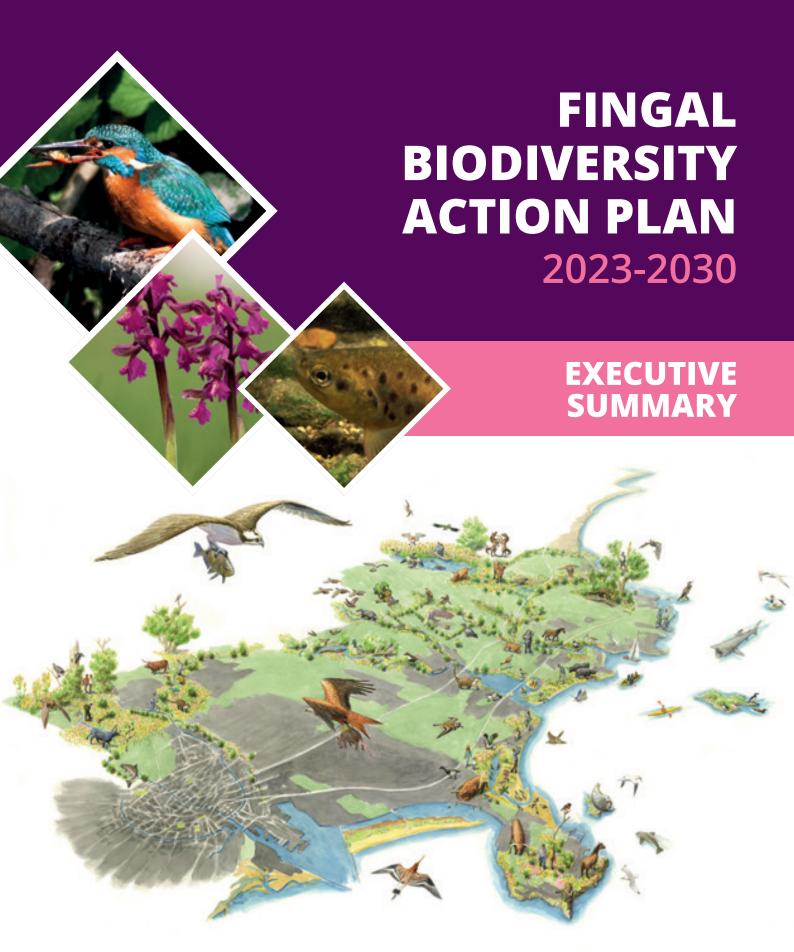
Comhairle Contae Fhine Gall Fingal County Council







FINGAL BIODIVERSITY ACTION PLAN

2023-2030

EXECUTIVE SUMMARY

Comhairle Contae Fhine Gall Fingal County Council







Biodiversity in Fingal

Biodiversity or 'Biological Diversity' is the variety of all life. Biodiversity includes all living things from the smallest of creatures such as ants to the mighty basking shark and from the tiniest algae to the giant oak trees. Biodiversity is not restricted to rare or threatened species, but includes the whole of the natural world from the commonplace to the critically endangered. Biodiversity also includes the range of places where plants and animals live, from the local park just around the corner to the world's deepest seas and oceans.

Our coastline, countryside and urban centres harbour a surprising variety of habitats, plants and animals, including many rare and protected habitats and wildlife species. This variety is the basis of our daily lives and livelihoods and makes up the resources which our families, communities and future generations depend upon. The coastline is our most important wildlife resource with most of the protected sites and protected wildlife species in the county found along our coast.

Biodiversity Loss in Fingal

Despite the important role Biodiversity plays in everyday life, there is a serious concern for biodiversity in Ireland and throughout the world. The pattern of biodiversity loss in Fingal mirrors the global pattern as our local habitats are lost and subject to degradation and species numbers have declined. The loss of biodiversity is considered a threat of equal size to the climate emergency. The main drivers of biodiversity loss in Fingal are habitat loss & fragmentation due to development, recreational disturbance, climate change, water pollution, lack of habitat management and alien invasive species.

The challenge for Fingal is to develop and grow in such a way which protects and enhances biodiversity for future generations. The Fingal Biodiversity Action Plan will provide a framework for biodiversity action for the next 8 years with the aim of halting the loss of biodiversity in Fingal. The primary purpose of the FBAP is to focus the efforts and resources of Fingal County Council and other nature conservation groups to respond to the escalating ecological crisis and climate emergency.

International and National Policy to Halt the Loss of Biodiversity

The UN and the EU have developed strategies to halt the loss of biodiversity by 2030. The UN Decade on Ecosystem Restoration aims to prevent, halt and reverse the degradation of ecosystems on every continent and in every ocean by 2030. The EU Biodiversity Strategy 2030 provides targets for all member states and has "We need nature in our lives" as its central message. It links the recovery of biodiversity to the recovery from economic recession, health threats and climate disasters. The Irish National Biodiversity Plan includes many nature conservation actions relevant for local authorities. Ireland's Biodiversity Sectoral Climate Change Adaptation Plan and the Fingal Climate Action Plan call for nature-based solutions to tackle the drivers and impacts of climate change.

The Fingal Biodiversity Action Plan translates national and international nature conservation and climate change policy into action on the ground. Ecosystem Restoration and Bringing Nature back into our Lives are important themes in the Fingal Biodiversity plan. The restoration of our terrestrial, freshwater and marine ecosystems in Fingal as well as working with local communities to enhance our urban environment for biodiversity, will be key priorities for the next 8 years.



