EDINBURGH BIODIVERSITY ACTION PLAN

2022 -2027

Edinburgh Biodiversity Partnership

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Contents

Edinburgh Biodiversity Partnership

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1 Introduction

1.1 Edinburgh is a place of great beauty and natural heritage. From the Pentland Hills to the Firth of Forth, there is a wide diversity of habitats and natural places. The dramatic geology of Arthur's Seat and Holyrood Park and river corridors such as the Water of Leith bring nature right into the heart of the city. Some of these places are home to rare and protected plants and animals. The Firth of Forth is of global and national importance for some species of birds. Add to this a recent focus on increasing habitat for pollinators, planting new trees and woodlands, and improving habitat at our seven Local Nature Reserves, and we have a picture of a capital city which is great for wildlife and people.

1.2 The management of these important places for wildlife continues to be central to the Edinburgh Biodiversity Action Plan (EBAP). Fundamentally, the EBAP meets the Council's statutory duty under the Nature Conservation (Scotland) Act 2004 for all public bodies to 'further the conservation of biodiversity'.

1.3 The Plan is produced at a time when the nature and climate crises are at the centre of global and national attention. The Council has declared a climate emergency and set a target of being net zero carbon by 2030. A resilient natural environment is a critical part of the solution to the climate crisis because:

- Soils and vegetation 'lock in' carbon sequestration, and protecting and increasing these carbon stores are essential to meet net zero targets. Studies have shown that carbon sequestration in soils and vegetation can help meet as much as 30% of emission reductions needed to reach the city's net zero target;
- Natural spaces and the increased "greening" of urban areas create resilience against overheating and flooding, and so help us adapt to climate change impacts, as well as many other benefits for health and wellbeing; and
- Improved quality and connectivity in our natural environment, helps our ecosystems have resilience to the impacts of climate change on nature.

1.4 In response to the nature crisis, key national, UK and international targets include:

- To halt biodiversity loss by 2030 and support the recovery of nature by 2045 as set out in the Scottish Programme for Government 2021/22 and a proposed target to be agreed at COP 15;
- For each local authority in Scotland to create a Nature Network by 2026, as set out in the Programme for Government 2021-22; and
- To protect 30% of our land and sea by 2030 (the 30x30 target), a UN target committed to by the UK Government and being taken forward in Scotland by NatureScot.

1.5 The Council has signed the Edinburgh Declaration which recognises the essential role of local and regional governments in delivery of biodiversity outcomes which help to meet global targets.

1.6 New global targets for biodiversity from COP 15 and a refreshed Scottish Biodiversity Strategy are also in production at the time of writing.

1.7 This Plan continues long running programmes to support biodiversity enhancement. It also responds to the current targets and emerging commitments with a framework for action to create a nature positive city by 2030.

1.8 This updated Plan reflects the continued importance of engaging communities and citizens in action for biodiversity. We are fortunate in Edinburgh to have organisations, groups and individuals with a wealth of expertise about species and habitats, to contribute to nature conservation. Many of these are long standing members of the Edinburgh Biodiversity Partnership (EBP). The EBP was created in 1997, is led by the City of Edinburgh Council and chaired by the Royal Botanic Garden Edinburgh.

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1.9 The Plan will be revised at appropriate points during its five-year duration to ensure that the actions continue to respond to a rapidly changing context of policies, targets, funding, and to deliver the scale of change needed.

2 Vision: A Nature Positive City

2.1 A Vision for 2050: Edinburgh - The Natural Capital of Scotland

2.2 "To make Edinburgh a greener city with more opportunities for wildlife, enabling people to engage with nature."

2.3 "In 2050 Edinburgh will have a species-rich nature network from the uplands of the Pentland Hills to the coastal waters of the Firth of Forth. It will be an environment abundant in wildlife that is enjoyed and respected by people, making Edinburgh a beautiful place to live, work and visit. Other benefits will be diverse: ensuring climate change resilience; helping to meet net zero through carbon storage; resistance to invasive species; forming a foundation for essential ecosystem services; supporting healthy lifestyles and a vibrant, sustainable economy. People will be able to easily access, learn about and engage with their local biodiversity directly, contributing through conservation action to protect and enhance it."

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@GoWildEdinburgh

3 Why biodiversity matters

3.1 Biodiversity is the variety of life on earth. It underpins all life on earth by providing food, raw materials, clean air and water, nutrient cycling and other essential services. In the last century human impacts have led to large scale loss of biodiversity. In recent decades some habitats have improved, for example water quality in rivers. However, intensive land use, habitat loss and other factors continue to cause declines in some species groups.

3.2 After these decades of decline, creating a resilient natural environment is essential to reverse the nature and climate crises. A high quality natural environment, with functioning and connected ecosystems, is essential for:

- Providing space for habitats and species to recover and thrive
- Adapting to the impacts of climate change by absorbing and slowing flood waters, and cooling urban areas during extreme heat events.
- Supporting carbon reduction through sequestration in vegetation and soils.
- Health and wellbeing benefits
- Allowing other ecosystem services to function, such as air and water purification, nutrient recycling in soils, food production, pollination.

3.3. The solution to some challenges are beyond the scope of this Plan. However, what the EBAP can do is to work to connect, protect, improve and create habitats within Edinburgh, to increase resilient ecosystems which enable species to cope with the pressures placed upon them.

4 State of Nature in Scotland and Edinburgh

4.1 Species trends in Scotland

4.2 The last comprehensive assessment of the State of Nature in Scotland was undertaken in 2019[1] and brought together data from Scotland's biodiversity community. Data from recording schemes across Scotland and the UK were used covering 352 species (birds, mammals, butterflies and moths).

4.3 The headline results painted a grim picture of continued species decline, both in terms of distribution and abundance, with a **24% decline in average species' abundance between 1994 and 2016** and a **14% decline in average species' distribution between 1970 and 2015.** Moreover, these declines should be viewed in the context of significant anthropogenic changes in wildlife which had already happened in the 18th and 19th centuries prior to the start of monitoring.

4.4 Another key conclusion of the report was that **wildlife is undergoing rapid change**, with 62% of species showing strong changes in abundance - either increasing or decreasing - in the last 10 years. Thus, there was no lessening in the net loss of nature in Scotland.

4.5 Species at risk of extinction in Scotland

4.6 The 2019 State of Nature Report Scotland revealed that 11% of species in Scotland are classed as threatened with extinction in Great Britain, based on the 6,413 species assessed using the IUCN's Regional Red List Criteria.

4.7 Habitat Trends in Scotland

4.8 UK Centre for Ecology and Hydrology's (UKCEH) Countryside Survey has been monitoring the changes in Scottish countryside since 1978. The latest Scotland report was published in 2007[2] and provides a summary of changes in habitat condition.

4.9 Headline findings included:

- Plant species richness declined on average by about 10% in most habitat types between 1998 and 2007.
- Plant species associated with more stable, productive, often nutrient-rich habitats (competitors) increased at the expense of species associated with harsher environmental conditions (stress tolerators) and open, disturbed habitats (ruderals). Species experiencing declines included uncompetitive plants that thrive in grasslands with a short sward that are maintained by low soil fertility or grazing.
- Grassland: Improved grassland and acid grassland habitat types increased by 9% and 8%, respectively, between 1998 and 2007. Other grassland habitats showed no change.

