Biodiversity, natural places, trees and soils

Local Development Plan Topic Paper

Dundee is one of **six** cities across Europe to capture **citizen data** on the local environment to identify **nature-based** solutions to issues such as biodiversity loss.

The City of Dundee covers **6515 hectares** and of this total amount, 4.3% (279 hectares) is **woodland.**

Dundee is a city which benefits from more **urban green space** per head of population **than anywhere** in the UK.

The network of green infrastructure in the city includes **59 parks** covering **4000 acres** (this includes cemeteries and allotments) and a 27 mile footpath/cycleway.

Dundee City Council

www.dundeecity.gov.uk

CHANGING FOR THE FUTURE

Topic Paper – Biodiversity, natural places, trees and soils

Contents

1. Introduction

This topic paper reviews evidence identified as relevant surrounding the Biodiversity, Natural Places, Trees and Soils topic grouping. This topic grouping includes:

- **NPF4 Policy 3 – Biodiversity**
- **NPF4 Policy 4 – Natural Places**
- **NPF4 Policy 5 – Soils**
- **NPF4 Policy 6 – Forestry, Woodland and Trees**
- **NPF4 Policy 8 - Greenbelts**

The topic paper summarises all evidence and data identified and considers specifically its relevance to Dundee. The implications of this evidence and data have been considered and how this might inform the Proposed Plan. The conclusions set out are based on a professional judgement as to the land use planning implications of the data examined.

The topic paper also outlines consultation that has been undertaken thus far, in identifying evidence and datasets through a key stakeholder group and the current stage of public consultation.

2. Identification of Evidence/ Datasets

NPF4 Policy	Evidence/ Dataset and Source
Policy 3 Biodiversity	National Planning Framework 4
	Dundee Local Development Plan 2019
	Scotland's Biodiversity Strategy and Delivery Plan
	State of Nature Report 2023
	NatureScot- Developing with Nature Guidance
	Biodiversity: draft planning guidance
	NBN atlas
	Net Zero Transition Plan 2024-2030
	Dundee Natural Capital Baseline Assessment report
	Dundee Biodiversity Action Plan 2020-2030
	Dundee Biodiversity Duty Report 2021-2023
	Climate Risk and Vulnerability Assessment 2019
	Urban ReLeaf Citizen Science Project
	Habitat Map of Scotland
	DCC Naturalised and Biodiversity Grasslands Feature Layer
	DCC Wildflower Area Feature Layer
	DCC Species Survey Feature Layer
	DCC Ash Dieback GIS platform
Policy 4 Natural Places	National Planning Framework 4
	Dundee Local Development Plan 2019
	Dundee Green Network 2016
	CivTech 8.3 Challenge- Nature Networks
	Framework for Nature Networks in Scotland- Draft
	NatureScot SiteLink
	Dundee Public Open Space Strategy 2008-2011
	Core Paths
	National Marine Plan (2015)
	River Basin Management Plan for Scotland 2021-2027
	Locally Important Nature Conservation Sites (LINCS) GIS Feature Layer
	Sites of Special Scientific Interest (SSSI)
	Ramsar Wetlands of International Importance
	Local Nature Reserves
	Scotland Land Cover Map 2022- EUNIS Level 1
	Scotland Land Cover Map 2022- EUNIS Level 2
	Scotland Land Cover Map- Change 2020-2022
	Water Classification Hub
	SEPA Flood Hazard Maps
	SEPA Environmental Data
Policy 5 Soils	National Planning Framework 4
	Dundee Local Development Plan 2019
	Scotland's Biodiversity Strategy and Delivery Plan (2022)
	Scotland's soils – National Soil Map of Scotland
	Scotland's soils – Carbon and Peatland 2016
	Scotland's Soils – Land Capability for Agriculture

NPF4 Policy	Evidence/ Dataset and Source
	James Hutton Institute land use classification map
	Scottish Environment, Food and Agriculture Research Institutions (SEFARI) – Healthy Soils for a Green Recovery (2022-2027)
	Habitat Map of Scotland
	Scotland Land Cover Map 2022 - EUNIS Level 1
	Scotland Land Cover Map 2022 - EUNIS Level 2
	Scotland Land Cover Map – Change 2020-2022
	SSW – Soil Map
	HES – Canmore (cultural soils)
	Map of soil erosion risk
	Map of soil leaching potential
	Map of runoff risk
	Nitrate Vulnerable Zone
Policy 6 Forestry, Woodland and Trees	National Planning Framework 4
	Dundee Local Development Plan 2019
	Scotland's Forestry Strategy (2019-2029)
	Strategic Forest Plan – Dundee City Woodlands (2015-2025)
	Native Woodland Survey of Scotland and Ancient woodland Inventory
	Tree Preservation Orders
	National Forest Inventory 2021
	Scottish Ancient Woodland Inventory
	Ancient Tree Inventory
	Designation Policy and Selection Guidance - Gardens and Designed Landscapes
	Spatial data (Gardens and Designed Landscapes) - https://portal.historicenvironment.scot/downloads/gardens
	Tree Equity Map
	iTree project
Policy 8 Greenbelts	National Planning Framework 4
	Dundee Local Development Plan 2019
	Dundee Green Network 2016
	Landscape character assessment – Tayside (2019)
	NatureScot National Landscape Character Assessment (2023)
	Initial thinking around Green belts for NPF4 (2021)
	Greenbelts Scotland - data (2023)
	Landscape Character Assessment 2019
	Framework for Nature Networks in Scotland – Draft

3. Summary of Evidence/ Datasets

Policy 3 – Biodiversity

National Planning Framework 4 (NPF4)

Restoring and better connecting biodiversity and providing nature-positive places is a principal policy in NPF4. It sets out new requirements for development to deliver positive effects to address the global biodiversity crisis, primarily under Policy 3.

The policy states that "LDPs should protect, conserve, restore and enhance biodiversity in line with the mitigation hierarchy. They should also promote nature recovery and nature restoration across the development plan area, including by: facilitating the creation of nature networks and strengthening connections between them to support improved ecological connectivity; restoring degraded habitats or creating new habitats; and incorporating measures to increase biodiversity, including populations of priority species."

Implications for development management include that development proposals should integrate nature-based solutions where possible, with more significant enhancements required for national or major development, or for development that requires an Environmental Impact Assessment. Measures should be proportionate to the nature and scale of development.

Dundee Local Development Plan 2019

Policy 32: National and International Nature Conservation Designations states that any development proposal that is likely to have a significant effect on the conservation management of the European site must include a Habitats Regulations Appraisal of the implications on the conservation objectives of the designations.

Policy 33: Local Nature Conservation Designations Development states that development which could have a significant effect on the conservation interests associated with Local Nature Reserves, Locally Important Nature Conservation Sites or Wildlife Corridors will only be permitted where it satisfies 3 criteria.

Policy 34: Protected Species states that development proposals which are likely to have a significant effect on a European protected species will not be supported unless they satisfy 2 criteria.

Policy 38: Protecting and Improving the Water Environment aims to safeguard and enhance Dundee's water environment in alignment with the Water Framework Directive and Scotland River Basin Management Plan 2 (RBMP). Development proposals must not compromise these objectives, considering impacts such as morphological changes, pollution, and non-native species invasion. Engineering works that harm the water environment won't be supported, while opportunities for improvement, like de-culverting and riparian buffer zones, are encouraged. The Dundee Water Environment and Strategic Flood Risk Assessment 2016 guides local interpretation and mitigation measures on a site-specific basis. When assessing proposals, the Council considers RBMP and the Dundee Assessment, ensuring developments align with water environment protection and improvement goals.

Scotland's Biodiversity Strategy and Delivery Plan (2023)

This strategy sets out a clear ambition: for Scotland to be Nature Positive by 2030, and to have restored and regenerated biodiversity across the country by 2045.

The strategy identifies the following six objectives to put Scotland on track for halting the loss of biodiversity and being nature positive by 2030:

1. Accelerate restoration and regeneration;
2. Protect nature on land and at sea, across and beyond protected areas;
3. Embed nature-positive farming, fishing and forestry;
4. Protect and support the recovery of vulnerable and important species and habitats;
5. Invest in Nature; and,
6. Take action on the indirect drivers of biodiversity loss.

State of Nature Report (2023)

The State of Nature 2023 report uses data from biological monitoring and recording schemes to provide a benchmark for the status of wildlife in the UK. While the report shows both losses and gains for biodiversity, measures of both average abundance and average distribution of species show that Scotland's wildlife has declined substantially in recent decades. 11% of 7,508 species in Scotland that have been assessed using IUCN Red List criteria have been classified as threatened with extinction and many species previously only present in the south of the UK are now present in Scotland and increasing in abundance.