It is 2030, and Fingal is teeming with life. Nature in the city, the countryside and the coast has clearly recovered. You can see it, hear it and smell it. We have a rich biodiversity of plants, insects, mammals, birds, amphibians, fish and soil life. The natural surroundings provide an attractive environment where people like to live, work and be outdoors. We need nature in our lives. We consider biodiversity conservation essential for our wellbeing and most importantly, we act accordingly. Central government, politicians and Council management are committed to halt the loss of biodiversity and have made the necessary staff and funding available to implement the Biodiversity Plan as we realized that nature-based solutions to some of society's key issues can provide multiple benefits and are therefore more cost effective. That we all managed to make a step-change is the result of new ideas, collective action and more innovative nature conservation models. The County Council, local residents, farmers, fishermen, NGO's, businesses, scientists and universities have all been working collectively to restore the species diversity in Fingal.

It was realised early on that Fingal can develop and grow while still protecting and enhancing biodiversity for future generations by developing an ecological network throughout the county to create an interconnected landscape through which wildlife can move freely and habitats and species are protected. The Council prepared management plans for all the designated sites in the county together with landowners, NGO's and the local community to protect and restore these sites. Hundreds of acres have been acquired by the Council near the estuaries and in the Liffey Valley to create new saltmarsh, wetlands and woodland that will act as carbon sinks to mitigate climate change, while also attenuating floodwaters and provide for recreational space. New carbon offsetting schemes have also been developed to facilitate the restoration of freshwater wetlands and woodland on private property.

EXECUTIVE SUMMARY

Developers, Architects, Engineers and Planners got up to speed quickly with the new Building for Biodiversity guidelines for new developments. As a result, many new housing estates, business parks, industrial estates and infrastructure projects include green roofs, green walls, nesting facilities for birds and bats, green carparking, wetlands and wildflower meadows. This helped us achieve an overall net biodiversity gain in most developments instead of a "No net loss of biodiversity". Open space management has become less intensive and pesticides are no longer used. People got used to the less manicured appearance of our open spaces and road verges and many residents made their gardens more wildlife friendly too. Schools, businesses and golf courses pride themselves on having hay meadows, ponds and woodland and a lot more wildlife on their grounds.

Our countryside remains an important food production area for the greater Dublin area with profitable farms where wildlife can thrive. Many farmers have broad field margins and use less intensive farming methods. Technical innovations and financial supports have allowed farmers to restore soil health and nutrient cycles and make their farms much more biodiversity friendly. Better quality and sustainability instead of higher productivity are the guiding principle for many farms. This has created more space on the farm for wildlife and has led to a major improvement of the quality of the water, soil and air, without affecting the income and viability of the farm.

Biodiversity Actions

The Fingal Biodiversity Action Plan puts forward an ambitious programme of a hundred actions to reverse the decline in biodiversity by 2030. The actions are based upon recommendations made in ecological studies and on proposals put forward by nature conservation NGO's, members of the public, the Public Participation Network, Strategic Policy Committee members and various Council Departments.

The actions in this plan are centred around six topics;

Delivery of the Ecological Network Across Fingal

About half of the actions relate to the development and management of an Ecological Network across Fingal. It is a network of habitats that are in good ecological condition, linking protected sites and other biodiversity hotspots across a wider nature-friendly farmed and urban landscape. This will create an interconnected landscape through which wildlife can move freely, and healthy populations of both rare and common species can be maintained.

The Ecological Network comprises of four elements:

- 1. Core nature conservation sites
- 2. Bufferzones around the core sites
- 3. Nature development areas
- 4. Ecological Corridors and stepping stones

A resilient ecological network is vital for the recovery of biodiversity. The network shall make provisions for recreational use, flood protection, climate change measures, farming and contributes to the quality of the living and working environment. The ecological network will thereby assist with the sustainable development of the countryside and towns in Fingal. By incorporating the Fingal Ecological Network in the County Development Plan, the network is fully integrated with spatial and land use planning.

Building for Biodiversity and Managing Open Space for Biodiversity

Although urban developments can lead to further habitat loss and fragmentation, there are also opportunities to undertake development in a way that will help to enhance biodiversity. Several technical and design guidance notes are to be prepared to inform developers, architects and engineers how nature can be incorporated in buildings, stormwater management and open spaces within a development. The Council will also undertake pilot projects in its own developments to gain more experience with building for biodiversity and share this experience with developers and other local authorities. Existing open space is also to be designed and managed in a more biodiversity friendly way.

Climate Change Adaptation and Mitigation

Nature is a vital ally in the fight against climate change. Without healthy and resilient ecosystems, it will not be possible to stabilise the climate or to adapt to the unavoidable impacts of climate change. Protecting and restoring ecosystems can help to reduce the impacts of climate change. This can be done by developing projects which address biodiversity loss and climate change adaptation and/or mitigation in an integrated manner. The restoration of carbon rich habitats such as saltmarsh, wetland and woodland will benefit many wildlife species, while these habitats can also sequester carbon, absorb floodwater and improve water quality.

Agri Environment Schemes and Rewilding

There are many options for farmers to support biodiversity on their farms to halt the loss of typical farmland species. The Council is keen to work with farmers to develop supportive measures along headlands of field to enhance their farms for wildlife, improve water quality and soil health through demonstration projects and agri-environment schemes. The Council is also keen to research the benefits of rewilding farmland for typical farmland species by means of undertaking a rewilding project and monitoring the results.

Research and Monitoring

The challenge of halting biodiversity loss must be underpinned by sound science. The Council has a legal responsibility to protect habitats and species listed in European and national legislation. It is therefore important to have a good understanding of the whereabouts and status of these habitats and species and to have this information incorporated into a GIS database to inform the planning process. A State of the Natural Environment Report for Fingal is to be prepared based on historical survey data and new studies. This will provide an overview of how our habitats and species are faring and what changes have occurred over the last 20 years. Monitoring the impacts of projects undertaken is also important to determine the success of the measures implemented to inform future projects.

