

East Lothian Council

# Draft Habitat Regulations Appraisal

Tree and Woodland Strategy

East Lothian Council Planning Service  
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# 1. Introduction

## Overview

The Tree and Woodland Strategy for East Lothian (TWSEL) has been developed by East Lothian Council to fulfil the legislative requirement under the Planning (Scotland) Act 2019. The TWSEL will replace the Lothian Forestry and Woodland Strategy 2013 – 2017. The strategy is intended to set out a long-term spatial and policy framework to guide the creation of woodland across East Lothian and support the sustainable management of existing and new woodlands. The Strategy has no end date but is intended to provide a framework for the next ten years, with the intention to review in line with Local Development Plan timescales.

This document is the Habitats Regulations Appraisal (HRA) of the Tree and Woodland Strategy for East Lothian.

## 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) aimed to protect natural habitats and wild flora and fauna through the establishment of European Sites including Special Areas of Conservation (SAC) and Special Protection Areas (SPA).

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

Article 6(3) of the EC Habitats Directive required that any plan (or project) which is not directly connected with or necessary to the management of the European Site, but would be likely to have a significant effect on said site, either individually or in combination with other plans or projects, shall be subject to an Appropriate Assessment of its implications for the European Site with regards to the site’s conservation objectives.

Following a European Court ruling in 2018 on the People Over Wind case (CECJ case C-323/17), mitigation measures to reduce the impact of a proposed development may no longer be taken into account at the screening stage. This is particularly concerned with proposals where mitigating measures may be applied at the screening stage in order to avoid or reduce likely significant effects on the European site, and therefore avoid the need for appropriate assessment; however, where mitigation is an intrinsic part of the development being assessed, these measures can be included at the likely significant effect stage.

HRA is a statutory requirement, and a plan making body may not adopt the plan unless it can be shown that the plan will not affect the integrity of the site. NatureScot must also be consulted as part of this process.

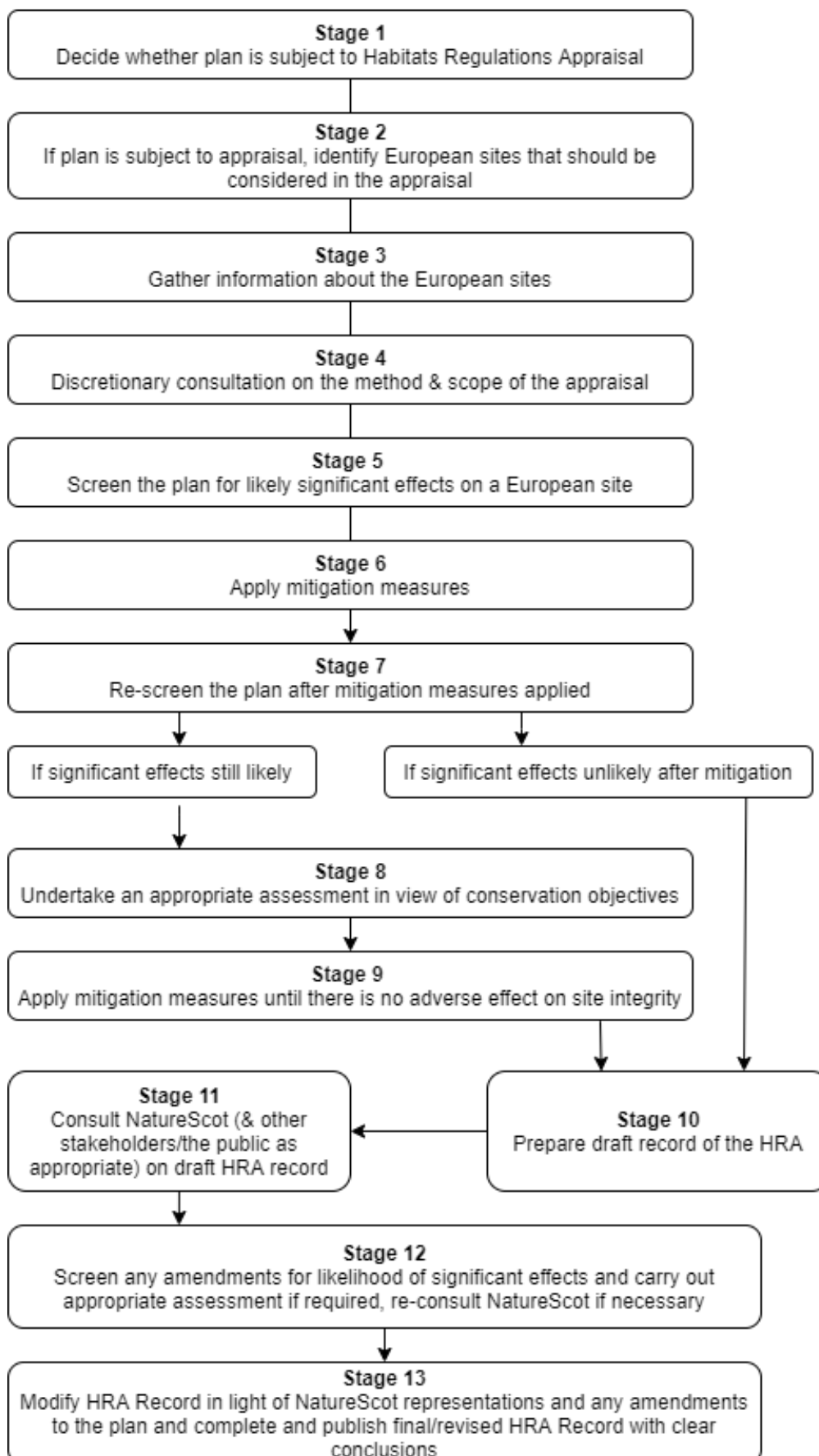
## Habitats Regulations Appraisal Process

A Habitats Regulations Appraisal is a multi-stage assessment that considers whether any plan or project that is not directly connected to the conservation of a European site will have a likely significant effect upon that site. This process includes identification of European sites, screening to determine if appropriate assessment is required, and where likely significant effects are identified the appropriate assessment itself. The plan should only be approved where it can be determined that it will not have, either alone or in combination with other plans or projects, an adverse effect upon the integrity of a European site.

Guidance on methods for undertaking plan-level has been prepared by David Tyldesley Associates on behalf of NatureScot (2015). This outlined a sequential approach for undertaking HRA in accordance with the Habitat Regulations, sub-dividing the process into 13 stages (Figure 1); these stages must be followed in the correct order. Before a conclusion can be reached, the competent authority should consult with NatureScot, the statutory nature conservation organisation.

This HRA has been prepared following the above guidance, and further informed by consultation with NatureScot. This report addresses each of the recommended 13 stages of the HRA process, including the Appropriate Assessment.

## Stages in Habitats Regulations Appraisal Process



## 2. Tree & Woodland Strategy

East Lothian's Tree and Woodland Strategy will help the Council address the climate and nature crises and guide the delivery of the East Lothian Climate Forest. It will promote sustainable woodland management and identify opportunities for woodland creation. The strategy covers all forms of tree and woodland, from small-scale tree planting to hedgerows and productive forestry.

The strategy:

- Sets out our long-term vision and our policies and proposals for trees and woodland
- Identifies woodlands of high nature conservation value.
- Shows how we will protect and enhance our trees and woodlands.
- Provides guidance to landowners and others seeking to manage woodland and plant trees and hedgerows.
- Provides guidance to developers for trees in and around their sites
- Provides advice for our people and communities who want to get involved with protecting trees or creating woodland

The Tree and Woodland Strategy has the overarching strategic vision that *“expanded and sustainably managed networks of woodland and trees across East Lothian contribute to addressing climate change, and provide healthy and resilient environment, nature recovery, a strong sustainable economy and enhanced quality of life for local communities”*

To support the delivery of this vision, seven strategic themes have been identified. Each theme has an aim and targets, and are supported by actions demonstrating how we intend to achieve these targets. The seven strategic themes and aims are:

- 1. Climate Change mitigation** – to increase the contribution that East Lothian's existing and future woodlands make to achieving net zero carbon in line with East Lothian Council and Scottish Government targets
- 2. Resilience and climate adaptation** – to increase resilience of East Lothian's environment and its woodland, including using trees and woodland to adapt to climate change
- 3. Biodiversity** – to work towards a more natural tree and woodland cover with thriving native flora and fauna, protecting, maintaining and connecting our distinctive native woodland types, and enhancing and connecting nature in our urban areas
- 4. Community** – to maximise the benefits for all people of trees and woodland for recreation, health, wellbeing and community including through placemaking
- 5. Economy** – trees and woodland contribute towards a sustainable and inclusive economy
- 6. Cultural Heritage** – to celebrate the role of trees and woodland as part of our cultural heritage and protect cultural heritage assets from harm from trees
- 7. Landscape Character** – to use trees to help retain and enhance the distinctiveness of landscape and settlement character within East Lothian

The Strategy is not directly related to the management of European Sites for their conservation interest. Therefore, it requires Habitat Regulation Appraisal.

