

ClimatEvolution Vision and Action Programme

Habitat Regulations Appraisal

East Lothian Council

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1. Introduction

1.1 Overview

Under the Habitat Regulations, East Lothian Council (ELC) as competent authority must consider whether any project or plan will have a 'likely significant effect' on a Natura 2000 site¹. The competent authority, with advice from Scottish Natural Heritage (SNH), will only provide planning permission when an application can be shown to have no adverse effects on a Natura site's integrity through Habitats Regulations Appraisal (HRA).

As part of the East Lothian Local Development Plan 2018 the Council allocated considerable areas of land in the west of East Lothian for housing and employment (including areas around Tranent, Musselburgh, Prestonpans and the new development at the former Blindwells opencast site). The ELLDP also safeguarded land for potential future development in a larger site to the east of Blindwells. The closure of the former Cockenzie Power Station, and the subsequent purchase by the Council of this site, is a further large scale opportunity for re-development. To balance the scale of development proposed, the Council recognised the desirability of enhancing the surrounding natural environment, providing good access to outdoor recreation and ensuring the existing areas and communities benefit from the new development. The Council therefore commissioned a vision and action plan for the area around these developments within the context of the Climate Emergency. The proposal is to create a destination parkland, providing connections within and between communities and creating and enhancing the blue-green infrastructure.

1.2 Scope of this report

The aim of this Habitats Regulations Appraisal (HRA) and Appropriate Assessment (AA) is to determine whether the proposed Vision and Action Plan for ClimatEvolution will have a likely significant effect on the integrity of one or more European designated sites. This report will consider the potential impacts both alone, and in combination with other plans or projects. As the ClimatEvolution Programme is a high level strategy identifying potential opportunities, this report will screen the plan as a whole rather than individual projects. This report should be read in conjunction with the Strategic Environmental Assessment Environmental Report for the strategy.

1.3 Limitations

This HRA and Appropriate Assessment considers the ClimatEvolution Programme, which has been written following the plans, strategies and policies as set out in the East Lothian Local Development Plan (ELLDP) 2018. It is assumed that all decisions related to the area going forward will be made in accordance with the ClimatEvolution Programme, however the actual impacts of the ClimatEvolution Programme will depend on the consistency of this approach and which projects are taken forward. In accordance with the SEA, it is therefore not possible at this stage to establish the detailed impacts of the proposed development. The focus of this report is to predict the likely significant effect of the plan; where relevant project level proposals emerge these may be subject to Environment Impact Assessment and further Habitat Regulations Appraisal.



1.4 Legislation and Guidance

The European Union Council Directive 92/43/EEC, also known as the 'Habitats Directive', in addition to the Birds Directive (2009/147/EC) protect natural habitats and wild flora and fauna through the establishment of Natura Sites including Special Areas of Conservation (SAC) and Special Protection Areas (SPA).

The Habitats Directive is translated into legal obligations in Scotland under the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended). Under the Habitats Regulations, the effect of proposals on Natura sites must be considered through a process commonly known as 'Habitats Regulations Appraisal'.

Following a European Court ruling in 2018, it is clear that mitigation measures to reduce the impact of a proposed development cannot into account at the screening stage; however these measures can be included in a Stage 2 Appropriate Assessment.

1.5 Habitats Regulations Appraisal Process

The European Commission guidance² on the provision of Article 6 of the Habitats Directive recommends a four-stage approach when carrying out a Habitats Regulations Appraisal. Each stage determines whether the next stage of the process is required. These stages can be summarised as follows:

Stage 1 – Screening

Where the proposal is not related to site management for nature conservation, it will be screened to determine whether a plan or project is likely to have a significant impact on a European site either alone or in combination with other plans and projects.

Projects and plans can be screened out if:

- There is no ecological connectivity to the site's qualifying features
- The work won't undermine the conservation objectives for the qualifying interest

Stage 2 – Appropriate Assessment

If likely significant effects are identified at Stage 1, Stage 2 considers whether the proposal will adversely affect the integrity of the site, taking into account the conservation objectives. The Appropriate Assessment also identifies any potential mitigation and standard control measures where there is potential for significant effects.

Stage 3 – Assessment of Alternative Solutions

Where likely significant effects cannot be removed at Stage 2, but the competent authority wish to proceed, Stage 3 must be carried out. Stage 3 identifies alternative solutions which meet the objectives of the project or plan without causing significant impacts on the integrity of the European sites.

Stage 4 – Assessment where no Alternative Solutions Exist and where Adverse Impacts remain



Stage 4 requires an overriding public interest for undertaking the plan or project despite the likely significant effects on the integrity of the European site. There are three tests which must be assessed before such plans can be approved:

- No alternative solutions are available which reduce the likelihood of a significant impact
- There are imperative reasons of overriding public interest (IROPI) for the plan or project to proceed
- Compensatory measures are identified to ensure that the overall coherence of the site is maintained. These must be clearly distinguished from mitigation measures.

