CITY POPULATION: 2.2 million

CITY DENSITY: 20,755 people/km²

METROPOLITAN POPULATION: 10.9 million

TREE CANOPY COVER: 21% (with plans to reach 23% by 2026)

PERMEABLE GREEN SURFACES: 3,419 hectares (33% of all land)

GREEN ROOFS AND WALLS: 143 hectares (with another 150ha planned by 2026)

URBAN AGRICULTURE: 34 hectares

BIODIVERSITY: 2,800 species recorded in 2020 across fauna, flora and fungi

Fish species in the Seine River are up from 4 to 36 in under three decades

COMPENDIUM FOR CITY GOOD PRACTICE SERIES

HOW **PARIS** IS LEVERAGING NATURE FOR CLIMATE RESILIENCE

PLAN FOR NATURE

Urban greening of spaces and buildings, and improving biodiversity are central to the adaptation strategy set out in the **Paris Climate and Energy Plan**. A high level of planning and policy integration ensures nature is part of every built environment decision.

MORE SEVERE WEATHER IS CAUSING HEATWAVES, FLOODING AND DROUGHT

Europe's densest city', Paris, has limited space prioritized for nature, increasing the impact and regularity of heatwaves, flooding, and water scarcity. Paris temperatures can be up to 8°C hotter than surrounding areas, negatively impacting biodiversity. The economic and health impacts are significant too, with reduced productivity, higher infrastructure costs, and lost tourism revenue.

NATURE AND BIODIVERSITY ARE CENTRAL TO PARIS'S CLIMATE ACTION

Urban heat, flooding and water scarcity pose risks to Paris, one of the world's foremost cities. The city's new **Climate Plan** prioritizes protecting people from the effects of climate change, with measures targeting almost every aspect of the built environment. Nature-based solutions and a strategy of improving biodiversity data, and using this to guide spatial planning and investment, is helping the city respond to climate change and remain globally competitive.

SECTORAL PLANS TO ENHANCE URBAN ECOLOGY

Paris's **Biodiversity Plan** provides clear steps for preserving and enhancing nature in the city. The focus is on how plants can help cool the city,

reduce surface runoff, and improve biodiversity, with guidelines covering minimum soil thickness, species to be planted, and plant hydration systems. The city's Soil and Rainwater Plan supports this alongside a focus on restoring soil permeability in public and private spaces to reduce flooding and the frequency of sewerage discharges into the Seine. Solutions to recover and reuse rainwater as close to where it falls prioritize permeable surfaces including roof gardens or grass-covered paving stones. Rainwater absorption is further localized by surface water filtering into underground walls and basins. A science-backed Tree Plan seeks to maintain species diversity and foster resilience to climate change, alongside increasing the number of trees from 500,000 to 670,000 between 2020-26. These plans improve urban ecological management and leverage nature to enhance urban resilience.

INTEGRATING BIODIVERSITY PLANNING INTO THE CITY'S MASTERPLAN

The data and key strategies in the biodiversity and other plans have also been integrated into Paris's new **Urban Masterplan**. The plan will guide land use, planning and urban development by protecting and strengthening biodiversity. Developed locally through a democratic consultation process, the masterplan is expected to be adopted in 2025 and will be legally binding for 15 years.

¹ See Population density by **NUTS 3 region.**



Martin Luther King Park

DEVELOPING DATA ON ECOLOGY AND BIODIVERSITY

Paris created a dedicated team within the city's Biodiversity Division to develop a publicly available inventory of green and blue infrastructure, including GIS data on animals, plants, and ecology, and data on microclimate, soil types, and pollution in air and soil. Some data was also crowdsourced using citizen surveys and participative science.

The city uses this data with a standardized assessment to map urban biodiversity reservoirs and corridors, with the aim of reducing ecological fragmentation and improving monitoring. The **Chemins de la Nature** (Nature Trails) map below



highlights the relative strength of biodiversity (dark green is strong) across diverse green and blue areas, including the River Seine, canals, parks, gardens, tree-lined streets, cemeteries, and along railway tracks. This data forms the foundation of the city's focus on nature, including being incorporated into Paris's masterplan and enabling coordination beyond the city.

PLAN FOR "GREEN CONNECTIVITY" BEYOND THE CITY'S BOUNDARY

France also has national legislation² and strategies that mandate ecological and spatial coordination between all levels of government, with a requirement³ to map green and blue infrastructure. The result will be ecological continuity between Paris, the Paris region⁴, and national planning⁵, with the aim of strengthening national biodiversity corridors.

² See regional land use and development plans.

- ³ See National Biodiversity Strategy 2030.
- ⁴ See Paris region masterplan.
- ⁵ See Cerema.

INVEST IN NATURE

MAKING ROADS, BUILDINGS, AND SPACES BIG AND SMALL PART OF A BROADER GREEN CONNECTIVITY STRATEGY

Paris has accelerated nature-based investment, leveraging public and private sector investment across hundreds of small-scale interventions up to creating new green neighborhoods strategically located along biodiversity corridors. Paris is developing BiodivScore, a self-assessment tool to help developers with construction and site layout decisions to improve integration into wider biodiversity corridors, and provides technical and financial support to incentivize green outcomes. All private condominiums, for example, have access to support for greening courtyards and roofs.

Rue Severo is one of over 200 pedestrianized streets around nurseries and elementary schools. The plan is to increase this to 300 by 2026, with half including trees. The city works with the police and fire brigade to ensure safety and access.







Sonia Yassa / Ville de Paris



Sonia Yassa / Ville de Paris

Place Sarah Monod was planted with 82 trees, bushes and herbaceous plants and forms part of a new network of small public and private green spaces.

The 10-hectare Martin Luther King Park is at the heart of the 54-hectare mixed-use Quartier Clichy-Batignolles, a neighborhood built on a former rail freight yard that uses nature-based solutions for water management, urban cooling and recreation. A high percentage of biodiverse planting on and around buildings, re-establishing urban wetlands, and holding developers to Passivhaus building efficiency standards supports the ambition to create a mix of connected green and blue spaces to increase climate resilience.



Martin Luther King Park

The GPSC, together with the United Nations Environment

and other partners, launched the Urban Nature Program

Program (UNEP), ICLEI, C40, World Resources Institute,

scale up financing to support cities and sub-national

governments in implementing the Global Biodiversity

Framework. Paris is one of the Urban Nature Program

at UNFCCC CoP 28 in 2023. The program aims to

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