### 3. Identification of European Sites

Habitats Regulations Appraisal needs to consider all European Sites that may be affected by a plan or project, including those that may be within other local authority areas. An initial sieve was carried out to determine if there is any connectivity between the site and the potential activity of tree and woodland strategy.

The main *potential* pathways – for an effect arising from the policies and actions of the TWSEL are considered to be:

- Direct effects on sites from habitat loss or changes to activity levels
- Loss of supporting habitat arising from woodland creation
- Changes to patterns of recreation and consequent disturbance
- Localised changes to water quality arising from woodland creation or forestry activity (silt or accidental spillage of pollutants)
- Changes to land cover altering distribution of invasive species, pathogens or wildfire
- Climate change mitigation (positive effect)

Bearing this in mind, European sites were identified to see if they needed further consideration of whether or not there is a likely significant effect. Sites were considered where:

1. Any part of their area within East Lothian
2. Any part of their area was within 20km of East Lothian
3. They contain mobile qualifying interest species that may use areas in East Lothian while at the site

The first two categories of site are considered in Table 1 below, the third in Table 2. No other sites were thought to be potentially affected there is no pathway for impact.

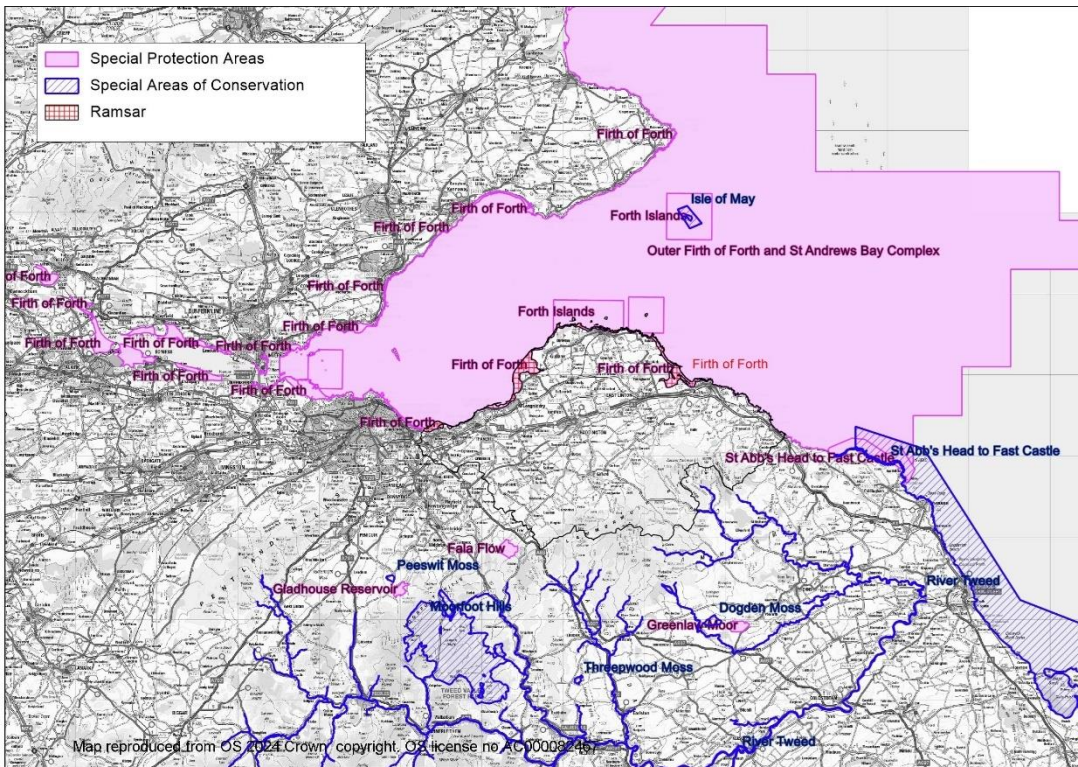
#### Sieving Exercise: Sites in or within 20km of East Lothian

European sites within 20km of the Tree & Woodland strategy area are:

Designation	Site Name
<b>Special Protection Area (SPA)</b>	Forth Islands
	Imperial Dock Lock, Leith
	Outer Firth of Forth and St Andrews Bay Complex
	St Abb's Head to Fast Castle
<b>SPA and Ramsar</b>	Fala Flow
	Firth of Forth
	Gladhouse Reservoir
	Greenlaw Moor
<b>Special Area of Conservation</b>	Berwickshire and North Northumberland Coast

Dogden Moss
Isle of May
Moorfoot Hills
Peeswit Moss
River Tweed
St Abb's Head to Fast Castle
Threepwood Moss

The locations of these sites in relation to East Lothian are shown on the map below. More detailed site location mapping is also available NatureScot's [Sitelink](#).



### Sieving Exercise Results: Sites in or within 20km of East Lothian

TABLE 1: Sieving exercise results for sites in or within 20km of East Lothian			
Site name/Reason for consideration	Interest	Negative pressures	Result, with reason
Firth of Forth SPA/ Ramsar	See Appendix 3	<p>Recreation/ Disturbance – Goldeneye, Knot, Mallard, Redshank; Waterfowl assemblage, Wigeon</p> <p>Recreation/ Disturbance – dog walking, walking Bar tailed Godwit, curlew, Eider, Grey Plover</p>	<b>Examine for LSE.</b> This SPA covers the intertidal area around the Firth of Forth, so partly falls within East Lothian. Some qualifying interest species use supporting habitat inland in East Lothian. Some are affected by changes to water quality.



		<p>Game/fisheries management - Cormorant, Waterfowl assemblage</p> <p>Climate Change - curlew, Goldeneye, Grey Plover, Knot, Mallard, Waterfowl assemblage</p> <p>Water Quality - Goldeneye,</p> <p>Natural event - Great crested grebe</p>	
Forth Islands SPA	See Appendix 3	<p>Inter-specific competition – Arctic Tern, Seabird assemblage</p> <p>Climate change – Guillemot, Kittiwake, Puffin, Razorbill, Seabird assemblage, Shag</p> <p>Game/fisheries management – Guillemot, Kittiwake, Puffin, Razorbill, Seabird assemblage</p> <p>Pro-active onsite management – Herring Gull</p> <p>Invasive species – Puffin, Seabird assemblage</p>	<p><b>Examine for LSE.</b> Parts of this site lie within East Lothian. There may be some use of supporting habitat of areas affected by the TWSEL by Herring Gull, Lesser Black Backed Gull, and Cormorant.</p>
Outer Firth of Forth and St Andrews Bay Complex SPA	See Appendix 3	<p>None</p> <p>Relevant sensitivities include: sensitivity to visual disturbance; prey availability; water clarity; oil pollution; chemical and oil pollution including small scale incidents; sudden loud noise; introduction of microbial pathogens; organochlorine pollution; disease (including avian flu); increase in turbidity of water; attraction to artificial light (Manx shearwater)</p>	<p><b>Examine for LSE.</b> This site very marginally overlaps with East Lothian in the intertidal zone. Black-headed gull, common gull, Herring Gull are likely to forage in inland areas. Cormorant and some of the duck species may also use nearby inland waters.</p>

Berwickshire and North Northumberland Coast SAC	Grey seal - Favourable Maintained	None	<b>No further consideration.</b> This site is around 8.5 km east of East Lothian. The site is considered too far for activities related to the strategy to affect the habitat qualifying interests. Grey Seal are mobile and do visit East Lothian's shores. The offshore area is a Seal Conservation Area, though for Common Seal rather than Grey. Scottish Grey seal east coast populations are increasing. Pressures include pathogens, toxins and contaminants, inter-species competition, changes in prey availability, underwater noise, disturbance and fisheries and aquaculture interactions. The pathway for the Strategy to affect these would be via water quality or changes to recreational patterns. Changes to water quality would be unintended, and likely to be localised and of short duration. The strategy is unlikely to change patterns of recreation such that it would affect the site due to the distance.
	Intertidal mudflats and sandflats  Reefs  Sea caves Shallow inlets and bays  - Condition not assessed		
Dogden Moss SAC	Active Raised Bog - Favourable Maintained	None	<b>No further consideration.</b> Dogden moss lies around 10.5 km south of East Lothian, not far from Greenlaw Moor SPA. The site is considered too distant from East Lothian for any activities related to the Strategy to affect the qualifying interest.
Fala Flow SPA Ramsar	Pink-footed Goose - Favourable Maintained	Water management	<b>Examine for LSE.</b> The SPA lies around 2km from East Lothian at its closest point. Pink footed goose from this site are known to visit East Lothian to forage ( <a href="#">Mitchell, 2012</a> ).
Gladhouse Reservoir SPA Ramsar 186.58	Pink-footed Goose - Unfavourable Declining	No proactive management Water management	<b>Examine for LSE.</b> The SPA lies around 14km west of East Lothian. Pink footed goose from this site are known to visit East Lothian to forage ( <a href="#">Mitchell, 2012</a> ). T
Greenlaw Moor SPA 245.81	Pink-footed Goose - Favourable maintained	None	<b>No further consideration.</b> Greenlaw Moor lies around 12.5 km to the south of East Lothian. The qualifying interest Pink Footed goose associated with this site are not thought to use areas within East Lothian (Mitchell, 2012) and suitable habitat here is at the edge of daily foraging range.