NatureScot- Developing with Nature Guidance (2022)

This guidance was published in support of policy 3(c) of National Planning Framework 4 to assist anyone making or considering a planning application under Scotland's Planning Acts for certain local developments. This is non-statutory guidance and not part of the development plan. However, applicants and planning authorities are expected to give this guidance due consideration through the site selection, design and planning application process. It promotes an ecosystem approach - understanding how proposed development interacts with ecosystems and their services. This involves early consideration of nature in the design process.

There are 5 principles for Developing with Nature:

- Take an ecosystem approach - consider impacts on ecosystems and their services
- Prioritise nature - aim for net positive outcomes for biodiversity
- Think in 3D - consider above and below ground habitats and connections
- Work with natural processes - design with nature in mind, enhance natural features
- Bring nature in - incorporate green/blue infrastructure and nature-based solutions.

Biodiversity: draft planning guidance (2023)

This guidance sets out the Scottish Ministers' expectations for implementing NPF4 policies which support the cross-cutting NPF4 outcome 'improving biodiversity'. It sets out ways for planners and developers to minimize impacts and maximize benefits for biodiversity through the planning process. Development plans should identify international, national and local priority habitats and species and safeguard them from adverse impacts. Development proposals should follow the mitigation hierarchy - avoid, minimize, restore, offset impacts on biodiversity. Net biodiversity gain should be sought where possible.

National Biodiversity Network atlas

The NBN Atlas is an online database that provides access to millions of wildlife records from across Britain and Ireland. It brings together data from a range of national schemes and local recording groups. Within the City Council boundary, the atlas displays occurrences of over 1500 species recorded between 1850 and 2024. The records show where species have been

recorded and allow users to generate maps and lists for any location. It covers all taxonomic groups from mammals and birds to fungi, plants and invertebrates.

Net Zero Transition Plan 2024- 2030

This organisational plan covers all service areas and includes climate resilience and biodiversity actions. The aims of the Net Zero Transition Plan are:

- Set out a clear roadmap for our transition to become a net zero organisation with a set of corporate actions across Net Zero emissions, Circular Economy, Climate Resilience and Just Transition;
- Implement a carbon accounting process that will embed delivery across all our Services;
- Ensure our activities and infrastructure are resilient to a changing climate;
- Engage and involve our staff, customers and the public in our journey to become a net zero organisation; and
- Act as a local leader and support the city of Dundee and Scotland in ambitions for a net zero society.

Natural Capital Baseline Assessment

In March 2023, a Natural Capital Baseline Assessment of Dundee was carried out as a starting point to future adaptation planning. This report used a specially adapted Scottish biodiversity metric to calculate the number of biodiversity units that the natural assets provide with an average of 10.4 units per hectare for Dundee. It was highlighted that some areas such as Riverside Nature Park, provide a very high number of units for the size of the area. This helped to identify opportunities for carbon storage and sequestration, soil erosion prevention, flood risk reduction, important areas for pollinators, important biodiversity habitats and opportunities for enhancement.

Dundee Biodiversity Action Plan 2020-2030

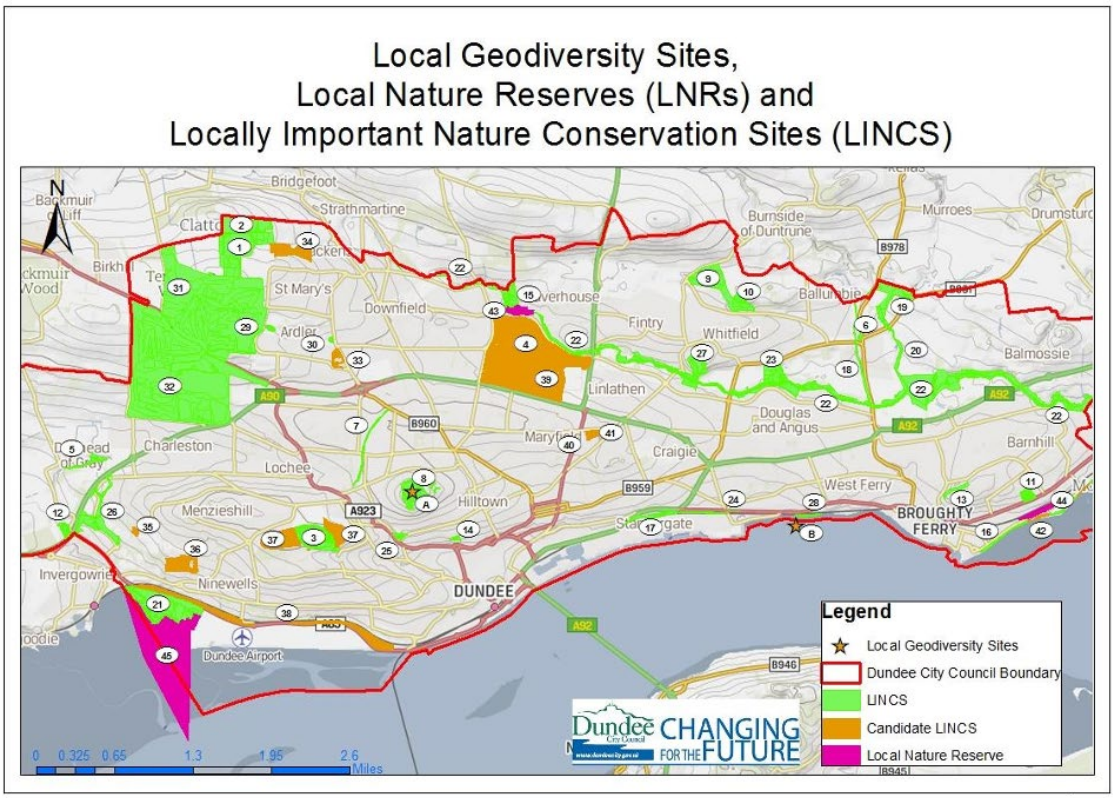
The Dundee Biodiversity Action Plan (BAP) was produced to raise awareness of the wildlife (flora and fauna) of Dundee in an international, national and local context. It focuses on the ecosystems, habitats and species most in need and ensures prioritisation of resources at a local level. The plan sets out clear objectives and targets to enable the monitoring of progress and enables measurement of achievements.

The plan outlines objectives and actions for each ecosystem and a number of cross ecosystem topics including planning and development. The main overall objectives of the plan are:

- To promote sympathetic management to improve the health of Dundee's ecosystems and ensure key sites are managed to a high standard for biodiversity.
- To ensure no net loss of habitat and, where appropriate, increase the extent of the distribution and connectivity of all habitats.
- To find a balance between providing for biodiversity and providing public amenity for all users within the city.

The below map highlights designations for sites which are important nationally and locally for habitats, species and geology:

Figure 1, Image reference: https://www.dundeecity.gov.uk/service-area/neighbourhood services/environment/biodiversity



Dundee Biodiversity Duty Report 2021-2023

This is the third Biodiversity Duty produced by Dundee City Council and covers the period 1st January 2021 to 31st December 2023. It evidences delivery of Dundee City Council's Biodiversity Duty during this period and follows the most recent Scottish Government / NatureScot guidance. Some key projects highlighted include re-planting and regeneration of woodland areas damaged by storms, the creation of new native woodlands, the preparation of an Ash Dieback Action Plan, grassland management, and planting of native species to stabilise sand dunes at Broughty Ferry.

Climate Risk and Vulnerability Assessment 2019

In preparation for Dundee's Climate Action Plan, a Risk and Vulnerability Assessment of ten policy sectors was carried out to determine the nature and extent of climate related risks in Dundee. The expected impacts to Environment and Biodiversity were thought to be ecosystem degradation, species migration, insect infestation, habitat loss due to flooding and access to food.

Work is ongoing to update the Climate Risk and Vulnerability Assessment including an assessment of previously identified risks, identification of changes, and suitable adaptation options.

Urban ReLeaf Citizen Science Project

Urban ReLeaf is a four-year cross-cultural EU project from January 2023 that aims to co-create citizen-powered data ecosystems to support climate change adaptation, green

infrastructure, and urban design planning. Dundee City Council is collaborating with the University of Dundee to deliver a two-year citizen sensing pilot monitoring a range of environmental issues that relate to Dundee's green transitions for the built environment. Dundee is one of six cities across Europe to capture citizen data on the local environment to identify nature-based solutions to issues such as biodiversity loss.

Habitat Map of Scotland

The Habitat Map of Scotland contains habitat and land use data including information on Sand Dune Vegetation, and Native Woodland. This can be used in conjunction with other datasets to identify opportunities for connecting habitats through corridors and stepping-stones.

