate amenity planting, that supports a wider range of species

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[3] https://webarchive.nationalarchives.gov.uk/ukgwa/20130402154501mp_/http://archive.defra.gov.uk/environment/biodiversity/documents/201009space-for-nature.pdf

[4] See SNAV's Statement on De-paving https://docs.google.com/document/d/1lqJScnXcYRkK9-dfOSGFQH5zJS05Xaq4/edit?usp=sharing&ouid=103269452666436198703&rtpof=true&sd=true

[5] SNAV would like to encourage the council in developing more grassroots car-share schemes that are more attractive and affordable than individual private car ownership. Reduced car ownership will free up valuable land for de-paving, SuDS and nature.

- Free from herbicide use (unless necessary for spot removal of noxious invasives, employing an integrated invasive weed management scheme)
- Managed to mimic the variation found in nature (e.g. areas of reduced mowing to provide seedheads for birds, flowers for pollinators, and cover for insect lifecycles, allowing bare soil patches (in untrampled areas), or small pools and banks/bunds in grasslands)
- As protected from artificial light as is possible whilst being compatible with safety needs.[6,7] General recommendations for wildlife-friendly lighting include positioning lights lower and closer together, using motion sensors and the lowest wattage or lumen output necessary, using longer wavelengths (eg red or amber LEDs) that are less disruptive to wildlife, and shielded, with no light above the 90-degree plane from the fixture. Modern technologies can enable motion sensors to shift lumen output or wavelength according to time of night or if pedestrians are detected[8].
- Taken into community and volunteer management, wherever there is interest, to reduce costs and increase social benefits. There is increasing evidence of the benefits of being actively engaged in nature as well as benefits for being in natural surroundings.

Box 1: Delivering new greenspaces that support biodiversity

Many butterflies and moths rely on a single plant species for larval food plants. For example, the Brimstone butterfly relies on buckthorn bushes. A thick hedge of native species will provide food, shelter, and nesting sites for a wide range of wildlife.

Insects need hibernation sites. Many spend the winter feeding on grass roots or sheltering in leaf litter-- a tidy park with mown grass and clean flower bed is death to them. Leaving some uncut grass, and confining leaf-blowing to footpaths, will allow their survival. Leaf litter is also vital for earthworms, and also for fungi which, in turn, support plants.

Woodland birds such as Nuthatch, Tree creeper, and Woodpecker depend on trees with deeply fissured bark to find spiders and insects to feed on. They also depend on cavities in tree trunks for nesting sites. Standing deadwood is important and can be made a safe feature if surrounded by bramble thickets. Cavities in dead wood are also used by bats and owls.

Water is essential for plants and wildlife, but we divert it straight into drains. Harvesting rainwater to supply rain gardens and for the use of community gardens would benefit wildlife in more ways than one; excessive nutrients that flow into waterbodies increase algae which de-oxygenate the water, killing fish. Evaporation of locally infiltrated water cools the soil . Across London there is an urgent need to better manage surface and ground water to divert out of the sewer system.

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[6] See, https://cdn.buglife.org.uk/2019/08/A-Review-of-the-Impact-of-Artificial-Light-on-Invertebrates-docx_0.pdf for impacts of light and for solutions: https://cdn.buglife.org.uk/2023/06/Buglife-Nurture-the-Night-Shift-Bug-friendly-Lighting.pdf

[7] https://theilp.org.uk/publication/guidance-note-8-bats-and-artificial-lighting/

[8] https://www.schreder.com/en/blogs/schreder-designs-lighting-solutions-protect-people-and-wildlife-during-night

Sadly, The Peck, Earl's Sluice & Neckinger run mostly underground apart from the pond in Ruskin Park and lake in Peckham Rye park. It may be possible to create **Scrape Ponds** in Peckham Rye Park. Scrape or temporary ponds are important as they do not support fish, so other species are able to thrive without being eaten.

Southwark needs more, and more evenly distributed, ponds. Even very small ponds, if well designed and well managed, can support wildlife such as toads, frogs, dragonflies, and provide a place to grow our incredibly beautiful native wetland plants. Here is a good design guide for wildlife ponds. Southwark's few existing waterbodies all need to increase their associated marginal and emergent vegetation, to improve water quality and provide more and better habitat.