Imperial Dock Lock, Leith SPA	Common Tern - Favourable Maintained	'Other'	<b>No further consideration.</b> Potential pathways would be proposals that affect feeding habitat/availability of prey e.g through changes to sediment. Tern feeding areas are close to the SPA. Any changes to water quality would be unintended, short term and localised arising from woodland management or planting activity.
Isle of May SAC	Grey seal Reefs  Both Favourable Maintained	Invasive Species – Reefs  Water management – Reefs	<b>No further consideration.</b> The SAC lies offshore between East Lothian and Fife. There is no pathway for an effect on the reefs. Grey seals feed within the Firth of Forth and can haul out on land on our shores. The Strategy supports woodland creation, including around the coast. There is a small chance that activity related to this could lead to the release of sediment or pollutants into the sea. Any effect would be localised and short term. This is not the intention of the strategy, and if good practice is followed, it will not occur. Other regimes including grant funders and EIA regulations, would provide for assessment at project level that would include measures to ensure normal good practice is followed. The Strategy does not promote recreation on areas that might be used as seal haul outs as these are areas where woodland creation is unlikely to be possible.
Moorfoot Hills SAC	Blanket Bog - Unfavourable Recovering  Dry heaths - Unfavourable No change	None  Burning Invasive species: Bracken Over grazing: Deer	<b>No further consideration.</b> This site is around 12 km southwest of East Lothian. Potential pathways include an increase in grazing from displacement of deer (potentially arising if land is fenced off to protect new planting), spread of invasive species, pathogens or from an increased risk of wildfire. There is considered to be too much intervening land for this to occur as a result of actions arising from the Strategy.

Peeswit Moss SAC	Active raised bog Degraded raised bog  Both Unfavourable Recovering	No proactive management – Active and Degraded raised bog	<b>No further consideration.</b> This site is around 16km west of East Lothian and no part of East Lothian drains into the site. The strategy cannot affect the management of the site. No other pathways for an effect were identified given the distance from East Lothian.
River Tweed SAC	Atlantic Salmon Brook Lamprey Otter River Laprey - Favourable Maintained Rivers with floating vegetation often dominated by water-crowfoot - Unfavourable no change Sea Lamprey - Unfavourable declining	Agricultural operations - Atlantic salmon  Climate Change - Atlantic salmon  Forestry operations Atlantic salmon, Otter  Invasive species - Atlantic salmon, Rivers with floating vegetation often	<b>Examine for LSE.</b> Some parts of upland East Lothian drain into the River Tweed SAC. Deterioration of water quality could affect all of the qualifying interests. Otter from the site may use supporting habitat in East Lothian.
St Abb's Head to Fast Castle SAC	Vegetated sea cliffs - Favourable Maintained	Over grazing - Rabbits, Sheep Under grazing	<b>No further consideration.</b> This site is around 6.5km broadly to the east of Dunglass at the East Lothian/ Scottish Borders boundary. The site is considered too distant for any potential effect arising from displacement of deer, or changes to land management that could potentially affect invasive species or pathogen spread, or fire risk.
St Abb's Head to Fast Castle SPA	Guillemot Razorbill - Favourable Maintained Herring Gull Kittiwake Seabird Assemblage Shag - Unfavourable Declining	Recreation/ Disturbance (Razorbill)	<b>Examine for LSE.</b> This site lies around 8.5 km east of Dunglass at the East Lothian/Scottish Borders boundary. Herring Gull from this site may use supporting habitat in East Lothian. The site is considered too distant from East Lothian for other pathways to affect the population or distribution of qualifying interest species on the site.
Threepwood Moss SAC	Active raised bog - Unfavourable, no change	Invasive species  Undergrazing; Cattle, Sheep	<b>No further consideration.</b> The site lies approximately 15 km to the south of the site, and no part of East Lothian drains into the site. The site is considered too distant for any potential effect arising

	Degraded raised bog - Unfavourable, no change	Invasive species; birch Under grazing	from displacement of deer, or changes to land management that could potentially affect invasive species or pathogen spread, or fire risk. There are no mobile qualifying features and therefore no pathway for an effect.
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Those sites that have been sieved out will not be considered any further within this assessment.

### Sieving Exercise: Sites Further than 20km from East Lothian

This section considers whether there are any sites further than 20km from East Lothian which need to be checked for LSE due to the mobile species. This was done by considering the species qualifying for protection with a European Site, and examining if there were any pathways for an effect at a distance of greater than 20km from East Lothian. There are considered to be no effects from the strategy that could affect land at more than 20km distance. Therefore remaining pathway is where there is an effect on mobile species associated with more distant sites visiting East Lothian or the immediately surrounding area.

The species that are qualifying interests for a European site in the UK were considered to see if there was a potential pathway. If so, sites include that species that are within the distance that could be affected were considered for LSE.

#### Birds

The Birds Directive protects both particularly threatened bird species, and regularly occurring migratory bird species. Some birds fall into both categories. The definition of 'migratory' was taken as being one that had a greater than 20km seasonal movement, so by definition these birds are capable of moving that far. These birds were examined to see if there were any potential pathways for an impact to a site where they are a qualifying interest.

#### Birds which do not currently occur in East Lothian

Some land-based birds have a range and series of sites is too far from East Lothian to be affected by any activity arising from the strategy. Such birds either do not occur in East Lothian or do so only rarely. There is therefore no pathway for an effect and no search has been made for SPAs that include these birds. These birds are:

Avocet *Recurvirostra avosetta*  
 Aquatic Warbler *Acrocephalus paludicola*  
 Bittern *Botaurus stellaris*  
 Capercaillie *Tetrao urogallus*  
 Dartford Warbler *Sylvia undata*  
 Chough *Pyrrhocorax pyrrhocorax*  
 Canadian Light-bellied Brent Goose *Branta bernicla hrota*  
 Svalbard Light-bellied Brent Goose *Branta bernicla hrota*  
 Corncrake *Crex crex*  
 Dark-bellied Brent Goose *Branta bernicla bernicla*  
 Dotterel *Charadrius morinellus*  
 Fair Isle Wren *Troglodytes troglodytes fridariensis*  
 Greenland Barnacle Goose *Branta leucopsis*  
 Greenland White-fronted Goose *Anser albifrons flavirostris*

Nightjar *Caprimulgus europaeus*  
Spotted Crake *Porzana porzana*  
Stone Curlew *Burhinus oedicephalus*

## Seabirds

Seabirds spend most of their time at sea, other than when breeding.

There are 52 marine birds (including gulls) that qualify for protection, though only 44 of those occur in large enough numbers to be included in sites designated as SPA. A review was carried out by C Thaxter et al published 2012, to investigate maximum and mean foraging distances for seabirds. Birds shown in **bold** are also a qualifying interest of a site within 20km of East Lothian.

Arctic Skua *Stercorarius parasiticus* (75km max, 6 km mean)  
**Arctic Tern *Sterna paradisaea* (30km max, 7km mean)**  
Balearic Shearwater *Puffinus mauretanicus*  
Black-necked Grebe *Podiceps nigricollis*  
Black-throated Diver *Gavia arctica*  
**Common Scoter *Melanitta nigra***  
**Common tern *Sterna hirundo* (30km max, 4.5km mean)**  
Cory's shearwater *Calonectris diomedea*  
Surf scoter *Melanitta perspicillata*  
Common Tern *Sterna hirundo*  
**Eider *Somateria mollissima* (80km max, 2.4km mean)**  
Fulmar *Fulmarus glacialis* (580km max, c.47km mean)  
**Gannet *Morus bassanus* (590km, 92km mean)**  
**Goldeneye *Bucephala clangula***  
Goosander *Mergus merganser*  
Great Black-backed Gull *Larus marinus*  
**Great Crested Grebe *Podiceps cristatus***  
Great Northern Diver *Gavia immer*  
Great Shearwater *Puffinus gravis*  
Great Skua *Catharacta skua* (13km from colony, 219km other)  
**Guillemot *Uria aalge* (135km max, 38km mean)**  
**Kittiwake *Rissa tridactyla* (120km max, 25km mean)**  
Leach's Petrel *Oceanodroma leucorhoa* (<120km)  
Little Auk *Alle alle*  
Little Tern *Sterna albifrons* (11km max, 2.1km mean)  
**Long-Tailed Duck *Clangula hyemalis***  
Long-Tailed skua *Stercorarius longicaudus*  
**Manx Shearwater *Puffinus puffinus* (near colony rafting birds 32km max, 2.3 mean)**  
Pomarine Skua *Stercorarius pomarinus*  
**Puffin *Fratercula arctica* (200km max, 4km mean)**  
**Razorbill *Alca torda* (95km max, 24km mean)**  
**Red-breasted Merganser *Mergus serrator***  
Red-necked Grebe *Podiceps grisena*  
Red-necked Phalarope *Phalaropus lobatus*  
**Red-throated Diver *Gavia stellata* (9km max, 4.5km mean)**  
**Roseate Tern *Sterna dougallii* (30km max, 12km mean)**  
**Sandwich Tern *Sterna sandvicensis* (54km max, 11.5km mean)**  
**Scaup *Aythya marila***  
**Shag *Phalacrocorax aristotelis* (17km)**  
**Slavonian Grebe *Podiceps auritus***  
Storm Petrel *Hydrobates pelagicus* (>65km)  
**Velvet Scoter *Melanitta fusca***  
Sooty Shearwater *Puffinus griseus*  
**Wigeon *Anas penelope***

Birds which are also a QI of a closer site were considered in relation to that site. Taking an iterative approach, if that study had identified an LSE on any of those species, the SPA series would have then examined to see if the effect on that bird could also lead to an effect on any other SPA of which it was a qualifying interest. However, no such LSE was so identified.