1 *https://nbn.org.uk/wp-content/uploads/2019/09/State-of-nature-Report-2019-Scotland-full-report.pdf*

2 *https://nora.nerc.ac.uk/id/eprint/7831/1/CS-Scotland-2007-KeyMessages.pdf*

- Woodlands: Broadleaved woodland habitats increased by 10% between 1998 and 2007, while conifer woodland decreased by 7.1%.
- Wetlands: The species richness of streamside habitats declined by 12% between 1998 and 2007. Declines were linked to increasingly rank vegetation (succession) with an increase in competition species. Improvements were however noted in headwater streams between 1998 and 2007 with species richness increasing over the same period. Species sensitive to the effects of nutrient enrichment increased in this habitat type, implying improving water quality. The number of ponds in Scotland increased by 6% between 1998 and 2007.
- Hedgerows: between 1998 and 2007 the length of managed hedgerow declined by 7%. A third of managed hedges were in good structural condition in 2007, with signs of improvement noted since 1998.[3]

4.10 State of nature in Edinburgh

Edinburgh hosts a diverse and varied landscape, which in turn supports a wide range of species and habitats, including:

- 6 Sites of Special Scientific Interest (SSSI) designated for biological or mixed interest covering 7,754 ha (almost 10,860 football pitches). This includes Arthur's Seat Volcano SSSI and Duddingston Loch SSSI which are in the heart of the city as well the Firth of Forth SSSI. City of Edinburgh Council total area is 27,304ha.
- 90 Local Biodiversity Sites covering 3,282 ha (or almost 4,597 football pitches[4]).
- Ancient woodland in Edinburgh covers 1067.5 ha (3.9 % of Edinburgh[5]).
- There are 129 ancient, veteran, or notable trees in Edinburgh: 1 ancient tree, 35 veteran trees and 93 notable trees.[6] The single ancient tree is a dead Sycamore, *Acer pseudoplatanus* found in Redford Brae & Laverock Dale Local Biodiversity Site.
- Scotland is an important resource for peatland habitats globally, with blanket bogs covering some 23% of Scotland's land area. In the Edinburgh area, the main area of peatland habitat is centred in the Pentland Hills Regional Park, with around 66.7 ha of Sphagnum bogs recorded in this area[7].
- There are around 121.6 km of rivers in Edinburgh.[8]
- Private gardens are now recognised as valuable wildlife resource and may account for a quarter of the area of a typical city and half its greenspace.[9]

3 *https://nora.nerc.ac.uk/id/eprint/7831/1/CS-Scotland-2007-KeyMessages.pdf*

4 *Based on a football pitch being 7,140 square metres*

5 *CEC area (not including marine environment) is 27,289 ha*

6 *Woodland Trust's Ancient Tree Inventory: https://ati.woodlandtrust.org.uk/*

7 *Phase 1 data held by TWIC.*

8 *OS Open Rivers (OGL)*

9 *http://www.wlgf.org/The%20garden%20Resource.pdf*

5 Priority habitats and species

5.1 It is important that any plans and proposals, site management, land use changes, take into account and avoid impacts on local priority habitats and species. Any habitat enhancement or creation projects should include suitable priority habitat improvements or extend habitat which can support priority species. Guidance and information to support this will be produced in the life of this plan, in Planning and other types of guidance.

5.2 Species

Priority species for Edinburgh includes protected species and 'notable' species which includes less common species and rarities. An updated list of priority species is reviewed periodically and will be available on the Edinburgh Biodiversity Action Plan page of the Council website: www.edinburgh.gov.uk/biodiversity

Table 5.1 Priority habitat types for Edinburgh

Broad habitat type	Includes
Coastal & Marine	Subtidal zones, intertidal mudflats, sandflats, rocky shores and islands.
Freshwater and wetlands	Lochs, ponds, reservoirs, rivers, burns, canal, associated riparian habitats, fens and swamps, temporary standing water areas.
Woodlands	Semi natural woodland; ancient and long established woodland inventory sites; broadleaved plantation woodlands; riparian woodlands; ancient and veteran trees; hedgerows.
Grasslands	Semi natural grasslands; unimproved grasslands of all types; native wildflower/grassland meadow areas.
Farmland	Arable field margins; parkland pasture; field boundaries such as hedgerows; farm ponds and wetlands.
Peatlands	Blanket bog, lowland raised bog, fens and mires.
Rock faces	Natural inland and coastal rock faces; man-made rock faces.
Urban greenspaces	Parks, cemeteries, gardens, golf courses, allotments, brownfield sites on vacant and derelict land, wildlife corridors such as path networks, transport routes with adjacent vegetation, road verges.

6 A Plan for Edinburgh's biodiversity

6.1 This plan includes actions for:

- Green networks
- Blue Networks
- Built environment
- Geodiversity
- Species

6.2 Green networks are defined here as land-based habitats such as woodlands, grasslands, parks and urban greenspace, gardens, farmland, upland, open mosaic habitats etc. Blue networks are water-based habitats such as ponds, rivers and coastal waters. Green and blue networks are interconnected to form all natural, semi-natural and man-made habitats. The relationship between green and blue networks is of particular importance to the water environment, where high quality green-blue habitat connectivity can help reduce pollution and slow water run off during flood events. There is an emphasis on the importance of collaborative work across different habitat types and increasing connectivity between habitats, using an ecosystem approach.

6.3 The principles laid out in The Lawton Review apply here to improve ecological networks; there needs to be more and they have to be bigger, better and more joined up.

6.4 As an Action Plan for an urban area, the importance of the built environment in supporting some of our rarer/more threatened species such as swifts and bats, is recognised. Challenges such as climate change, water management, flooding and pollution impact on the built environment and there are opportunities for creating blue/green infrastructure and other adaptation measures.

6.5 We include the importance of private gardens and their valuable contribution to biodiversity through creating habitat for pollinating insects including bumblebees and butterflies, mammals such as hedgehogs, as well as ponds for amphibians. Food growing areas, such as allotments and community gardens, were found to be the most valuable habitat type for pollinators by the University of Edinburgh Urban Pollinators project, and are promoted by partners in this plan.

7 People power – citizens, communities and partners delivering for nature

7.1 There are over 30 organisations and groups working as part of the Edinburgh Biodiversity Partnership to increase biodiversity in our city, and to engage communities and volunteers in those efforts. From research organisations such as Royal Botanic Garden Edinburgh and our Universities, to government agencies, environmental and conservation charities, expert species and nature groups, and local communities working in parks and greenspaces, there is a huge resource of people and knowledge committed to improving our city for nature.

7.2 The strength of Local Biodiversity Partnerships is that they bring together organisations who can work together to co-design projects to increase impact and make them more inclusive. Collaboration is now becoming ever more important with the need to plan on a landscape-scale and use an ecosystem approach.

7.3 The majority of conservation effort for priority species in Edinburgh is led by environmental charities or voluntary expert groups. As well as habitat management activities and projects, they carry out regular or ad hoc monitoring which provides species data invaluable for informing priorities and site designations, etc.

7.4 Monitoring and conservation efforts in our Local Nature Reserves, Pentland Hills Regional Park, Holyrood Park and other important places such as the Water of Leith, are co-ordinated by staff, but are completely reliant on significant numbers of volunteers to deliver.

7.5 Across all types of greenspace, from parks to cemeteries, there are community groups and volunteers making positive changes for wildlife and people. This has great advantages for health and wellbeing, both for the active community members and also indirectly for the visitors to the improved urban greenspace.

7.6 We are very fortunate in Edinburgh to work with our regional biological records centre, The Wildlife Information Centre (TWIC). TWIC work with local wildlife recording experts and others, to collate, verify and mobilise ecological data. This data feeds into national records and is also made available under licence to be used in site designations, planning casework, site management and project planning by the Council and others.

7.7 TWIC and other partners also promote wildlife recording to all, through public events, bioblitz events and offer training and support for tools such as iNaturalist.

7.8 Citizen Science (the collection and analysis of data relating to the natural world by members of the general public, typically as part of a collaborative project with professional scientists) and easily-accessible mobile apps and surveys such as BeeWalks, Big Garden Birdwatch and the Big Butterfly Count have resulted in important additional records. Social media can also play an important part by informing people about events, what to look out for and sharing information.

7.9 This joined up effort provides a great outcome for Edinburgh, with access to high quality ecological data from Partnership working.

8 Biodiversity, land use, planning and development in Edinburgh – reversing the ecological crisis

8.1 Planning can play an important part in protecting and enhancing the City's biodiversity.

8.2 Development can help reverse the ecological crisis by:

- Avoiding loss of, or damage to, existing priority habitats, features of ecological value, priority and protected species, and designated sites.
- Increasing biodiversity through enhancement, habitat creation, connectivity to existing habitats and natural areas.