Along the banks of the Thames, we need to work with PLA & Thames 21 to explore possibilities for improvements to biodiversity. It may be possible to create sandbanks to encourage birds that feed on mudflats, e.g. black-tailed godwits, or to create reedbeds which support a multitude of invertebrates as well as avian specialists such as reed warblers.

Here is a good London Biodiversity Partnership report on urban animals in small parks and squares (from 2004). Tits, wrens, dunnock, greenfinches, and robins all show increased frequency when more tall and dense shrubbery, undergrowth, and dead wood are present. Blue tits and great tits benefit most from nest boxes.

Here is a 2006 report from the Government's Commission for Architecture and the Built Environment, which you could cite when explaining that to better support biodiversity, green space must be designed and managed as a more complex "layered mosaic" of

1. long grass w seeds, flowers (herbaceous layer)
2. hedgerows and dense native shrubbery of varying heights, providing cover
3. understory trees
4. large canopy trees
5. leaf litter allowed to remain, providing cover for insects
6. significant amounts of deadwood (chips, sticks, logs, stumps) allowed to remain - very important for insect habitat at different stages of life cycle
7. aquatic zones (w sloping natural banks, and area of associated vegetation ideally equal to area of open water, or as much as can be managed).

This report provides lots of suggestions and case studies for how management contracts can be written to be more wildlife-friendly.

More joined up

Although the long term vision is for complete nature connectivity throughout the borough, the strategic starting point is to focus on connecting SINCs. To ensure that wildlife is able to move around to access habitats, Southwark should:

- Map and enhance existing and new potential green routes/corridors (see Box 2) that can connect our parks for wildlife. The Borough should maintain a list of key corridors

and a list of candidate routes for consideration when new highways or streetscape works are planned. A list or inventory of corridors would facilitate consideration for early integration into new (large) development proposals and when reviewing planning applications and developing Local Nature Recovery Strategy proposals. “Strategic” locations for wildlife affect Biodiversity Net Gain calculations and compliance.

- Avoid adding any new barriers or ‘sinks’ for wildlife populations such as large expanses of paved areas and adopting a preference for ground--level planting (rather than raised planting) that is more accessible to terrestrial species
- Continue and strengthen efforts to reduce vehicular traffic that contributes to wildlife mortality [9] and impedes movement due to noise and pollution.
- More important points for connectivity are outlined in Simon Saville’s paper for Butterfly Conservation, “Improving biodiversity in Southwark - SuDs, de-paving, pocket parks, and other measures.”

Box 2: Nature corridors

SNAV has developed a map showing locations of SINCs in the borough, and also the currently proposed or existing walking routes. We propose that the Council recognise two main types of nature corridor - “Pedestrian/Nature Corridors”, to support the movement of both pedestrians and wildlife, and “Strategic Wildlife Corridors”, which may only support the movement of wildlife.

Pedestrian/Nature Corridor Definition and Recommendations

A Pedestrian/Nature Corridor is designed to support the easy movement of both pedestrians and wildlife. In addition to wildlife-friendly tree planting, it should include:

1. Areas of complex, wildlife-friendly areas of planting with multiple layers generally including shrubs, mixed grass/ herbaceous plants, and healthy soil,
    a. of at least 10m2 or more in area,
    b. spaced every 50m maximum along the corridor.
    c. These areas should be managed in a manner friendly to wildlife (less frequent mowing or pruning),
    d. ideally with some dense evergreen or semi-evergreen shrubs at least 2.5m in height and 1.5m in width
    e. The plant species should be at least 50% UK native and 80% wildlife-friendly
2. The focus is to provide resources to species which are most able to safely cross roads, such as birds, bats, and flying insects. Support for all phases of the full life cycle at all times of year and stages of maturity should be considered.
3. Adjacency of proposed “biodiversity stepping stone” areas to any existing green areas along the way should be prioritised where possible.
4. Not only providing resources for habitat, but also removing stresses, such as chemical sprays and unnecessarily bright or consolidated lighting, and vehicular traffic, should be considered.

[9] Kent et al. 2021 https://doi.org/10.1093/jue/juaa039

5. Street trees chosen for their benefits to wildlife. Trees do not always have to be native trees, but should supply fruit or berries, or nectar and pollen attractive to native wildlife. New tree pits should be large enough to accommodate more than one tree, and undergrowth. Introduce an 'Adopt a Tree Pit' scheme to allow residents to plant up tree pits.
6. Engagement with local residents in the design is essential to get spaces which benefit people and wildlife.