For the seabirds, the only potential pathway to an effect on birds that are associated with sites more than 20km distant is an impact occurring when they are visiting the marine or intertidal area around East Lothian. The only potential such impact is through a change to water quality. The Strategy supports woodland creation, including around the coast. There is a small chance that activity related to this could lead to the release of sediment or pollutants into the sea. Any effect would be unintentional localised and short term. Following good practice will avoid this. The legal duty to follow SEPA General Binding Rules during track construction, harvesting and other forestry operations will apply to prevent pollution of coastal sites by run-off. Other regimes including grant funders and EIA regulations, would provide for assessment at project level that would include measures to ensure normal good practice is followed.

Given this, there would be no likely significant effect on any site on account of these birds being a QI, and no sites have been scoped in on account of impact on seabirds.

### Gulls and cormorant (Seabirds using inland areas)

Most gulls come inland to feed, and some cover large distances to do so. Maximum and mean foraging distances from Thaxter, et al (2012) are in parenthesis. Those shown in **bold** are also qualifying interests of a site within 20km of East Lothian.

**Black-headed Gull *Larus ridibundus* (40km max, 11km mean)**

**Common Gull *Larus canus* (50km max, 25km mean)**

**Herring Gull *Larus argentatus* (92km max, 10km mean)**

**Lesser Black-backed Gull *Larus fuscus* (181km max, 71km mean)**

Mediterranean Gull *Larus melanocephalus* (20km max, 11 mean)

**Little gull *Larus minutus***

Sabine's gull *Larus sabini*

Iceland gull *Larus glaucooides*

Glaucous gull *Larus hyperboreus*

**Cormorant *Phalacrocorax carbo carbo* (35km max, 1.5 mean)**

### Birds that are also a qualifying interest of a site within 20 km

Where the species is a qualifying interest of a site in or within 20km of East Lothian, it is assumed that if the bird is here, it is in association with the nearer rather than further site. Therefore sites further than 20km afield which have these birds as QI have not been sieved on account of hosting these birds.

The birds which fall into this category (excluding sea birds listed above) are:

Bar-tailed Godwit *Limosa lapponica*

Curlew *Numenius arquata*

Dunlin *Calidris alpina schinzii* (core range 500m, max range 3km, [NatureScot](#))

Golden Plover *Pluvialis apricaria* (core range 3km, max range 11km, [NatureScot](#))

Grey Plover *Pluvialis squatarola*

Knot *Calidris canutus*

Lapwing *Vanellus vanellus*

Mallard *Anas platyrhynchos*

Oystercatcher *Haematopus ostralegus*

Pink-footed Goose *Anser brachyrhynchus*

Redshank *Tringa totanus*

Shelduck *Tadorna tadorna*

### Waterbirds/ ducks/waders not also a QI of a site within 20km

The potential pathway for impact on these birds would be through changes to water quality from the strategy as noted under 'seabirds. As with seabirds, there is no pathway for LSE on any site on account of impact on these birds.

These birds are:

Black-tailed Godwit *Limosa limosa islandica*

Little Grebe *Tachybaptus ruficollis*

Pintail *Anas acuta*

Pochard *Aythya farina*

Coot *Fulica atra*

Gadwall *Anas strepera*

Greenshank *Tringa nebularia* (core foraging range of 2km from the nest site in the breeding season, with maximum range of 3km – NatureScot)

Sanderling *Calidris alba*

Shoveler *Anas clypeata*

Snipe *Gallinago gallinago*

Teal *Anas crecca*

Tufted Duck *Aythya fuligula*

Whimbrel *Numenius phaeopus*

### Woodland birds

Some birds would benefit from increased woodland, so would be positively impacted from the implementation of the strategy, were they to occur or arrive in East Lothian. No pathway.

Honey Buzzard *Pernis apivorus*

Scottish Crossbill *Loxia scotica*

Woodlark *Lullula arborea*

### Geese and swans

**Bean Goose** *Anser fabalis*

This goose forages on grass, grain from stubble, potatoes and winter wheat. It is no longer a common wintering species and there are only two regularly used sites, Slammannan Plateau in central Scotland and the Yare Valley in Norfolk. It is a rare visitor to East Lothian so impact on these individuals would not affect the conservation objectives of the SPA.

**Greenland Barnacle Goose** *Branta leucopsis*

Barnacle geese arrive en masse in Islay before dispersing to wintering grounds, almost exclusively in islands along the west and northern coast of Scotland. There are records of the goose in East Lothian at the wader scrapes and Aberlady Bay in particular. NatureScot [advise](#) there is a core foraging range of 15km, with maximum recorded distance of up to 25km. No pathway.

**Svalbard Barnacle Goose** *Branta leucopsis*

NatureScot advise there is a core foraging range of 15km, with maximum recorded distance of up to 25km. There are two SPAs, one in the Solway Firth and the other in Aberdeenshire. No pathway.



### **Icelandic Greylag Goose** *Anser anser*

Greylag geese were traditionally associated with estuaries but have adapted to using agricultural areas near nest sites. SPA sites in Tayside and Fife were selected to provide population and range coverage. NatureScot [advise](#) that Greylag geese have a core foraging range from night roost during the winter season of 15 – 20 km. No pathway.

### **Russian White-fronted Goose** *Anser albifrons albifrons*

There are records of this bird in East Lothian. NatureScot have not provided advice on its core range, however the most important wintering sites are in South Wales and along the southern, south-east and eastern English coasts, where SPAs are designated. Due to distance no pathway.

### **Bewick's Swan** *Cygnus columbianus bewickii*

Bewick's Swan overwinters in lowland areas of northern Europe. They are found in marine and intertidal areas as well as on farmland and wetland. In Britain the largest concentrations are in Eastern England, at the Nene and Ouse Washes. Bewick's swan is occasionally seen in East Lothian, usually in with Whooper swans. SPAs are south of Yorkshire/Lancashire. Due to the low numbers of birds here any impact would not affect the conservation objectives of the designated sites, which are south of Yorkshire/Lancashire.

### **Whooper Swan** *Cygnus cygnus* 69

Whooper Swan winter on fresh waterbodies and marshes, and on low lying coastal agricultural land. These birds are very mobile, though they also show a high degree of winter site loyalty. Whooper Swan is a qualifying interest at the Loch Leven SAC site, and this site is considered in Table 2 below. [NatureScot advise](#) that the core foraging range from night roost during the winter season is less than 5km.

## Raptors

### **Golden Eagle** *Aquila chrysaetos*

Golden Eagles occur principally in mountainous regions, occupying most areas where woodland cover is not continuous. The majority of the population is found in the Highlands, though there are records in East Lothian. The nearest site is Caenlochan, which is 90 km distant. Golden eagles are capable of flying over 200 km a day however [NatureScot advise](#) that their core range is 6km with a maximum range of up to 9km during the breeding season. No pathway.

### **Hen Harrier** *Circus cyaneus*

Hen harrier preferentially breed on moorland but may colonise young plantations. The species was formerly widespread but suffered serious declines from persecution. There are records of hen harrier in East Lothian. NatureScot advise that there is a core foraging range of 2km in the breeding season, with maximum range of 10km. The nearest SPA at Langholm is at about 60km distance. No pathway.

### **Peregrine Falcon** *peregrinus*

There are records of this bird in East Lothian. NatureScot advise that core foraging range is 2km from the nest site during breeding season, with maximum recorded distance in Britain being 18km. Muirkirk and North Lowther Uplands is the closest SPA for peregrine and is well beyond this distance. No pathway.

**Merlin** *Falco columbarius*

NatureScot advise the core range of this bird is within 5km; all SPAs for which this bird is a QI are well beyond this distance. No pathway.

**Osprey** *Pandion haliaetus*

NatureScot advise that the core foraging range from the nest site during breeding season is 10km, with some regular and a maximum recorded distance of 28km. The nearest SPA which has this bird as a QI is Forest of Clunie, which is about 70km north of East Lothian. No pathway.

**Red Kite** *Milvus milvus*

NatureScot advise that the core foraging range from the nest site during breeding season is 4km, with a maximum range up to 6km. The nearest SPA for this species is in Wales. No pathway.

**Short-eared Owl** *Asio flammeus*

NatureScot advise that the core range of this species is 2km, with a maximum range of 5km. The nearest SPA which has this bird as a QI is Forest of Clunie, at 70km distance. No pathway.

**Others**

**Little Egret** *Egretta garzetta* – this primarily estuarine species is still rare in Scotland, though a few individuals have been seen in East Lothian. It roosts in trees or saltmarsh. The effects of the Strategy (creating woodland and avoiding impact on saltmarsh) mean that the effects on this species would be likely to be positive. The SPAs for this species are all on the south coast of England. No pathway.

