

Topic Paper – Water Environment, Open Space, Play, Recreation and Sport

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1. Introduction

This topic paper reviews evidence identified as relevant surrounding the Water Environment, Open Space, Play, Recreation and Sport topic grouping. This topic grouping includes:

- **NPF4 Policy 20 – Blue and Green Infrastructure**
- **NPF4 Policy 21 – Play, Recreation and Sport**
- **NPF4 Policy 22 – Flood Risk and Water Management**

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 20 Blue and Green Infrastructure	National Planning Framework
	Dundee Local Development Plan (LDP) 2019
	Water-Resilient Places
	The Third State of Scotland's Greenspace Report
	The Dundee Green Network (2016)
	Dundee Core Paths Plan (amended 2020 & 2023)
	Dundee Outdoor Access Strategy 2012 – 2017 (2012)
	Public Open Space Strategy 2008 - 2011 (Dundee)
	Developer Contributions Supplementary Guidance (Dundee)
	Dundee Local Biodiversity Action Plan 2020-2030
	Dundee Biodiversity Duty Report 2021-2023
	St Leonards Park Regeneration
	Greenspace map Greenspace Scotland
	Local Food Growing Strategy Dundee 2020 - 2025
	Dundee Food Growing Space Map
Policy 21 Play, Recreation and Sport	National Planning Framework 4
	Active Scotland Outcomes Framework
	Scottish Index of Multiple Deprivation
	Place and Wellbeing Outcomes
	A More Active Scotland: Scotland's Physical Activity Delivery Plan
	Dundee Local Development Plan 2019
	Dundee's Play Sufficiency Assessment
	Dundee Sports Pitch Strategy
	Dundee Open Space Strategy
	Dundee Forestry and Woodland Strategy
	Place Standard Tool Survey
	Dundee Walking and Cycling Index 2023
	Dundee Partnership Physical Activity Strategy
	Sportscotland Facilities Database
	Community Sports Hubs
Core Paths Plan	
Policy 22 Flood Risk and Water Management	National Planning Framework 4
	Dundee Local Development Plan 2019
	Scottish Government Draft Flood Resilience Strategy
	Strategic Flood Risk Assessment
	Guidance for Planning Authorities on Strategic Flood Risk Assessment- SEPA
	Surface Water and Drainage Planning Guidance 2020

Surface Water Drainage Design and Flood Risk Assessment Requirements- Technical Guidance 2020
River Basin Management Plan for Scotland 2021-2027
Dighty Resoration Feasibility Study
Tay Estuary and Montrose Basin Flood Risk Management Plan 2022-2028
SEPA position statement: Elevated buildings in areas of flood risk
SEPA Climate Change Allowances for Flood Risk Assessment in Land Use Planning
SEPA Flood Risk Standing Advice for Planning Authorities
SEPA Water Scarcity
Scottish Water Surface Water Policy
Climate Risk and Vulnerability Assessment (2018)
Water Resilient Dundee
SEPA Flood Maps
SEPA Future Flood Maps
Recommended Riparian Corridor Layer
Riparian Vegetation Planting Opportunities Layer
Water Classification Hub
RBMP3 Water Environment Hub
Geomorphic Risk Layer
Dundee Projects (Scottish Water Projects within Dundee City boundary)
Hatton PFI Combined Sewers
Hatton PFI Foul Sewers
Hatton PFI Storm Sewers
Dundee Gullies within Depression Watersheds
Hatton Opportunity Mapping
Storm Water Management Opportunities
Flooding Media Map
Dundee Strategic Flow Paths, Green and Grey Space, and Large Roofs
Dynamic Coast
NatureScot Spatial Data Hub , Dynamic Coast
Drought Risk Assessment Tool

3. Summary of Evidence/ Datasets

3.1. Policy 20 – Blue and Green Infrastructure

National Planning Framework 4 (NPF4)

Protecting and enhancing blue and green infrastructure and their networks is a principal policy of NPF4.

The policy seeks to protect our existing blue and green infrastructure, by supporting development that protect the overall integrity of these environmental assets. Planning authorities should support development proposals that incorporate new or enhanced blue and/or green infrastructure.

The implications on development proposals are that they are required to consider blue and green infrastructure as an integral part of design and development process, for multiple functions including climate mitigation, nature restoration, biodiversity enhancement, flood prevention and water management. Resulting in the development of accessible, high-quality blue, green and open spaces.

Within NPF4, blue and green infrastructure is outlined as a priority for both Regional Spatial Strategies as well as Local Development Plans. The greening of the built environment, including former industrial areas, is a long-held ambition that we now need to expedite to significantly reduce emissions, adapt to the future impacts of climate change and tackle biodiversity loss.

NPF4 states that *“investment in green infrastructure will support urban sustainability, help to restore biodiversity, contribute to our overall targets for reducing emissions and improve health and wellbeing. There is much that we have already learned from past work, for example initiatives to naturalise former mining features, reclaiming canals as a cultural heritage and natural asset, and extensive woodland creation. Wider woodland expansion across more urban areas could make a significant contribution to improving air quality and quality of life by reducing pollution, managing water and cooling urban environments. Blue and green networks can help to deliver compact and liveable cities.”*

Dundee Local Development Plan 2019

Dundee’s 2019 Local Development Plan has a broad range of policies that directly relate to blue and green infrastructure.

Policy 1: High Quality Design and Placemaking states that design and siting of development should respect the character and amenity of the place, create a sense of community and identity, enhance connectivity and incorporate creative approaches to urban design, landscaping and green infrastructure, appropriate to the local context and the scale and nature of the development.

Policy 20: Funding of On and Off Site Infrastructure Provision principles guide the requirement for contributions and the preparation of the Developer Contributions Supplementary Guidance are developer contributions will be sought where a need for new or improved services, facilities or infrastructure has been demonstrated that relates directly to the requirements or impacts of a proposed development.

Policy 28: Protecting and Enhancing the Dundee Green Network states 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.

Policy 29: Outdoor Access and the Dundee Green Network 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.

Policy 30: Green Infrastructure Maintenance will apply planning conditions or Section 75 obligations to planning permissions to make suitable provision for the long-term maintenance of green infrastructure (including open space and landscaping associated with Sustainable Drainage Systems) in new housing developments.

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 35: Trees and Urban Woodland state the Council will support the establishment and enhancement of woodland, tree belts and corridors. New development must ensure the survival of woodland, hedgerows and individual trees, especially 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.

Policy 37: Sustainable Drainage Systems states that surface water discharging to the water environment from new development must be treated by a Sustainable Drainage System (SuDS) except for single houses or where discharge is to coastal waters. Proposals will be encouraged to adopt an ecological approach to surface water management, ensure an appropriate level of treatment and exploit opportunities for the system to form an integral part of the Dundee Green Network through habitat creation or enhancement through measures such as the formulation of wetlands or ponds.

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 nonnative 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.

Water-Resilient Places

The Scottish Government has identified the need to improve how we manage surface water in Scotland. The Scottish Government Water-Resilient Places paper outlines the improvements we can make to surface water management in communities across Scotland by building on existing policy and by improving how we work together.

The paper outlines how surface water is currently managed in Scotland, setting out a vision for the future and details the components that will inform the delivery of a coherent framework.

It concludes with recommendations to improve the delivery of surface water management and flood resilience in Scotland, to support the commitments by Scottish Government and to help address the relevant recommendations in the Infrastructure Commission for Scotland’s Key Findings Report. Specifically those focused on climate adaptation, “infrastructure first” and improving regulatory coherence across water provision, flood management and resilience.

The Third State of Scotland’s Greenspace Report

The Third State of Scotland’s Greenspace Report 2018 is a comprehensive document that statistically measures the quantity, quality and use of greenspace across Scotland, as well as also outlining how green infrastructure can be utilised to create places where people want to live and work. Data on greenspace can provide a powerful tool for planning and delivering on local quality of life issues. The report demonstrates the systemic effect that improving greenspaces can positively impact our broader communities.



Figure 1 'What Can greenspace Do?' Third State of Scotland's Greenspace Report

The report details that Dundee City covers 6300 hectares, with 41% of this being greenspace, which is the highest percentage of publicly accessible greenspace of any city in Scotland. Adding private gardens increases this figure to 62%.

The Dundee Green Network (2016)

The Dundee Green Network is a non-statutory planning guidance that promotes the provision of green infrastructure in and around Dundee.

The document details that 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.

It is outlined that new developments offer 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.