Raising Awareness

Educating people of all ages about biodiversity and the essential role it plays in our society and economy is fundamental to the success of the Biodiversity Plan. The best way to learn about the natural environment is to be out in nature and through direct involvement in nature conservation projects. It is envisaged that a program of outdoor and online events, the development of a nature education centre, a wildlife gardening campaign and the revamping of Fingal biodiversity website as an online resource, will encourage people to take action and get involved.

Implementation of the Plan

The Fingal Biodiversity Action Plan sets out a hundred actions to achieve halting the loss of biodiversity by 2030 in Fingal. The delivery of the Biodiversity Plan and the associated Ecological Network are ambitious targets that require significant resources to be fully implemented. The Council has committed to resourcing the plan and setting up a Biodiversity team within the Planning and Strategic Infrastructure Department to ensure the implementation of all actions. Other departments within the Council will also be contribute to the implementation of the plan. A biodiversity forum will be set up that will be made up of various Council Departments, state agencies, nature conservation NGO's, councillors and community groups. This forum will determine the priority actions and oversee the overall implementation of the Fingal Biodiversity Action Plan.

Monitoring Progress

Annual reports will be prepared by the Biodiversity Officer reporting on progress in relation to implementing the Biodiversity Action Plan and achieving the targets set out in the plan. In 2027 a review will be carried out to assess the overall progress to date, and to make any amendments to the plan deemed necessary, taking into account any changes in terms of legislation, policies and conservation priorities.



Developing the Ecological Network

No.	Action	Objective	KPIs	Partners
1	Implement masterplan for Rogerstown Inner Estuary and prepare and implement masterplan for Rogerstown Outer Estuary.	To develop and implement a masterplan for the Rogerstown Estuary and surrounding lands with the aim of protecting and enhancing the qualifying habitats and species.	 Length of flood embankment removed, and acreage of new saltmarsh and brackish meadows created. Populations of qualifying interest species are stable or increasing. No loss of feeding and roosting sites on lands surrounding the estuary as a result of human disturbance. Populations of Green winged Orchid, Hairy Violet, Rough Poppy are stable or increasing. Population of breeding Lapwing and Skylark increasing. 	FCC, landowners, local community groups, Birdwatch, NPWS & DNFC
2	Continue to support Little Tern and Ringed Plover conservation project at tip of Portrane.	To protect Little Tern Colony at the Burrow, Portrane.	Population of Little tern and Ringed Plover increasing.	FCC, Birdwatch
3	Continue managing lands at the Burrow Portrane for Green winged orchid and Hairy Violet.	To protect the existing populations of Greenwinged orchid and Hairy violet.	 Lease on lands renewed. Population of Green winged Orchid and Hairy Violet stable or increasing. 	FCC & Landowner
4	Restore and enhance the Meadow Barley sites at the Rogerstown Estuary.	Restore population of Meadow Barley at Rogerstown Inner Estuary.	 Number of Meadow Barley sites subject to active restoration measures and enhanced measures. Meadow Barley numbers stable or increasing. 	FCC
5	Prepare and implement masterplan for Malahide Estuary SAC & SPA, including Cave's Marsh.	To develop and implement a masterplan for the Malahide Estuary and surrounding lands with the aim of protecting and enhancing the nature conservation and recreational values of this area.	 Populations of migratory birds such as Brent Goose, Black-tailed Godwit, Curlew, Lapwing, Redshank are stable or increasing. No loss of feeding and roosting sites on lands surrounding the estuary as a result of human disturbance. 	FCC & Landowner

No.	Action	Objective	KPIs	Partners
6	Develop artificial nesting platforms Malahide estuary.	To develop small floating platforms in the estuaries that will serve as secure nesting sites for seabirds.	 Number of floating devices installed. Number of Little Tern, Common Tern or Arctic tern using the platforms. 	FCC, Birdwatch, NPWS
7	Restore Wintering bird roosting site at Cave's Marsh in Malahide.	To restore the conservation status of the Malahide Estuary SPA.	 Number of measures installed to prevent access by people and dogs to key roosting site. Duration of stay and number of Brent Goose, Oystercatcher, Redshank, Bar Tailed godwit increasing. 	FCC, NPWS, Birdwatch
8	Organise clean- up of mudflats in Malahide Estuary once a year.	To remove rubbish from the mudflats.	Clean up of mudflat organised.	FCC, local volunteers
9	Maintain the verge along the coast Road between Portmarnock and Malahide as a wildflower meadow.	To continue the wildflower management project along the coast road.	Number of Pyramidal and bee orchids in verge.	FCC, TT
10	Prepare and implement masterplan for Baldoyle bay SAC & SPA.	To develop and implement the masterplan for the Baldoyle Bay and surrounding lands with the aim of protecting and enhancing the nature conservation and recreational values of this area.	 Populations of migratory birds such as Brent Goose, Black-tailed Godwit, Curlew, Lapwing, Redshank are stable or increasing. No loss of feeding and roosting sites on lands surrounding the estuary as a result of human disturbance. Racecourse Park Plan implemented. 	FCC, landowners, local community groups, Birdwatch, NPWS & DNFC
11	Lease or acquire the Sluice River Marsh for wildlife.	To protect and enhance the Sluice River Marsh NHA and its surrounding lands for protected plant species and migratory birds.	 Lands acquired or leased. Number of recommendations implemented from latest ecological study report. Breeding Stock Dove, Skylark, Grasshopper warbler, water rail numbers stable or increasing. Migratory birds number using the sites stable or increasing. 	FCC and landowner

