Summary of Public Health Implications of Biodiversity

1. What will this do for the health and wellbeing of the population? Will this reduce health inequalities locally?

Biodiversity is a key determinant of health. Loss of natural habitats can increase air pollution, heat stress, and mental health burdens. Integrating biodiversity into planning such as green corridors, urban trees, and nature-based solutions aligns with the One Health approach, benefiting people, wildlife, and ecosystems (WHO, 2025). Creating and safeguarding biodiverse green spaces and protecting wetlands delivers co-benefits: climate resilience, reduced air pollution, and improved wellbeing (UK Health Alliance, 2025; WHO, 2025).

Health and Wellbeing Benefits

- **Physical Activity:** Biodiverse environments encourage walking, cycling, and outdoor recreation, reducing risks of obesity, diabetes, cardiovascular disease, and some cancers. Physical activity also helps maintain a healthy BMI, strengthens the immune system, and improves mental health. (NHS England, 2025)
- **Mental Health:** Access to biodiverse spaces reduces depression, stress, anxiety and other mental health conditions and helps support and manage symptoms of existing conditions. (WHO, 2025).
- Natural spaces with high biodiversity provide stronger mental health benefits than low-diversity areas. People living near nature rich areas report better mental health outcomes compared to those in highly built-up environments. (King's College London, 2024; The Wildlife Trust, 2022)
- **Air Quality:** Trees and vegetation filter pollutants, reducing respiratory illnesses such as asthma and COPD, while promoting wellbeing through cleaner air. (WHO, 2025)
- **Climate Resilience:** Biodiversity mitigates climate impacts such as heatwaves and flooding, reducing related health risks. Climate resilience requires a comprehensive plan and programme to protect and improve population health (UK Health and Security Agency, 2023).
- **Microbiome Benefits:** Ongoing biodiversity declines and inadequate green areas in residential environments can limit human exposure to beneficial microbes. Contact with biodiverse environments exposes people to beneficial microorganisms, strengthening

immune function and reducing allergies and autoimmune disorders. (Natural England, 2024; Haahtela, 2022; Lehtimäki,2025)

Reducing Health Inequalities

- Biodiversity conservation can reduce inequalities by improving access to nutritious food, clean water, and natural spaces especially in deprived areas (WHO, 2025).
- People living in the most deprived areas are four times more likely to live in neighbourhoods with the least access to biodiversity and green space compared to the least deprived areas. 28% of people in the most deprived neighbourhoods fall into the bottom 10% for green space access, versus only 7% in the least deprived neighbourhoods (The Health Foundation, 2024).
- Protecting biodiversity ensures that new housing developments do not eliminate access to nature, which is essential for wellbeing. We need to ensure that housing growth does not eliminate access to nature, which is linked to better mental health and lower chronic disease rates (The Wildlife Trust, 2022).

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