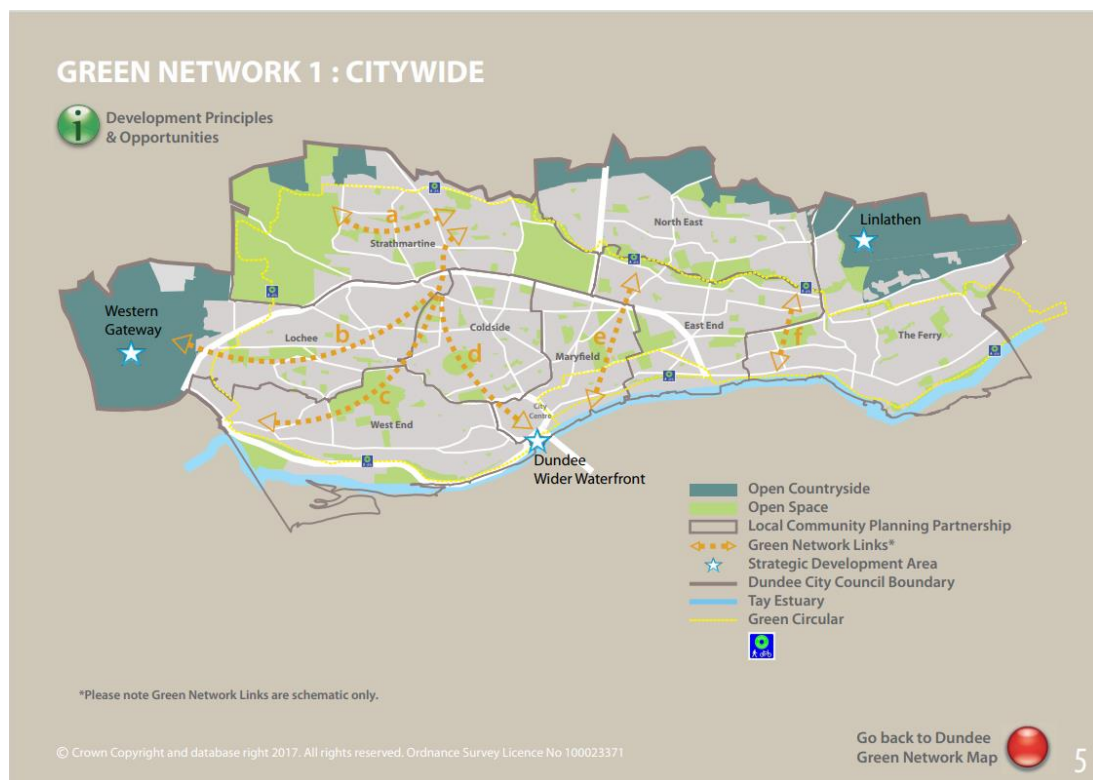


Figure 2 'Green Network 1: Citywide' Dundee Green Network

Dundee Core Paths Plan (amended 2020 & 2023)

The Core Path Plan is used to help promote outdoor access on a network of routes throughout the city. The Core Paths Plan helps to deliver a number of outcomes from other Council Plans and Strategies such as the Outdoor Access Strategy, the Public Open Space Strategy, Local Community Plans, Dundee's Green Network and Dundee's Physical Activity Strategy. These outcomes include promoting access to greenspaces and services and encouraging physical activity through sustainable and active travel.

Core Paths form part of the Dundee Green Network, which includes parks and open spaces. The provision of green infrastructure in and around towns and cities is now widely recognised

as contributing towards creating places that function well economically and help people to live happy and healthy lives. Connecting green infrastructure components such as street trees, parks, open space, watercourses, woodland, meadows and walking and cycling routes into a multi-functional green network helps to further improve the quality of life within an area and create sustainable communities. Core Paths in Dundee also link to neighbouring authority areas offering an opportunity to connect beyond the city.

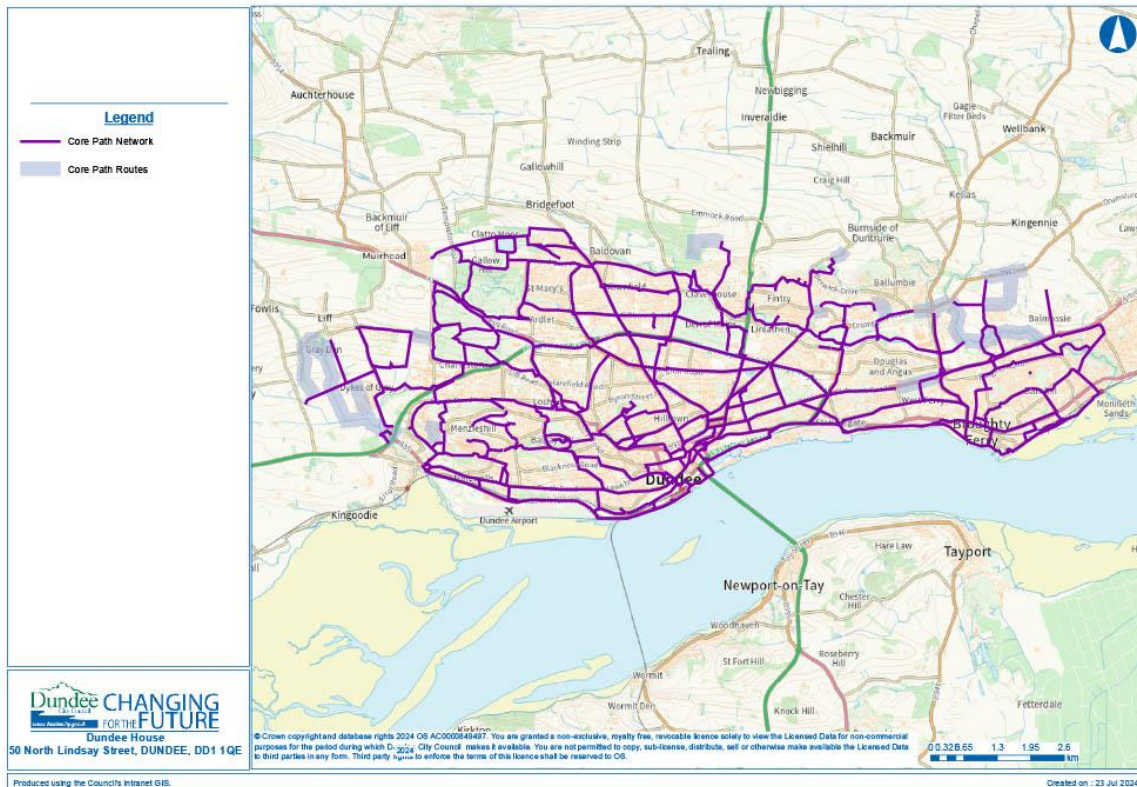


Figure 3 City of Dundee Core Paths

Dundee Outdoor Access Strategy 2012 – 2017

The Dundee Outdoor Access Strategy is responsible for directing outdoor access provision in Dundee. Outdoor access includes all non-motorised travel, in and around our city and enjoying the outdoors in our green open space. This is often using paths through and linking our parks, woods and countryside, but also the active travel in built up areas between communities, their local facilities and work opportunities.

Well planned outdoor access is socially inclusive and improves health, supports sustainable travel and improves quality of life. Dundee has many attractive open spaces throughout the city. Planning access to and through these spaces improves their benefit to our everyday lives and substantially contributes to 9 out of the 11 Outcomes of Dundee’s Single Outcome Agreement (SOA).

Public Open Space Strategy 2008 – 2011 & 2024

The last Public Open Space Strategy was produced in 2008. 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 has assessed and mapped the quantity, quality and accessibility of existing open space provision in the city, using Green Flag assessment criteria and Ordnance Survey data. The audit will be used by the planning authority and Council’s Greenspace team to inform a refreshed Open Space Strategy (OSS), which will

establish a strategic framework outlining policies and proposals for the development, maintenance, and use of green infrastructure in the city, including an assessment of future needs. Parks will be categorised into City, Neighbourhood and Local Parks based on an agreed set of criteria.

Developer Contributions Supplementary Guidance

Dundee City Council has set out its vision for development through the Dundee Local Development Plan 2019. Green infrastructure and green networks were outlined as infrastructure that developer contributions are most likely to be sought for. Two green policies were outlined,

- Policy 1 – High Quality Design and Placemaking: refers to enhancing connectivity and incorporating creative approaches to urban design, landscaping and green infrastructure.
- Policy 28 – Protecting and Enhancing the Dundee Green Network: requires New development should contribute to the Dundee Green Network where appropriate

The Local Development Plan supports a presumption that new development should contribute to the enhancement and connectivity of open space and habitats, where appropriate as part of the wider green network. Developments are encouraged to not only include appropriate open space and links within the site boundaries, but to consider how these will interact with surrounding areas.