Local GIS datasets managed by Dundee City Council

Naturalised and Biodiversity Grasslands GIS Feature Layer

This map shows where the mowing regime has been relaxed to create biodiversity grasslands and naturalised grasslands. Some sites have additional spring bulb planting to create pollinator banks. Areas in 24 parks have been identified to be managed as naturalised grasslands or biodiversity grasslands. Each will comprise up to approximately 15% of the respective park (view individual meadow maps here).

Wildflower Area Feature Layer

This map shows wildflower meadows (annual and perennial) which have been established for biodiversity across the city including Camperdown Country Park and Riverside Drive.

Species Survey Feature Layer

A mapped survey of invasive species such as Giant Hogweed, Himalayan Balsam and Japanese Knotweed, including locations recorded, population size and area covered.

Ash Dieback GIS platform

A GIS based tree management platform has been developed and currently contains a two-year survey of 3,200 ash trees on council property. This will enable the Council to further the successful management of the disease and ensure the safety of communities. It is anticipated that this platform will have all street tree data added to it over time, allowing for better record keeping and more efficient management of all trees in the future.

Policy 4 – Natural Places

National Planning Framework 4 (NPF4)

Policy 4 seeks to protect, restore and enhance natural assets making best use of nature-based solutions. Accompanying this policy, it is noted that LDPs will identify and protect locally, regionally, nationally and internationally important natural assets, on land and along coasts. The spatial strategy should safeguard them and take into account the objectives and level of their protected status in allocating land for development. Spatial strategies should also better connect nature rich areas by establishing and growing nature networks to help protect and restore the biodiversity, ecosystems and natural processes in their area.

Dundee Local Development Plan 2019

Policy 28 of the Dundee Local Development Plan aims to protect and enhance the city's green infrastructure network. Development proposals must safeguard existing green spaces and contribute to the network's expansion where appropriate. Changes in land use from designated green infrastructure sites require justification, either through adherence to approved masterplans, provision of compensatory green space, or enhancements to recreational value. Outdoor sports facilities are to be safeguarded unless minor impacts occur, or they're replaced by facilities of equal quality. Compatibility with Dundee's Physical Activity and Pitch Strategies is also required, ensuring development aligns with broader community needs.

Policy 29 focuses on safeguarding, improving, and extending outdoor access routes, especially those supporting the Dundee Green Network. The Council will protect existing and proposed access routes affected by development unless a satisfactory alternative route can be agreed. The policy seeks to secure additional access opportunities from developments and ensure temporary disruptions are mitigated with alternative routes during construction, reinstating them post-development.

Policy 30 addresses the long-term maintenance of green infrastructure in new housing developments. The Council will enforce planning conditions or Section 75 obligations to secure maintenance provisions. Developers must choose between two options: either the Council adopts and maintains the green infrastructure, with developers contributing to maintenance costs, or developers transfer the infrastructure to a third party or residents, who then assume responsibility for maintenance.

Policy 31 regulates development in Dundee's Open Countryside, aiming to uphold sustainability principles by minimizing greenfield use. New development in these areas is generally discouraged unless meeting specific criteria: limited additional buildings in existing groups, restoration of architecturally significant stone buildings, agricultural justification, or alignment with approved masterplans. This aims to reduce travel needs, promote community regeneration, and prioritize brownfield site reuse. By limiting development in open countryside, the policy aims to protect natural landscapes, conserve rural character, and promote sustainable urban growth in Dundee.

Policy 32 focuses on Dundee's nationally and internationally significant natural heritage, particularly Natura sites within the Tay Estuary. Any proposal affecting these areas must undergo a Habitats Regulations Appraisal, ensuring conservation objectives aren't compromised. For international sites, development is permitted only if an Appropriate Assessment confirms no adverse effects or if imperative national interests justify it. Similarly, development on national sites is allowed if benefits outweigh adverse effects or if integrity is maintained.

Policy 33 addresses development's impact on Dundee's local nature conservation sites. Proposals affecting these areas must undergo an ecological assessment to identify potential impacts. Development is permitted only if negative impacts can be contained and mitigated without compromising the area's integrity. Additionally, it must be shown that no alternative sites can accommodate the development. This policy ensures the protection of local biodiversity hotspots while allowing for sustainable development under strict conditions.

Policy 38 aims to safeguard and enhance Dundee's water environment in alignment with the Water Framework Directive and Scotland River Basin Management Plan 2 (RBMP). Development proposals must not compromise these objectives, considering impacts such as morphological changes, pollution, and non-native species invasion. Engineering works that harm the water environment won't be supported, while opportunities for improvement, like de-culverting and riparian buffer zones, are encouraged. The Dundee Water Environment and Strategic Flood Risk Assessment 2016 guides local interpretation and mitigation measures on a site-specific basis. When assessing proposals, the Council considers RBMP and the Dundee Assessment, ensuring developments align with water environment protection and improvement goals.

Dundee Green Network 2016

Dundee is a city which benefits from more urban green space per head of population than anywhere in the UK. The network of green infrastructure in the city includes 59 parks covering 4000 acres (this includes cemeteries and allotments) and a 27-mile footpath/cycleway circumnavigating internationally important sites on the inner reaches of the Tay Estuary and locally important green and blue spaces enjoyed by both residents and visitors alike. Green infrastructure assets include Camperdown Country Park, Baxter Park, Broughty Ferry Local Nature Reserve, The Miley, The Law, Riverside Nature Park, Dighty Green Corridor, Trottick Ponds and Templeton Woods and green connections such as the Dundee Green Circular, Greenways, Core Paths and National Cycle Routes.

Dundee's Green Network was identified through a collaborative process with SNH (now NatureScot). The Dundee Green Network 2016 contains an interactive map with links to detailed aerial maps identifying existing assets and opportunities to protect and enhance them.

For planning, new development offers an opportunity for the Council to work with its partners to strengthen and extend the network of green infrastructure. It is important to ensure that as the City develops and embraces change, people living, working, or visiting the City continue to have access to quality, connected, multifunctional and well managed green infrastructure.

Connecting individual elements into a multifunctional green network helps to:

- provide a range of opportunities for leisure and recreation;
- improve environmental quality;
- link and create wildlife habitats; and
- protect existing features.

CivTech 8.3 Challenge- Nature Networks Corridors

NatureScot and Scottish Wildlife Trust are co-sponsoring a project on "how can technology help to create a nature network across all of the different areas of Scotland?". Dundee is one of five Local Authorities working with Aecom to develop a process for identifying and mapping wildlife connectivity and opportunities for habitat creation using a place-based approach. New map datasets will include wildlife connectivity, nature network corridors, nature recovery opportunities, and a connectivity simulator. The Nature Networks Tool is an opportunity to review, enhance and strengthen the current Dundee Green Network by bringing together

Council-owned data and data managed by Key Agencies such as Scottish Water, NatureScot and SEPA. The Local Biodiversity Action Plan and forthcoming Forestry and Woodland Strategy will be key considerations in mapping Dundee's nature network opportunities. The data tool is still under production but will be available to inform the proposed plan.

Framework for Nature Networks in Scotland – Draft

This framework aims to catalyse the urgent and transformative action needed across Scotland to implement Nature Networks that help halt and reverse biodiversity loss. It promotes the basic principles which associated action and delivery, at all levels, should be founded upon. The focus is on ensuring a deliver for a nature-rich future.

NatureScot SiteLink

SiteLink provides access to data and information on key Protected Areas across Scotland including site boundaries, designated features and download supporting documents. There is also data on site management agreements and consultation cases along with links to other websites for supporting information.

The map can be viewed here: https://sitelink.nature.scot/map

Dundee has several nationally and internationally important natural heritage designations that focus on the Tay Estuary as it relates to the Council's administrative boundary.

The Tay Estuary is a Special Area of Conservation and a significant area for wildlife, including various bird species, marine life, and habitats such as mudflats, salt marshes, and intertidal zones. It provides important feeding and breeding grounds for birds, including migratory species. The Firth of Tay and Eden Estuary is a Ramsar and Site of Special Scientific Interest which extends into the Dundee City Council boundary.

Dundee Open Space Audit and Strategy

In late 2023, Dundee City Council awarded Ironside Farrar with a contract to undertake an Open Space Audit to inform an update to the city's Open Space Strategy. The audit will assess and map the quantity, quality and accessibility of open spaces in the city, using Green Flag assessment criteria and Ordnance Survey data. The final output is expected by the end of April 2024.

The audit will then inform an Open Space Strategy (OSS) which will set out a strategic framework of the planning authority's policies and proposals as to the development, maintenance and use of green infrastructure in the city, including open spaces and green networks.