Strategic Wildlife Corridor Definition and Recommendations

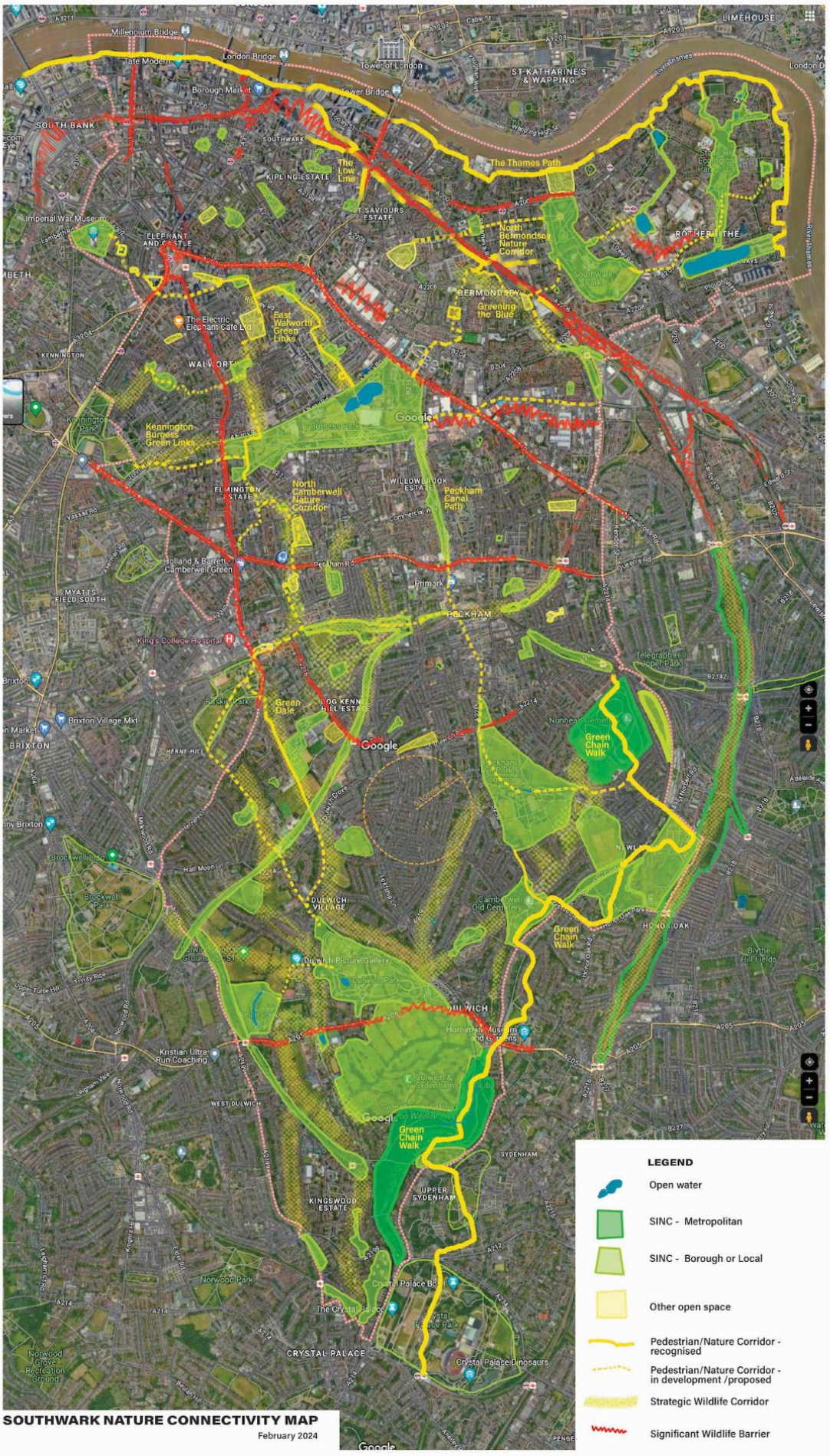
A Strategic Wildlife Corridor is a vector along which flying as well as non-flying wildlife such as foxes, hedgehogs, and amphibians can move, but the public may not be able to - for example, steep railway cuttings that are rich with sycamores and other wild plants, or long rows of adjoining back gardens. These connections can be very important resources for the health and resilience of wildlife populations.