No.	Action	Objective	KPIs	Partners
12	Develop and implement detailed management plan for the Howth Head SAC & SPA.	To develop and implement a management plan for Howth Head to restore this SAC to good ecological status.	 Management Plan for Howth Head SAC prepared. Vegetated sea cliffs and European dry heaths habitats restored to good ecological status. 	FCC, Howth SAAO committee, NPWS
13	Develop and implement Operational Plans for Howth Head SAAO and Liffey Valley SAAO.	To carry out studies and practical conservation work on heathland, wildfire management, wetland restoration and woodland management.	Number and percentage of prioritized actions implemented in both Operational Plans.	FCC, SAAO committees, NPWS
14	Support implementation of Dublin Bay Biosphere Nature Conser-vation Strategy, Education & Awareness strategy.	To carry out studies and practical conservation work outlined in the Biosphere strategy documents.	Number of FCC and joint actions implemented.	FCC, DCC , DLR, NPWS, DP, FI
15	Develop management plans for key winter bird sites identified in satellite tagging programs.	To ensure the protection of the most important feeding and roosting sites of qualifying interest species outside designated sites.	 Management plans prepared for key winter bird sites. Percentage of key sites actively managed for qualifying interest species. 	FCC, NPWS, Birdwatch Ireland, Brent Research Group
16	Prepare and implement masterplan for Tolka Valley Park.	To develop a masterplan that will combine recreational and nature conservation requirements in such a way, that allows both functions to be developed to their full potential.	 Masterplan for Tolka Valley Park prepared. Water quality status restored to good quality. Acreage of Orchid rich dry calcareous grassland protected and restored. Acreage of alluvial woodland created. Length of river habitat restored. Populations of Otter, Kingfisher, Dipper, Bats, Brown Trout and Badger are stable or increasing. 	FCC & Local Community groups

No.	Action	Objective	KPIs	Partners
17	Prepare and implement masterplan for Ward River Valley Park.	To prepare a masterplan that will combine recreational and nature conservation requirements in such a way, that allows both functions to be developed to their full potential.	 Masterplan for Tolka Valley Park prepared. Water quality status restored to good quality. Salmon spawning beds protected. Acreage of Orchid rich dry calcareous grassland protected and restored. Acreage of alluvial woodland created. Length of river habitat restored and number of artificial structures such as weirs removed. Populations of Otter, Kingfisher, Dipper, Bats, Salmon, Brown Trout and Badger are stable or increasing. 	FCC & Local Community groups
18	Prepare and implement masterplan for the linear park along the Mayne River together with Dublin City Council.	To prepare a masterplan that will combine recreational and nature conservation requirements in such a way, that allows both functions to be developed to their full potential.	 Masterplan prepared for Mayne River Green Corridor. Length of river habitat restored. Water quality status restored to good quality. Acreage of Alluvial woodland created. Populations of typical river species such as Otter, Kingfisher, Dipper, Bats, Lamprey, Brown Trout are stable or increasing. 	FCC, DCC, DAA & Local Community groups
19	Incorporate measures for biodiversity conservation in the management plans for a Regional Parks in Fingal.	To enhance the biodiversity potential of regional parks.	 Number of management plans developed for Fingal parks with specific recommendations for biodiversity conservation. 	FCC
20	Seek to establish an ecological corridor to link the Royal Canal, the Tolka River and the Liffey Valley.	To develop a network of wetland habitats linking the Liffey Valley with the Royal Canal and the Tolka Valley for Otter, Common Frog, Kingfisher, Bats, Green Figwort.	 Ecological corridor established. Number of target species using the corridor. 	FCC, Waterways Ireland, OPW
21	Seek to establish two wetland corridors between the river Liffey and the Royal Canal at Westmanstown	To develop a corridor of wetland habitats linking the Liffey Valley with the Royal Canal for Otter, Common Frog, Kingfisher, Dipper, all Bats.	 Wetland corridors established. Number of target species using the corridor. 	FCC & Landowners

No.	Action	Objective	KPIs	Partners
22	Establish a woodland corridor between St. Catherine's Park and Luttrelstown Demesne.	To expand and link the old woodlands in the Liffey Valley by planting new woodland for Common Pipistrelle, Soprano Pipistrelle, Leislers Bat, Natterer's bat, Whiskered bat, Brown Long-eared bat, Red Squirrel, Badger, Pine marten, Spotted flycatcher.	 Wetland corridors established. Number of target species using the corridor. 	FCC
23	Liaise with landowners to explore possibilities of introducing grazing management in Liffey floodplain at Strawberry beds.	To establish low-intensity grazing regime on Liffey Valley floodplain.	 Number of floodplain sites along the Liffey in Fingal subject to a lease or conservation grazing agreement with a local farmer. Acreage of new Alluvial woodland, Wet grassland, Freshwater marsh and Ponds. Numbers of Otter, Common Frog, Common Newt, Kingfisher, Green Figwort, various bat species found on newly managed sites. 	FCC & Landowners
24	Seek to establish an ecological corridor between the Tolka and Ward rivers via the Pinkeen stream.	To develop an ecological corridor of wetland and terrestrial habitats linking the Tolka River Valley and the Ward River Valley for Otter, Common Frog, Kingfisher, Dipper, Bats and Badger.	 Acreage of ecological corridor acquired. Acreage of ecological corridor developed and managed. Number of target species using the corridor. 	FCC
25	Manage linear calcareous grass- land strip along the Canal at Clonsilla.	To restore calcareous grassland at this site.	 Acreage of Calcareous grassland with orchid species that is restored. Numbers of Pyramidal and Common spotted orchid on site. 	FCC & Landowner
26	Control invasive species in Fingal.	To eradicate and control invasive flora and fauna species.	 Giant Hogweed, Japanese Knotweed & Himalayan Balsam eradicated throughout Fingal. Rhododendron Ponticum eradicated from Howth Head SAC on Howth. Cherry laurel, Snowberry and Bamboo eradicated from private pNHA woodlands and Council woodlands. 	FCC & Landowners