8.3 These measures increase biodiversity and deliver:

- Adaptation and resilience to the impacts of climate change (flooding, overheating)
- Increasing carbon sequestration in vegetation and soils, to support Net Zero targets
- Increasing amenity, health and wellbeing.

8.4 In the programme for government there is a requirement for Nature Networks to be identified at local level. Work has already begun on this in Edinburgh.

8.5 The draft National Planning Framework 4 (NPF4) places a strong emphasis on Planning, doing its part, to reverse the ecological crisis by including policy 3(a) Positive effects for biodiversity. NatureScot has produced draft guidance to support developers implementing this policy, through the development process.

8.6 The draft City Plan2030 also includes policy Env 37 to support delivery of national policy at the local level and the EBAP is a key document to support application.

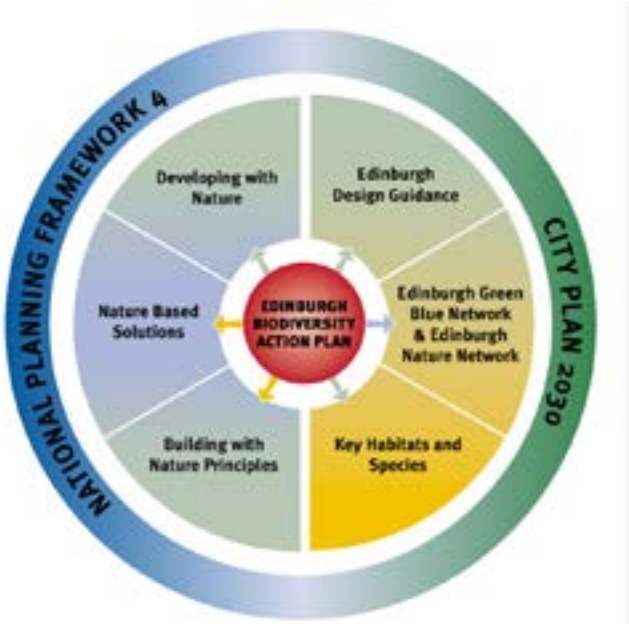
8.7 The EBAP identifies the priority habitats and species (section 7) which require protection and enhancement at the local level, and the importance of using Nature Based Solution as part of the development process. Also within City Plan 2030 is the Green-blue Network which identifies and includes spatial information on the Edinburgh Nature Network (Figure 8.1).

8.8 The Green Blue Network and Edinburgh Nature Network both map the existing biodiversity/ nature network of designated sites and priority habitats. As outlined in section 8 the opportunity sites for expanding and better connecting the biodiversity/nature network are also identified. Development falling within these sites should maximise the positive effects for biodiversity to expand the existing nature network. Further guidance to support this will be developed.

8.9 The Edinburgh Design Guidance chapter 3 includes the Mitigation Hierarchy, as the starting point of any development consideration of biodiversity, also BS42020 Biodiveristy -code of practice for planning and development, provides useful guidance.

8.10 The EBAP also supports projects and initiatives which developers can connect with to ensure their proposals are focused on delivery at the local level.

Figure 8.1 Links from EBAP to Planning and Development policy and delivery.



9 A Case Study: Using Edinburgh Biodiversity Partnership data to develop Green-Blue and Nature Networks

9.1 As part of the Council's "Thriving Green Spaces" project, an Edinburgh Nature Network has been developed in partnership with Scottish Wildlife Trust, University of Edinburgh, Edinburgh Biodiversity Partnership members and other stakeholders. The Nature Network focuses on creating a well-connected, healthy, resilient ecosystem supporting Edinburgh's wildlife and people.

9.2 This city-wide Nature Network is a powerful tool that provides a strategic approach to prioritising environmental protection and enhancements, along with nature-based solutions, to tackle the threats of climate change and biodiversity loss. The model was grounded in the invaluable ecological data resource arising from over 20 years of Edinburgh Biodiversity Partnership working to record, map and protect our most important species, habitats and sites. The majority of the Edinburgh Nature Network is based on our large network of designated sites and priority habitats. (Figure 9.1). Mapping these gives the core Nature Network area. To highlight the areas with best potential to increase the connectivity and extent of the Nature Network, a 100m buffer was added based on modelling work by University of Edinburgh. Any opportunities for habitat creation which arise in the buffer zones can deliver an increase in the Nature Network coverage.

9.3 This work has allowed City of Edinburgh Council to be the first Local Authority to produce a Nature Network, which is a requirement of the Scottish Government's latest Programme for Government and must be created by 2026.

9.4 A parallel project looking at flooding and drainage issues, led to the development of a Green-Blue Network for Edinburgh. The Nature Network model was integrated into the Green-Blue Network. Although closely related, the driver for the Green-Blue Network are pressures on the surface water drainage system, and the need to identify where nature based solutions are needed to address flooding issues. The Green-Blue Network has been incorporated into the draft City Plan 2030.

9.5 By combining geographical data with local knowledge and considerations, we can identify opportunities for nature-based solutions and environmental enhancements that provide multiple benefits for both people and wildlife.

9.6 The Edinburgh Biodiversity Partnership will continue to work with both programmes as they enter the delivery phase.

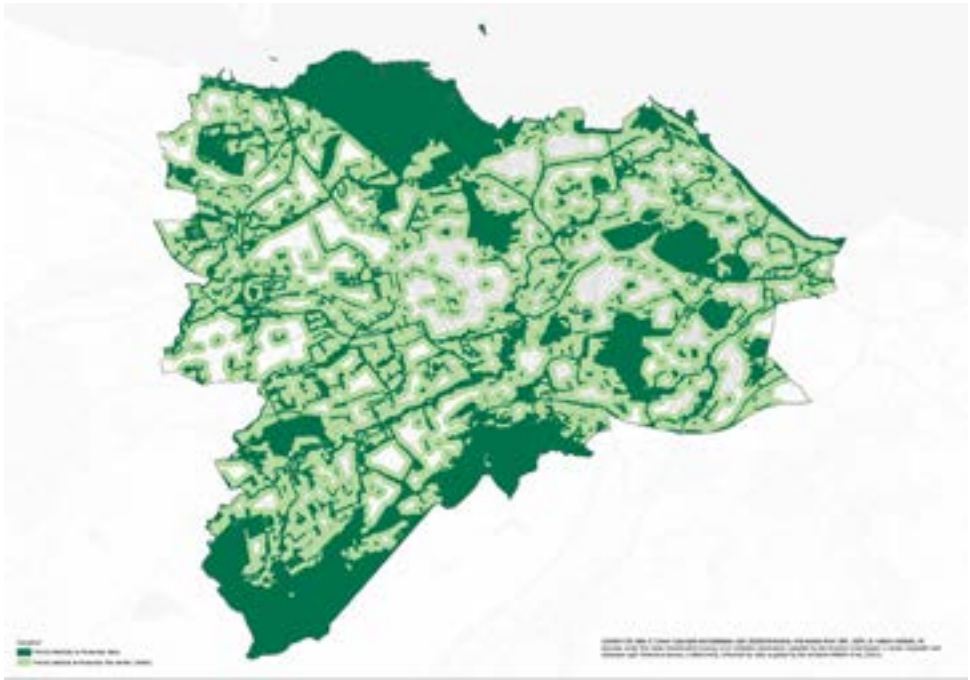


Figure 9.1 Draft Nature Network and 'Green' part of the Green-blue Network

10 Delivering biodiversity outcomes through joint working

10.1 There are several strategic plans and programmes which are closely linked to the Edinburgh Biodiversity Action Plan, through the work of Partners or Council services. These programmes have the potential to deliver significant improvements to the natural environment. They are at different stages of development or delivery, and continued engagement by the Edinburgh Biodiversity Partnership in these programmes will help to ensure opportunities for positive outcomes for biodiversity across the city and delivery of a Nature Positive City (table 10.1).