No development should be viewed in isolation, and all will have a duty to contribute to the quality of their local environment by integrating into existing green networks in an appropriate and sensitive manner. As such it is possible that off-site provision will be necessary to ensure that new development sites connect into the existing green network.

Dundee Local Biodiversity Action Plan 2020-2030

The Dundee Biodiversity Action Plan (LBAP) outlines Dundee City's strategy to protect the environments and ecosystems that all living things exist within.

Many of these green areas have considerable biodiversity value and contribute greatly to the character of the city. The contribution and multiple benefits provided by these areas, including mental and physical health benefits, ecosystem services, education and community enhancement is widely recognised. Further to these benefits, these systems have the potential to improve Dundee's flood management system.

The plan separates the wider ecosystem into five individual systems:

- Woodlands
- Water and Wetlands
- Marine and Coastal
- Grasslands
- Urban Green Network

Below is a brief description of these ecosystems in Dundee.

Woodlands

Dundee has many areas of urban woodland around 318 hectares of woodland in Locally Important Nature Conservation Sites (LINCS) and Local Nature Reserve (LNRs). This comprises a mix of semi-natural and plantation woodlands as well as a mix of broadleaved and coniferous trees. Dundee has 238 hectares of ancient woodland which cannot be recreated and, as Scotland only has 2% of land area covered by ancient woodland, we cannot afford to lose any more of it.

Trees which are deemed by the Council to make a special contribution to the landscape or are threatened with removal or damage may be issued with a Tree Preservation Order (TPO). Trees under these orders require special permission from the Council for any pruning, lopping or felling.

Water and Wetlands

For Scotland, 55.7% of water bodies meet the EU water quality standard of being at either good or high status. (SEPA). The sub basin district for the Tay has around 48% of water bodies meeting these criteria.

After the River Tay, the Dighty Burn is the most important water course in the city. It runs almost the full length of the city, creating a riparian wildlife corridor that connects many LINCS and greenspaces. There are also many ponds throughout Dundee. These ponds vary in size from the large mill ponds at Trottick Ponds LNR to small Sustainable Urban Drainage System (SuDS) ponds created as part of new developments across the city. A 2018 biodiversity survey identified around 25 hectares of water, swamp and marginal vegetation. This figure only includes LINCS, LNR's and other significant sites in the city and the actual figure is likely to be much higher.

Marine and Coastal

The Firth of Tay Estuary has been described as the least modified of the large east coast estuaries in Scotland. Combined with the Eden Estuary, it forms a mosaic of estuarine and coastal habitats of local, national and international significance. This had led to numerous scientific designations for the habitats here and the flora and fauna that live in them. The two estuaries are designated as Ramsar site for their international importance under the UNESCO Convention (1971).

Scotland has a large amount of coastline and Scotland has the majority of the UK's sand dunes. A 2018 biodiversity survey identified around 59 hectares of coastal habitat, including intertidal habitats and coastal grassland habitat. In the urban context of Dundee, this is a valuable component of green infrastructure, as well as habitat. Substantial investment has been made within the last 5 years in Dundee's coastal defences, protecting the city from the potential impact of climate change. This has affected a proportion of the dune habitat at Broughty Ferry Esplanade with areas of rock armour / rip rap being installed along the seaward edge of the dune habitat. However, current engineering works are seeking to protect and enhance the remaining natural dunes through further fencing, planting and restricting pedestrian access.

Grasslands

Many different types of grassland are found in Dundee from short amenity grassland in parks and sports pitches to wildflower meadows such as those at Riverside Nature Park (coastal grassland is covered in the Marine and Coast Ecosystem Statement). The 2018 biodiversity survey identified 287 hectares of different types of grassland in Dundee's LINCS, LNR's and

other significant sites. Most of the grassland (63%), in Dundee is amenity grassland. This reflects the urban nature of our local authority which provides amenity spaces such as sports pitches, parks and urban greenspace. It also shows a legacy of historic greenspace management where neat and tidy grass was highly desirable.

Around 16% is semi-improved neutral grassland. This is due to Dundee's past expansion into agricultural land. There are also other areas of more neutral grassland not surveyed, including road verges, which can be of high quality and support important plant species such as orchids and other wildflowers.

Urban Green Network

Dundee is one of the smallest Local Authorities in Scotland. Its boundary closely follows the urban edge. Despite this the Dundee's urban environment is not devoid of biodiversity and contains a variety of ecosystems. Private gardens, allotments, community gardens, cemeteries, parks, sports pitches, roadside verges, urban orchards and street trees are also considered as part of the Urban Green Network. Small areas and corridors blue and green infrastructure are interwoven and provide vital connectivity which is why they are referred to as the Urban Green Network.

Dundee Biodiversity Duty Report 2021-2023

The Third Biodiversity Duty Report was produced by Dundee City Council, has been summarised and considered as part of the Biodiversity Schedule 3.

Greenspace map | Greenspace Scotland

Greenspace Scotland in partnership with Ordnance Survey (OS) publish up to date green space maps that are updated every six months. These are available via both an OS interactive map ([OS Maps](#)) as well as publicly available layers across other mapping systems including GIS (attached below).

The Greenspace maps include parks, public gardens, playing fields, sports areas, play spaces, allotments and community gardens.

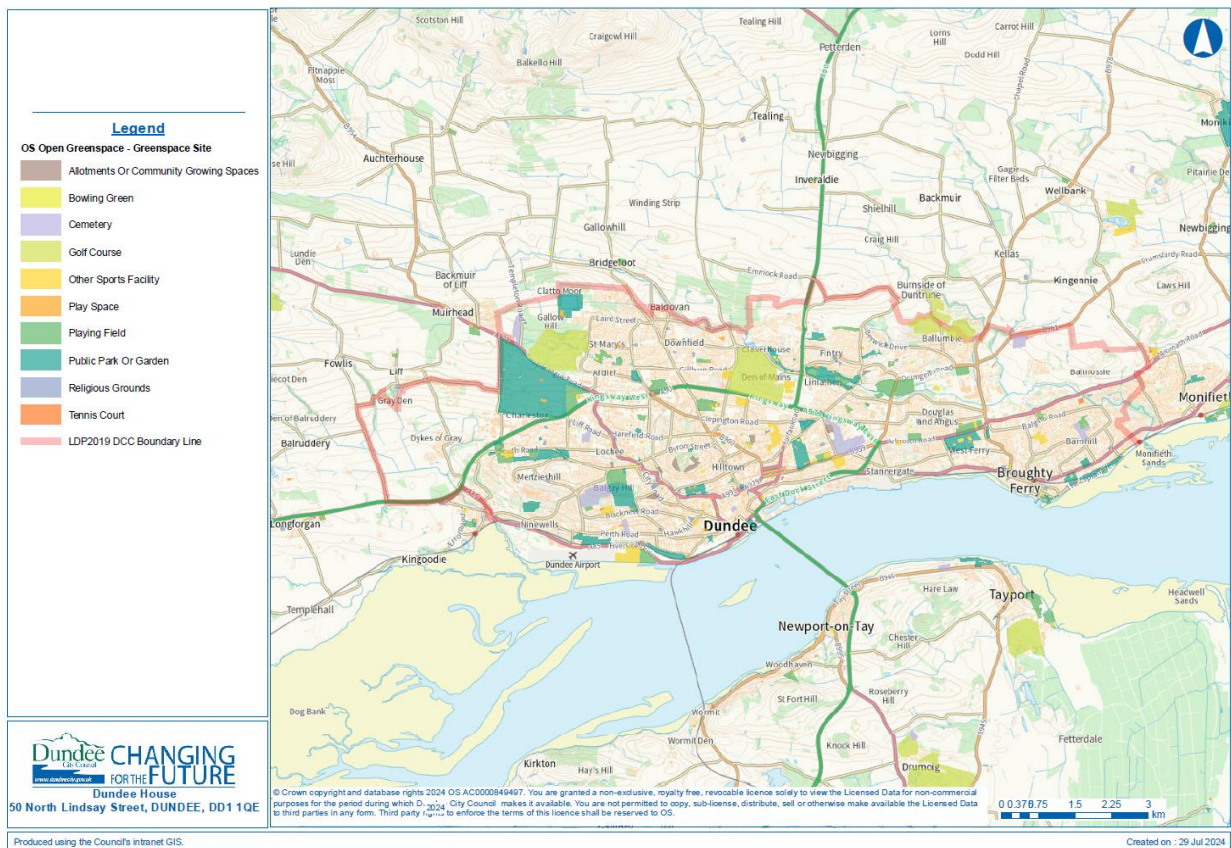


Figure 4 'Dundee Greenspace GIS Layer' Greenspace Scotland

Local Food Growing Strategy Dundee 2020 - 2025

The Local Food Growing Strategy Dundee 2020 – 2025 outlines Dundee’s ambitions to build upon an enviable resource of community growing spaces and allotments, working with communities, local people and organisations to enable them to access ‘grow your own’ opportunities, whilst recognising the value of such growing spaces in reducing food insecurity.