*Plants and invertebrates*

There is no pathway for the strategy to affect plant or invertebrate species at more than 20km.

*Amphibians*

The only amphibian Annex II species is the great crested newt. This species has a small range and activity in East Lothian could not affect it at a distance greater than 20km.

*Mammals*

Lesser horseshoe bat *Rhinolophus hipposideros*

This bat lives in sheltered valleys with woods or dense scrub, close to roost sites in Wales and southwest England. Activity in East Lothian could not affect this species due to distance and location. No pathway.

Greater horseshoe bat *Rhinolophus ferrumequinum*

In the UK the bat is close to its climatic limit. It is found in south Wales and southwest England. Activity in East Lothian could not affect this species due to distance and location. No pathway.

### Barbastelle *Barbastella barbastellus*

In Europe this bat is thought to be mainly an upland and forest species, in the UK it prefers wooded river valleys. This bat does not occur in Scotland and activity in East Lothian could not affect the species. No pathway.

### Bechstein's bat *Myotis bechsteinii*

This species is associated with mature deciduous woodland. There are populations in southern England and Wales. Activity in East Lothian could not affect the species. No pathway.

### Bottlenose dolphin *Tursiops truncatus*

This species is widely distributed in North Atlantic, West African, Mediterranean and UK coastal waters. There are two resident populations, one in the Moray Firth and the other at Cardigan Bay, as well as small groups off Cornwall and Dorset (not designated SAC sites). Dolphins from these areas are primarily and inshore species but can range widely. The dolphins of the Moray Firth have increasingly made extended movements eastwards and southwards and have been recorded in the inshore area off East Lothian's coast. Considered for LSE as a QI of Moray Firth SAC.

### Harbour porpoise *Phocoena phocoena*

Harbour porpoise are a marine species appearing to favour the continental shelf, but may make seasonal movement to the coast. They are widespread in the cold and temperate seas of Europe, including the North Sea. There is only one site on the east coast, which is to the east of The Wash. Due to the amount of intervening habitat, and that this is a sea going species, activity in East Lothian will not have an effect on this species at any SAC. No pathway.

### Otter *Lutra Lutra*

Historically, otter occurred across most of the UK, however declined due to persecution, habitat loss and the impact of toxic organochlorine insecticides, but now appear to be recovering. Otter occur in a wide range of conditions. In coastal areas they use shallow inshore areas to feed but also need fresh water for bathing, and land for resting and breeding holts. Inland, otter occur around a range of running and standing water. SAC Sites were selected to reflect the discontinuous distribution of otter, with areas of known high densities and good quality habitat features selected.

The otter population is widespread and individuals wide ranging. Otter from the River Tweed SAC are likely to use land in East Lothian. It is not expected that otter from any SAC other than the River Tweed (and the Berwickshire and North Northumberland Coast, where it is noted by the JNCC but not included as a qualifying interest) would use land in East Lothian.

The Strategy contains policy, actions and targets aimed at increasing riparian woodland to improve water quality. This would improve supporting habitat for otter so if there is any usage of land in East Lothian by otter from other sites any effect would be positive. Considered for LSE as a QI of River Tweed SAC.

### Grey seal *Halichoerus grypus*

The UK holds around half of the world population of grey seal, and almost all of the European population. The UK therefore has responsibility to protect this species. A Seal Conservation Area has been designated in the offshore area from Stonehaven to Torness for both grey and harbour seals. The SAC sites were chosen as the largest breeding colonies, based on pup production. The SAC series will contribute to securing favourable conservation status, but wider measures are also essential.

Grey Seal spend most of the year at sea and may range widely in search of prey. Grey Seal from SACs other than the Isle of May and Berwickshire and North Northumberland Coast SAC may visit East Lothian's coast. Considered for LSE as a QI of Isle of May and Berwickshire and North Northumberland Coast SAC.

#### Harbour Seal *Phoca vitulina*

Harbour Seal are widely distributed, and so sites with a relatively small proportion of the population were selected to ensure conservation and representation of the range. Site selection focussed on sites that are important for haul out and breeding. Harbour Seals are mostly found on sandflats and estuaries, but also use rocky shores. Seals may range widely in search of prey. There are records of them around the coast of East Lothian.

The closest site is the Firth of Tay and Eden Estuary SAC. While the SAC series contributes to securing favourable conservation status for this species wider conservation measures will also be needed.

#### *Fish*

#### Sea lamprey *Petromyzon marinus*

The sea lamprey occurs in estuaries and easily accessible rivers. Sea Lamprey are bad at ascending obstacles to migration, and so are often restricted to lower reaches of river. The sea lamprey is reasonably widespread in UK river but has decline in parts of its range. Sites were selected with habitat requirements for spawning and survival of juveniles, and for a geographical range of species with high quality river types.

The River Teith SAC is part of the east coast range; it is the most significant tributary of the River Forth. This site is further considered below.

#### Brook lamprey *Lampetra planeri*

Brook Lamprey is a widespread non-migratory freshwater species. It needs clean gravel beds to spawn, and soft marginal silt or sand for the larvae. The Brook Lamprey has declined in the UK, but it is still widespread. SAC sites were designated which are extensive river systems that provide conservation of the range of habitat features required.

The River Teith SAC is the closest site and is considered in Table 2.

#### River Lamprey *Lampetra fluviatilis*

River Lamprey are found only in western Europe. The species is widespread in the UK, with strong populations. The fish are found in coastal waters, estuaries and accessible rivers. It normally spawns in freshwater but spends part of its life cycle in the sea. Pollution or obstacles can impede migration.

The River Teith SAC is the closest site and is considered in Table 2.

#### Allis shad *Alosa alosa*

Allis shad are a coastal species recorded from many areas around the British Isles. The species is not a primary reason for site selection on any site. The sites where it is a qualifying feature are off Wales and Cornwall. Population declines in many parts of Europe have been attributed to the effects of pollution, overfishing and river obstructions to migration. There does not appear to be any link between the conservation of the species on the designated sites and potential impacts from the TWSEL.

#### Twaite shad *Alosa fallax*

Twaite shad are similar to Allis shad. They are found along the western coastline of Europe. Declines in the species have been attributed to pollution, overfishing and obstacles to migratory routes. Spawning is known to take place in a few Welsh Rivers, and on the England/Wales border, flowing into the Severn. The SAC series have selected areas in the southwest of the UK suitable for spawning with good prospects of habitat conservation, as well as marine areas that are considered important for migration or feeding, and are in/off the southwest of the UK.

As with allis chad there have been population declines, attributed to the same reasons. There does not appear to be any link between the conservation of the species on the designated sites and potential impacts from the TWSEL.

#### Atlantic salmon *Salmo salar*

Salmon migrate to freshwater to breed but otherwise spend their lives at sea. Spawning occurs in shallow, gravelled areas in clean rivers and streams. The young fish remain in the river for between 1-6 years, then spend the next 1-3 years at sea, before returning to their natal river to spawn and, usually, die. This means that there is genetic differences between rivers. Pressures on the species include pollution, introduction of non-native stock, physical barriers to migration, direct exploitation from fishing, degradation of spawning and nursery habitat and increased mortality.

Atlantic Salmon is a primary reason for selection of the River Tweed SAC, and is also a qualifying interest of the River Teith. The River Tweed was considered as a site within 20km and the River Teith in Table 2.

#### Spined loach *Cobitis taenia*

The spined loach has a very wide distribution across Europe and Asia but is regarded as threatened. This is a river fish apparently occurring in five east-flowing rivers in Eastern England. There is no pathway for an impact on this species from the activity in East Lothian due to its location.

#### Bullhead *Cottus gobio*

The bullhead lives in a variety of rivers, streams and stony lacks. It is widespread and often common across Europe. It occurs in the Forth, thought to be from an introduction. The SAC sites were chosen to encompass the natural geographical range of the species, which is in England and Wales. Due to

the distance between the rivers where sites have been designated and as no land in East Lothian drains to them, there is no pathway for an effect.