1. The focus is to protect nature areas with limited human access, to allow fuller development of denser undergrowth, brush and cover, and less disturbance.
2. In the case where a Wildlife Corridor is formed through long rows of adjoining back gardens, it would be worth asking private landowners to maintain their land in a way that contributes to the needs of wildlife using the corridor.
3. Otherwise same considerations as for Pedestrian/Nature Corridors.

Specific Points to be noted from the Mapping Exercise

1. Peckham's Rye Lane area is a strategic missing connection point for wildlife. Additional resources there might have more positive impact for biodiversity than elsewhere.
2. Strategic wildlife corridors need more study, protection, and recognition. For example, Grove Park Cuttings (borough SINC) from Queens Road Peckham to Denmark Hill Station forms an important connection and resource. Warwick Gardens is along this vector --that may be why there are over 500 species of insects recorded living there.[10] Network Rail employs a dedicated ecologist, Aline Gomes, who may be able to share useful information such as species surveys along cuttings.
3. In the re-development of Canada Water, wildlife-friendly design is critical and highly strategic to connect and optimise the benefits of several major SINCs in the area.
4. Old Kent Road Opportunity Area redevelopment zone needs to reduce traffic and increase greenery, including green roofs, to reduce barriers to wildlife between north and south of the borough. The planned green route needs to include sufficient green space suitable planted and managed to be a nature corridor.
5. More ideas for active travel routes have been collected by Southwark Living Streets group here.
6. All nature corridors need to link effectively to SINCs beyond the borough boundary.

[10] https://insectinside.me/category/penny-metal/



SOUTHWARK NATURE CONNECTIVITY MAP

February 2024

Having a comprehensive nature strategy for a local area, if well refined by and collaborated on with local residents, can help to reduce conflict between housing development and biodiversity. Importantly, it can also align and inspire local volunteer efforts with a clear vision and common purpose.

While Southwark works to make its nature areas more strategically joined up, it will also be improving conditions for residents by meeting recognised human needs for green space (see Box 3).

Box 3: The social importance of green spaces

It is in all of our best interests to make Southwark safe and hospitable for its multiple species. Hearing birds singing outside our windows[11], enjoying a variety of seasonal blooms and fruits, watching pollinators forage, and bats hunt, and maintaining peaceful, landscape-based solutions for coexistence with scavengers and land predators - these are all essential parts of a healthy, shared urban experience.

The World Health Organization recommends the availability of a minimum of 9 m^2 of green space per individual with an ideal UGS value of 50 m^2 per capita.

The World Health Organization recommends that all people reside within 300m of green space.

The GLA's goal is that all Londoners should live within a 10 minute walk of green space.

https://www.london.gov.uk/programmes-and-strategies/environment-and-climate-change/parks-green-spaces-and-biodiversity/green-infrastructure-maps-and-tools/10-minute-walk-map

https://www.theguardian.com/environment/2024/jan/13/children-living-near-green-spaces-tronger-bones-study?CMP=share_btn_wa

Nature led solutions are increasingly recognised as central to the response to climate change. The climate crises will widen inequalities, and increasing green spaces are central to the solution: reducing flood risk and heat, and benefiting communities.[12]

More exciting

Increasing wildlife protections in the city should not only be considered a statutory obligation or a maintenance concern. Improving conditions for biodiversity can be an effective and wonderful means to benefit the daily lives and mental health of Southwark residents -- and it can create a really exciting opportunities for Southwark to show exemplary urban design and cultural leadership. For example, to engage and educate residents and visitors on the benefits and importance of greenspace (see Box 3) and of biodiversity, Southwark could:

[11] "Smartphone-based ecological momentary assessment reveals mental health benefits of birdlife" https://www.nature.com/articles/s41598-022-20207-6?itid=lk_inline_enhanced-template

[12] London Climate Resilience Review (Interim Report 2024) London Climate Resilience Review Interim Report