With aims:

- To consolidate and support existing growing spaces
- To work with partners and local people to develop existing growing spaces
- To work with partners and local people to share skills and resources
- To work with partners and local people to identify and develop additional spaces for growing
- To work with partners and communities to develop new local growing spaces
- To promote good environmental practice within growing spaces
- To support innovative solutions for encouraging grow your own, through development opportunities and existing infrastructure
- To integrate grow your own opportunities into existing strategic plans, processes and structures

The strategy outlines the significance that a comprehensive food growing strategy. The food growing strategy will help to underpin a number of strategic priorities and Dundee outcomes including Health Care and Wellbeing and Building Stronger Communities. Community Growing was highlighted as a priority by local people in all local wards during a community engagement exercise carried out in the preparation for the City Plan.

The City Plan for Dundee 2017-2026 aligns the Scottish Government’s NPF with local circumstances and promotes the long standing vision for the city framed around jobs, social inclusion and quality of life. The City Plan sets out 5 strategic priorities:

- Fair Work and Enterprise
- Children and Families
- Health, Care and Wellbeing
- Community Safety and Justice
- Building Stronger Communities

Dundee Food Growing Space Map

Below shows Dundee’s food growing map, which includes allotments, community gardens, therapy gardens and school gardens.

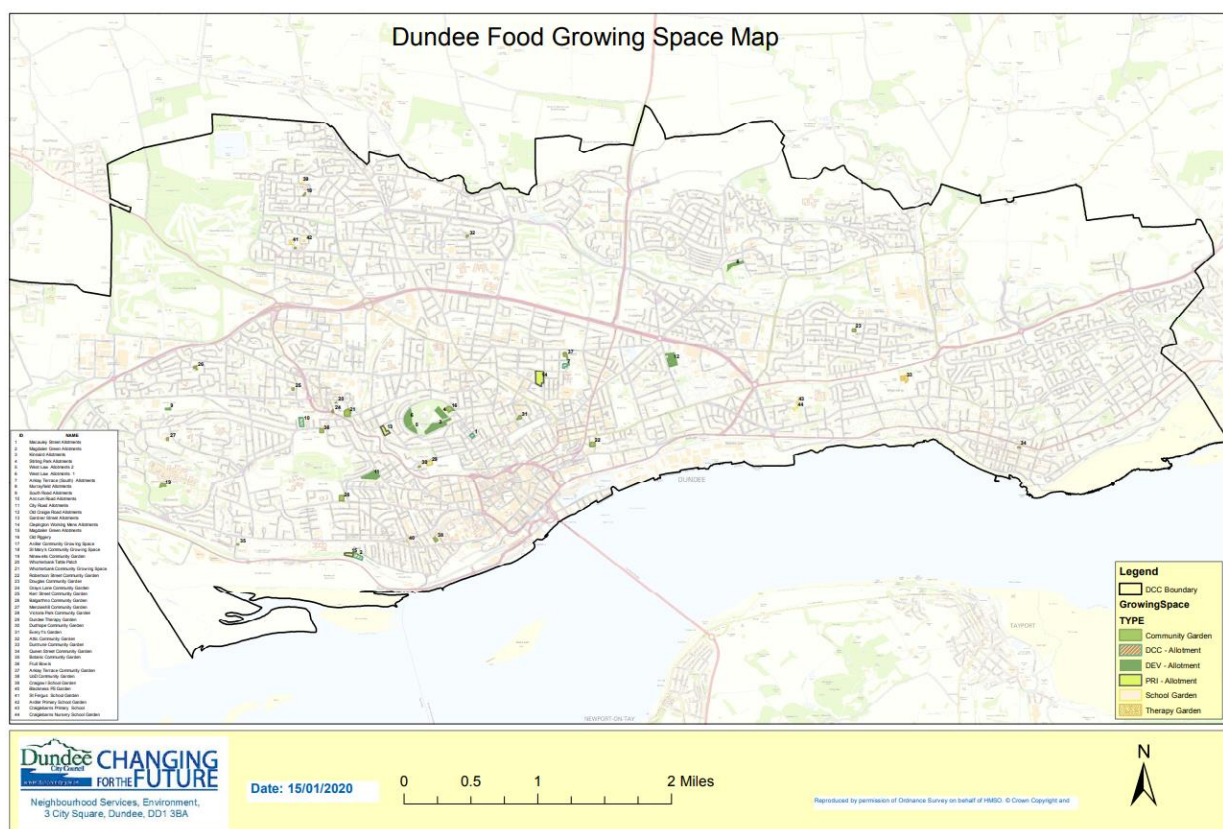


Figure 5 Dundee Food Growing Space Map

Bathing Waters

The Scottish Environment Protection Agency (SEPA) sample water quality weekly, across registered bathing waters. Broughty Ferry is a registered bathing location. The Broughty Ferry bathing location is to the east of the Dundee and accessible via a traffic free path from both the centre of Broughty Ferry and Dundee. It is a 1.5km long sandy beach that is popular with wildlife enthusiasts and swimmers.

Current and future opportunities

Due to Dundee’s history and environmental landscape the city has opportunities to utilise existing water courses for surface water management, improving the cities flood resilience whilst enhancing biodiversity and placemaking.

The St Leonards Park Regeneration Strategy is a part of the wider St. Mary's Drainage Strategy, in partnership with Scottish Water, NatureScot and Dundee City Council. Plans have been developed to reduce flooding in the Downfield by reinstating the Back Burn (watercourse). The strategy aims to create a sustainable, nature-based drainage solutions for St Leonard Park.

The St Leonard Park project is the first phase of a storm water drainage strategy for the St Mary's area of Dundee, developed jointly by Scottish Water and Dundee City Council in consultation with partners such as SEPA and NatureScot. The intervention would reduce the risk of flooding in this area by introducing blue and green infrastructure, allowing surface water to be attenuated naturally.

The strategy proposes to reinstate the historic Back Burn above ground in an area of greenspace alongside St Leonard Place, which floods regularly during periods of heavy rainfall. The area would be landscaped to allow this water to flow into the Dighty Burn, taking with it any excess surface water. This will then enable Scottish Water to disconnect surface water from the combined sewer, freeing up capacity in the system and significantly reducing the risk of flooding.

While flood prevention is the driver for these plans, the proposed management of water in greenspaces provides opportunity for multiple benefits for people and nature. Enhancing the park with open water and additional planting will boost biodiversity, providing habitats for a range of insects, birds, mammals and amphibians. The park will also become a more attractive area for play and recreation, as well as encouraging walking, cycling and wheeling, enabling better, healthier access to schools and local amenities.

The St Marys project has the potential to set a precedent that demonstrates a holistic approach to over-ground surface water management, delivering climate resilience, biodiversity gain, urban functionality, health and well-being, and become an exemplar of a water-resilient place.

Dundee shares boundaries with both Angus Council and Perth & Kinross Council. This provides opportunities for Dundee to connect with blue and green infrastructure beyond the local authorities' boundaries.

There are proposed active travel infrastructure projects in Dundee and across bordering authorities. These developments offer opportunities to extend blue and green infrastructure, integrating and expanding nature networks. Fig 6 (TACTRAN) demonstrates infrastructure projects proposed across Dundee's bordering local authorities Angus and Perth & Kinross.