Core Paths

Section 17 of the Land Reform (Scotland) Act requires Local Authorities to provide a system of core paths that are sufficient for the purpose of giving the public reasonable access throughout their area. These will link into wider path networks and general access areas, such as open land, woods, fields and hills.

The original Core Path Plan was adopted by Dundee City Council in 2009 after extensive consultations and with support and advice from Dundee's Local Access Forum. Paths in the plan have been improved, particularly through improvements in Dundee Waterfront. The Local Access Forum carried out surveys, and proposed changes to the plan. The changes were

subject to consultations and were adopted by Dundee City Council on the 1st March 2020. A single amendment for a permanent diversion of Core Path 7 was adopted on the 24th July 2023.

The Core Paths map can be viewed here: https://www.dundeecity.gov.uk/outdoor-access-in-dundee/core-paths

Scotland's National Marine Plan (2015)

Scotland's National Marine Plan serves as a framework for the sustainable management of Scotland's seas. The plan adopts an integrated approach to managing marine activities, considering social, economic, and environmental factors. It provides a framework for spatial planning in Scotland's marine environment, guiding the location and scale of different activities to minimize conflicts and protect sensitive areas. The plan emphasizes ecosystem-based management, aiming to safeguard the health and resilience of marine ecosystems while supporting sustainable use. It identifies areas of high ecological value, such as marine protected areas (MPAs), and sets objectives for their conservation and protection. The involvement of stakeholders in the planning and decision-making processes ensures that the interests of natural places and the communities reliant on them are taken into account. Dundee is within the Scottish Marine Region of Forth and Tay for the purposes of regional marine planning.

Scotland's National Marine Plan is being updated with the Scottish Government's Marine Directorate leading the process for the development of NMP2, starting in 2023 and taking several years.

River Basin Management Plan for Scotland 2021-2027 (RBMP3)

This river basin management plan (RBMP) sets out a framework for protecting and improving the benefits provided by the water environment across Scotland. The Scottish Government, Scottish Environment Protection Agency (SEPA), responsible authorities and all of Scotland's other public bodies are responsible for developing and delivering the RBMP actions. These actions ensure that Scotland's rivers, lochs, estuaries, coastal areas and groundwater can continue to supply drinking water; support fisheries; offer an essential resource for business and agriculture and serve as a source of recreation that promotes health and wellbeing.

Dundee Locally Important Nature Conservation Sites (LINCS) GIS Feature Layer

This layer shows the boundaries of Locally Important Nature Conservation Sites as agreed in Dundee's Local Development Plan 2019. There is also a phase 1 habitat layer for each site which was developed after ecological surveys carried out in 2018/2019.

Other relevant data

A number of NatureScot, SEPA, and other national datasets have been identified as relevant in considering Policies 3 and 4 of NPF4:

- **Sites of Scientific Interest (SSSI)**

This dataset shows areas of land and water that NatureScot considers to best represent our natural heritage. One site is located within and adjacent to the Dundee City boundary, the Inner Tay Estuary, with a total site area of 4,132.95 ha.

- **RAMSAR Wetlands of International Importance**

This dataset shows sites classified to meet the UK's commitments under the RAMSAR Convention. The First of Tay and Eden Estuary are two high-quality estuarine areas which are components of a large, geomorphologically complex area that incorporates estuarine and coastal habitats.

- **Local Nature Reserves (LNRs)**

Areas of Land set aside for nature which are designated to promote their conservation and enjoyment and managed by local authorities. Local examples include Broughty Ferry and Trottick.

- **Scotland Land Cover Map 2022 - EUNIS Level 1 and Scotland Land Cover Map 2022 - EUNIS Level 2**

These Habitat and land cover maps created using AI to classify satellite data to EUNIS by Space Intelligence in partnership with NatureScot and can be used to help identify nature networks. For Dundee the maps separate out the urban environment and habitat and landcover.

- **Scotland Land Cover Map – Change 2020-2022**

This dataset is a change map, which provides predicted land cover changes that occurred between 2020 and 2022.

- **SEPA Environmental Data**
  - Water Classification Hub
  - SEPA Flood Maps
  - Scottish Wetland Inventory
  - Geomorphic Risk Layer
  - Riparian Vegetation Planting opportunities and conditions
  - Obstacles to fish migration

The river network and other water environment features, such as wetlands, are key aspects of existing and proposed nature networks with the linear nature of riparian (river bank) corridors providing opportunities to create wildlife corridors and connect habitats.
SEPA data on the river network and riparian areas including the geomorphic risk layer, riparian vegetation planting opportunity layer and flood maps are crucial to nature network mapping.

Policy 5 – Soils

National Planning Framework 4

Policy 5 seeks to protect carbon-rich soils, restore peatlands and minimise disturbance to soils from development. Through this policy it is noted that LDPs should protect locally, regionally, nationally and internationally valued soils, including land of lesser quality that is culturally or locally important for primary use.

Dundee Local Development Plan 2019

Soils currently has limited mention within the Dundee Local Development Plan 2019. There is reference to carbon rich soils in the text relating to Policy 47: Wind Turbines, but no specific policy relating to soils.

Scotland's Biodiversity Strategy and Delivery Plan (2022)

This draft biodiversity strategy sets out our clear ambition for Scotland to be Nature Positive by 2030, and to have restored and regenerated biodiversity across the country by 2045.

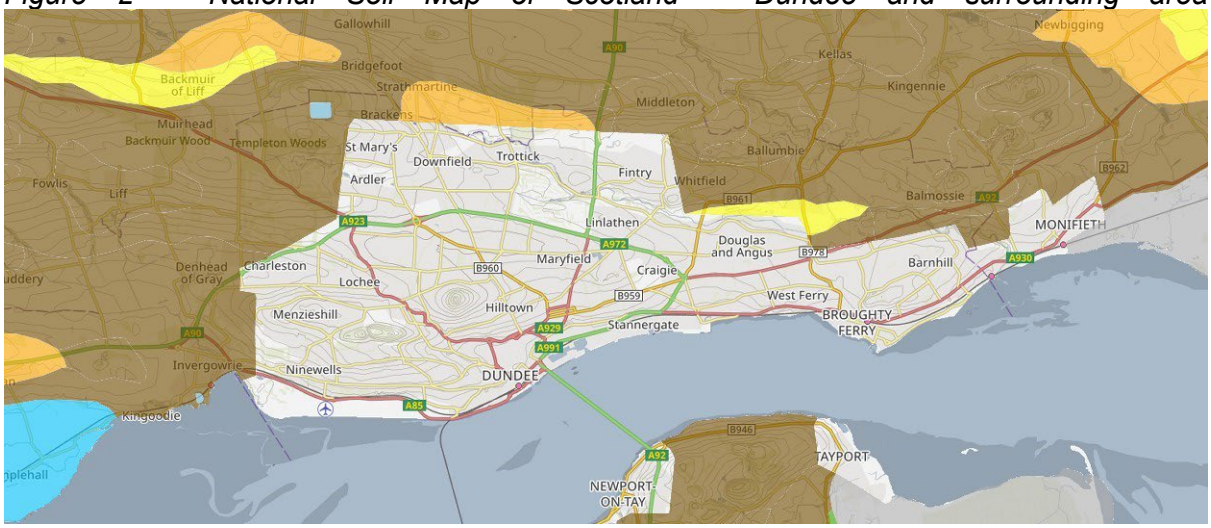
The strategy states that soil health will be improved by tackling loss of organic carbon, erosion, compaction, and the impacts of grazing, air pollution and climate change, and will function as a nature-based solution to flooding, erosion and biodiversity loss. Soils and species indicators also point to ecosystem health improvements and reveal which drivers are working positively or negatively across habitats and areas. Healthy biodiversity protects soil from eroding.

The strategy also states that impermeable surfaces can be replaced with species-rich grassland and urban woodland to increase soil biodiversity and capture carbon within the soil.

Scotland's soils

Scotland's soils are an important natural resource. They affect our health, our environment and our economy. Healthy soils can provide us with a wide range of benefits. Some of these benefits are obvious, like growing food, while many are less clear, like filtering water, reducing flood risk and regulating climate. In contrast, damaged soils can harm crops, pollute water and increase the risk of flooding. We need to look after our soils to make sure they can provide us with these benefits, both now and in future.