- Restore ancient rivers in the Borough by exploring options to de-culvert long lost waterways. This has been achieved to great local benefit and international acclaim in places as diverse as Seoul and Los Angeles. There have also been smaller successful urban river restoration projects in UK cities.[13,14]
- Develop plans to make room for previously lost species such as water voles[15], or publicise work to support particular species like the white-letter hairstreak butterfly recorded in Burgess Park, or the Jersey cudweed, which is a nationally rare species that has recently turned up as a London pavement plant after reduction in herbicide use.
- Explore the scope for high-profile, ecologically functional new greenspaces in its redevelopment proposals, bringing together the urban and natural worlds as New York's High Line.[16] Consider a Mile End-style habitat-based overpass from Southwark Park to new boardwalks and reedbeds in King's Stairs Gardens. Or could the two parks be joined and remodelled as a controlled, urban version of species-rich floodplains, allowing an easier, nature-based pedestrian connection to the River Thames?[17]
- Consider de-paving unsightly, polluted roads around some of Southwark's beautiful historic architecture, and replacing with lush original habitat and protected accessible footpaths, incorporating sustainable drainage (SuDS) and opportunities for community gardening.
- Work with SNAV and local organisations such as the Garden Museum and South London Botanical Institute to develop information boards or QR codes to help engage local people in the wildlife and plants they can find around them
- Introduce live webcast wildlife data collection such as bioacoustic surveying and webcams, so people can engage with and track local "wildlives" without risk or disturbance.

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[13] A great urban river restoration image gallery including integration with SuDS flood risk management: https://www.harvestingrainwater.com/gallery/daylighting-buried-waterways-show-the-flow-image-gallery/#:~:text=Daylighting%20the%20Cheong%20Gye%20Cheon,in%20Seoul%2C%20South%20Korea&text=The%20river%20is%20buried%20underneath,along%20the%20now%20daylighted%20river.

[14] More practical advice for daylighting urban rivers and some UK examples: https://www.therrc.co.uk/sites/default/files/general/Training/esmee/river_restoration_in_urban_areas.pdf

[15] See the London Water Vole Project https://www.lbp.org.uk/07library/water%20vole%20proof%204%20amended%20-%20small.pdf

[16] More information: https://www.thehighline.org/

[17] More on the value of restoring a river's connection to its vegetated floodplains: https://www.fensforthefuture.org.uk/admin/resources/downloads/vnp09-natcapsynthesisreport-floodplains-a4-16pp-144dpi.pdf

Box 4: The policy framework

The Southwark Plan is the strategic spatial plan for shaping the physical environment. Within this document a clear vision and direction for a network of nature corridors and strategic connectivity between SINCs could make clear to all landowners and developers the Council's biodiversity vision and intentions.

The planning policy on Green Infrastructure P59 and Biodiversity P60 both need to take a more strategic view on the value and impact of nature to the boroughs environment and the benefit for residents. Policies should be amended to:

- Set a strategic direction to link SINCs through strategic wildlife corridors and the expectation that new developments will contribute to this through green infrastructure and include as an ambition (with maps) for the revised Southwark Nature Action Plan.
- Identify and map the nature corridors which should be considered and incorporated into relevant site developments. Supporting P59 with specific expectations and policy.
- Set out and map the green infrastructure network in relevant strategic policies. There needs to be a clear vision and policy that operates across a number of policy areas including council strategies e.g. Streets for People, Climate Change Climate Resilience and Adaptation, Surface Flooding Mitigation, any new policies to tackle heat, public health and health equalities.
- The rationale for this needs to include the justifications as set out in above policies.
- Areas of Southwark are in deficit of green space and significant variation of tree canopy cover. The council needs to set a clear ambition to address this and minimise tree removal in and around new developments, taking a stronger stance on tree removal e.g. in the public realm on pavements; Policy P61 Trees.
- Other planning policy levers available to the council could also be explored for example: the London Plan Urban Greening Factor minimum score could be increased; the surface water greenfield run-off rate could be reduced and SuDs increased; finance/legal mechanisms to deliver offsite Biodiversity Net Gain on Council-owned land could be explored[18] (SNAV would want to see BNG credits used in the borough); explore increasing the percentage and types of schemes UGF applies to; a blue ribbon approach for waterways (as in the London Plan) with benefits for nature and biodiversity, the impact of tall buildings on green spaces and hours of sunshine.
- The planned Climate Change early review and the SPD to support policies P59, P60 and P61 of the Southwark Plan could incorporate these proposals.The SPD is scheduled for Cabinet in June 2024.

[18] Currently the council have ruled out registering for BNG credits - as stated in the Scrutiny Report: February 2024 Biodiversity: Progress, Delivery and Requirements arising from the Environment Act (2021)