No.	Action	Objective	KPIs	Partners
			 Acreage of Seabuckthorn in dunes reduced by 75%. Hottentot fig and garden invasives eradicated from sea cliffs at Howth and Balbriggan. Control program undertaken every two years for Mink on all rivers in Fingal. 	
27	Prepare biodiversity plans for golf courses in conjunction with golf course owners to enhance their grounds for Biodiversity.	To protect and enhance the nature conservation value of the golf courses.	 Number of Biodiversity Plans prepared, and number of actions implemented for golf courses in Fingal. Populations stable or increasing of Hairy violet, Lesser Centaury, Green winged orchid, Bee orchid, Green flowered helleborine, Spring vetch, Sea bindweed, Skylark, Shelduck, Small Blue, Dark Green Fritillary and Grayling, Colletes floralis, Colletes similis, Osmia aurulenta, Andrena barbilabris, Bombus lapidarius, B. muscorum. 	FCC and golf course owners
28	Work together with quarry owners to develop biodiversity plans for quarries to enhance these sites for Biodiversity.	To protect and enhance the nature conservation value of the quarries with a focus on orchid rich calcareous grassland, Peregrine Falcon, Sand martin and amphibians.	 Number of Biodiversity Plans prepared for Quarries. Number of actions implemented. 	FCC and quarry owners

Building for Biodiversity

No.	Action	Objective	KPIs	Partners
29	Prepare planning & design guidance for incorporating nesting facilities in building facades.	To maximise nesting opportunities arising from new developments for Swift, House Sparrow, House Martin, Swallow, Bats & insects.	 Guidance document produced. Number of sites where nesting facilities have been incorporated. 	FCC, DCC, DLR, Birdwatch, BCI, NPWS

No.	Action	Objective	KPIs	Partners
30	Prepare guidance document and training on quality rating and management prescription of hedgerows in open space for FCC Operations and developers.	To provide guidance on the protection and management hedgerows during planning process and in open space management.	 Guidance document produced. Number of training events organized and numbers of attendees at training events. Length of hedgerow managed appropriately on FCC owned open space. 	FCC, DCC, DLR, HA, TTs
31	Prepare promotional guidance on how to incorporate biodiversity in development and infrastructure projects.	To promote biodiversity conservation in residential, industrial, commercial and infrastructure developments.	Guidance document produced.	FCC, DCC, DLR, Birdwatch, BCI
32	Prepare planning and design guidance for ecological corridors.	To provide technical specification for ecological corridors along rivers and terrestrial sites.	Guidance document produced.	FCC, DCC, DLR, BCI, Birdwatch, IFI, NPWS
33	Prepare planning and design guidance on net biodiversity gain.	To inform the Council on how to incorporate net biodiversity gain in the planning process.	 Guidance document produced. Number of sites where net biodiversity gain has been applied and achieved. 	FCC, DCC, DLR
34	Organise a conference on Building for Biodiversity/ Nature inclusive design.	To organize at least 1 conference promoting best practice examples of nature inclusive design.	Conference organised.	FCC
35	Pilot a biodiversity inclusive design for a social housing estate with green roofs, green walls, wetland & pond SUDS, green carparking, nest boxes in facades, wildflower meadows and wildlife friendly shrubs and trees in open space.	To gain practical experience within the County Council with Building for Biodiversity and to allow for the monitoring of the impact of these measures on the flora and fauna in the new development.	Demonstration site developed of a social housing site where biodiversity inclusive design has been applied.	FCC

No.	Action	Objective	KPIs	Partners
36	All Council housing, parks and infrastructure projects to include biodiversity enhancement proposals.	To ensure that Council projects achieve at least no net loss and ideally a net biodiversity gain.	Number of Council projects where no biodiversity net loss has been achieved	FCC

Managing Open Space for Biodiversity

No.	Action	Objective	KPIs	Partners
37	Develop pesticide use policy for Fingal County Council.	Eliminate pesticide use in the Council where possible.	Policy document prepared and approved.	FCC
38	Support and promote All Ireland Pollinator Plan Actions for Councils and monitor resulting changes.	Increase by 20% the area of Council owned land that is managed with the objective of improving biodiversity.	 Acreage of FCC owned open space subject to wildflower management. Annual monitoring program for invertebrates established for key sites. 	FCC & TTs
39	Develop a grass maintenance policy for open spaces including options for grass disposal from wildflower meadows.	To reduce grass cutting frequency of open space where possible.	Policy document prepared and approved.	FCC
40	Implement Tidy Towns Biodiversity Action Plans.	To guide 23 TT group efforts for nature conservation.	 Annual number of actions implemented from Tidy towns Biodiversity plans. 	FCC & TT's
41	Organise and monitor the effects of a biodiversity makeover of 3 housing estates in Fingal in conjunction with local residents and FCC Operations Department.	To gain practical experience with managing open space and gardens for Biodiversity and to monitor of the impact of particular measures on flora and fauna.	 3 demonstration estates established. Annual monitoring program implemented. 	FCC