Sieving Exercise Results: Sites further than 20km from East Lothian

TABLE 2 Results of Sieving Exercise – Mobile Species from sites over 20km from East Lothian.			
Site	Mobile species	Pressures	Verdict
Firth of Tay and Eden Estuary SAC	Harbour seal <i>Phoca vitulina</i> - Unfavourable declining	Other Recreation/ disturbance To be identified	<b>No further consideration.</b> Harbour Seal are known to occur around the shores of East Lothian and may be from this site. Activities arising from the tree and woodland strategy will not affect the marine/intertidal zone or foreshore where seals might haul out. Any effect on water quality would be short term and localised, and given the large amount of alternative habitat, and distance from the site, would not affect the population numbers or distribution over the site.
Firth of Tay and Eden Estuary SPA	Bar-tailed godwit Goosander Cormorant Grey plover Icelandic Black-tailed godwit Marsh harrier Oystercatcher Pink-footed goose Sanderling Waterfowl assemblage  - Favourable Maintained	Natural event (eider, Little tern, Pink-footed goose,  Recreation/ Disturbance (eider, Icelandic Black-tailed godwit, Marsh harrier, waterfowl assemblage)  Recreation/disturbance: Dog walking (Pink-footed goose)  Water management (Icelandic Black-tailed godwit  Invasive species (Redshank)  Climate change (waterfowl assemblage)	<b>No further consideration.</b> The QI which are also within sites within 20km of East Lothian will be considered there. The remaining species do not have a pathway for LSE for the reasons given in the site sieving exercise, though some individuals from the site may pass through East Lothian.
	Eider Favourable Recovered		
	Bar-tailed godwit Dunlin Redshank Favourable declining		
	Common scoter Goldeneye Greylag goose Long-tailed duck Red-breasted merganser		

	<p>Shelduck Velvet scoter</p> <p>Unfavourable Declining</p> <p>Little tern Unfavourable No change</p>		
Loch Leven SPA and Ramsar	<p>Cormorant <i>Phalacrocorax carbo</i> Gadwall <i>Anas strepera</i> Goldeneye <i>Bucephala clangula</i> Pink-footed goose <i>Anser brachyrhynchus</i> Pochard <i>Aythya farina</i> Shoveler <i>Anas clypeata</i> Teal <i>Anas crecca</i> Tufted duck <i>Aythya fuligula</i> Waterfowl assemblage Whooper swan <i>Cygnus cygnus</i></p>		<p><b>No further consideration.</b> Pink footed goose from this site are unlikely to forage in East Lothian (Mitchell 2012). Whooper swan are beyond the daily foraging distance. Golden eye and cormorant are also QI of the Firth of Forth SPA and would be attributed to that site while here.</p>
Moray Firth SAC	<p>Bottlenose dolphin <i>Tursiops truncatus</i> - Favourable Maintained</p>	None	<p><b>No further consideration.</b> Bottlenose dolphin are occasional visitors to waters off East Lothian, however generally do not come close to the shore. They could in theory be affected by changes to water quality however this, if it were to occur as a result of the Strategy, would be unintentional, localised and short term. The legal duty to follow SEPA General Binding Rules during track construction, harvesting and other forestry operations will apply to prevent pollution of coastal sites by run-off. Given the large amount of alternative habitat this would not significantly affect the qualifying interest even were it to occur.</p>
River Teith SAC	<p>River lamprey <i>Lampetra fluviatilis</i> Brook lamprey <i>Lampetra planeri</i> - Favourable Maintained</p>	<p>Forestry operations Invasive species Water quality</p>	<p><b>No further consideration.</b> The migratory fish that are a qualifying interest of this site (river lamprey, sea lamprey, salmon) pass the shores of East Lothian on their way to the site. They could be affected by changes to water</p>

	Atlantic salmon - Unfavourable recovering		quality however this is unlikely to occur and if it did, would be unintentional, localised and short term. The legal duty to follow SEPA General Binding Rules during track construction, harvesting and other forestry operations will apply to prevent pollution of coastal sites by run-off. Given the large amount of alternative habitat this would not significantly affect the species even were it to occur.
	Sea lamprey <i>Petromyzon marinus</i> - Unfavourable declining		

Appendix 3 shows the Qualifying Interests and Conservation Objectives of sites to be examined for LSE.

## 4. Strategy Screening

Likely significant effects (LSE) 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.

It must be noted that the Tree and Woodland Strategy contains policy aimed at protecting European Sites, and notes that any project or plan that could adversely affect the integrity of these sites cannot normally 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 sites.

A screening exercise was undertaken to ascertain which aspects of the plan need to be considered further for appropriate assessment. This screening method followed the approach recommended by the NatureScot Guidance (2015)<sup>7</sup>, whereby policies and proposals are assigned one of the following seven categories:

1. General Policy Statements
2. Projects referred to in, but not proposed by, the plan
- 3a. Elements of the plan with no LSE on the European Site as they are intended to protect the natural or built environment
- 3b. Elements of the plan with no LSE on the European Site as they do not in themselves lead to development or other change.
- 3c. Elements of the plan that make provision for change, but there is no link or pathway between them and the qualifying interests of a European Site.
- 3d. Elements of the plan that make provision for change, but there is not likely to be a significant effect, but may give rise to Minor Residual Effects.
- 3e. Elements of the plan for which effects cannot be determined as the nature and location of any effects is unknown owing to the general nature of the plan.



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## Targets, Policies & Actions

Table 3 below shows the screening results for the Targets, Policies and Actions which need to be considered.

<b>TABLE 3: Screening of Strategy Targets, Policies and Actions</b>				
<b>Proposal</b>	<b>Brief Descriptions</b>	Likely Significant Effect	<b>Screen In/Out</b>	<b>Reason</b>
		Minor Residual		
		No likely significant effect		
<b>Targets</b>				
Target 1	Creation of the East Lothian Climate Forest of at least 80-125 ha of new woodland annually across East Lothian to provide 2 million trees in 10 years to achieve increased woodland coverage of 13.45% by 2031	No likely significant effect	Out	2. Projects referred to in, but not proposed by, the plan The Climate Forest proposal and target was introduced as part of East Lothian's Climate Strategy Update. This strategy does not set the target but aims to show how and where it can be delivered.
Target 2	Improve resilience of East Lothian's environment including by increasing riparian woodland and securing functional native woodland connections	Likely Significant Effect	In	This target specifically guides woodland creation to riparian areas to improve water quality.
Target 3	Improve biodiversity value of East Lothian's woodland habitats in line with the Green Network Strategy SPG	No likely significant effect	Out	2. Projects referred to in, but not proposed by, the plan. This approach was proposed by the Council's Green Network Strategy, in line with the CSGN
Target 4	Increase access to trees and woodland for all	Likely Significant Effect	In	This target could have the effect of more people recreating in woodlands, which could increase potential for disturbance.

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Target 5	Create 300 hectares of new small farm woodlands, shelterbelts, orchards and other agroforestry which align with and support agricultural production	Likely Significant Effect	In	This target steers some woodland towards farmland, which is supporting habitat used by some qualifying interest species.
Target 6	Improve recognition and protection of trees with cultural heritage value	No likely significant effect	Out	3b. Elements of the plan with no LSE on the European Site as they do not in themselves lead to development or other change.
Target 7	Improve landscapes through woodland creation	Likely Significant Effect	In	The Target steers woodland to particular locations at landscape scale.
<b>Theme 1: Climate Change Mitigation</b>				
Policy 1	Retention of woodland, trees and hedges/hedgerows		Out	1. General Policy Statements
Policy 2	Change of Use of woodland to garden ground	No likely significant effect	Out	1. General Policy Statements
Policy 3	Woodland creation	Likely Significant Effect	In	The Strategy has proposed general locations for woodland creation, including preferred and potential areas. The assessment of the spatial elements of the strategy are assessed in relation to European Sites is detailed in <a href="#">Section 5</a> .
Policy 4	Reducing climate forcing emissions from tree planting and forestry operations	No likely significant effect	Out	1. General Policy Statements
Policy 5	Wood Products	No likely significant effect	Out	1. General Policy Statements

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Action 1	The Council will investigate opportunities for offsetting its own unavoidable carbon emission through creation of new multifunctional woodland locally	Likely Significant Effect	In	This action is very general, however makes provision for change to support woodland expansion. There may therefore be a likely significant effect on a European Site
Action 2	Deliver the East Lothian Climate Forest	Likely Significant Effect	In	This action is very general, however makes provision for change to support woodland expansion. There may therefore be a likely significant effect on a European Site. The overall tree planting target was set in the Council's Climate Change Update approved 19 January 2021. No HRA was carried out at that time.
Action 3	The Council will explore ways of increasing use of wood and wood products, particularly locally sourced timber	No likely significant effect	Out	1. General Policy Statements
<b>Theme 2: Resilience and Climate Adaptation</b>				
Policy 6	Water Management and Slope Stability	Likely Significant Effect	In	
Policy 7	Sustainable Woodland Management	No likely significant effect	Out	3a. Elements of the plan with no LSE on the European Site as they are intended to protect the natural or built environment
Action 4	Work with farmers and landowners to encourage hedgerow and tree planting and woodland creation where appropriate, to help reduce water run-off onto our roads	Likely Significant Effect	In	The Strategy has proposed general locations for woodland creation, including preferred and potential areas. The assessment of the spatial

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				elements of the strategy are assessed in relation to European Sites is detailed in <a href="#">Section 5</a> .
Action 5	Work with SEPA, neighbouring authorities and stakeholders to identify where woodland retention, creation and management could most improve water quality, support reduction in flood risk and help increase slope stability	Likely Significant Effect	In	The Strategy has proposed general locations for woodland creation, including preferred and potential areas. The assessment of the spatial elements of the strategy are assessed in relation to European Sites is detailed in <a href="#">Section 5</a> .
Action 6	Adopt the draft Ash Dieback Action Plan and manage ash trees in accordance with this.	No likely significant effect	Out	1. General Policy Statements
Action 7	Develop and implement a plan for the landscape scale replacement of ash trees lost to Ash Dieback disease.	No likely significant effect	Out	3e. Elements of the plan for which effects cannot be determined as the nature and location of any effects is unknown owing to the general nature of the plan.
<b>Theme 3: Biodiversity</b>				
Policy 8	Protecting the Biodiversity Value of East Lothian's Woodland	No likely significant effect	Out	3a. Elements of the plan with no LSE on the European Site as they are intended to protect the natural or built environment
Policy 9	Seed and Tree Stock Sourcing	No likely significant effect	Out	1. General Policy Statements