Figure 2 – National Soil Map of Scotland – Dundee and surrounding area



National Soil Map of Scotland: Generalised Soil Type

- Alluvial soils
- Brown soils
- Calcareous soils
- Immature soils
- Mineral gleys
- Mineral podzols
- Montane soils
- Peat
- Peaty gleys
- Peaty podzols
- Lochs

Image reference: https://map.environment.gov.scot/Soil_maps/?layer=1#

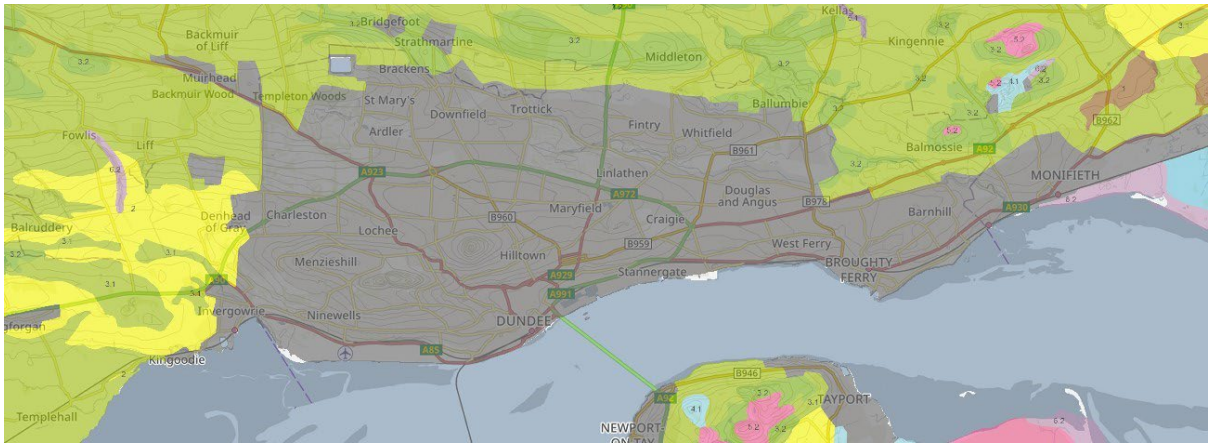
Dundee's outer periphery is predominately characterised by Calcareous soils, with a pocket of mineral gleys at Clatto. There is a stretch of mineral podzols to the northern boundary and a stretch of alluvial soils to the east of the city.

Dundee City only has no classified carbon rich soils.

James Hutton Institute land use classification map

The Macaulay Institute developed a Land Use Capability (LUC) system which was based upon a series of guidelines that allowed soil maps and other landscape and climatic information to be interpreted into land classification maps.

Figure 3 – Land Capability for Agriculture – Dundee and surrounding area



Land capability for agriculture (partial cover)

- 1 - Land capable of producing a very wide range of crops.
- 2 - Land capable of producing a wide range of crops.
- 3.1 - Land capable of producing consistently high yields of a narrow range of crops and/ or moderate yields of a wider range. Short grass leys are common.
- 3.2 - Land capable of average production though high yields of barley, oats and grass can be obtained. Grass leys are common.
- 4.1 - Land capable of producing a narrow range of crops, primarily grassland with short arable breaks of forage crops and cereal.
- 4.2 - Land capable of producing a narrow range of crops, primarily on grassland with short arable breaks of forage crops.
- 5.1 - Land capable of use as improved grassland. Few problems with pasture establishment and maintenance and potential high yields.
- 5.2 - Land capable of use as improved grassland. Few problems with pasture establishment but may be difficult to maintain.
- 5.3 - Land capable of use as improved grassland. Pasture deteriorates quickly.
- 6.1 - Land capable of use as rough grazings with a high proportion of palatable plants.
- 6.2 - Land capable of use as rough grazings with moderate quality plants.
- 6.3 - Land capable of use as rough grazings with low quality plants.
- 7 - Land of very limited agricultural value.
- Urban

Image reference: Scotland's Soils - soil maps (environment.gov.scot)

Dundee City has areas of land capable for agriculture mainly around its outer boundaries identified on the Land Capability for Agriculture Map (Classes 2, 3.1 and 3.2). Classes 1-3.1 are classified as prime agricultural land in the Scottish Land Capability for agriculture map.

Due to Dundee's predominately urban environment there is a limit to the relevance of the land use classification map for the inner city area. However, nonetheless the map is of specific relevance to the outer periphery areas of Dundee. This should therefore be taken into account in developing the Proposed Plan and relevant policies relating to soils.

Scottish Environment, Food and Agriculture Research Institutions (SEFARI) – Healthy Soils for a Green Recovery

The SEFARI Gateway undertake research and analysis to ensure scientific evidence helps inform the health, wealth and wellbeing of Scotland.

This project delivers new insights and knowledge on the role of Scottish soils, the benefits the benefits and identifies strategies to mitigate degradation, reduce loss and enhance soil health.

Overall, this project delivers data underpinning advances in scientific understanding of soil function and the complex role that soil has in contributing to ecosystem services. This is helping to develop strategies for sustainable management and minimise degradation and loss of Scotland's soils.

Data

A number of NatureScot, Scottish Government and other national datasets have been identified as relevant in the consideration of NPF4 Policy 5:

- **Habitat Map of Scotland**

This map shows varying habitat classifications across Dundee, from very small-scale habitats connected to buildings, to large scale habitat areas including golf courses.

- **Scotland Land Cover Map 2022 - EUNIS Level 1**
- **Scotland Land Cover Map 2022 - EUNIS Level 2**

These Habitat and land cover map created using AI to classify satellite data to EUNIS by Space Intelligence in partnership with NatureScot. For Dundee the maps separate out the urban environment and habitat and landcover.

- **Scotland Land Cover Map – Change 2020-2022**

This dataset is a change map, which provides predicted land cover changes that occurred between 2020 and 2022.

- **SSW – Soil Map**

National coverage of the main soil types across Scotland mapped originally at 1:250 000 scale. The map is based on data collected between 1947 and 1981.

- **Map of soil erosion risk**
- **Map of soil leaching potential**
- **Map of runoff risk**
- **HES – Canmore (cultural soils)**
- **Nitrate Vulnerable Zone**

These maps show:

- The risk of a bare soil being eroded by water under intense or prolonged rainfall;
- The risk of potential pollutants and nutrients leaching through the soil to ground and surface waters.
- The risk of the soil becoming saturated, causing water (or any liquid applied to the soil) to flow over land (runoff) and carry potential pollutants into water courses, or to collect (pond) on the surface.
- Areas of cultural soils.
- Areas within Scotland that contain surface water or groundwater that is susceptible to nitrate pollution from agricultural activities.

They cover most of Scotland's cultivated agricultural land area and have some general implications in Dundee.

Policy 6 – Forestry, Woodland and Trees

NPF4 Policy 6 Forestry, woodland and trees

Policy 6 seeks to protect and expand forests, woodlands and trees. Through this policy it is noted that existing woodlands and trees are to be protected and cover is expanded, avoiding habitat fragmentation and improve ecological connectivity, helping to support and expand nature networks.

Dundee Local Development Plan 2019

LDP Policy 35: Trees and Urban Woodland states that the establishment and enhancement of woodland, tree belts and corridors will be supported. New development must ensure the survival of woodland, hedgerows and individual trees. This is especially the case for healthy mature trees, of nature conservation or landscape value through sensitive site layout both during and after construction, unless removal has been approved in advance by the council. Where appropriate, development proposals must be accompanied by maintenance arrangements and justification for the removal of any trees or hedgerows.

Scotland's Forestry Strategy

This Strategy provides an overview of contemporary Scottish forestry, presents the 50-year vision for Scotland's forests and woodlands, and sets out a 10-year framework for action. It places forestry policy at the heart of government, helping to deliver the aims of the National Performance Framework, supporting the vision, objectives and principles of the Land Use Strategy, and building on the achievements of the previous strategy.

Strategic Forest Plan – Dundee City Woodlands

The City of Dundee covers 6515 hectares and of this total amount, 4.3% (279 hectares) is woodland. There is a mixture of woodland, varying both in species composition and extent, including both old estate woodlands and new plantations. The woodland in Dundee provides multiple benefits for the city, including reduction of CO2, pollution and noise, as well as mitigating the effects of flooding and extreme weather. They provide attractive, relaxing places for the residents of the city to walk in and enjoy and help to protect the city's biodiversity.

Figure 4: Strategic Forest Plan – Dundee Woodlands

Image reference: https://www.dundeecity.gov.uk/sites/default/files/publications/STRATEGIC%20FOREST%20PLAN.pdf

The woodlands are listed and detailed as separate units, as they are spread over the whole city area. There are 27 sites in total.

A strategic approach is required for the management of Dundee's forest resource to make sure that all areas of appropriate woodland are managed properly; as such this Strategic Forest Plan has been created.

For planning in Dundee considerations around the location of woodlands go further than just understanding the forest resource. As set out in the Strategic Forest Plan understanding how an increase in the amenity and habitat value of Dundee's woodlands is important. Equally, the connectivity between and through forest resources across the city and associated habitat and biodiversity networks is important.

