Climate Action Lewisham response to Lewisham Council's draft Local Flood Risk Management Strategy, October 2021

Climate Action Lewisham is pleased to submit its response to Lewisham's draft Local Flood Risk Management Strategy:

https://consultation.lewisham.gov.uk/environment/local-flood-risk-managment-strategy/

Our feedback relates to the document provided on the consultation page:

https://consultation.lewisham.gov.uk/environment/local-flood-risk-managment-strategy/supporting_documents/011021%20Local%20Flood%20Risk%20Management%20Strategy%20Consultation.pdf

Climate Action Lewisham supports the commitment from the council to understand, record and improve the borough's resilience to potential flooding events. We also recognise that historical schemes to restore water ways and construct wetland areas in public green spaces have helped reduce the impact of more recent flooding events.

We encourage this tradition to carry on, but we would like the scale of ambition increased to match the scale of the climate crisis, which is producing increasingly extreme weather patterns. These adversely affect lives and livelihoods and will continue to do so, most significantly of those from poorer socio-economic backgrounds. As well as the responsibility for flood risk management, we would expect the final strategy to go hand in hand with pro-active and ambitious climate crisis solution thinking and awareness. Acceptance of the status quo is not an option, and strong forward progress should be built into the plan. Many of the longer-term ambitions can and should take the place of short-term, for example: Objective 4 gives providing online information and support for households about their flood risk as a 2027 objective, when this kind of intervention is necessary now and should be prioritised.

Action to prevent flooding is, like many other aspects of action on climate change, ultimately good for the health of people who live in Lewisham. This concept should be central to the process of developing flood risk management plans, and, like any public health intervention, must be participatory and inclusive in nature to achieve the best possible outcome.

Flood prevention delivers co-benefits health and wellbeing in many other ways. These include: protecting and enhancing existing green spaces; protecting mature trees, which also in provide significant health benefits in their own right; developing more green/blue spaces as community assets and providing active travel infrastructure.

Core Principles

1 – Improve the borough's resilience to flooding and protect the most vulnerable:
We support this principle but find the statement unclear regarding targeting investment to support the borough's most vulnerable individuals and communities and how this is measured.

"Support decision-making across the Council that ensures future development across Lewisham reduces flood risk" – we believe that statement should be more authoritative i.e. the strategy should ensure that all decision making must be informed by the necessity to reduce flood risk. Flooding mitigation must be at the core of all development and infrastructure.

It is notable that from the map provided the area most likely to be affected by serious flooding is the very north of the borough, near the Thames. This is also, possibly not coincidentally, where the lowest-income residents of the borough live, which has the lowest tree cover and the worst

air pollution. We would like to see this borough collaborate with other London boroughs and London authorities to advocate for support, protection and, crucially, financial support in the event of destructive flooding.

2 – Take an evidenced-based approach when assessing investment needs and prioritising project delivery:
We agree that evidence based on risk data and modelling should be integral to assessing investment needs and prioritising project delivery. We are assuming this covers all infrastructure and services provided by the council, but it would be useful to see more detail added here giving examples of types of projects to be delivered.

We feel that an evidence-based approach to evaluation of existing assets is important and should not be forgotten, especially as many of those assets are currently under threat from planning or destruction (including: Chilthorne close in SE6, West Catford area; the Moremead Oaks, SE6 Bellingham; Senlac Road plane tree and Willow Wetlands site in Grove Park, SE12).

3 – Work in partnership to deliver multiple benefits through coordinated action:
We agree that the council should be working with other Risk Management partners and securing partnership funding deliver costs effective projects.

We believe that SuDS must be integrated into as many new and existing projects local authority projects as possible but would add that the strategy should provide strong leadership to promote this principle as well as coordination.

We support the statement "Integrate adaptation and investment in green infrastructure as part of Lewisham's response to the Climate Emergency promoting a natural and healthy environment for the benefit of residents and wildlife" but would add blue infrastructure and express the necessity to see this embedded in council strategy and progress measured.