No.	Action	Objective	KPIs	Partners
42	Develop Urban greening Plans for Dublin 15, Swords and Balbriggan.	To prepare 3 Urban greening plans that outline biodiversity & green infrastructure enhancement opportunities in these towns.	 3 Urban Greening Plans prepared. Number of actions implemented from Urban Greening Plans. 	FCC

Woodland and Wetland Projects - Climate Change Adaptation and Mitigation

No.	Action	Objective	KPIs	Partners
43	Prepare wetland and river restoration project for the Bog of the Ring and the Matt river corridor.	To restore wetland river habitat and improve water quality to good status and capture carbon.	 Restoration plan prepared. % of actions from restoration plan implemented. Acreage of land acquired for wetland and river restoration. Water Quality status of Matt river improved. Length of river corridor restored. Populations of target species stable or increasing: Otter, Kingfisher, Dipper, Bats, Amphibians, Snipe, Grasshopper warbler & Water rail. 	FCC and local community
44	Develop St. lta's local nature reserve.	Maximise water attenuation capacity and nature conservation benefits.	 Two roads removed from wetland. Number of new habitat features added. Populations of target species stable or increasing.	FCC & HSE
45	Develop SUDS demonstration sites in the Tolka Valley, Ward River Valley, Balbriggan town Park and Rogerstown estuary.	To gain experience with using wetlands to treat surface water effluent to improve water quality.	 The number of demonstration sites developed. The water quality status of the adjoining river and the outflow of the SUDS features. 	FCC

No.	Action	Objective	KPIs	Partners
46	Prepare and implement woodland management plans in Fingal Demesnes and parks.	To enhance the nature conservation value of the woodlands in Fingal.	 Number of woodland management plans prepared. Number of actions implemented at each site. Populations of target species are stable or increasing: Hairy St. John'swort, Yellow archangel, Common Pipistrelle, Soprano Pipistrelle, Leislers Bat, Natterer's bat, Whiskered bat, Brown Long-eared bat, Spotted flycatcher. 	FCC
47	Acquire sites for woodland planting at St. Catherine's park and Ardgillan Demesne and prepare masterplans for the design of these woodlands.	To expand existing woodland cover and regional parks.	 Acreage of land acquired for new woodland planting. Two masterplans prepared for new woodland sites. Acreage of new woodland planted. 	FCC
48	Identify and acquire where possible, Climate buffer sites where flood defence features can be removed or relocated to increase flood capacity of rivers and estuaries.	To increase flood capacity of rivers and estuaries, restore natural dynamics, restore floodplain habitat & capture carbon.	 High potential climate buffer sites identified. Acreage of land acquired for increasing the floodplain capacity of rivers and estuaries. Number of projects implemented to develop the climate buffer sites. 	FCC
49	Prepare river restoration project for the Ballyboughal, Corduff, Delvin & Turvey rivers.	To restore river habitat and improve water quality to good status and capture carbon.	 River Restoration plans prepared. % of actions from restoration plans implemented. Acreage of land acquired for river restoration. Water Quality status of river improved. Length of river corridor restored. Populations of target species are stable or increasing: Otter, Kingfisher, Dipper, Bats, Brown Trout & Salmon. 	FCC and local community

No.	Action	Objective	KPIs	Partners
50	Carry out feasibility study to restore Garristown Bog and acquire lands where opportunities arise.	To establish if the former 300ha wetland can be restored.	 Feasibility study undertaken. Acreage of lands acquired for wetland restoration purposes. 	FCC and local community

Wilding

No.	Action	Objective	KPIs	Partners
51	Acquire and/ or lease lands at Rogerstown, Broadmeadow and Baldoyle estuaries.	To create more robust core sites, restore natural processes and allow for wilding opportunities.	 Acreage of land acquired or leased at estuaries. Number of wilding projects implemented on newly acquired lands. 	FCC and landowners
52	Support reintroduction of Osprey in Fingal and install artificial nest platforms near estuaries.	To establish a sustainable breeding population of Osprey along the Fingal coast.	 Osprey reintroduced in Fingal. Number of artificial nesting platforms installed. Numbers of breeding pairs of Osprey in Fingal. 	FCC, Golden Eagle Trust & Birdwatch
53	Wild FCC owned Corballis golf club lands to create natural Grey dunes (bad status in Ireland).	To restore at least 75% of the dune habitat at Corballis.	 Wilding project implemented. Acreage of good quality Grey dunes at Corballis. 	FCC
54	Acquire large area of farmland or work with farmer(s) for wilding project to create alternative natural habitat for declining typical farmland species.	To organize a demonstration project to showcase and assess the effectiveness of wilding farmland in enhancing the populations of declining farmland species.	 Acreage of farmland acquired or under cooperative agreement with local farmer for wilding demonstration project. Annual monitoring program implemented to establish effects on Yellowhammer, Tree Sparrow, Stock dove, Birds of Prey, Invertebrates and Bats. 	FCC and local farmer(s)
55	Organise and/or support a national conference on wilding.	To organize at least 1 conference promoting the use of wilding as a nature conservation tool.	Conference organised.	FCC

No.	Action	Objective	KPIs	Partners
56	Carry out feasibility studies of developing a Marine Protection Area along the Fingal Coast and on the restoration of Oyster beds, Shellfish beds, Seagrass beds and Kelp stands.	The feasibility studies will determine to what extent these marine habitats can be restored and what practical actions and steps are required to make such projects a success.	 Feasibility study undertaken for Marine Protected Area between Howth and Rush. Feasibility studies undertaken of restoration potential for Oyster beds, Shellfish beds, Seagrass beds and Kelp stands. 	FCC, Marine Institute, UCD and fishing industry
57	Restore marine ecosystem along Fingal coast by supporting restoration projects of Oyster beds, Shellfish beds, Seagrass beds and Kelp stands.	To support or organize at least 2 projects to restore the marine ecosystem.	Number of sites and acreage of restored Oyster beds, Shellfish beds, Seagrass beds and Kelp stands.	FCC, Marine Institute, UCD and fishing industry