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Policy 10	Addressing fragmentation	No likely significant effect	Out	3e. Elements of the plan for which effects cannot be determined as the nature and location of any effects is unknown owing to the general nature of the plan.
Policy 11	Invasive Species	No likely significant effect	Out	3a. Elements of the plan with no LSE on the European Site as they are intended to protect the natural or built environment
Policy 12	Deer management	No likely significant effect	Out	3a. Elements of the plan with no LSE on the European Site as they are intended to protect the natural or built environment
Policy 13	Protection of European Sites	No likely significant effect	Out	3a. Elements of the plan with no LSE on the European Site as they are intended to protect the natural or built environment
Policy 14	Protection of the natural environment	No likely significant effect	out	3a. Elements of the plan with no LSE on the European Site as they are intended to protect the natural or built environment
Policy 15	Peatland	No likely significant effect	Out	3a. Elements of the plan with no LSE on the European Site as they are intended to protect the natural or built environment

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Action 8	Complete the Ancient Woodland Survey for East Lothian including the mapping of wood pasture, parkland and orchards	No likely significant effect	Out	3a. Elements of the plan with no LSE on the European Site as they are intended to protect the natural or built environment
Action 9	Map locations, species and condition of all hedgerows and hedgerow trees in East Lothian	No likely significant effect	Out	3b. Elements of the plan with no LSE on the European Site as they do not in themselves lead to development or other change.
Action 10		No likely significant effect	Out	3a. Elements of the plan with no LSE on the European Site as they are intended to protect the natural or built environment
Action 11	Create and expand native woodlands where there are suitable opportunities, in particular where this will have most benefit for connectivity	Likely Significant Effect	In	The Strategy has proposed general locations for woodland creation, including preferred and potential areas. The assessment of the spatial elements of the strategy are assessed in relation to European Sites is detailed in <a href="#">Section 5</a> .
Action 12	The Council will work with others including neighbouring authorities to identify the best areas for connectivity of woodland habitat networks.	No likely significant effect	Out	3a. Elements of the plan with no LSE on the European Site as they are intended to protect the natural or built environment
Action 13	Develop a Hedgerow Plan for retention, replacement, increase and management of hedgerows and hedgerow trees	No likely significant effect	Out	3e. Elements of the plan for which effects cannot be determined as the nature and location of any effects is

				unknown owing to the general nature of the plan.
Action 14	Create and retain a balanced coastal mosaic habitat including reverting plantation woodland to more natural coastal habitat should the opportunity arise, subject to public engagement	No likely significant effect	Out	3a. Elements of the plan with no LSE on the European Site as they are intended to protect the natural or built environment
Action 33	Coordinate local seed collection and tree growing projects and identification of sites for planting	No likely significant effect	Out	3b Elements of the plan with no LSE on the European Site as they themselves do not lead to development or other change. This action is about coordination
<b>Theme 4: Community</b>				
Policy 16	Design for all	No likely significant effect	Out	3e. Elements of the plan for which effects cannot be determined as the nature and location of any effects is unknown owing to the general nature of the plan.
Policy 17	Hutting	No likely significant effect	Out	1. General Policy Statements
Policy 18	Community Collaboration	No likely significant effect	Out	3c. Elements of the plan that make provision for change, but there is no link or pathway between them and the qualifying interests of a European Site.



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Policy 19	Management of Council trees	No likely significant effect	Out	3a. Elements of the plan with no LSE on the European Site as they are intended to protect the natural or built environment
Action 15	Work with landowners and Scottish Forestry to investigate opportunities for creating woodland where required to meet the Woodland Trust's Accessible Woodland Standard	Minor Residual	Out	3d. Elements of the plan that make provision for change, but there is not likely to be a significant effect, but may give rise to Minor Residual Effects.
Action 16	Map existing woodland provision for people with reduced mobility and work with disability groups to identify where this could be increased.	No likely significant effect	Out	3e. Elements of the plan for which effects cannot be determined as the nature and location of any effects is unknown owing to the general nature of the plan.
Action 17	The Council will promote access to and enjoyment of woodland for all, particularly with respect to underrepresented groups, where this can be done in a manner that does not harm the woodland.	No likely significant effect	Out	Some qualifying interests of the Firth of Forth SPA are vulnerable to disturbance from recreation, including walking and dog walking. Promotion of alternatives recreational areas to the beach is however unlikely to alter recreational use of the beach area due to its inherent attractiveness.
Action 18	Encourage those preparing Area Partnership Plans and Local Place Plans to include appropriate proposals for trees and woodlands in their area	No likely significant effect	Out	1. General Policy Statements

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Action 19	Produce a Tree Management Strategy for trees on our own land	No likely significant effect	Out	3b. Elements of the plan with no LSE on the European Site as they do not in themselves lead to development or other change.
Action 34	Map canopy coverage for all settlements not yet mapped	No likely significant effect	Out	3b. Elements of the plan with no LSE on the European Site as they do not in themselves lead to development or other change.
Action 20	Identify funding to carry out an audit/survey of our current tree estate including tree condition etc; management requirements for these trees, including need for selective felling where needed	No likely significant effect	Out	3b. Elements of the plan with no LSE on the European Site as they do not in themselves lead to development or other change.
Action 35	Involve communities in tree planting and maintenance of new trees	No likely significant effect	Out	3b. Elements of the plan with no LSE on the European Site as they do not in themselves lead to development or other change.
Action 21	Where appropriate, plant street trees and hedges in urban areas, including in Air Quality Management Areas and around sensitive sites including hospitals, schools, care homes and play areas and sports fields; woodland expansion along strategic road corridors and adjacent to industrial sites; and hedges along roadside edges	No likely significant effect	Out	3c. Elements of the plan that make provision for change, but there is no link or pathway between them and the qualifying interests of a European Site.
Action 22	Maintain and where appropriate publicise a list of community orchards	No likely significant effect	Out	3b. Elements of the plan with no LSE on the European Site as they do not in themselves lead to development or other change.

Action 23	Work with communities to develop and manage community orchards and fruit growing including promotion of heritage varieties.	No likely significant effect	Out	1. General Policy Statements
<b>Theme 5: Economy</b>				
Policy 20	Productive woodland	Likely Significant effect	In	
Policy 21	Woodland creation within farmland	No likely significant effect	Out	3e. Elements of the plan for which effects cannot be determined as the nature and location of any effects is unknown owing to the general nature of the plan.
Action 24	Encourage and enable smaller producers to work together in joint marketing, promotion and equipment sourcing through a local timber forum	No likely significant effect	Out	1. General Policy Statements
Action 25	Promote woodland based tourism and recreation, where appropriate, including joint marketing campaigns with other visitor attractions, tourism operators and accommodation providers.	No likely significant effect	Out	1. General Policy Statements
Action 26	Encourage the development of small-scale low impact tourism enterprises (excluding accommodation) linked to appropriate woodlands	No likely significant effect	Out	1. General Policy Statements
<b>Theme 6: Cultural Heritage</b>				

Appropriate Assessment

Application Name: Tree and Woodland Strategy

Policy 22	Notable Trees	No likely significant effect	Out	3a. Elements of the plan with no LSE on the European Site as they are intended to protect the natural or built environment
Policy 23	Plaques and memorial trees	No likely significant effect	Out	1. General Policy Statements
Policy 24	Scheduled Monuments and Archaeological sites	No likely significant effect	Out	3a. Elements of the plan with no LSE on the European Site as they are intended to protect the natural or built environment
Policy 25	Protection of the historic environment	No likely significant effect	Out	3a. Elements of the plan with no LSE on the European Site as they are intended to protect the natural or built environment
Action 27	Develop an interpretation plan highlighting planting for the climate forest, existing woodlands, notable trees, paths within the woodlands and develop a series of tree trails for our town and villages. Badge using logo to link together.	No likely significant effect	Out	3e. Elements of the plan for which effects cannot be determined as the nature and location of any effects is unknown owing to the general nature of the plan.
Action 28	Encourage identification and recording of important individual historic, ancient veteran and champion trees and where appropriate begin succession planting.	No likely significant effect	Out	3a. Elements of the plan with no LSE on the European Site as they are intended to protect the natural or built environment
Action 29	Promote positive management of historic gardens and designed landscapes and heritage trees to maintain their historic and cultural significance	No likely significant effect	Out	3a. Elements of the plan with no LSE on the European Site as they are intended to protect the natural or built environment

<b>Theme 7: Landscape Character</b>				
Policy 26	Protection and Enhancement of Landscape	No likely significant effect	Out	3a. Elements of the plan with no LSE on the European Site as they are intended to protect the natural or built environment
Action 30	Develop and implement a landscape masterplan for the Innerwick Coastal Margin and adjacent Upland Fringe area	No likely significant effect	Out	3e. Elements of the plan for which effects cannot be determined as the nature and location of any effects is unknown owing to the general nature of the plan.
Action 31	Develop and implement a landscape framework and planting programme for the Cockenzie/Blindwells area.	No likely significant effect	Out	3e. Elements of the plan for which effects cannot be determined as the nature and location of any effects is unknown owing to the general nature of the plan.
Action 32	Support managed programme of replacement of trees important to townscape character	No likely significant effect	Out	3a. Elements of the plan with no LSE on the European Site as they are intended to protect the natural or built environment

## Spatial Maps Screening

The Tree and Woodland Strategy categorises land with differing potential to support woodland creation according to existing sensitivities. This method follows Scottish Government Guidance “The Right Tree in the Right Place”. The mapping identifies areas that are ‘Preferred’ and ‘Potential’ for woodland creation (not necessarily native woodland). These are areas where woodland creation is supported by the Strategy and is likely to result in increased possibility of grant funding being available for woodland creation. Special Protection Areas were shown on this mapping as ‘Sensitive’ as maintenance of appropriate habitat is required for protection of their internationally recognised bird interest.