Each programme and links to this plan are set out below. Progress and outcomes will be reported through annual update reports, and any specific activities reflected as this Plan is refreshed going forward.

In addition there are other more peripheral plans and programmes, but which have the potential to support increased biodiversity (section 10.2).

Table 10.1 Core plans and programmes linked to EBAP

Name	Programme description	Description of links, requirements and opportunities for biodiversity	EBP partners involved	2022 Status
2030 Climate Strategy: delivering a net zero, Climate Ready City:	Overarching strategy for climate change including net zero targets and adaptation requirements.	Natural environment is a critical part of the solution for net zero, through carbon sequestration in soils and habitats, and adapting to the impacts of climate change. Knowledge exchange, capacity building, research and demonstration projects to be developed.	CEC Planning, NatureScot, University of Edinburgh, RBGE.	Strategy published.
Edinburgh Adapts Action Plan	Plan outlining necessary adaptation measures	A resilient natural environment is required for adaptation to the impacts of climate change. Urban overheating is alleviated by cooling and shading from vegetation. Parks, street trees, raingardens, living roofs all provide urban cooling. These examples of nature based solutions also slow water run off during extreme weather events, to reduce flood and pollution risk. They also help reverse the nature crisis.	CEC Planning NatureScot	New plan to be produced by 2023
Climate Change Risk Assessment	City wide modelling of the risks from climate change, report produced summer 2022.	EBP members to review final report to prioritise areas which would benefit from nature based solutions.	CEC, NatureScot, SEPA.	Report produced. Next steps to review report and identify priority areas for NBS.
City Plan 2030 Edinburgh Design Guidance and other associate planning guidance	New Local Development Plan for Edinburgh.	New draft policies on biodiversity included. Once NPF4 is published, and as City Plan progresses, policy wording will be finalised through the plan examination process. Clear links to EBAP priorities and opportunities to deliver the Edinburgh Nature Network and Green Blue Network can be identified when detailed guidance is produced.	CEC Planning	Awaiting NPF4 and City Plan 2030 publication.

Thriving Green Spaces	To create a vision and 30 year strategy for Edinburgh's green environment.	Working together to identify opportunities to increase biodiversity in Edinburgh's parks and greenspaces.	CEC Parks, CEC Planning.	Develop pilot projects. Next phase of funding and staffing underway in autumn 2022.
Edinburgh Nature Network	Map and deliver an improved Nature Network for Edinburgh.	Members of the EBP have been involved in the core project group and in the wider stakeholder group. Data on designated sites and priority habitats from EBAP work has been incorporated into the model.	CEC, Scottish Wildlife Trust, all EBP.	Develop projects in priority areas from the Nature Network map outputs.
Green-blue Network	Identify green-blue infrastructure requirements to address drainage and flooding issues.	Members of the EBP have input to the wider stakeholder group. Data on designated sites and priority habitats from EBAP work has been incorporated into the Green Blue Network model.	CEC, SEPA, NatureScot.	Pilot areas identified and funding being sought.
Forest and Woodland Strategy	Requirement of Planning legislation to produce a refreshed strategy to identify areas for protection, management and creation of woodland.	Important to use data and expertise of EBP to protect and expand the woodland areas of greatest ecological value.	CEC, ELGT.	Early stages of development 2022/23
Million Trees & Wee Forests projects	To become a Million Tree City by 2030 and continue to create 'Wee Forests' in parks and schools as part of a national NatureScot project aiming to have one 'Wee forest' for every primary school cluster in Scotland.	Members of the EBP, and relevant Council services, are involved in opportunities and site identification.	CEC, ELGT.	Progressing as part of project plan.

10.2 Peripheral plans and programmes with potential to support biodiversity improvements also include:

- Emerging Streetspace Allocation Framework, as reported to Transport and Environment Committee in October 2022
- Street Design Guidance
- Active Travel Action Plan
- Air Quality Action Plan
- 20 Minute Neighbourhoods Programme

11 Strategic EBAP actions to be developed by Edinburgh Biodiversity Partnership

11.1 In addition to the detailed action programme, some partners have identified potential projects or priority areas which require further development, research or funding. A brief list is included here and as the EBAP is refreshed and progress reports produced during the life of this Plan, new projects and actions arising from this development work will be included.

Projects and priorities for development into outputs and actions

Workstream for development (funding, resources dependent)	Proposed timescale
Produce an updated list of priority and notable species for publication.	2023
Produce a 'Vision for Nature' aligned with new global targes post-COP 15 and Scottish Biodiversity Strategy, NPF4 production.	2023/4
Guidance on species choices for future climate resilience, for different habitats.	2023/4
Rare plants project refresh. Identify new target species.	2023
Review priority habitats for LNCS site designations gaps – eg Ancient Woodland Inventory sites and other important woodlands.	2023
Edinburgh Nature Network programme review and identify priority projects to align/deliver through EBAP.	2022/3
Review priority habitats and species lists to identify a pipeline of projects and funding sources including Nature Restoration Funding scheme.	2022/23
Establish an inventory of SUDS ponds in Edinburgh to encourage monitoring of biodiversity.	2024
Update the Open Mosaic Habitat survey.	2023/4
Produce guidance and information for different priority habitats, including information linked to climate change risks and opportunities for adaptation and carbon capture.	2024
City wide action framework for biosecurity, pests, diseases and invasive non native species.	2024
Informed by the Climate Change Risk Assessment and other work, develop a joint action list for biodiversity and the next Edinburgh Adapts action plan, to address climate impacts and opportunities for biodiversity and adaptation.	2023
Develop guidance and information around the importance of soils.	2023/4
Identify opportunities for biodiversity enhancements on golf courses. Identify a partner to engage and explore funding for work on golf course. Start with CEC owned sites.	2023/4
Engagement with privately owned LNCS sites, linked to development management briefs.	2022/3
Engagement with large private estate owners on biodiversity opportunities.	2024
Ecosystem health indicators development, including a climate indicator species list.	2023/4
Develop a monitoring scheme for Local Biodiversity Sites/Local Nature Conservation Sites.	2025
Native species reintroductions or naturalisation opportunities.	2024/5
Identify opportunities for 'rewilding' projects in Edinburgh, through the 'Wilding Wee Spaces' project and other opportunities.	2024
Shoreline management plan; green blue network opportunities; development briefs.	2023/4/5

12 Action plan 2022-2027

Green Networks

GN1	Undertake at least one joint campaign per year to raise awareness and increase engagement with biodiversity conservation across Edinburgh, using social media, events, projects and other means. Focus particularly on private gardens, parks and greenspace and other priority areas of Edinburgh's green network.	Edinburgh Biodiversity Partnership
GN2	Raise awareness of the importance of biological recording and wildlife conservation in the Edinburgh area through attendance at public events, including bioblitzes, social media and through running excursions and training workshops.	TWIC, ENHS, Royal Botanic Garden Edinburgh.
GN3	Continue to provide a key role for the collection, collation and dissemination of biological records for the Edinburgh area. TWIC will target recording effort on Local Biodiversity Sites in the Edinburgh area through excursions and volunteering. Public wildlife surveys will continue to encourage recording of specific under-recorded taxa.	TWIC
GN4	Provide training in species ID and biological recording for new and existing recorders to improve individual's knowledge and skills.	TWIC
GN5	Support and encourage the increasing use of new online recording tools such as iRecord, BirdTrack, iNaturalist and others, to continue to increase engagement in recording and availability of data.	TWIC, ENHS, Royal Botanic Garden Edinburgh.
GN6	Establish a new wildlife recording project for the Royal Botanic Garden using the iNaturalist platform to enable easy contribution of records by all users.	Royal Botanic Garden Edinburgh
GN7	Continue to offer a programme of outdoor learning opportunities and public event programmes that raise awareness of the rich biodiversity across Holyrood Park and the wider City.	Historic Environment Scotland Ranger Service
GN8	Develop a suite of ecosystem health measures and indicators based on Scottish Biodiversity Indicators and any relevant targets from the new Scottish Biodiversity Strategy when available, using available datasets relevant to Edinburgh.	TWIC, CEC, EBP, NatureScot
GN9	Produce awareness raising materials and online information for parks using e.g. noticeboard posters and QR codes.	CEC Place (Parks)
GN10	Support community groups and volunteers to engage in activities which increase biodiversity through habitat improvements or creation, and awareness raising activities in parks and other greenspaces.	CEC Place (Parks)
GN11	Include biodiversity awareness material in any Schools and Group education packs produced for Parks. Provide biodiversity information in the Park interpretative materials and signage.	CEC Place (Parks)