Agri-Environment Schemes and Irish Rare Farm Breed Conservation

No.	Action	Objective	KPIs	Partners
58	Develop Newbridge Farm as a national hub for the promotion of Irish rare farm breeds.	To support and promote the conservation of Irish rare farm breed.	 % of actions from Newbridge Rare Breeds Promotional Study implemented. Number of breeding females of Irish cattle, horses and sheep at Newbridge. 	FCC, DAFM, rare breed societies
59	Use native Irish farm breeds for conservation grazing schemes.	To support and promote the conservation of Irish rare farm breed.	 Number of sites where native livestock breeds are used for conservation grazing. 	FCC
60	Support the development of a national conservation strategy for rare farmland breeds.	To support and promote the conservation of Irish rare farm breed.	 Level of funding support provided towards national conservation strategy. 	FCC, DAFM, rare breed societies

No.	Action	Objective	KPIs	Partners
61	Develop a 400ha demonstration Agri-Environment EIP Scheme with local farmers in Fingal target-ing farmland birds and habitats and water quality improvement measures.	To implement conservation measures for farmland species & habitats and water quality improvement at landscape level.	 EIP project proposal submitted and approved. Number of farmers participating in scheme. Populations of target species stable or increasing: Grey Partridge, Yellowhammer, Tree Sparrow, Stock Dove, Bird of Prey, pollinators. 	FCC & Local farmers
62	Develop Bird of Prey Conservation project with local farmers including raising awareness of the impacts of Rodenticide use and its proper application.	To increase the Bird of Prey population of 4 species.	 Number of farmers participating in Bird of Prey project. Populations of target species stable or increasing: Red Kite, Buzzard, Barn owl, Kestrel and Long eared owl. 	FCC, Birdwatch & Local farmers
63	Develop demonstration farm(s) for biodiversity conservation e.g. hedgerow management, field margins, river management, soil improvement, Integrated pest management, nest boxes etc.	To set up a demonstration farm with a local farmer showcasing best practice for biodiversity conservation and monitoring effectiveness of measures.	 Demonstration farm set up. Number of visits by interested farmers. Populations of target species stable or increasing: Yellowhammer, Linnet, Tree Sparrow, Grey Partridge, Bats, Badger, Birds of Prey Andrena and Nomada ground nesting bee species. 	FCC, Local Farmer, Birdwatch, DNFC, BCI & Hedgelaying Association
64	Carry out feasibility study on local marketing of the produce from lands included in the ecological network.	To develop a regional market between farmers and consumers for local wood, fruit, veg and meat etc.	 Feasibility study undertaken. Number of participating landowners. 	FCC

Research & Monitoring

No.	Action	Objective	KPIs	Partners
65	Fund satellite tracking studies of winter birds listed as qualifying features in SPA's.	To identify key roosting and feeding sites of qualifying species outside the estuaries.	 Key feeding and roosting sites identified outside designated sites for Brent Goose, Golden Plover, Oystercatcher, Redshank, Black-tailed Godwit and Curlew. 	FCC, Exeter University
66	Carry out population assessments of wintering birds in estuaries.	To determine population trends of qualifying species.	 Assessment carried out for all qualifying bird species associated with estuarine SPAs. 	FCC , Birdwatch
67	Repeat rare and protected flora study along the Fingal coast.	To provide new flora data for state of environment report.	Coastal rare and protected flora study repeated and report(s) produced.	FCC
68	Carry out Otter survey all of rivers in Fingal.	To determine if Otters are still present along all Fingal rivers.	Otter survey of all Fingal rivers undertaken and report produced.	FCC, LAWPRO
69	Carry out urban bird and bat survey.	To determine the presence of breeding birds in urban areas.	 Number of towns that are included in the urban bird and bat studies Number of records submitted by the public. 	FCC, Birdwatch, BCl, TT's
70	Undertake study to identify the habitats and species at risk of climate change.	To determine which species and habitats are most at risk from climate change and where they are located.	Study undertaken and report with map of habitats at risk produced.	FCC, Universities
71	Explore funding models for carbon offsetting to fund wetland and woodland development.	To find alternative funding sources to fund wetland and woodland creation.	 Funding models identified. Number of projects implemented using new funding models. 	FCC, CARO
72	Map petrifying springs on the green infrastructure maps.	To help protect petrifying springs from adverse developments.	Petrifying springs mapped and incorporated on green infrastructure maps.	FCC
73	Re assess Annex I habitats outside designated sites.	To determine the conservation status of the Annex I habitats.	 All sites revisited and assessed. Green Infrastructure maps updated in County Development Plan. 	FCC