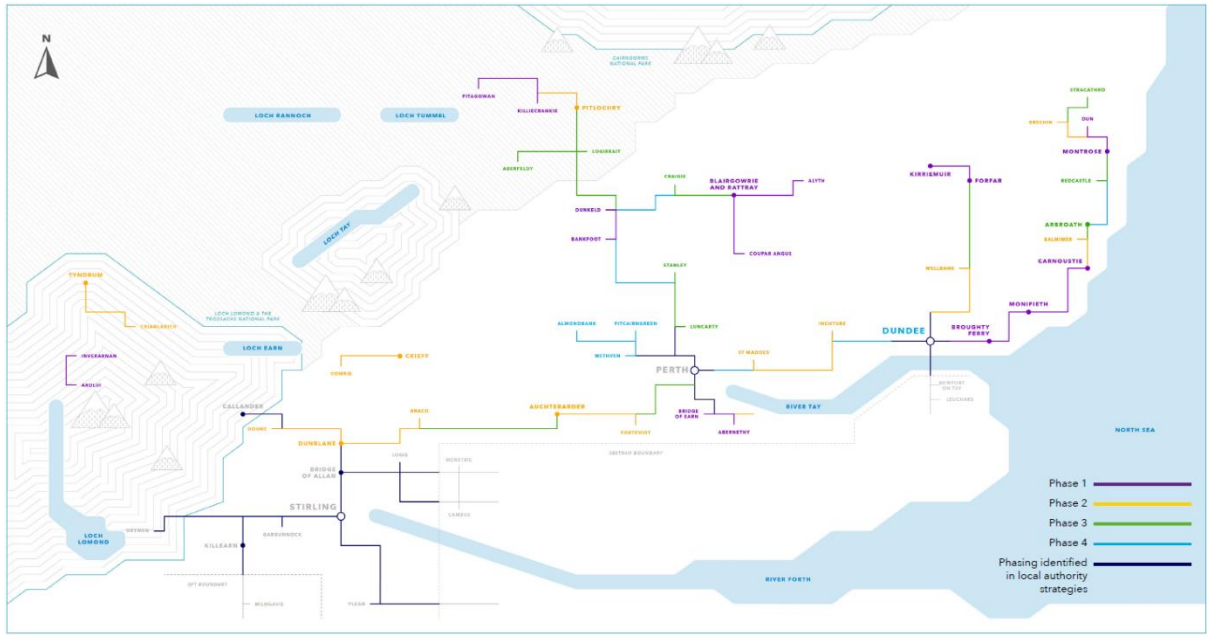


Figure 6 TACTRAN Future Development

3.2. Policy 21: Play, Recreation and Sport

National Planning Framework 4 Policy 21

Under NPF4 Policy 21, Local Development Plans should identify sites for sports, play and recreation for all ages, based on community needs and assessments. These spaces should enhance and expand existing blue and green infrastructure, considering related policy frameworks (e.g. flood risk management). New provisions should be well-designed, high-quality, accessible, and inclusive. Development leading to the loss of outdoor sports facilities is generally not supported unless:

- it is ancillary to the principal use of the site as an outdoor sports facility,
- involves only a minor part without affecting overall use,
- provides an equivalent or improved replacement facility,
- there is clear evidence of excess provision.

Loss of children's play areas is not supported unless there is no ongoing or future demand, or it's replaced with a better quality or more appropriate facility.

The policy also sets out requirements for development proposals likely to be occupied or used by children and young people, new streets and public realm, and new replacement or improved play/sport provision.

Active Scotland Outcomes Framework

The Scottish Government has outlined the ambitions for sport and physical activity in the Active Scotland Outcomes Framework and these are:

- We encourage and enable the inactive to be more active
- We encourage and enable the active to stay active throughout life
- We develop physical confidence and competence from the earliest age
- We improve active infrastructure – people and places
- We support wellbeing and resilience in communities through physical activity and sport
- We improve opportunities to participate, progress and achieve in sport

These link to a number of the national outcomes that the Government is seeking to achieve, most relevant to sport is that 'We are healthy and active.' The availability of a network of places, of the right quality and capacity to meet the needs of sport, is crucial to deliver these outcomes.

Scottish Index of Multiple Deprivation 2020

The Scottish Index of Multiple Deprivation (SIMD) assesses deprivation levels. The SIMD splits Scotland into 6,976 small areas, called 'data zones', with roughly equal populations. There are 188 SIMD data zones in Dundee, of which 70 are ranked within the 20% most deprived in Scotland. The SIMD 2020v2 shows that 36.6% of people in Dundee City live in a data zone within the 20% most deprived.

The Scottish Index of Multiple Deprivation (SIMD) includes a health domain that evaluates factors like illness, mortality, and access to healthcare services. 23 of the 188 SIMD data zones are ranked within the top 5% most health-deprived areas in Scotland.

This data suggests that health inequalities are a pressing issue in Dundee, with certain areas facing severe health deprivation. Data summarised in the "Health and Safety" Topic Paper shows that Dundee's East End, Lochee and Collieston wards have the highest prevalence of people with mental health conditions, physical disabilities, learning disabilities and sensory impairment. These wards also have the highest proportion of residents classified as income deprived.

Place and Wellbeing Outcomes

The Place and Wellbeing Outcomes support all sectors to focus decision-making and implementation on a common set of evidenced features that will enable each place to have a positive impact on wellbeing of people and planet while reducing inequality. The Play and Recreation Outcome is as follows:

“Everyone can access a range of high quality, safe, well-maintained, accessible places with opportunities for play and recreation to meet the varying needs of different population groups and the community itself.”

A More Active Scotland: Scotland’s Physical Activity Delivery Plan

This strategic document is designed to increase physical activity levels across the country by 2030. The plan underscores the importance of integrating physical activity into local development planning. This includes considering the needs of pedestrians and cyclists in urban design and ensuring that new developments support active lifestyles by providing access to green spaces, parks, and recreational facilities. Gathering data on current activity levels and understanding barriers to physical activity are important to ensure interventions are effective in promoting physical activity.

Dundee Local Development Plan 2019

The following policies from the current LDP are relevant to this topic:

Policy 18: Community Facilities

New community facilities should be conveniently located for the community they service and should be easily accessible, especially by public transport, walking and cycling. Joint developments with other agencies to create diverse but integrated community facilities are encouraged.

Policy 19: Private Day Nurseries

Private day nurseries must provide an outdoor play space that is attractive, usable, safe, and enjoys a sunny aspect. The play space must be directly accessible from the ground floor.

Dundee’s Play Sufficiency Assessment

The planning authority is conducting a Play Sufficiency Assessment as required by the Planning (Scotland) Act 2019. This assessment will be available as part of the upcoming Evidence Report submission and will include an assessment of the quality, quantity, and accessibility of formal play spaces in the Dundee area. ‘Informal’ play spaces which children and young people use for free play and to hangout will also be assessed.

To gather input on needs and demand, an online survey is open to public consultation until August 30th, 2024. The survey seeks feedback from children, young people, parents/carers, and professionals who work with them on preferred play/hangout locations and the reasons behind their choices.

Simultaneously, the authority is carrying out physical assessments of all public and private play parks in the city. These assessments focus on evaluating the quality and accessibility of the parks, considering factors such as noise, cleanliness, paths, signage, and outlook.

The outputs are being mapped and will be available in an interactive online map format.

Dundee Sports Pitch Strategy

Work has begun on an update to the Dundee Sports Pitch Strategy. The previous strategy covered the period 2011-2016 and was part of a broader initiative to enhance community sports facilities across the city, focusing on both upgrading existing pitches and adding new ones. The strategy is closely linked to the city's Capital Plan for 2021-2026, which outlines

significant investments in sports infrastructure. Dundee City Council manages numerous outdoor sports pitches, offering facilities for a wide range of sports like football, Gaelic football, rugby, shinty, and cricket. The council is responsible for the maintenance and booking of these pitches, which are located in various parks and open spaces across Dundee.

Dundee Forestry and Woodland Strategy

Work is ongoing on the preparation of Dundee's Forestry and Woodland Strategy, which is anticipated to be finalised by December 2024. Policy connections between woodland assets and opportunities for play, recreation and sport, will be taken into account in the preparation of the Dundee Local Development Plan. Further consideration of the review of the Forest & Woodland Strategy is included in the Topic Paper "Biodiversity, natural places, trees and soils".

Place Standard Tool Survey

The Planning Team has created an interactive survey using the Place Standard Tool to help us gain a deeper understanding of the quality of neighbourhoods in Dundee. This survey is open to all Dundee residents until 30th August 2024 and includes an evaluation of the availability and quality of spaces and opportunities for play and recreation.

Dundee Walking and Cycling Index 2023

The Walking and Cycling Index (formerly Bike Life) is the biggest assessment of walking, wheeling and cycling in urban areas in the UK and Ireland. It is delivered by Sustrans in collaboration with 23 cities and urban areas. Each city reports on the progress made towards making walking, wheeling and cycling more attractive, everyday ways to travel.

In Dundee the number of people walking and wheeling regularly (at least five days a week) has decreased since 2021 (51% down from 54% in 2021). However, 48% of residents want to walk or wheel more and 41% want to cycle more. Therefore, enhancing active travel infrastructure to improve safety and accessibility are key considerations for the development of the spatial strategy of the Proposed Plan.