GN12	Edinburgh Natural History Society will lead a programme of field trips, talks and workshops for people to learn the skills to observe, identify and record natural history. Field trips will be to a variety of habitats within the area. There will be approximately 30 events each year and many will be within the Edinburgh city boundary or nearby.	Edinburgh Natural History Society
GN13	Support schools with Learning for Sustainability through the Eco-Schools programme, and other award programmes such as John Muir Award, to include learning about local biodiversity.	CEC Children and Families
GN14	Fund 'Wee forest' projects for each cluster of primary schools as part of a Scotland wide programme.	NatureScot
GN15	Continue to involve communities in SSSI management where opportunities arise, for example at Wester Craiglockhart Hill SSSI.	NatureScot
GN16	Review the Local Biodiversity Sites network across Edinburgh and identify where positive management, projects or management plans should be implemented.	CEC Place (Planning), NatureScot, TWIC, SWT, WOLAG
GN17	Identify and assess potential new Local Biodiversity Sites, especially where priority habitats are present and sites are important for habitat network connectivity.	CEC Place (Planning), NatureScot, TWIC, SWT
GN18	Engage with local communities and landowners about the ecological importance of Local Biodiversity Sites, with an initial focus on Council owned land.	CEC Place (Planning), CEC Place (Parks), NatureScot, TWIC, SWT
GN20	Deliver the Giving Nature a Home initiative in Edinburgh. Work with communities, schools and volunteers to raise awareness of biodiversity and its health benefits in Edinburgh.	RSPB
GN21	Provide information, advice and expertise on plant conservation and the maintenance and creation of species-rich habitat.	Royal Botanic Garden Edinburgh
GN23	Undertake and record the treatment of Japanese Knotweed and Giant Hogweed on Council owned land across Edinburgh.	CEC Place (Parks)
GN24	Provide information about INNS identification and removal as part of training for Council grounds maintenance staff.	CEC Place (Parks)
GN26	Delivery of habitat creation projects in parks as opportunities arise, e.g. in West Pilton Park.	Edinburgh Lothian Greenspace Trust
GN27	Increase the number of people growing their own food and the number of food growing areas, targeting areas of deprivation.	CEC Place (Parks), Edinburgh Lothian Greenspace Trust
GN28	Increase the number of allotment sites/plots in the city and actively encourage the lease of appropriate sites to engaged communities, e.g. Pilton Gardeners, Duddingston Field.	CEC Place (Parks)

GN30	Manage and maintain up to 70 urban meadow sites on Council land incorporating mixed floral meadows, native wildflower meadows and grass meadow sites as part of the Edinburgh Living Landscape programme.	CEC Place (Parks)
GN31	Encourage and support Friends of Parks and other community groups to deliver biodiversity improvements in their local greenspace, including bird, bee and bat boxes, habitat creation or similar.	CEC Place (Parks), Edinburgh Lothian Greenspace Trust, CEC Localities
GN32	Manage and maintain naturalised grasslands in parks and other Council land as part of the Edinburgh Living Landscapes programme.	CEC Place (Parks)
GN33	Deliver greenspace projects with wildlife benefits across the city as opportunities arise - e.g. Little France Park, allotments, community gardens etc. including in areas of multiple deprivation.	CEC Place (Parks), Edinburgh Lothian Greenspace Trust
GN34	Cyclepath management: Carry out biodiversity enhancement/conservation enhancement projects along Edinburgh's Cyclepath Network.	Edinburgh Lothian Greenspace Trust
GN35	Aim to plant up to 50,000 bulbs in naturalised grass annually across the city as part of the Edinburgh Living Landscape programme.	CEC Place (Parks)
GN40	Work with the Active Travel team to identify and deliver opportunities for biodiversity enhancements in the Active Travel Action Plan programme.	CEC Place (Placemaking and mobility)
GN41	Continue to record all native and alien vascular plants in the wild and public areas of Edinburgh. Contribute to the National Plant Monitoring Scheme. Incorporate the data into the next Atlas of the British and Irish Flora and into the next edition of the Rare Plant Register for Midlothian. Communicate the data to interested parties as required.	Botanical Society of Britain and Ireland
GN42	Undertake site condition monitoring for Edinburgh SSSIs.	NatureScot
GN43	Restore the species rich grassland at Murder Acre using grazing.	SWT Lothians
GN44	Deliver the Million Tree City project to plant an additional 300,000 trees by 2030.	CEC Place (Parks), CEC Localities, ELL, ELGT.
GN45	Continue to implement Site of Special Scientific Interest (SSSI) grassland management plan for Holyrood Park as agreed with NatureScot.	Historic Environment Scotland Ranger Service
GN46	Manage newly established wildflower meadows in areas of Holyrood Park outwith the SSSI.	Historic Environment Scotland Ranger Service

GN47	Continue to offer a programme of volunteer opportunities, training, activities and surveys to enhance the biodiversity and assist in the monitoring of wildlife sightings across Holyrood Park, with all records shared with relevant organisations.	Historic Environment Scotland Ranger Service
GN48	Through active management, continue to increase diversity within meadow habitats at the following CEC Natural Heritage sites: Meadows Yard LNR, Craigmillar Castle Park, Hermitage of Braid and Blackford Hill LNR, Easter Craiglockhart Hill LNR, Wester Craiglockhart Hill SSSI, Burdiehouse Burn LNR, Cammo Estate LNR and Bavelaw Marsh SSSI.	CEC Place (Natural Heritage Service)
GN49	Monitor and control invasive plant species on CEC Natural Heritage managed sites.	CEC Place (Natural Heritage Service)
GN50	Continue to enable community involvement and volunteer participation in the control of INNS on Natural Heritage sites.	CEC Place (Natural Heritage Service)
GN51	Manage the moorland of Bonaly Country Park to create a mosaic of habitats, including native woodland.	CEC Place (Natural Heritage Service)
GN52	Manage Local Nature Reserves and other natural heritage parks to benefit biodiversity.	CEC Place (Natural Heritage Service)
GN53	Liaise with Parks Events team and event organisers to ensure that events are well managed and do not damage any valuable habitats on Natural Heritage Sites.	CEC Place (Natural Heritage Service)
GN54	Continue to delivery woodland network expansion projects.	Edinburgh Lothian Greenspace Trust
GN55	Identify key woodland projects and sites to direct Scottish Forestry WIAT funding.	Edinburgh Lothian Greenspace Trust
GN56	Deliver the ‘Treetime’ project, to plant new trees in Edinburgh, including park trees, street trees and woodland planting.	Edinburgh Lothian Greenspace Trust
GN57	Identify sites or projects which require a woodland management plan and can be funded under Woodlands in and around towns (WIAT).	Edinburgh Lothian Greenspace Trust
GN58	Identify sites or projects which would benefit from woodland management as part of the WIAT scheme from Scottish Forestry.	Edinburgh Lothian Greenspace Trust
GN59	Continue the woodland engagement project based at Craigmillar Castle Park.	Edinburgh Lothian Greenspace Trust
GN60	Identify sites suitable for riparian woodland creation or enhancement.	Edinburgh Lothian Greenspace Trust
GN61	Promote the Edinburgh Pollinators Species mix for meadow creation in habitat projects and new developments	CEC Place (Planning), ELL
GN63	Increase habitat quality within the botanic garden e.g., by conversion of lawns to “living lawns”, with more flowering and less mowing, and the retention of deadwood habitat.	Royal Botanic Garden Edinburgh