Work is ongoing on the preparation of Dundee's Forestry and Woodland Strategy, which is anticipated to be finalised by December 2024. This will be taken into account in the preparation of the Dundee Local Development Plan.

Native Woodland Survey of Scotland and Ancient woodland Inventory

The Native Woodland Survey of Scotland (NWSS) surveyed all native woods and near-native woods currently present on ancient woodland sites, as well as all other planted woods on ancient woodland sites (PAWS).

All Scotland's forests, woodlands and associated open ground habitats provide some biodiversity value. However, suitably managed native, and in particular ancient and semi-

natural woodlands, including appropriately restored Plantations on Ancient Woodland Sites (PAWS), will contribute the most.

Improving woodland condition is a strategic driver in Scotland's Forestry Strategy and target in the Scottish Biodiversity Strategy. The National Planning Framework 4 recognises the high value of ancient woods and semi-natural woodlands for nature conservation.

Tree Preservation Orders

Tree Preservation Orders are supported and promoted by the Council to protect individual trees or entire planting schemes.

The map below shows where tree preservation orders are in place across Dundee.

Figure 5: Tree Preservation Orders in Dundee

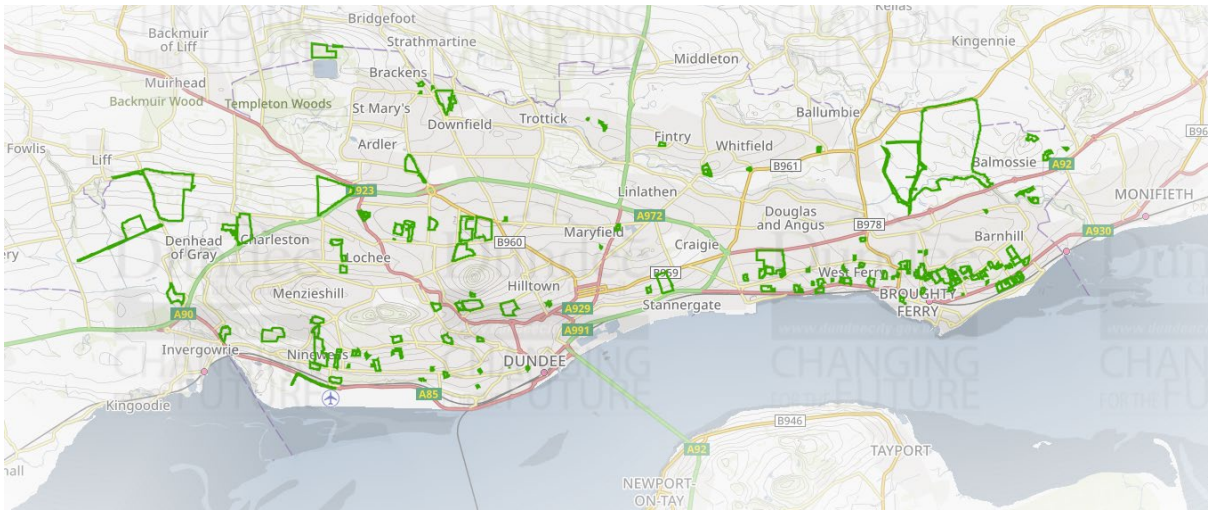


Image reference: https://dundeecity.gov.uk/service-area/city-development/tree-preservation-orders-map

The presence of trees on a site is a planning consideration when planning applications are being assessed. Tree Preservation Orders can help protect woods and trees. Dundee has a number of individual trees and wooded areas protected by Tree Preservation Orders. These can help preserve and protect urban woodlands across the city.

National Forest Inventory 2021

Figure 6: Woodland in Dundee City 2021

Image reference: National Forest Inventory 2021
Contains, or is based on, information supplied by the Forestry Commission. © Crown copyright and database right 2023 Ordnance Survey [100021242]

It can be seen that concentrations of woodland in Dundee are largely towards the outer peripheries of the City with a large concentration around Camperdown Park. However, there are some larger concentrations within the inner city area including Arbortum Woodland, Balgay Park, the University of Dundee Botanical Gardens and the area surrounding the Law Hill to name a few. This is not an absolute constraint on development, providing the terms of Policy 6 of National Planning Framework 4 are met.

The datasets used above have their limitations, in particular, smaller areas of woodlands, hedgerows and/or individual trees are not identified. This may include trees along field boundaries and/or around watercourses. NPF4 identifies that existing trees and woodland are key factors for development to take account of.

Scottish Ancient Woodland Inventory

Figure 7: Ancient Woodland in Dundee City

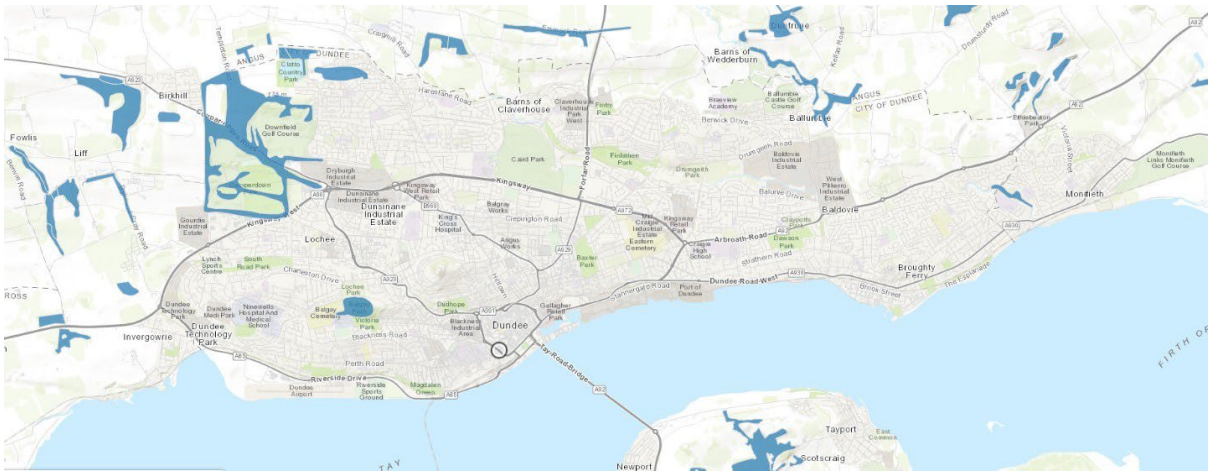


Image reference: Ancient Woodland Inventory (nature.scot)
Contains public sector information licensed under the Open Government Licence v3.0.

In order to fully understand trees and woodland across the city, it is important to consider all relevant datasets. As evident from Figure 4, it can be seen that there are classified ancient woodlands in the city. These are predominately around Camperdown Park and other smaller woodlands around the periphery, but also Balgay Park to the west of the city centre.

Ancient Tree Inventory

Figure 8: Ancient Trees in Dundee City

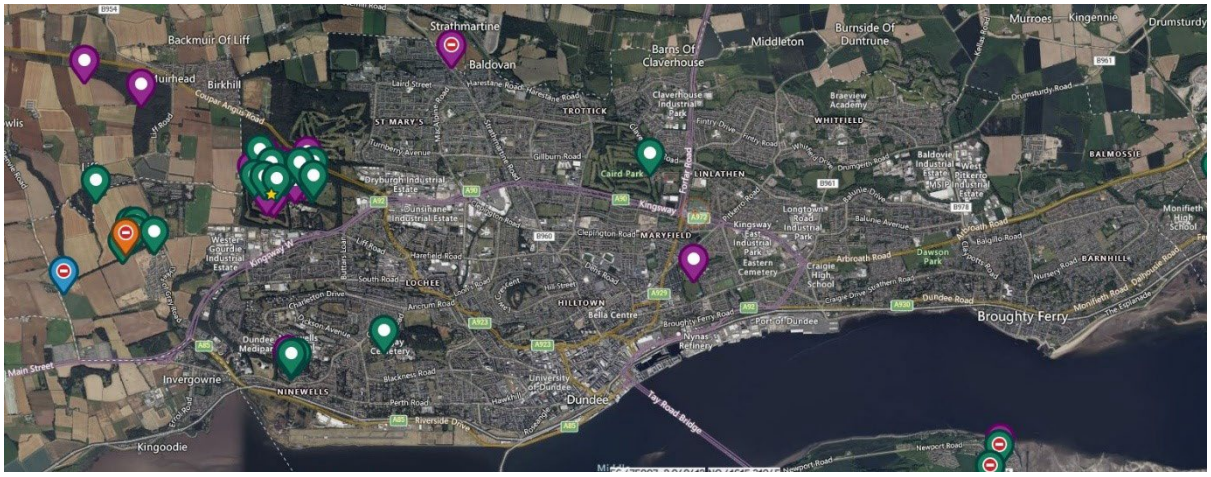


Image reference: Ancient Tree Inventory - Woodland Trust
www.openstreetmap.org/copyright

The above map in Figure 5 provides another layer of information regarding the status of trees across the city, evidencing the location of ancient trees in Dundee. These are largely concentrated within Camperdown Park but there are also smaller groupings and individual ancient trees elsewhere in the city.