No.	Action	Objective	KPIs	Partners
74	Map townland boundary hedgerows on green infrastructure maps.	To help protect the most important hedgerows from adverse developments.	All townland boundaries mapped and incorporated on Green Infrastructure maps.	FCC
75	Carry out or support Harbour Porpoise research program along Dublin Coast.	To identify the key feeding and breeding areas within the Rockabill to Dalkey Island SAC.	Research program carried out and report published.	FCC, NPWS, UCC
76	Review beach management practices of FCC in context of management of SAC's and SPA's.	To assess the impact of beach cleaning operations on the ecology of the beach and dunes habitats and associated flora & fauna species.	Beach cleaning operations reviewed and amended where necessary.	FCC
77	Prepare a State of the natural environment in Fingal report.	To provide an overview of the state of the natural environment in Fingal based on a comparison of historical and new survey work.	State of the natural environment in Fingal report prepared.	FCC
78	Repeat coastal breeding bird study.	To provide new bird data for state of environment report.	Breeding bird study repeated and report(s) produced.	FCC, Birdwatch
79	Repeat Intertidal study of the Fingal Coast.	To provide new intertidal data for state of environment report.	Intertidal study repeated and report(s) produced.	FCC
80	Repeat woodland bird, mammal and rare plant survey.	To provide new woodland data for state of environment report.	Woodland studies repeated and report(s) produced.	FCC
81	Carry out Countryside Breeding bird survey.	To provide new countryside bird data for state of environment report.	Countryside Breeding Bird survey completed and report produced.	FCC, Birdwatch
82	Carry out Countryside Mammal Survey.	To provide new mammal data for state of environment report.	Countryside Mammal survey completed and report produced.	FCC, BCI

No.	Action	Objective	KPIs	Partners
83	Carry out Fungi Surveys in Turvey, Luttrelstown, Knockmaroon, Santry and Malahide Demesne.	To locate the most important locations for fungi in these woodlands and provide new data for state of environment report.	Fungi surveys completed and report(s) produced.	FCC, DNFC
84	Undertake surveys of obstacles to fish passage for freshwater migratory fish species and identify mitigation options on all rivers.	To improve migration for salmon, trout, eel, and lamprey.	 Number of rivers subject to survey. Number of obstacles removed. Presence of Sea trout above obstacle. 	FCC, Inland Fisheries, OPW
85	Carry out an ecological study and habi-tat assessment of the Delvin, Ballyboughal, Corduff, Turvey, Mayne, Sluice and Matt rivers.	To find out what flora & fauna species can be found along our rivers, what the conservation status is of our rivers and what works are required to restore the rivers to their full health.	Number of rivers surveyed and reports prepared.	FCC, LAWPRO
86	Carry out flora study and breeding bird study of the Skerries Islands.	To find out what flora species can be found on the islands and how the breeding seabirds are faring.	Flora and breeding bird survey undertaken and report produced.	FCC, Birdwatch Ireland
87	Carry out breeding bird, flora and invertebrate studies in Turvey Nature Reserve, Donabate.	To determine the effects of land management changes in the park.	 Breeding bird, flora and invertebrate studies undertaken and reports produced. 	FCC
88	Carry out feasibility study for bird conservation projects at the tips of the Donabate & Portmarnock peninsulas.	To assess the potential for the reinstatement of a Little Tern and Ringed Plover colony at Donabate and Portmarnock.	 Feasibility study undertaken. Number of proposed actions in study implemented. 	FCC, Birdwatch
89	Assess lands adjacent to estuaries for breeding potential for Redshank, Snipe and Lapwing.	Identify and protect potential breeding sites for Redshank, Snipe and Lapwing.	Field studies undertaken and report produced.	FCC, Birdwatch

No.	Action	Objective	KPIs	Partners
90	Support Eco- toxicology studies on farmland.	To research the impacts of the use of pesticides on farmland species.	Number of research projects funded by the Council.	FCC, universities
91	Carry out ecological study of the large open water bodies and reservoirs in Fingal.	To find out what flora & fauna species can be found in the large standing water bodies.	Field studies undertaken and report produced.	FCC
92	Establish a monitoring programme on coastal dynamics along the Fingal Coast.	To gain a better understanding of the natural sedimentation and erosion processes that occur along the Fingal coastline.	 Coastal monitoring program established. Results published every two years. 	FCC, local community groups and specialists

Raising Awareness

No.	Action	Objective	KPIs	Partners
93	Re-develop Fingal Biodiversity website and social media channels.	Re-develop website to promote latest research, projects volunteering work and events.	Fingal Biodiversity Website re-developed.	FCC
94	Organise a monthly program of events e.g. walks, talks and practical conservation outings.	Organise at least 20 outings per year.	 Number of outings organized per year. Number of attendees to events. 	FCC
95	Develop a Nature Education Centre for Dublin in Turvey Nature Park.	To provide a dedicated nature education centre for Dublin.	 Nature Education Centre developed at Turvey. Number of annual visitors. 	FCC
96	Develop a promotional program on what people can do for wildlife in their garden.	To encourage the public to make their gardens more biodiversity friendly.	 Promotional program developed. Online tutorials included in Fingal Biodiversity website. 	FCC, local garden centres
97	Run a nature education program for primary and secondary schools.	Provide multi-annual nature education program to at least 20 schools.	 Number of schools participating in program. Number of students participating in program. 	FCC

Raising Awareness

No.	Action	Objective	KPIs	Partners
98	Include biodiversity corner at Flavours of Fingal festival.	to promote conservation work by FCC and other groups.	Number of events attended.	FCC, NGO's, Tidy towns
99	Organise training days for County Council staff and politicians regarding biodiversity.	To educate staff and politicians about biodiversity e.g. building for biodiversity, rewilding, & appropriate assessment.	 Number of training days organized. Number of attendees at training events. 	FCC
100	Develop operational procedures with respect to Council work that may impact on SAC's and SPA's and protected species.	To avoid damaging SAC's and SPAs and protected species as a result of Council activities.	Operational procedures developed for Operations and Water Services Departments.	FCC





Comhairle Contae Fhine Gall Fingal County Council



Fingal County Council, County Hall, Swords, Co. Dublin K67 X8Y2