GN64	Work with community groups, schools and volunteers to take positive action to protect and enhance biodiveristy in Edinburgh through nature on your doorstep actions.	RSPB
GN65	Monitor, remove and prevent the spread of Invasive non-native species on Inchmickery.	RSPB, NatureScot, Forth Seabird Group
GN67	Produce a surveys checklist for Forestry Commission Scotland woodland grant or felling licence applicants for Edinburgh sites.	Forestry Commission Scotland, CEC Place (Planning), TWIC
GN68	Identify opportunities for new greenspace associated with housing development. Use open space quality standards and other natural capital standards.	CEC Place (Planning), RSPB, ELL
GN69	Scope and develop a Strategic Management Plan for Holyrood Park in conjunction with partners.	Historic Environment Scotland Ranger Service
GN70	Include policies, targets and actions relating to biodiversity, Green-blue and Nature Networks, greenspace and green infrastructure in the Edinburgh Design Guidance, City Plan 2030, Open Space Strategy, Edinburgh Adapts and Climate Ready City plans.	CEC Place (Planning), CEC Chief Executive
GN71	Once NPF4 is adopted, continue to work with NatureScot on finalising developing with nature guidance to ensure positive effects for biodiversity is included in new developments.	CEC Place (Planning)
GN72	Embed climate change adaptation considerations, and potential responses such as habitat network restoration or creation, into wider land use planning decisions through the use of Forestry and Woodland Strategies, regional land use strategies, Strategic/Local Development Plans and development masterplans.	CEC Place (Planning)
GN73	Respond to casework relating to all protected sites, windfarms and other relevant issues.	RSPB, SWT, NatureScot, CEC Place (Planning)
GN74	As part of core duties, continue to 1) respond to statutory casework affecting protected sites; 2) respond to statutory windfarm casework; 3) continue to provide Green Infrastructure and biodiversity advice in master planning/major developments; 4) continue to provide management advice and consents for Edinburgh SSSIs (i. facilitate scrub/grassland management at Wester Craiglockhart Hill SSSI and advise on the new management plan; ii. advise on management for revision of Arthur's Seat Volcano SSSI Management Plan).	NatureScot
GN75	Increase biodiversity and enrichment of local habitats while creating a large scale, nature-rich urban food growing project at Lauriston Farm.	Edinburgh Agroecology Co-op

Blue Networks

BN1	Deliver a programme of clean up events along the Water of Leith, focusing on local community engagement and highlighting links between riparian and coastal litter.	Water of Leith Conservation Trust
BN2	Continue a programme of volunteer, training, patrols and surveys for the Water of Leith to enable the monitoring of wildlife sightings, meadow surveys and river bank habitats and pass all sightings and records to TWIC.	Water of Leith Conservation Trust
BN3	Undertake promotional and awareness raising activities relating to the Firth of Forth SPA. Identify opportunities for interpretation.	FEF, NatureScot, RSPB, CEC Place (Planning)
BN5	As part of annual water course inspections, record locations of INNS and any wildlife features observed.	CEC Place (Flood team)
BN6	Continue to undertake work in relation to the creation of a Marine SPA in the Forth.	NatureScot, Forth Estuary Forum.
BN7	Undertake site condition monitoring for Firth of Forth SSSI as required through the NatureScot national programme.	NatureScot
BN9	Deliver a programme of clean up events along the Water of Leith, focusing on local community engagement and highlighting links between riparian and coastal litter.	WOLCT, CEC Place (Natural Heritage Service)
BN10	Maintain the seven Biodiversity Boost habitat improvement sites along the Water of Leith. Seek funding to extend this network to more sites.	WOLCT, CEC Place (Natural Heritage Service)
BN11	Respond to all opportunities for tree planting, biodiversity improvements, and the creation of new greenspaces connected to the river catchment and to supplement the Edinburgh Million Tree City project. Consult with SEPA on river restoration projects.	WOLCT, CEC Place (Parks), WOLAG
BN13	Act to conserve the coastal sand dunes (a UKBAP Priority Habitat) at Cramond, focusing on the control of invasive species (Japanese rose, bracken, Japanese knotweed, sycamore). Identify any other threats to this habitat such as visitor pressure, fly-tipping and erosion.	CEC Place (Natural Heritage Service)
BN14	Carry out WeBs counts on CEC Natural Heritage sites to help monitor coastal habitat and bird populations.	CEC Place (Natural Heritage Service)
BN15	Manage River Almond woodlands in partnership with Friends group.	CEC Place (Natural Heritage Service)
BN16	Manage Harperrigg, Harlaw, Bonaly and Threipmuir Reservoirs within Pentlands Hill Regional Park in conjunction with Flood Prevention to improve biodiversity where appropriate.	CEC Place (Natural Heritage Service)

BN17	Through SSSI monitoring and site management, take particular account of the habitat requirements of the nationally scarce bryophytes at Balerno Common SSSI (Bavelaw Marsh) which require periodic lowering of the water levels.	NatureScot, CEC Place (Natural Heritage Service), Bavelaw Management Group, WOLAG
BN18	Encourage student research projects on Otters.	CEC Place (Natural Heritage Service)
BN19	Management of the Water of Leith corridor in partnership with Water of Leith Conservation Trust	CEC Place (Natural Heritage Service)
BN20	Deliver the River Almond barriers project by identifying the best solution for improved fish passage on the river, either removal of obstructions or construction/repair of fish passages.	CEC Place (Natural Heritage Service)
BN21	Identify sites suitable for riparian woodland creation or enhancement.	CEC Place (Natural Heritage Service)
BN22	Manage and enhance ponds and wetlands at Cammo canal, Blackford Pond, Easter Craiglockhart Hill to include the investigation of water quality	CEC Place (Natural Heritage Service)
BN23	Deliver the Restoration Forth project to restore seagrass and native oysters to the Forth as part of the Edinburgh Living Landscapes initiative.	Royal Botanic Garden Edinburgh, Marine Conservation Society, Heriot Watt University, ELL
BN24	Identify opportunities to manage and restore wetlands and peatlands for species enhancement and carbon storage, including in upper catchment of Water of Leith.	EBP, WOLAG
BN25	Assess each weir in the lower catchment of the Water of Leith within the context of the catchment remodelling, for heritage value and ecological gain. Devise a programme of work to improve the ecological potential of the river within the context of a cost benefit analysis.	WOLAG, SEPA
BN26	Investigate necessary morphological improvements for Harperrig Reservoir, Murrayburn, and Water of Leith (Poets Burn to Murray Burn to Estuary) with stakeholders and devise a programme of work to improve the ecological potential of the river within the context of a cost benefit analysis.	WOLAG, SEPA
BN28	As part of core duties, continue to provide Natura advice on all casework and licences affecting the Firth of Forth SPA.	NatureScot
BN29	Fulfill the habitat and species actions within the Water of Leith Management Plan.	Water of Leith Action Group, WOLCT, CEC Place (Planning), SEPA

Geodiversity		
GE1	Collaborate with partners such as Landowners, CEC Natural Heritage Service, Education Institutes, SRUC, NatureScot, Edinburgh World Heritage, nature conservation and geology groups, and local communities to encourage use of Local Geodiversity Sites for formal and informal education.	Lothian and Borders GeoConservation Committee Lothian and Borders GeoConservation Volunteer Group
GE2	Promote Local Geodiversity Sites to partners – e.g. within CEC, nature conservation groups, local groups with an interest in geology, local communities.	Lothian and Borders GeoConservation Committee
GE3	Maintain range of leaflets and posters for the general public, supply to distribution network. Develop further leaflets and web resources etc.	Lothian and Borders GeoConservation Committee, Lothian and Borders GeoConservation Volunteer Group
GE4	Keep under review Local Geodiversity sites including geomorphological and building stone site and maintain list of potential sites in Edinburgh. Designated further sites as appropriate.	CEC Place
GE5	Monitor condition of Local Geodiversity Sites using GeoConservation UK site monitoring form to collate and record site visits: Record issues with access, vandalism, vegetation and notify concerns to CEC and landowners.	Lothian and Borders GeoConservation Committee, Lothian and Borders GeoConservation Volunteer Group
GE6	Work with Scottish Geodiversity Forum to contribute to the vision of Scotland's Geodiversity Charter. Liaise with other GeoConservation Groups in Scotland to arrange regional meetings including training.	Scottish Geodiversity Forum, Lothian and Borders GeoConservation Committee
GE7	Ensure Local Geodiversity Sites are included in Local Plans and that there is specific mention of the need to protect Local Geodiversity in local plans and other policies and guidance.	Lothian and Boprders GeoConservation Committee, CEC Place (Planning)