Designation Policy and Selection Guidance - Gardens and Designed Landscapes

Inventory Gardens and Designed Landscapes Gardens are grounds that are consciously laid out for artistic effect (such as country estate landscapes, botanic garden collections, urban parks and cemeteries) and are an important element of our historic environment and landscape.

In considering whether or not a garden and designed landscape is of national importance its cultural significance is examined under seven headings. Of particular interest to this topic paper are the headings of nature conservation interest, horticultural interest and scenic interest.

There are 3 Inventory GDLs in the Dundee area. These are Balgay Park, Camperdown House and Baxter Park.

Tree Equity Map

Tree Equity Score UK is a map-based application that was created to help address disparities in urban tree distribution by identifying the areas in greatest need of people-focused investment in trees. This is mapped by datazone and provides information on canopy cover and climate and socio-economic characteristics that are integrated into the tree equity score. This is wide ranging for Dundee.

iTree project

Urban forests play an indispensable role in enhancing environmental quality, human health, and the overall liveability of cities.

i-Tree is a software suite from the USDA Forest Service, updated to reflect UK species and conditions, that provides urban and rural forestry analysis and ecosystem benefits assessment tools. The i-Tree tools can help strengthen forest management and allowing for urban forests and environmental management of them to be quantified.

A project proposal has been drawn up in partnership with the University of Dundee and funding is being sought to finance the work. The aim is to complete all survey work and reporting by December 2025.

The outputs from this work will be incorporated into work on the Climate Action Plan, The Biodiversity Action Plan and a new Woodland and Tree Strategy for the city.

Policy 8 - Greenbelts

NPF4 Policy 8 Green belts

Policy 8 Green belts encourages, promotes and facilitates compact urban growth and use the land around towns and cities sustainably. The policy states that development should be directed to the right locations, urban density is increased, and unsustainable growth is prevented. The character, landscape, natural setting and identity of settlements should be protected and enhanced. Nature networks are to be supported and land is managed to help tackle climate change.

The policy also outlines that green belts will not be necessary for most settlements but may be zoned around settlements where there is a significant danger of unsustainable growth in car-based commuting or suburbanisation of the countryside.

Dundee Local Development Plan 2019

LDP Policy 28: Protecting and Enhancing the Dundee Green Network states that development proposals shall protect and enhance the Dundee Green Network by ensuring that development will not lead to the fragmentation of the existing network of green infrastructure. New development should contribute to the Dundee Green Network where appropriate and as determined by the Council, through the integration of green infrastructure in masterplans or development frameworks and the creation and/or improvement of green infrastructure within development sites or in the local area.

LDP Policy 29: Outdoor Access and the Dundee Green Network states that the Council will seek to safeguard, improve and extend the network of outdoor access routes, with particular emphasis on the Core Path network and routes identified in the Dundee Cycling Strategy which support the development of the Dundee Green Network.

Dundee Green Network 2016

Dundee is a city which benefits from more urban green space per head of population than anywhere in the UK. The network of green infrastructure in the city includes 59 parks covering 4000 acres (this includes cemeteries and allotments) and a 27-mile footpath/cycleway circumnavigating internationally important sites on the inner reaches of the Tay Estuary and locally important green and blue spaces enjoyed by both residents and visitors alike. Green infrastructure assets include Camperdown Country Park, Baxter Park, Broughty Ferry Local Nature Reserve, The Miley, The Law, Riverside Nature Park, Dighty Green Corridor, Trottick Ponds and Templeton Woods and green connections such as the Dundee Green Circular, Greenways, Core Paths and National Cycle Routes.

Dundee's Green Network has been identified through a collaborative process with SNH (now NatureScot). The Dundee Green Network 2016 contains an interactive map with links to detailed aerial maps identifying existing assets and opportunities to protect and enhance them.

The below map in Figure 9 is the outcome of this approach (page 4 of document).

Figure 9: Dundee Green Network

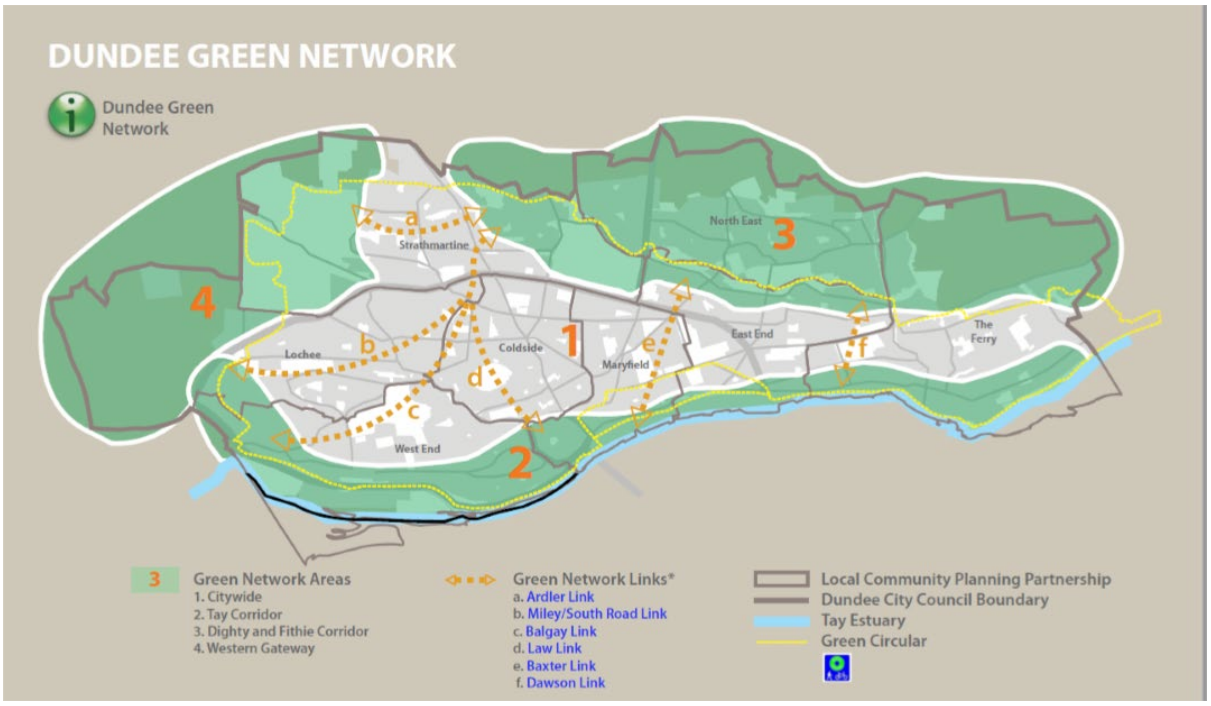


Image reference: Dundee Green Network 2016

For planning, new development offers an opportunity for the Council to work with its partners to strengthen and extend the network of green infrastructure. It is important to ensure that as the City develops and embraces change, people living, working, or visiting the City continue to have access to quality, connected, multifunctional and well managed green infrastructure.

Connecting individual elements into a multifunctional green network helps to:
• provide a range of opportunities for leisure and recreation;
• improve environmental quality;
• link and create wildlife habitats; and
• protect existing features.

Landscape character assessment – Tayside - Landscape Evolution and Influences

This document provides information on how the landscape of the local authority area has evolved. It complements the Landscape Character Type descriptions of the 2019 dataset.

The Tayside Region consists of two broadly distinctive geomorphological areas separated by the Highland Boundary Fault. Both are relevant to Dundee City specifically and connections to the wider region, which have implications for Dundee.

North of the Highland Boundary Fault, generally harder rocks have resulted in higher elevations despite being subject to similar glacial processes as to the south of the Fault. Much of this area is covered in either moorland or blanket bog, indicating higher rainfall and less fertile soils. Where valleys have been created or enlarged by glaciation, the more fertile soils occurring on drift deposits support agriculture.

To the south of the fault line are broad, flat, fertile straths corresponding with areas of softer sandstone, eroded during glaciation. The fertile soils which now cover these areas are the result of glacial drift deposits and eroded material carried down by rivers from the Highland glens.

The coast varies from steep cliffs to wide bays and to low areas with raised beaches. These raised beaches are covered by marine deposits originating from periods of former higher sea levels. The estuaries, especially Montrose Basin, form an important tidal habitat for wildlife, especially birds.