Dundee Partnership Physical Activity Strategy

The Dundee Physical Activity Strategy, rooted in the national Active Scotland Framework and Local Community Plans, sets the city's priorities for promoting physical activity. After reviewing the previous strategy and engaging with stakeholders, four key frameworks were developed: Active Living, Dance, Play, and Sport & Recreation. Each framework addresses specific issues and is overseen by governance groups reporting to the Physical Activity Leadership Group. The strategy aims to make Dundee "An Active City with Active People" through coordinated efforts, investment, and unity.

Sports Facilities, Sport Scotland

This dataset contains multiple themed layers of different types of sporting facilities across Scotland. The facilities are represented as point locations, which have been captured against Google Maps (along with attributes and details about them). This will form part of the evidence used to consider where there are existing sites that can be identified in the Spatial Strategy as well as to help inform the assessment of community need and demand in relation to existing assets and opportunities for new/upgraded facilities.

Below is the number of each type of facility identified within the Dundee City Council boundary:

Athletics Tracks (incl velodromes, training areas, indoor and outdoor)- 4
Bowling Greens (incl croquet, étanque and cricket squares)- 17
Fitness Suites- 14
Golf Courses- 4
Ice Rinks (incl curling rinks)- 1
Pitches (incl size, sport and type)- 156

Sports Halls (incl gyms and other types)- 84
Squash Court- 4
Swimming Pools (incl diving and other types)- 12
Indoor Tennis Courts- 0
Outdoor Tennis Courts- 5

Skateparks

According to internal Grounds Maintenance data, Dundee is home to four skateparks- South Road, Finlathen Park, Whitfield and Dudhope- which are open to skateboarders, BMX bikers and inline skaters. An indoor skatepark is also under construction at Gellatly Street.

Community Sports Hubs

Leisure and Culture Dundee work in partnership with SportsScotland to develop Community Sports Hubs. The following Community Sports Hubs are located in Dundee:

- Caird Park Community Sports Hub
- Craigie Community Sports Hub
- Dundee North West Community Sports Hub
- Fairfield Community Sports Hub
- Forthill Community Sports Hub
- Tay Estuary Water Sports Hub
- West End Community Sports Hub

3.3. Policy 22: Flood Risk and Water Management

NPF4 Policy 22 Flood risk and Water Management

The intent of this policy is “to strengthen resilience to flood risk by promoting avoidance as a first principle and reducing the vulnerability of existing and future development to flooding.” LDPs should strengthen community resilience to the current and future impacts of climate change, by avoiding development in areas at flood risk as a first principle. Resilience should also be supported by managing the need to bring previously used sites in built up areas into positive use; planning for adaptation measures; and identifying opportunities to implement improvements to the water environment through natural flood risk management and blue green infrastructure. Plans should take into account the probability of flooding from all sources and make use of relevant flood risk and river basin management plans for the area.

The policy's implications for development management are that development in flood risk areas will only be supported if it involves essential infrastructure, water-compatible uses, redevelopment for less vulnerable uses, or redevelopment of previously used sites where the LDP has identified a need to bring into positive use.

Scottish Government Draft Flood Resilience Strategy

In May 2024, the Scottish Government published a consultation paper for its first Flood Resilience Strategy, aiming to enhance long-term flood resilience across the country. This strategy marks a shift from the traditional approach of "fixing flooding problems" to a more integrated, multi-sectoral effort to create flood-resilient communities. The strategy focuses on reducing exposure to flooding and mitigating its impacts through proactive measures.

Dundee Local Development Plan 2019 Policy 36: Flood Risk Management

The current LDP aims to ensure development proposals do not directly or indirectly impact on areas at risk of flooding. All sources of flooding (fluvial, coastal, pluvial, drainage, infrastructure failure e.g. reservoirs, and groundwater) including the impacts of climate change should be taken into account.

There is a general presumption against development on previously undeveloped land and development of essential civil infrastructure where flooding is predicted up to and including the critical 1:200 year storm event plus an additional allowance of 600mm. Areas with a 1 in 1000 annual probability of flooding will generally be suitable for most development. Like NPF4, this policy highlights the need for developments to incorporate flood resilient materials and construction methods and considers existing or under-construction flood protection schemes as a factor in determining the viability of new developments in flood risk areas. Flood risk assessments are required for any development within medium to high-risk categories and potentially in low to medium risk areas based on local circumstances.

Dundee Local Development Plan 2019 Policy 37: Sustainable Drainage Systems

SuDS are environmentally friendly and cost-effective for managing surface water by slowing runoff and treating it naturally. They integrate with the Green Network, enhancing habitats. Policy 37 mandates SuDS for new developments, excluding single houses and coastal discharges. Designs must manage water from 1:200 year storms plus climate change allowances, keeping levels 600mm below floor levels. SuDS should support ecological approaches, treatment quality, and habitat creation, avoiding negative impacts on water ecology.

Strategic Flood Risk Assessment

A Strategic Flood Risk Assessment (SFRA) was prepared in 2017 to inform the current Local Development Plan. It identified locations and sources of flooding and pressures on the water environment, provided an environmental assessment of the implications of the spatial strategy and development sites, and identified opportunities to safeguard and improve the water environment.

An updated SFRA is being prepared for the Dundee City Council area ahead of submission of the evidence report, following SEPA's SFRA Guidance for Planning Authorities. This will identify areas where climate change is resulting in unmanageable flood exposure. It will also identify where and how actions contained in the local flood risk management plan affect the location of new development. It will inform the Open Space Strategy and Strategic Environmental Assessment (SEA) of the LDP. A draft SFRA is expected to be included in the Evidence Report submission. This will be prepared in close collaboration with SEPA.

Surface Water and Drainage Planning Guidance 2020

The purpose of this guidance is to help applicants understand Dundee City Council's expectations and requirements in respect of the surface water and drainage information required to support planning applications for development in Dundee. The guidance should facilitate the efficient validation and processing of planning applications.

Developers should consider the potential to create new green or blue infrastructure to form part of the Green Network when designing sustainable drainage systems. SuDS systems and the associated infrastructure should be located within public areas and be maintained by a publicly accountable organisation/body. Privately maintained drainage systems serving more than two properties will generally not be acceptable.

Surface Water Drainage Design and Flood Risk Assessment Requirements- Technical Guidance 2020

This document is used to inform the design of surface water drainage/SuDS and the preparation of Flood Risk Assessments associated with new development sites within the Dundee City Council boundary.

River Basin Management Plan for Scotland 2021-2027

River basin management planning (RBMP) protects and improves Scotland's water environment for the benefit of people, wildlife and the economy.

Much of the water environment in Scotland is in good condition. However, there are still significant problems affecting water quality, physical condition, water resources, and the migration of wild fish.

The River Basin Management Plans for Scotland set out a range of actions to address these impacts. They are produced by SEPA on behalf of Scottish Government. They cover actions for public bodies, industry and land managers in Scotland. They summarise:

- the state of the water environment;
- pressures affecting the quality of the water environment where it is in less than good condition;
- actions to protect and improve the water environment;
- a summary of outcomes following implementation.

In the third RBMP cycle, 51 new restoration projects that have the potential to improve the ecological condition of rivers in Scotland's towns and cities have been identified for delivery. Within Dundee, the restoration of the Dighty Burn is a key potential project.

This publication is a material planning consideration with the potential to significantly influence future land use strategies, their implementation and future development proposals within Dundee.

Dighty Restoration Feasibility Study

The Scottish Environmental Protection Agency (SEPA) have identified three lengths of the Dighty as having potential for restoration that would enhance biodiversity, expand the natural habitat and create better community access. It covers areas:

- north of Harestane Road from Harestane House, 88 Harestane Road to Emmock Road;
- east of Millburn Gardens and upstream of the Trottick Ponds; and
- between Fintry Road and Baldovie Road.

If funding and approval processes are agreed construction work would be expected to start in 2028. Consultation with all interested parties will be undertaken in late 2024.

Tay Estuary and Montrose Basin Flood Risk Management Plan 2022-2028

The Tay Estuary and Montrose Basin Local Plan District covers around 2700km² and includes the urban areas of Arbroath, Brechin, Dundee, Montrose and Angus. Dundee is designated as a potentially vulnerable area due to flood risk from all sources including coastal from the Firth of Tay, surface water and small watercourses. The main source of flooding in Dundee is surface water, however there is also a risk of river and coastal flooding. Prior to the construction of the coastal flood protection scheme from City Quay to Dundee Airport, there were approximately 6,100 people and 4,400 homes and businesses at risk from flooding. The recent construction of the coastal flood protection schemes at Dundee and Broughty Ferry are likely to result in a revision of flood risk estimates.