Built Environment

BE1	Raise awareness about swifts and importance of built environment for nest sites with planners, architects and developers. Engage volunteers and others in swift conservation and monitoring of swift bricks and nesting sites.	CEC Place (Planning), RSPB
BE2	Run a series of events promoting and training on different types of green infrastructure and the relationship between built and natural environment.	CEC Place (Planning), Edinburgh Adapts Steering Group, EBP
BE3	Demonstrate nature-based solutions to the climate emergency, based on urban greening, that have co-benefits for biodiversity.	Royal Botanic Garden Edinburgh
BE4	Work with a housing developer to showcase high quality, wildlife rich developments including meadows, ponds, native trees etc.	SWT, ELL, CEC Place (Planning)
BE5	Promote the Natural Capital Standard for green infrastructure as opportunities arise.	SWT, ELL, University of Edinburgh
BE6	Raise awareness of the value of 'brownfield' sites for biodiversity through training, events and inclusion in assessments, guidance and policy relating to new development and the City Plan 2030.	CEC Place (Planning), Buglife
BE7	Promote the creation of 'Living Roofs' as mitigation for the loss of ecologically valuable brownfield sites to development, especially sites which contain the UKBAP 'Open Mosaic Habitat on Previously Developed Land'.	CEC Place (Planning), Buglife
BE8	Swifts - Monitor and record installation and use of artificial nest boxes, swift bricks and existing known nests through continued survey, volunteer engagement and data sharing.	CEC Place (Planning), RSPB, TWIC
BE9	Promote green infrastructure to help nature to adapt to climate change by strengthening habitat networks, reducing habitat fragmentation and providing opportunities for species to migrate.	CEC Place (Planning), Edinburgh Adapts Steering Group, Edinburgh Living Landscapes Initiative, NatureScot
BE10	Implement the biodiversity strategy for the University of Edinburgh.	University of Edinburgh
BE11	Ensure biodiversity best practice guidance and policy framework is included in the Edinburgh Design Guidance, Climate Ready City and Edinburgh Adapts to integrate green infrastructure in the built environment for biodiversity and climate resilience.	CEC Place (Planning), Edinburgh Adapts Steering Group, Edinburgh Living Landscapes Initiative, NatureScot
BE12	Promote green infrastructure and green networks in new developments through training and raise awareness of the relationship between built and natural environments, and other issues such as air quality, water quality and climate change.	CEC Place (Planning), Edinburgh Adapts Steering Group, Edinburgh Living Landscapes Initiative, NatureScot

Species		
S1	Engage the public with wildlife conservation and awareness raising through attendance at public events, bioblitzes, running excursions and running public events and workshops. F120	The Wildlife Information Centre
S2	Raise awareness of native biodiversity through interpretation of habitat management to visitors at Edinburgh Zoo.	Royal Zoological Society Scotland
S3	Provide opportunities for people from all backgrounds to connect with nature through visiting the Garden, attending events and via targeted community engagement.	Royal Botanic Garden Edinburgh
S4	Butterfly Conservation staff and volunteers carry out survey and monitoring work across Edinburgh including transects across key sites and habitat management projects to benefit butterflies and moths. Monitor spread of Small Skipper and Speckled Wood. Increase the recording effort for moths especially in the uplands, grasslands (including day-flying moths) and valley woodlands.	Butterfly Conservation Scotland
S5	Butterfly Conservation staff and volunteers promote the creation of Wild Spaces in Edinburgh. These are places where butterflies and moths can feed, breed and shelter, with a focus on the planting of species (wildflowers, trees and shrubs) that their caterpillars eat. Wild Spaces can be in private gardens and businesses, and public areas such as parks.'	Butterfly Conservation Scotland
S6	Raise awareness of biological recording, and the monitoring of priority species and habitats in Edinburgh through events such as City Nature Challenge, bioblitzes and volunteer training.	RSPB
S7	Butterfly Conservation staff and volunteers to promote targeted monitoring of Grayling and Northern Brown Argus butterflies wherever they occur in Edinburgh.	Butterfly Conservation Scotland, Historic Environment Scotland Ranger Service, CEC Place (Natural Heritage Service)
S8	Use the Urban Flora Project to promote and raise awareness and understanding of recording plants in urban areas.	Botanical Society of Scotland
S9	Promote the annual New Year Plant Hunt across Edinburgh, encouraging citizens to take part.	BSBI, Edinburgh Biodiversity Partnership.
S10	Edinburgh Natural History Society will continue to monitor the Field Gentians at Hound Point.	Edinburgh Natural History Society
S11	Continue to monitor populations of terns breeding and nesting around the Firth of Forth, including the raft at Port Edgar. Look for oportunities to install further tern rafts.	RSPB, NatureScot, CEC Place (Planning), Forth Seabird Group
S12	Support an increase in the population of pond mud snails in Pentland Hills Regional Park through continued monitoring and additional releases to increase the population.	Royal Zoological Society Scotland, SWT, CEC Place (Natural Heritage Service)

S13	Identify opportunities to apply new eDNA techniques to species and site conservation projects.	Edinburgh Biodiversity Partnership
S14	Monitor known populations of Bordered Brown Lacewing in Holyrood Park to establish more about the ecology of this rare insect. Pass results to Buglife.	Historic Environment Scotland Ranger Service, Buglife
S15	Continue to plant endangered conifers on Council owned land through the Conifer Trust project.	Royal Botanic Garden Edinburgh, CEC Place (Parks)
S16	Carry out ex-situ conservation of rare Arran Whitebeam (Sorbus arranensis) species by planting on Council land as part of rare plants project.	Royal Botanic Garden Edinburgh, CEC Place (Parks)
S17	Continue to encourage members of the public to join Natural Heritage Officers on surveys - Breeding birds, green hairstreak, small pearl-bordered fritillary and wildflower meadows.	CEC Place (Natural Heritage Service)
S18	Continue breeding bird survey on Bonaly Moor at Bonaly Country Park as a way of monitoring heather management and contributing to national monitoring scheme.	CEC Place (Natural Heritage Service)
S19	Encourage student to research data collected from the Breeding Bird Survey (BBS).	CEC Place (Natural Heritage Service)
S20	Continue to carry out butterfly transects to build an understanding of changing populations and monitor habitats at the following Natural Heritage sites: Burdiehouse Burn LNR, Cammo Estate LNR, Meadows Yard LNR, Craigmillar Castle Park and Hermitage of Braid and Blackford Hill LNR.	CEC Place (Natural Heritage Service)
S21	Continue to utilise volunteers in the surveying of butterfly species on Natural Heritage sites.	CEC Place (Natural Heritage Service)
S22	Continue to monitor the known populations of Green Hairstreak in the PHRP via butterfly transects.	CEC Place (Natural Heritage Service)
S23	Increase knowledge of bee populations by undertaking bee transect recording at Natural Heritage sites.	CEC Place (Natural Heritage Service)
S24	Undertake annual survey for Bordered brown lacewing to establish ecology and distribution on Blackford Hill and other suitable habitats on Natural Heritage sites.	CEC Place (Natural Heritage Service)
S25	Continue to monitor the known population of Small Pearl-bordered Fritillary at Balerno Common SSSI via butterfly transects.	CEC Place (Natural Heritage Service)
S26	Encourage research into identifying habitat improvements to help species spread of Small Pearl-Bordered Fritillary	CEC Place (Natural Heritage Service)
S27	Continue to work with the Lothian Bat Group to monitor bats on CEC Natural Heritage sites.	CEC Place (Natural Heritage Service)