The large river systems help to shape the landscape and land use. The River Tay catchment supports hydroelectricity in the west of the area and intensive arable farming to its east.

The flat, low-lying Loch Leven Basin is in the southernmost part of lowland Tayside. Loch Leven itself is a large but relatively shallow freshwater loch. The area has widely recognised geological, archaeological, cultural, historical and ecological interests of regional, national and international importance.

The two ranges of hills south of the Highland Boundary Fault, the Ochils and Sidlaws, are igneous intrusions. As a result of tilting, these hills now form south-facing dip slopes and north-facing scarp slopes.

NatureScot National Landscape Character Assessment

NatureScot commissioned, in partnership with others, a series of 30 regional LCA studies. Together, these identified, mapped and described the landscape character of all of Scotland (mostly at a scale of 1:50,000).

Each study typically covered a local authority area and provided the landscape foundation for natural heritage and planning policymaking. The studies have been used widely in the development planning system.

Scotland has a digital map-based national LCA (published in 2019). This shows Landscape Character Types (LCTs) – i.e. areas of consistent and recognisable landscape character.

Initial thinking around green belts for NPF4

This paper outlines where some of thinking has come from around consideration of green belts and Policy 8 of NPFs. The key objective from this is to direct planned growth to the most

appropriate, sustainable locations whilst protecting and enhancing the character, landscape setting and identity of settlements and providing access to countryside recreation.

Greenbelts Scotland

A council development plan may designate a green belt around a city or town to support the spatial strategy by:
- directing development to the most appropriate locations and supporting regeneration;
- protecting and enhancing the character, landscape setting and identity of the settlement; and
- protecting and providing access to open space.

This dataset provides a polygon layer of green belt designations across Scotland. Whilst not specifically relevant to Dundee, this dataset assists in understanding other greenbelt designations and why they are in existence. This is helpful in understanding their relevance to Dundee.

Framework for Nature Networks in Scotland – Draft

This framework aims to catalyse the urgent and transformative action needed across Scotland to implement Nature Networks that help halt and reverse biodiversity loss. It promotes the basic principles which associated action and delivery, at all levels, should be founded upon. The focus is on ensuring a deliver for a nature-rich future.

4. Implications for the Proposed Plan

Policy 3 – Biodiversity

Climate change is a direct driver of biodiversity loss in Dundee, and this will need to be addressed in the new Local Development Plan. The range of different types of habitat within Dundee's greenspaces, such as woodland, grassland, beach and wetland, means that we have a high level of biodiversity which must be protected and enhanced to reduce and mitigate against the effects of climate change.

As the climate changes, species will need opportunities to colonise areas with more suitable conditions. To achieve this within Dundee's urban fabric, appropriate routes and areas of habitat are imperative via a nature network. Working with new Scottish Government and NatureScot guidance, encouraging and facilitating high quality, evidence-based design will be crucial to achieving this.

One of the main constraints already identified is that Dundee is a small and very urban local authority. The opportunities for creating new habitats are therefore limited. National Planning Framework 4 (NPF4) sets out how planning authorities and developers can move towards sustainable development and long-term management and maintenance of habitats. The Local Development Plan may include specific site briefs to identify particular opportunities to enhance biodiversity.

Moving forward to the Proposed Plan, it will be important to review any new tools, data and guidance on biodiversity protection, enhancement, monitoring and mitigation, for example a biodiversity metric framework. Taking account of the evidence set out above and local priorities will be key to ensuring that biodiversity objectives link to other strategic objectives and overall place-making strategy, for example this could be health, flood risk management, active travel and climate emergency ambitions.

Forthcoming data on existing habitats, ecological connections, nature networks and biodiversity value will inform the spatial strategy, policy direction and development standards.

Policy 4 – Natural Places

Preserving natural landscapes can yield numerous benefits and bolster the quality and character of our surroundings. This includes enhancing urban design, fostering climate regulation through natural cooling and heating processes, and establishing blue-green infrastructure that contributes to the overall appeal of a place. Natural areas play a crucial role in conserving habitats that hold ecological and cultural significance. Examples include ancient woodlands, wetlands, and rivers, all of which serve as invaluable resources for biodiversity and wildlife. These sites are earmarked for protection at various levels, spanning international, national, and local designations, underscoring their importance in maintaining ecological balance and preserving our natural heritage.

The proposed plan will need to identify all internationally, nationally, regionally and locally important natural assets from the data sources set out above and integrate these into the spatial strategy and land use allocations. Connectivity between natural areas will need to be considered including protecting and maintaining nature networks that support biodiversity. Policies and assessment criteria will likely be needed to ensure development does not adversely impact natural assets.

Policy 5 – Soils

Soil is a finite resource and even within urban areas the resource necessitates careful management and protection. Soil can assist in managing impacts of climate change in cities like Dundee, in so far as it can offer drainage and permeable effects. It is also often reclaimed through brownfield redevelopment and can be used for landscaping and acoustic purposes. Soil and vegetation surrounding it also offer important biodiversity and habitat aspects for animals and birds. These remain important considerations for inner city Dundee.

From the maps outlined above, it is evident that Dundee's periphery benefits from areas of good quality soils, including soils classified as land capable for agriculture and prime agricultural land.

For the Proposed Plan, it may be that a standalone policy on soils is not required due to the existing NPF4 policy and the intention not to replicate this, however the issues should be an inherent consideration within other policies on the environment, brownfield land, biodiversity and climate change.

NPF4 states the requirement to minimise disturbance to soils from development, which will be an important policy consideration in Dundee.

Questions for the Proposed Plan:

- What is the role of Dundee's soils in contributing to greenhouse gas reductions, food production, biodiversity, flood regulation, water availability and water quality?
- How do we apply this knowledge we have about Dundee's soils to maximise soil protection and re-use in an urban area?
- How can we best use nature-based solutions to protect Dundee's soils and achieve sustainable soil management in the city?
- How can we balance the need for economic growth and housing requirements with protection of soils/the natural environment?

Policy 6 – Forestry, Woodland and Trees

Dundee benefits from significant woodland areas particularly in the north and east of the City, areas of woodland that are of cultural significance, community woodland on the urban edge, significant tree belts and corridors through to smaller groups or single trees including garden and street trees. Green infrastructure includes individual elements such as trees and woodlands in urban areas. Trees and urban woodland stretches can make a significant contribution to reinforcing green networks, reducing flood risk, reclamation of derelict land and temporary screening of vacant sites as well as defining key points and gateways in the City.

Going forward, and in light of biodiversity and environmental requirements of NPF4 it will also be important to consider the environmental benefits of urban woodland resources in Dundee. Of specific note will be protecting and enhancing associated biodiversity value of existing woodland resources and new and developing woodland stretches across the city.

In a number of NPF4 policies, including in Policy 6 Forestry, Woodland and Trees, the protection and enhancement of ecological connectivity and natural networks is identified as a key aim. Development has an important role in this through protecting existing networks and in expanding and enhancing these networks. Moving forward to the Proposed Plan, it will be important to review any new tools and guidance on the identification and mapping of nature

networks. Also, to use the existing mapping sources identified to ensure that greater weight is given to development that would develop individual woodlands and potential for connectivity between them.

Policy 8 - Greenbelts

Dundee does not currently have a Green belt designation. Due to the density and boundaries of Dundee, it may be that a Green belt is not considered necessary or appropriate. However, the data sources and background information above emphasise that whilst a Green belt may not be appropriate for everywhere, this is not just important for nature conservation alone. Green infrastructure and networks are equally important in considering open land and green corridors which can potentially allow for better connectivity between places and sites. It is therefore likely that existing Dundee Local Development Plan 2019 Policy 28: Protecting and Enhancing the Dundee Green Network will be carried forward into the next LDP in some form. This will require to be further developed from the data and sources outlined above and new and updated requirements of NPF4.

Green belts and/ or green infrastructure in other forms are important for climate change and can reduce air pollution and mitigate against flooding. Net zero ambitions are clear within NPF4. Through considerations of Green belts/ green infrastructure there will be a direct link with other policy considerations around active travel, directing development to brownfield sites and vacant and derelict land and the re-use of existing buildings.

5. Engagement and Consultation

Stakeholder Working Group

The below initial stakeholder working group was developed through internal and external individuals with specific interest in the thematic area of Biodiversity, Natural Places, Trees and Soils. The initial stakeholder working group was restricted to internal Dundee City Council representatives and external contacts within Key Agency group topic experts. These topic experts have assisted in developing a robust evidence base for the topic paper grouping.

Internal
- DCC Environment (Greenspace)
- DCC Sustainability and Climate Change

External
- NatureScot
- SEPA
- Scottish Water
- Historic Environment Scotland