This publication is a material planning consideration with the potential to significantly influence future land use strategies, their implementation and future development proposals within Dundee.

SEPA position statement: Elevated buildings in areas of flood risk

This position statement constitutes part of 'relevant SEPA advice' as referred to in criterion a) iv of the National Planning Framework 4 (under Policy 22: Flood Risk and water management). It applies only where such structures are used to enable development that would not otherwise be acceptable according to Policy 22.

In accordance with Policy 22, sites suitable for the development of elevated buildings must be identified through the development planning process, where the need to manage flood risk rather than avoid it can be considered alongside and balanced with other policy and placemaking considerations. Avoiding development in a flood risk area is still the best approach to managing flood risk, both now and in the future – in most cases this means avoiding development completely. However, in managing climate change there may be a need to bring previously used urban land near our rivers and coasts back into positive use and to enable existing built-up areas to adapt to increasing flood risk. This must happen in a way that ensures there is no unacceptable risk from flooding to people and places, and that those places are safe and resilient in the long term.

Also, in accordance with Policy 22, sites must be previously used, and in a built-up area.

SEPA Climate Change Allowances for Flood Risk Assessment in Land Use Planning

This guidance sets out required allowances for climate change that must be used for flood risk assessment following the adoption of National Planning Framework 4. A climate change allowance is a prediction of anticipated change in peak river flow, peak rainfall intensity or sea level rise caused by future climate change. The type of allowance used will depend upon the type of flooding being considered and, for river (fluvial) flooding, the size of catchment or location. This guidance will assist in the preparation of the Council's SFRA and informing site specific assessments.

SEPA Flood Risk Standing Advice for Planning Authorities

Planning authorities should determine whether development is covered by this standing advice in the first instance and should only consult SEPA for flood risk advice for developments not covered by this standing advice. Consultation requests to SEPA for development covered by standing advice will be directed to this document. The advice addresses various sources of flooding, including river (fluvial) flooding, coastal flooding and surface water (pluvial) flooding.

SEPA Water Scarcity

The overall risk of water scarcity takes account of the individual water scarcity indices, relevant water use, sectors in each region and forecast weather conditions. NPF4 presumes against private water supplies, unless they will be sourced from a sustainable water source that is resilient to periods of water scarcity. The Drought Risk Assessment tool helps to identify water scarcity levels and areas at risk.

Scottish Water Surface Water Policy

Scottish Water's starting position on the management of surface water through infrastructure assets is that they will not accept any new surface water connections to the combined sewers network. Surface water can be more sustainably treated above ground, often in conjunction with other existing surface waters, in a way that contributes to flood risk management, place making and biodiversity.

Climate Risk and Vulnerability Assessment (2018)

This assessment identified actions for mitigating climate risks through land use planning including retrofitting SuDS, considering air quality at early stages of the development process, and increasing well designed blue and green infrastructure. A new Climate Risk and Vulnerability Assessment based on the 2 degree and 4 degree scenarios is being carried out to refresh the 2018 version and this will be completed in 2024. Since the previous assessment, partnerships and expertise have broadened which will help to gather a more accurate representation of adaptation actions required. Regional adaptation actions are also being identified through regional adaptation work with the support of Adaptation Scotland, Perth and Kinross and Angus Councils.

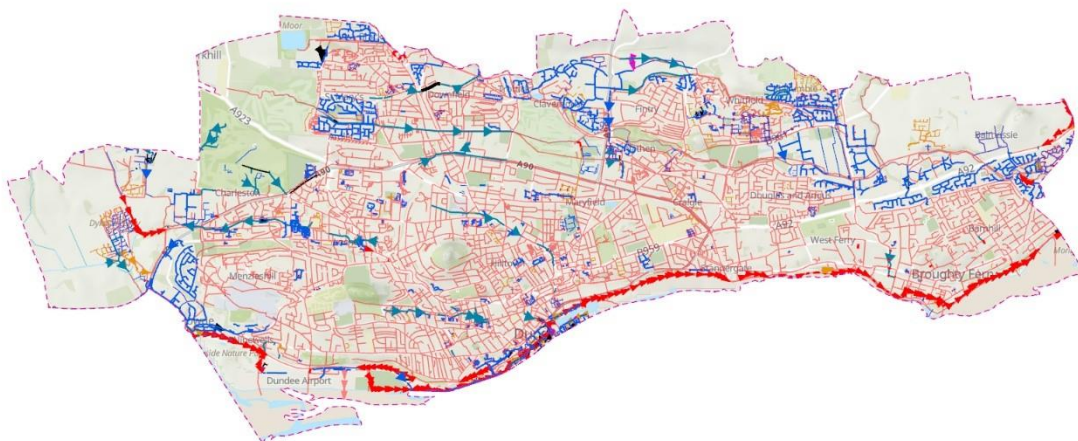
Water Resilient Dundee

Dundee City Council and Scottish Water recognise the need to develop new ways to manage intense rainfall and storm water flooding to create future-proofed, flood-resilient communities. The Water Resilient Dundee partnership aims to jointly plan and sustainably manage rainwater in the City of Dundee to help the city respond to climate change now and for future generations. It is important to note that there are many existing green spaces, particularly park areas, in Dundee which are designed or configured in such a way that rainwater and surface water from

these areas flows directly into the city's combined sewer system. This can be problematic because during heavy rainfall, combined sewers can become overwhelmed, leading to flooding or the discharge of untreated sewage into rivers or other bodies of water.

The Partnership is developing an overall drainage strategy for the City, as well as detailed District strategies and projects. The City Districts, sixty in total, each have a preferred conveyance route to manage flows towards or directly to the water environment. The watercourses across the City are critical to managing rainwater sustainably. Many of the urban watercourses have been culverted or piped below ground level at some time in the past. Industrial use and development in the main urban area of Dundee has led to diversions and, in some cases, the connection of the watercourses into the combined sewers. The Partnership recognises the need to collaborate with others to ensure that drainage work in the urban catchment enhances, rather than impacts, the natural environment. To date, the Partnership has influenced the successful delivery of the Douglas Community Park (National Lottery) and Albert Street Works (Sustrans) projects, ensuring that sustainable drainage was a feature of these multiple-benefit projects.

Dundee sits within the Tay Hatton Drainage Operational Area. Combined flows are conveyed from Dundee to the Treatment Works at Hatton, close to Arbroath. 88.5% (81,252) of properties in Dundee drain through a combined system. 9% (6,397) of these properties start in a separate system which connects to combined sewers. Only 11.5% (9,306) of properties across Dundee drain to a separate system which discharges directly to the water environment. The City's surface water networks are evident around the edges of the City, along the Dighty Corridor to the North, Tay to the south and Invergowrie Burn to the West, Figure 7. Within the City, there are 22km of known culverted water courses. The Scouring, Dens, Back, Mause and Claypots Burns are all known to connect to the combined sewers, accounting for 5.2 km of culverted water course.



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Contains data from OS Zoomstack, Contains OS data © Crown Copyright and database right 2019

Figure 7 City of Dundee Area Drainage Network (Red - Combined, Blue - Surface Water)

Data sets / spatial data resources

SEPA Flood Maps Overview

SEPA's Flood Maps consist of two key series of flood hazard maps for both river and coastal flooding: 'Present Day' and 'Future' Flood Hazard Maps. These maps are accessible on SEPA's website.

Present Day Flood Maps: These maps are generated using current meteorological, river flow, and sea level data, reflecting the climate conditions of today. They do not account for future changes due to climate change.

Future Flood Maps: These maps incorporate the predicted effects of climate change, based on forecasts of river flows and sea levels for the 2080s. This scenario helps identify potential future flood risks.

The latest data highlights areas at risk of flooding (river, surface water, and coastal), the likelihood of such events, existing flood defence schemes, opportunities for natural flood management, and economic and community activities that may be at risk. Specific opportunities for natural flood management include runoff reduction in Camperdown Park, floodplain storage and sediment management around the Dighty Burn, and high potential for estuarine surge attenuation along the Waterfront.

For planning purposes, land or structures are considered at risk of flooding if they have an annual flood probability greater than 0.5%, which includes an allowance for future climate change. This risk is indicated on SEPA's future flood maps and may require further evaluation through a flood risk assessment.