1.6 Methodology

A desk based assessment was undertaken utilising ornithological data obtained from the following sources:

- Wetland Bird Survey (WeBS)
- East Lothian Council Goose Survey
- East Lothian Council ad hoc bird survey
- Bird Survey conducted for LDP2
- SNH Count data for supporting habitat

Site descriptions for the relevant Natura 2000 sites and other relevant information were obtained using the SNH Sitelink and JNCC websites.

1.7 Identification of European Sites

The Habitats Regulations Appraisal needs to consider all European Sites that may be affected by a plan or project. The following European sites are within 20km of the ClimatEvolution strategy area:

- Firth of Forth SPA
- Forth Islands SPA
- Outer Forth and St Andrews Bay Complex pSPA
- Imperial Dock Lock, Leith SPA
- Fala Flow SPA
- River Tweed SAC

Screening of the potential effects on the above European Sites was undertaken as part of the SEA process. This screening concluded that there was no connectivity between the strategy area and five of the above European sites and therefore no likely significant effects were expected on these sites as a result of ClimatEvolution. These sites will not be considered further within this assessment.

The screening process concluded that there was a likely significant effect on the Firth of Forth SPA. The potential impacts on this site will therefore be considered below.



2. Firth of Forth SPA

The Firth of Forth Special Protection Area (SPA) (EU Code: UK9004411)³ is a complex area of estuarine and coastal habitats, stretching along the River Forth from Alloa to the coasts of Fife and East Lothian. The documented area of the site is 6313.72 ha⁵.

2.1 Key Features

The Firth of Forth includes extensive invertebrate-rich intertidal flats and rocky shores, with a range of habitats including saltmarsh, lagoons and sand dune. The Firth is of major importance for an assemblage of water fowl. The SPA is underpinned by the Firth of Forth Site of Special Scientific Interest (SSSI) and slightly overlaps with the Forth Islands SPA.

The Firth of Forth SPA qualifies under ARTICLE 4.1 by regularly supporting over-wintering populations of European importance of the ANNEX 1 species: Red-throated Diver (*Gavia stellata*), Slavonian Grebe (*Podiceps auritus*), Golden Plover (*Pluvialis apricaria*), and Bar-tailed Godwit (*Limosa lapponica*).

The site further qualifies under ARTICLE 4.1 by regularly supporting a passage population of European importance of the ANNEX 1 species: Sandwich Tern *(Sterna sandvicensis)*.

The Firth of Forth SPA qualifies under ARTICLE 4.2 by regularly supporting over-wintering populations of European importance of the MIGRATORY species: Pink-footed Goose (*Anser brachyrhynchus*), Shelduck (*Tadorna tadorna*), Knot (*Calidris canutus*), Redshank (*Tringa totanus*), and Turnstone (*Arenaria interpres*).

The Firth of Forth SPA also qualifies under ARTICLE 4.2 by regularly supporting IN EXCESS OF 20,000 INDIVIDUAL WATERFOWL, including nationally important populations of the following species: Scaup (Aythya marila), Slavonian Grebe, Golden Plover, Bar-tailed Godwit, Pink-footed Goose, Shelduck, Knot, Redshank, Turnstone, Great Crested Grebe (Podiceps cristatus), Cormorant (Phalacrocorax carbo), Red-throated Diver, Curlew (Numenius arquata), Eider (Somateria mollissima), Long-tailed duck (Clangula hyemalis), Common Scoter (Melanitta nigra), Velvet Scoter (Melanitta fusca), Goldeneye (Bucephala clangula), Red-breasted Merganser (Mergus serrator), Oystercatcher (Haematopus ostralegus), Ringer Plover (Charadrius hiaticula), Grey Plover (Pluvialus squatarola), Dunlin (Calidris alpina alpina), Mallard (Anas platyrhynchos), Lapwing (Vanellus vanellus), and Wigeon (Anas penelope).

2.2 Conservation Objectives

To avoid deterioration of the habitats of the qualifying species (listed above) or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained; and

To ensure for the qualifying species that the following are maintained in the long term:

- Population of the species as a viable component of the site
- Distribution of the species within site
- Distribution and extent of habitats supporting the species
- Structure, function and supporting processes of habitats supporting the species
- No significant disturbance of the species



2.3 Vulnerabilities

Negative pressures on the qualifying features of the Firth of Forth SPA as identified by SNH⁵ include:

- Climate Change
- Recreation/disturbance
- Water quality
- Game/fisheries management
- Natural events

2.4 Site Condition

The condition of the SPA was last assessed by SNH in March 2015. The condition of each qualifying feature is outlined in Table 1.