We urge Lewisham Council to work in partnership with community to protect and extend green/blue-green spaces which can be left to nature eg the Willow Wetlands behind Northbrook Park which are under continuous threat from developers and being defended by community led team including Stephen Kenny, Kay Pallaris and Barry Donovan.

We note that trees are mentioned alongside hedgerows and woodland in the newly published Biodiversity Action Plan 2021 as providing drainage and resilience to storm events (p24).

Objectives

Objective 1: Understanding Risk
We support the initiative to "Produce a shared SuDS Opportunities Register showing area where flood storage could be incorporated into the public realm" but it would be useful to obtain more information about how it would be shared. Will this just be for strategic partners or shared with the public and local organisations who could benefit from the knowledge and research?

We also call for the council to draw up an asset register of existing naturally occurring flood defence systems. This would include the borough's many (but declining numbers due to high rate of felling) mature trees, with their significant contribution to flood risk mitigation, and wetland areas such as the Willow Carr next to the railway line between Hither Green and Grove Park.

Objective 2: Reducing Risk of Flooding
We support the objective of "investment in flood risk management projects and programmes using new or innovative techniques where appropriate" but would like to see ambitious creative thinking and a proactive approach to applying solutions. As well as measuring mitigation of flooding and water storage, KPIs could include enabling use of the stored water to reduce mains water use and projects to mitigate flooding to provide multiple benefits, such as carbon capture and improving mental health through provision of green and blue infrastructure.

We support the ongoing objective 'Programme of planting SuDS trees within areas of high surface water flood risk' and agree that tree planting should be done to help with the mitigation of surface water run-off. Planting trees as repositories for filtering out pollutants should be augmented by a wide variety of solutions.

New tree planting is not failsafe, the conditions and existing infrastructure may not provide optimal planting conditions, early years maintenance is often ineffective, and trees can also succumb to pest and disease. We need a commitment to protect our mature trees which are established and make sure that trees in the public realm are not removed on the behest of insurance companies without thorough and robust evidence that is made available for public scrutiny.

It is not sufficient to regard just trees planted in flood-risk areas to be tools for flood reduction: floods occur in a systemic manner, and the localised environments of uplands can strongly influence the behaviour of storm water as it flows downhill. For example, upland bare or loose soil can be washed away and quickly clog drains and smaller waterways in an exceptional storm, exacerbating flooding. Likewise, replacing green space with tarmac and buildings in uplands can make storm runoff flow very fast, exacerbating the flow of water downhill. In this way, all soil and all mature trees and green spaces are potentially flood prevention tools: their removal and paving over can have terrible consequences long term.

We note that currently between 150-200 mature trees are felled each year in Lewisham, and between 70-110 for insurance claims alone in the last 5 years. These trees are invaluable in their contribution to flood risk mitigation and cannot be replaced with saplings. Trees reduce stormwater runoff by capturing and storing rainfall in their canopy and have been shown to help reduce surface water runoff by as much as 60% compared to asphalt (Bton_Stormwater_Mitigation_Case_Study_report.pdf (indiana.edu)), and their capacity to do this increases linearly with age. Young trees such as those planted as replacements for felled mature trees, are not able to contribute as much as larger mature trees. Our large mature trees are irreplaceable; their continued loss in Lewisham presents a direct challenge to our flood risk mitigation, and therefore the health of the community. The 2020 Parks and Open Spaces Strategy declares that a record must be kept of tree planting and losses, with the aim of exceeding a 2:1 ratio (p21). This information is not generally made available to the public and there appears to be no official recognition of the difference between the loss of a sapling, which can be inevitable, and the loss of a centennial tree that has huge ecological and social value as well as being helpful for flood risk mitigation.

A statement by the Woodland Trust outlines the way that trees can help reduce flood risk: https://www.woodlandtrust.org.uk/media/1747/trees-and-flood-risk-position-statement.pdf

As well as flooding mitigation though root take up and canopy rainfall interception, mature trees are integral for their carbon storage, urban cooling effects, windbreak provision, benefits to mental health, wildlife support, pollution reduction and economic benefit in increasing property prices and commerce.