Recommended Riparian Corridor Layer for Land Use Planning

Healthy riparian corridors offer numerous benefits, including climate adaptation, improved water quality, enhanced habitats and wildlife, flood mitigation, and increased community amenities. Ensuring riparian corridors remain undeveloped helps protect buildings and infrastructure by keeping them set back from rivers, thereby reducing flood risks. These corridors promote flood reduction through increased infiltration, altered surface roughness, and expanded water storage capacity. The recommended riparian corridor width is scaled to the river's width, allowing rivers the space to adapt to changing flood conditions and offering a range of environmental and community benefits. Riparian areas are a crucial component of the natural environment within nature network mapping.

Riparian Vegetation Planting Opportunities Layer

This layer identifies at a catchment scale, areas where riverbanks could be protected from erosion by improved riparian vegetation ideally including riparian woodland. Thus, the layer identifies areas where tree planting will benefit geomorphology through river restoration when morphological pressures were present in a particular section. This layer could be used as a source of evidence at a strategic scale to identify where riparian vegetation, and particularly woodland could be beneficial to the water environment within a catchment.

Water Classification Hub

The most recent water environment classification data, from 2022, includes details on both bathing waters and surface waters relevant to the Dundee City Council area. The latest overall condition of the Lower Tay Estuary and Upper Tay Estuary water bodies has been classified as **Good**. The condition of bathing waters at Broughty Ferry has been most recently classified as Excellent.

RBMP3 Water Environment Hub

Several pressures on water bodies in the Dundee City Council area are evident from this spatial dataset. For example, the Dighty Water river is facing pressures from invasive species (namely the North American signal crayfish), its physical condition has been weakened by modifications to its bed, banks and shores and it is a source of diffuse pollution. The Local Development Plan could help address pressures through identification of opportunities to improve the water environment in nature network/ blue green infrastructure mapping or in proposed development.

Geomorphic Risk Layer

To accommodate more frequent floods, rivers will erode their banks to increase their channel size, thereby increase their capacity so they can convey larger volumes of water. The **geomorphic risk layer** identifies sections along the river network where channel adjustment (erosion) is likely to be significant. Sections of the Dighty Water are described as High geomorphic risk.

Scottish Water data

There are a number of relevant datasets shared with Dundee City Council as part of an agreement with Scottish Water:

- Dundee Projects (Scottish Water Projects within Dundee City boundary)
- Hatton PFI Combined Sewers
- Hatton PFI Foul Sewers
- Hatton PFI Storm Sewers
- Dundee Gullies within Depression Watersheds
- Hatton Opportunity Mapping
- Storm Water Management Opportunities
- Flooding Media Map
- Dundee Strategic Flow Paths, Green and Grey Space, and Large Roofs

Unfortunately, we cannot publish this mapped information due to licensing restrictions. However, these datasets highlight strategic capacity asset data for water and wastewater, as well as opportunities for projects to enhance blue and green infrastructure whilst managing flood risk.

Dynamic Coast

Dynamic Coast provides detailed reports on erosion and coastal change, highlighting places where erosion alone will be a significant future challenge, and where it may increase the risk of flooding. Please refer to the Climate Change, Mitigation and Adaptation, Environmental Responsibility Topic Paper for more in-depth analysis of this data in a local context.

4. Implications for the Proposed Plan

Policy 20 – Blue and Green Infrastructure

Blue and green infrastructure refers to a wide range of natural assets, such as, trees, rivers and allotments. These assets have the potential to improve living standards and offer nature-based alternatives to issues relating to climate change when they are comprehensively considered within the planning or development process.

Dundee has a good supply of open green space, whilst also having a broad range of natural ecosystems across both blue and green systems. This statement is evidenced by Dundee Biodiversity Duty Report 2021-2023 and the State of Scotland's Greenspace Report. The upcoming Public Open Space Audit and Strategy (2024) is expected to echo this, whilst also demonstrating the quality of connectivity and accessibility of these systems. This information will be valuable during the proposed process to further inform decision making with regard to improving the systemic network of blue and green infrastructure.

The proposed plan will take an active role in promoting, protecting and developing blue and green infrastructure. Future developments should consider impacts on biodiversity from the start, taking an infrastructure first approach. Dundee is a small dense urban area with almost a hundred and fifty thousand people co-existing with nature. It is important as we develop and increase density within the city, that we prioritise and utilise blue and green assets sympathetically, to create a more environmentally and socially resilient city.

Policy 21 – Play, Recreation and Sport

The evidence summarised above highlights several key implications for the Dundee Local Development Plan (LDP), emphasizing the interconnectedness of play, recreation, sport, and the broader goals of 20-minute neighbourhoods and blue-green infrastructure.

The LDP should ensure that parks, playgrounds, sports facilities, and open spaces are evenly distributed across Dundee and accessible within a 10-minute walk or cycle for all residents. Utilising data from the Open Space Strategy, Play Sufficiency Assessment, Forestry and Woodland Strategy, and community feedback from the Place Standard Tool will be crucial to understanding the needs and demands of communities. Mapping existing facilities will help identify gaps in provision, ensuring that new developments address areas of need. This evidence-based approach will guide the allocation of land for new open spaces and play infrastructure while protecting existing assets.

The LDP should prioritise the development of safe, well-lit, and connected walking and cycling routes. These routes should link residential areas to recreational facilities, schools, and community sports hubs, facilitating active travel and ensuring that recreational spaces are easily accessible.

Streetscapes and public spaces should be designed to naturally encourage play and physical activity. The LDP should promote the inclusion of multi-functional spaces, interactive public art, playful street furniture, and safe pedestrian zones, making physical activity an integral part of daily life.

The development of recreational facilities should be closely aligned with broader health initiatives, such as those aimed at reducing obesity, increasing physical activity, and improving mental health. By doing so, the LDP can contribute to addressing the health inequalities

identified in areas like Dundee's East End, Lochee, and Coldside wards, where residents face significant health challenges.

The LDP will seek to support high quality development in the right places and this can include the provision of open spaces and play areas as part of development proposals. In some circumstances it may be appropriate to use planning obligations, such as Section 75 agreements, to secure the creation or improvement of open spaces and play infrastructure, ensuring that new developments enhance the local environment and meet community needs.

Policy 22- Flood Risk and Water Management

Dundee is currently facing significant pressures and future threats related to sea level rise and flood risk. To address these challenges in the proposed Local Development Plan (LDP), a comprehensive approach that integrates flood risk management with land use planning is essential.

An updated Strategic Flood Risk Assessment will inform choices about appropriate locations for development and avoid increasing overall flood risk. It is important to ensure that new development does not contribute to flood risk, as well as avoiding being located in a flood risk area itself. The SEPA future flood maps, alongside the Strategic Environmental Assessment (SEA) site assessment and Water Environment Hub, will be utilised to assess flood risks for all proposals considered for potential LDP allocation. Data on sewer and surface water network capacity will guide decisions on land allocation, with robust infrastructure areas potentially earmarked for higher-density development.

The LDP will need to consider climate change allowances and ensure that all developments, especially in areas identified as at risk, adhere to guidelines set forth in SEPA's Climate Change Allowances for Flood Risk Assessment. The LDP will aim to balance urban growth with sustainable water management practices. This includes protecting areas that contribute to flood resilience by designating zones for green spaces and riparian corridors.

The Open Space Strategy and SFRA will inform the identification and analysis of natural flood risk management opportunities within Dundee. Green infrastructure solutions, such as green roofs, permeable surfaces, and rain gardens, will be integrated to manage surface water runoff, reducing the risk of surface water flooding by allowing natural infiltration. SuDS will be encouraged to mimic natural water management processes, with features like swales, retention ponds, and wetlands helping to manage urban water flow, filter pollutants, and reduce flood risks.

Given Dundee's proximity to the North Sea, coastal flooding poses a significant threat. Natural Flood Management (NFM) approaches, such as restoring saltmarshes and dunes, could be considered to act as natural buffers. Managed realignment, allowing certain low-lying coastal areas to flood naturally, may also be explored as a strategy to reduce pressure on hard coastal defences and create new habitats.

Environmental Impact Assessments (EIAs) for proposed developments will be informed by the data and strategies outlined above, ensuring that potential impacts on water management systems are thoroughly assessed and mitigated.

Finally, the Plan will also consider renewable opportunities from local water bodies as identified in Local Area Energy Planning, contributing to Dundee's broader sustainability goals.

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 Water Environment, Open Space, Play, Recreation and Sport. The initial stakeholder working group was restricted to internal Dundee City Council representatives and external topic experts. These topic experts have assisted in developing a robust evidence base for the topic paper grouping.

Internal

- DCC Environment (Greenspace)
- DCC Drainage Engineers

External

- NatureScot
- Scottish Environment Protection Agency (SEPA)
- Scottish Water
- Sport Scotland