Qualifying Feature	Condition	Date of Last Visit
Dunlin	Favourable Declining	1 st March 2015
Eider		
Grey Plover		
Lapwing		
Mallard		
Bar-tailed Godwit	Favourable Maintained	
Cormorant		
Curlew		
Oystercatcher		
Pint-footed goose		
Red-throated Diver		
Redshank		
Ringer plover		
Sandwich tern		
Shelduck		
Turnstone		
Velvet scoter		
Waterfowl assemblage, non-		
breeding		
Wigeon		
Common scoter	Unfavourable Declining	
Golden Plover		
Goldeneye		
Great crested grebe		
Knot		
Long-tailed duck		
Red-breasted merganser		
Scaup		
Slavonian grebe		

Table 1: Latest assessed condition of each qualifying feature of the Firth of Forth SPA



3. ClimatEvolution Vision & Action Programme

3.1 Overview

OPEN and PBA Stantec were appointed via a tendering process to produce the initial ClimatEvolution Programme, which sets out a high level strategy and vision for the potential future use and development of the land. This contains an outline of opportunities and ideas to guide future decision making. ClimatEvolution will integrate existing infrastructure and natural and cultural heritage assets with new elements to deliver benefits for people, places, the economy and the environment within the context of climate resilience and mitigation.

3.2 Strategy Area

ClimatEvolution is focused on the area between and around Prestonpans, Cockenzie, Port Seton, Tranent, Blindwells and Longniddry (Figure 1), however this boundary is not fixed to allow for flexibility as opportunities arise. The proposed site is located adjacent to Firth of Forth SPA at the closest point.



Figure 1: ClimatEvolution Area and Core Area

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4. Appropriate Assessment

4.1 Potential Impacts in the Absence of Mitigation

Likely significant effects are identified using the source-pathway-receptor model, where there would need to be a source of potential impact and a pathway to the European site or qualifying feature to enable an impact to occur. Effects can be both positive and negative.

The SPA has been designated as it supports significant populations of over-wintering bird and passage migrants (i.e. non-breeding populations). These species are highly mobile and can be found commuting between nesting/roosting sites and foraging habitat. Important habitats for these species can therefore be found both within and outwith the SPA boundary. Pink footed geese, for example, are considered to have a foraging range of between 15 and 20km.

It must be noted that ClimatEvolution considers the Firth of Forth SPA to be an asset to the strategy area, and notes that any project or plan that could adversely affect the integrity of the site cannot be approved. The Strategy proposes to enhance biodiversity within the area, and there may be projects which emerge that will have a positive impact on the SPA, or are related to the conservation management of the SPA. This will need to be determined at the project stage.

The key impact pathways between the strategy area and the Firth of Forth SPA relate to ornithological and hydrological connections; the agricultural fields within the area may provide foraging habitat for the qualifying bird species and there are a number of water bodies which outflow into the Firth of Forth. The main sources of impact have been identified as:

- Loss of, or disturbance whilst using, inland roost/foraging habitat
- Changes in water quality leading to deterioration of supporting habitats
- Disturbance through increased recreational pressure

Loss of habitat & disturbance of species

The ClimatEvolution programme includes proposals for over 40 projects ranging from geothermal energy generation to a wetland park. The site currently has a number of habitats including woodland, grassland, open water and arable agriculture; development of this area therefore could lead to loss of those habitats which support the qualifying species of the SPA.

As proposals are taking forward, there is also potential for disturbance of species through construction work with associated increase in noise levels. Any disturbance arising from construction will be localised and temporary in nature.

Changes in Water Quality

Given the proximity of the strategy area to the Firth of Forth and the hydrological connection, there exists a potential pathway for contamination/pollution. This could include both diffuse and point sources, arising from the change in land use, abstraction and the introduction of geothermal energy and the increase in waste matter (including silt and chemical pollution). The introduction of pollutants into the water system may reduce water quality and alter the distribution of aquatic species.



Recreational Impact

At the heart of ClimatEvolution is the desire to create a 'destination parkland' that will attract people to the area and provide a variety of recreational opportunities. The increase in visitors to the area has the potential to directly disturb qualifying interests, and may also result in habitat deterioration where the level or type of activity prevents or significant impacts any on-site conservation measures. The HRA and Appropriate Assessment for the LDP (2018) recognised the significant increase in the use of the East Lothian Coastline due to increased participation in outdoor activities, such as water sports and dog walking.

As ClimatEvolution was identified as having a likely significant effect on the Firth of Forth SPA, it must be subject to appropriate assessment.