Tree pits also help reduce flooding. It is imperative that existing trees that are surrounded by asphalt up to the trunk, where possible this should be removed to provide a tree pit to aid water drainage and possibility for root take up.

Regarding pollution from surface run off from roads, we believe that traffic, which causes pollution and contamination of surface water run-off from roads, should be reduced. One way of doing this is to provide cycle routes along highways as an alternative for car use. We believe that encouraging of active travel is essential to tackling our air quality as well as climate crisis. Providing local areas with more attractive green and blue infrastructure will encourage residents to stay in the local environment and walk or cycle rather than travel by car.

Green infrastructure that enables active travel, such as the existing cycle path along the Waterlink Way therefore directly impacts health in many ways: by increasing physical activity, reducing air pollution exposure, reducing air pollution generation, reducing surface run off from roads, and thereby reducing flood risk – with consequent improvement in health impacts associated with flooding (mental ill health, impact on wellbeing, loss of belongings, physical health impacts.

UK Public Health Register – Health impacts of flooding (ukphr.org) for more information)

We understand that adding greenery is key to a more liveable and sustainable environment but schemes but adding greenery must not just be attractive but implement the latest scientific innovations and be appropriate for the specific area, identified through research and mapping. As well as implementing the right solution, soils used in implementation should be appropriate for the site as well as using plants that are well adapted for both drought and heavy rainfall events. Leading research on this is being done by the School of Landscape Design at Sheffield University, led by Nigel Dunnet and James Hitchmough. Dunnet was responsible for the innovative John Lewis Rain Garden in Central London and the 'Grey to Green' 1.6km green street' project in Sheffield which could provide some inspiration for the A21 development strategy.

https://www.nigeldunnett.com/ajohn-lewis-rain-garden/
https://www.nigeldunnett.com/grey-to-green-2/

Another source of information for choosing appropriate and resilient plants is the RHS who lead extensive research in this subject.

Research into the minimal requirements for green roofs using light soil mixes could be undertaken to enable as many businesses and organisations with flat roofs to install them. Advantages for temperature regulation should be provided to encourage implementation by organisations.

We would like to see ambitious thinking regarding the potential capture of rainfall for uses by organisations and businesses and follows the top SuDS priority which is storing rainfall for later use. We believe that there could be a lot of opportunity for re-directing water for re-use to large scale users of water ie for sanitation, sports field irrigation, vehicle cleaning. The re-use of water for such activities could save money for organisations as well as re-direct rainwater from downpipes to the sewerage system.

We would also like to see the council provide active encouragement for de-paving projects, green roofs, use of permeable materials and the council should be proactively encouraging and assisting residents and providing information about how to apply greening and drainage options private premises and available shared spaces. The council should make it clear to residents how to obtain funding for such schemes. Lambeth council have an initiative called Freshview whereby the council provide advice, help and equipment to residents for street improvement projects. The London Wildlife Trust cites an example for encouraging de-paving whereby residents are offered skips, a team and compost free of charge to enable them to do so. An equivalent scheme would be welcome in Lewisham.

https://issuu.com/londonwildlifetrust/docs/living-with-rainwater

Objective 3: Resilient Planning
We would expect that the strategy should ensure that (where possible) all development within critical drainage areas will attenuate to greenfield runoff rate.

We welcome the objective that there will be SuDS seminars and training for planning and policy officers but would like to see the KPI's to reflect implementation of the training and measured results.

Objective 4: Resilient Communities
We agree with the general objectives but the KPI 'Number of residents that enquire about property level resilience' is very passive. As well as providing information to residents and businesses and waiting for enquiries, Lewisham should be actively educating the community about the risks and what can be done to prepare by those at risk, especially those who live and work in the large high-risk area in the very north of the borough which flanks the Thames. Information and guidance for residents and businesses to get proactive in retrofitting properties, de-paving and becoming involved with small scale SuDS initiatives should be made available through clear, understandable, engaging literature and online content which will be key to building awareness and action.

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