S28	Continue to pass all wildlife sightings and records to TWIC.	CEC Place (Natural Heritage Service)
S29	Attempt to establish new populations of Maiden Pink at historical sites around the city.	CEC Place (Natural Heritage Service)
S30	Establish new populations of rare plant priority species at historical sites.	CEC Place (Natural Heritage Service)
S32	Investigate additional locations for new woodland plantings e.g. Bonaly, Hillend Country Parks and work with landowners for new locations within PHRP.	CEC Place (Natural Heritage Service)
S33	Continue to monitor Juniper in Pentland Hills Regional Park.	CEC Place (Natural Heritage Service)
S34	Monitor and repair all raptor nest boxes in the Pentland Hills Regional Park	Lothian and Borders Raptor Study group, CEC Place (Natural Heritage Service), Friends of Pentland Hills Regional Park
S35	Increase the number of raptor nest boxes across the city.	Lothian and Borders Raptor Study group, CEC Place (Natural Heritage Service)
S36	Continue to monitor raptors through the Urban Sparrowhawk project.	Lothian and Borders Raptor Study Group
S37	Review rare plants list and scope future monitoring and habitat conservation work. Royal Botanic Garden Edinburgh to support with interpretation and re-introductions where appropriate.	CEC Place (Natural Heritage Service)
S38	Support rare plant conservation through seed collection, propagation and translocation work in collaboration with landowners and other partners.	Royal Botanic Garden Edinburgh, Historic Environment Scotland Ranger Service
S39	Establish more rare plant colonies on Wester Craiglockhart Hill and Blackford Hill.	CEC Place (Natural Heritage Service)
S40	Monitor and manage populations of Sticky Catchfly (Silene viscaria).	CEC Place (Natural Heritage Service)
S41	Identify opportunities and resources to capture baseline data for INNS on Council owned Parks and Greenspace land, i.e. Himalayan Balsam, Giant Hogweed, Japanese Knotweed. Include other areas such as cyclepaths and river corridors where possible.	CEC Place (Parks), RAFTS, SEPA, WOLCT.
S42	Remove, monitor and prevent the spread of Invasive plant species along the Water of Leith. Conclude research looking at practical alternative control methods of Giant Hogweed to herbicides. Using research findings develop an integrated INNS management plan specific to the WOL with a focus on reducing herbicide use. Continue the volunteer hand pulling Himalayan Balsam programme with the view to significantly reducing the riparian population.	Water of Leith Action Group, WOLCT, CEC Place (Parks), Napier University, SEPA etc

S43	Continue to implement the site management plan to benefit Small Pearl Bordered Fritillary at Red Moss Reserve and monitor the population.	SWT, Butterfly Conservation
S44	Progress the reintroduction of Pillwort at SWT Bawsinch reserve and monitor. Progress reintroduction at other historical sites.	SWT Lothians
S45	Increase knowledge of bee populations by recording the presence of bee species at Ranger-managed sites throughout Edinburgh, using bumblebee transects and other recording methods.	Historic Environment Scotland Ranger Service, CEC Place (Natural Heritage Service)
S46	Continue to carry out generic butterfly surveys to build an understanding of changing populations at the following managed sites: Holyrood Park, Cammo Estate LBS, Meadows Yard LNR, Craigmillar Castle Park and Hermitage of Braid and Blackford Hill LNR.	Historic Environment Scotland Ranger Service, CEC Place (Natural Heritage Service)
S47	Monitor scrub encroachment into areas of biting stonecrop, the larval foodplant of the stonecrop fanner (Glyphipterix equitella). Every five years, funding dependent, commission a specialist survey to establish if this nationally scarce micromoth remains extant within Holyrood.	Historic Environment Scotland Ranger Service, Edinburgh Biodiversity Partnership
S48	Survey for the presence of Northern Brown Argus (Aricia artaxerxes), a UKBAP Priority Species found at Holyrood Park and act to conserve known populations of Common Rock-rose (Helianthemum nummularium).	Historic Environment Scotland Ranger Service
S49	Continue to monitor known populations of the Wood Sage Plume Moth (Capperia britanniodactylus).	Historic Environment Scotland Ranger Service
S50	Monitor and act to conserve the known population of Adder's-tongue fern (Ophioglossum vulgatum) at Holyrood Park.	Historic Environment Scotland Ranger Service
S51	Monitor and act to conserve the existing and newly established populations of Maiden Pink at Holyrood Park.	Historic Environment Scotland Ranger Service
S52	Act to conserve known populations of Purple milk-vetch (Astragalus danicus), an Endangered and UKBAP Priority Species found in Holyrood Park, via control of encroaching scrub.	Historic Environment Scotland Ranger Service
S53	Manage habitats around confirmed Rock Whitebeam trees to reduce threat of fire damage.	Historic Environment Scotland Ranger Service

S54	Act to conserve known populations of the Nationally Rare, Scottish Biodiversity List mosses Sieve-toothed moss (Coscinodon cribrosus), Grimmia anodon (Critically endangered), Schsitidium confertum and the Nationally Scarce mosses Grimmia laevigata, Grimmia lisae, Grimmia montana and Schistidium pruinosum in Holyrood Park.	Historic Environment Scotland Ranger Service
S55	Act to conserve known populations of Spring Sandwort (Minuartia verna) in Holyrood Park. This species is Near Threatened and Nationally Scarce.	Historic Environment Scotland Ranger Service
S56	Act to conserve existing populations of Sticky Catchfly (Silene viscaria) at Holyrood Park.	Historic Environment Scotland Ranger Service
S57	Continue to monitor, advise and raise awareness of the badger population in Edinburgh.	Lothian Badger Group/Scottish Badgers, EBP
S58	Promote the sharing and use of biological records for the Edinburgh area so that environmental decision making is based on the best available data.	TWIC
S59	Promote recording at public events and through public wildlife surveys to encourage a greater participation in biological recording.	TWIC
S60	Continue to mobilise datasets to the National Biodiversity Network (NBN) Atlas Scotland for the Edinburgh area, including records from the City of Edinburgh Council.	TWIC, CEC Place
S65	Review rare plants list and scope future monitoring and habitat conservation work. Royal Botanic Garden Edinburgh to support with interpretation and re-introductions where appropriate.	CEC Place (Natural Heritage Service), Royal Botanic Garden Edinburgh, Historic Environment Scotland Ranger Service, BSBI
S66	Liaise with Historic Environment Scotland Ranger Service on seed collection for propagation by Inch Nursery as part of rare plants project.	CEC Place (Natural Heritage Service), Historic Environment Scotland Ranger Service
S67	Investigate and engage with stakeholders to determine options to tackle impassable fish barriers within the Water of Leith catchment. Use fish survey data to inform proposals.	WOLCT, WOLAG, SEPA
S68	Survey, record and monitor the presense of EBAP and European Protected Species on the Water of Leith and monitor their resilience to changes. Otter, bats, kingfishers, swifts, terns.	WOLCT

S69	Monitor freshwater invertebrate population in the Water of Leith using River Fly Monitoring.	WOLCT
S70	Expand the 2019 survey of potential brown trout spawning beds in the Water of Leith to cover the whole river.	
S71	Seek funding for an electro-fishing survey to establish the health and diversity of fish populations.	WOLCT
S72	Ensure protected and priority species are reflected in development plans, policies, strategies, projects and other activities as appropriate.	CEC Place (Planning) Edinburgh Adapts Steering Group, Edinburgh Living Landscapes Initiative, NatureScot
s73	Create and maintain wader scrape areas as part of habitat work at Lauriston Farm.	Edinburgh Agroecology Co-op
s74	Monitor known breeding ponds and carry out 'toad patrols' and site improvements as needed.	Lothian Amphibian and Reptile Group