4.2 Mitigation and Control Measures

The impacts as identified above will be both temporary and permanent, depending on the nature of the impact. Temporary impacts may arise during the construction phase, such as an increase in noise as a result of the use of equipment to undertake the works. Permanent impacts may arise once the development is complete due to the permanent loss of foraging habitat. Control measures will be in place to mitigate these impacts, and ensure that the ClimatEvolution does not adversely affect the integrity of the Firth of Forth SPA. Mitigation measures include:

- Provision for the enhancement of existing greenspace and creation of new habitat
- Promotion of the area as a destination parkland with appropriate facilities to attract visitors and recreational users
- Provision of rangers and visitor management measures to manage and monitor recreational access and species present on site
- Path creation and design to focus on linear routes linking in with existing active travel corridors and on-site circular walks for dog walkers
- Creation of a low disturbance zone within the area to be managed for wildlife
- Limiting access by car, and encouraging the use of public transport to access the area
- Production of a Surface Water Management Plan, including creation of Sustainable Drainage Systems

4.3 Assessment of Likely Impacts Affecting the Firth of Forth SPA

The appropriate assessment is based on existing survey information, with reference to existing policies and reports including the HRA and Appropriate Assessment for the LDP 2018. Bird survey data including surveys and ad hoc records undertaken by East Lothian Council Countryside team, and through the WeBS data has been used to identify the distribution of qualifying interests of the Firth of Forth and therefore assess the impact of ClimatEvolution on these species.

Loss of Habitat & Disturbance of Species

There will not be any direct loss of habitat within the SPA boundary, and the proposals to create wetland habitat has potential to provide valuable foraging habitat for the qualifying interests of the SPA. Bird survey data shows that limited numbers of bird species use the core area, therefore with mitigation measures in place the impact of ClimatEvolution is expected to be significantly reduced.



Changes in Water Quality

Water management is one of the core themes within ClimatEvolution, and the proposals include provision for water treatment with the dual aims of managing flood risk and improving water quality. None of the proposals foresee direct discharges into the Firth of Forth, and with mitigation measures in place water quality is expected to be maintained or enhanced.

Recreational Impact

The creation of this destination parkland may draw visitors away from coastal areas by providing comprehensive alternatives including high quality open space with appropriate supporting infrastructure; this will focus the attention away from sensitive areas and thus reducing the likelihood of disturbance.

After consideration of the above potential impacts, with the implementation of mitigation measures (as outlined in section 4.2) it is considered that ClimatEvolution **will not affect the integrity of the SPA**.

4.4 In-combination Effects

Where there are concurrent proposals or plans, the combined impacts can result in an overall significant effect on a European site even where any individual plan or proposal is found to not to affect the integrity of the site.

There is potential for cumulative impacts to occur from the following proposals:

- Blindwells new town development
- Housing allocations as part of the current LDP (2018)

A Habitat Regulations Appraisal was undertaken for the Blindwells new town development. Survey work submitted in support for this proposal found that very low numbers of qualifying species of the Firth of Forth SPA were using the site. Whilst there would be a total loss of habitat as a result of the development, this was found to be of minor significance. The HRA concluded that the Blindwells development would therefore have no significant effect on the Firth of Forth SPA either alone or in combination with other projects at the time. It must be noted, however, that SNH recommended that should significant changes occur, particularly with regard to the land allocation, an Appropriate Assessment would be required.

Similarly, a HRA and Appropriate Assessment was undertaken as part of the LDP process. This provided further discussion around the recreational impacts on the coastline as a result of housing development across East Lothian. The HRA concluded that with the inclusion of mitigation measures, the proposals outlined with the 2018 LDP would not have an adverse effect upon the integrity of the Firth of Forth SPA.

There may be further cumulative impacts from other policies which aim to attract visitors to the East Lothian coast. This is mitigated to a certain extent by visitor management measures implemented by the East Lothian Council Ranger Service.

It is therefore considered that these developments **will not result in a combined likely significant effect on the SPA** with the implementation of the recommended mitigation measures.



5. Outcome of Appropriate Assessment

It has been determined that ClimatEvolution is unlikely to have a significant effect on the Firth of Forth SPA or its qualifying features for the following reasons:

- The creation of a destination parkland at the heart of this proposal will draw visitors away from sensitive areas, thus reducing the likelihood of disturbance events
- Mitigation measures will ensure that any impacts are not detrimental to the SPA's qualifying features.

Additionally, no significant in-combination effects are anticipated from other developments.

Considering these factors, no likely significant impacts on the European site or its qualifying features are predicted, and the proposal will not affect the integrity or the conservation objectives of the site.



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Appendix A – Location Plan