The Tree and Woodland Strategy includes maps to indicate tree planting opportunities in East Lothian. The Strategy explicitly states that the maps are indicative of where native woodland planting would be most beneficial, but that not all areas mapped may be suitable for woodland planting.

Inland areas may be used by waders from the Firth of Forth SPA as feeding or roosting habitat. This usage is focussed on areas no more than 5km from the coast. This area is shown overlaid on the ‘Constraints to Woodland Expansion Map’, Figure 1 below, which shows which areas are identified as ‘Preferred’ or ‘Potential’ in the strategy. Some of the areas drain into the River Tweed SAC. This area is also shown on the map at Figure 1. All areas of East Lothian containing agricultural land could be used by Pink footed geese for foraging. All areas could be used by Herring Gull, Blackheaded or Common gull, with a focus on coastal areas and inland water.

KEY TO CONSTRAINTS TO WOODLAND EXPANSION MAP	
Land Category	Description of information mapped
Existing Woodland	Areas already wooded  Mapped: CSGN Woodland Network 2021 (Habitat areas only); National Forest Inventory 2020 (not including areas identified as felled).
Unsuitable	Areas where the land is unlikely to be physically suitable for trees.  Mapped: John Hutton Institute map “Land Suitability for Forestry” category “Land unsuitable for trees”
Water bodies	Based on OS mapping
Urban	Settlements with 50 or more addressable properties. The settlement boundaries include areas allocated for development in the Local Development Plan (ELC, 2018(1)). (Note, the settlement boundaries are drawn solely for this Strategy, and have no other planning status).

Sensitive	Mapped: Special Protection Areas; Scheduled Monuments; SSSIs; Local Geodiversity Sites; CSGN Grassland, Bog Heath and Wetland Habitat; Non-woodland East Lothian Priority Habitat
Potential – designations	Mapped: Geological Conservation Review; Inventory and Local Gardens and Designed Landscapes; Inventory Battlefields; Local Biodiversity Sites; Conservation Areas, Golf Courses.
Potential – Prime Farmland	Mapped: from James Hutton Institute Land capability for agriculture: Class 1-3.1
Potential – Mixed Farmland	Mapped: from James Hutton Institute Land capability for agriculture: Class 3.2-4.2
Preferred	Land with no strategic constraints that offers the greatest flexibility for woodland expansion, and vacant and derelict land.

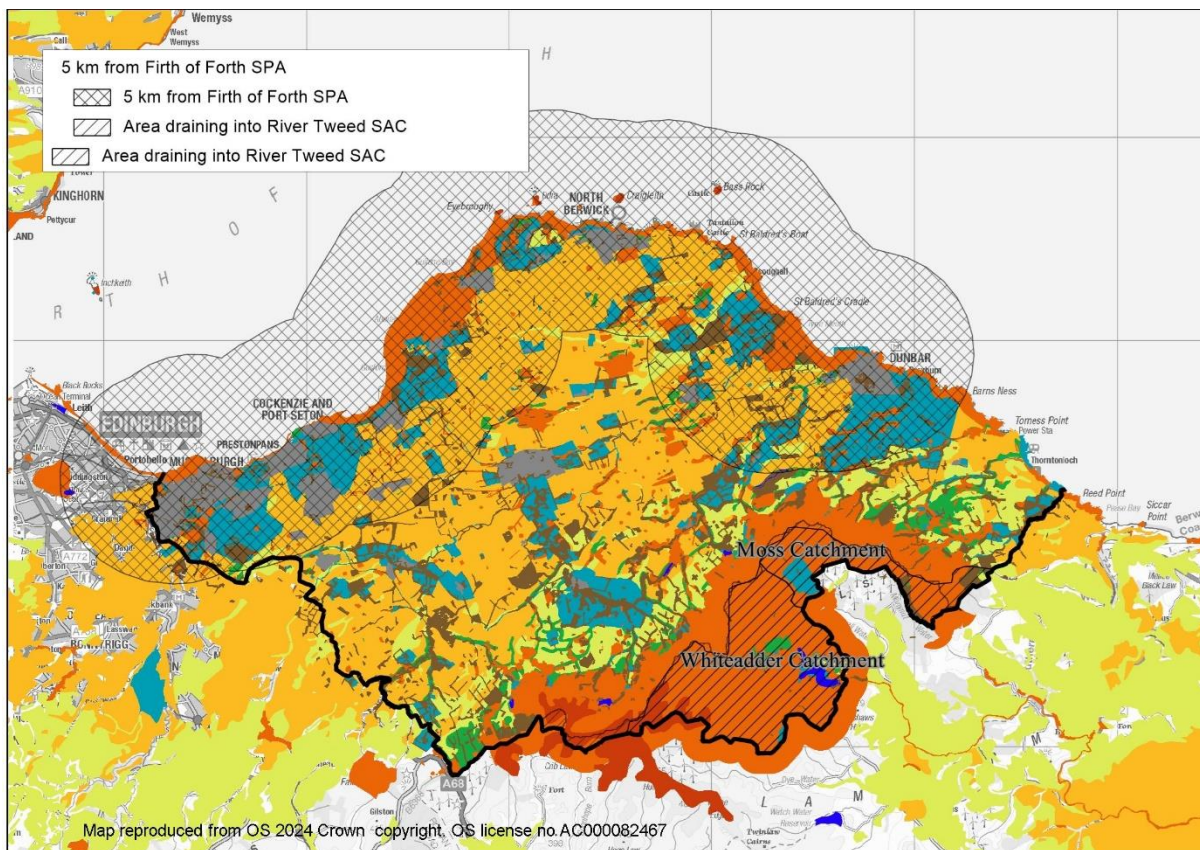


Figure 1 Constraints for Woodland Expansion mapping, with overlay

The Tree and Woodland Strategy also includes maps to indicate native woodland tree planting opportunities in East Lothian, and tree planting opportunities within or adjacent to urban areas. The Strategy explicitly states that the maps are indicative of where native woodland planting would be most beneficial, but that not all areas mapped may be suitable for woodland planting.

KEY TO NATIVE WOODLAND EXPANSION OPPORTUNITIES MAP	
Woodland Type	Description of information mapped
Existing native woodland	Native woodland identified in the Native Woodland Survey of Scotland
Nearly Native Woodland	Woodland of 40-50% native species identified in the Native Woodland Survey of Scotland
Other Existing mainly broadleaved woodland	CSGN 2021 woodland, which is based on broadleaf and yew habitat (native and non-native species) National Forestry Inventory 2020 woodland areas excluding those identified as felled and coniferous woodland.
Existing Coniferous Woodland	Woodland described as solely coniferous on the National Forestry Inventory 2020
ELC CAWS	East Lothian Conifers on Ancient Woodland. Areas of ancient woodland identified as planted with conifer or mainly conifer on the National Forestry Inventory 2020
Riparian zone	60m wide riparian zone, 30m from OS watercourses.
Priority riparian areas	Priority areas identified by Scottish Forestry for riparian woodland creation with Forestry Grant Scheme funding
Primary Native Woodland Expansion	Primary areas for native woodland expansion identified by Scottish Forestry with Forestry Grant Scheme funding
Native Woodland Expansion Areas – Secondary Zone	Secondary areas for native woodland expansion identified by Scottish Forestry for Forestry Grant Scheme funding
CSGN primary connection opportunities	Priority areas for woodland connectivity identified by Central Scotland Green Network Primary Opportunities
CSGN secondary connections opportunities	Secondary areas for woodland connectivity identified by Central Scotland Green Network
Strategic ELC connections	A flexible migration corridor where connections can best achieve functional connectivity across East Lothian
Native Woodland Model areas	
Upland Oak	Areas where this will grow based on the Native Woodland Model.
Peatland with scattered birch/pine/scrub trees	Areas where this will grow based on the Native Woodland Model. This would be compatible with peatland restoration.
Birch with moor grass and open land	Areas where this will grow based on the Native Woodland Model.
Lowland mixed broadleaf	Areas where this will grow based on the Native Woodland Model.
Scots pine with heather	Areas where this will grow based on the Native Woodland Model.
Alder-ash	Areas where this will grow based on the Native Woodland Model.



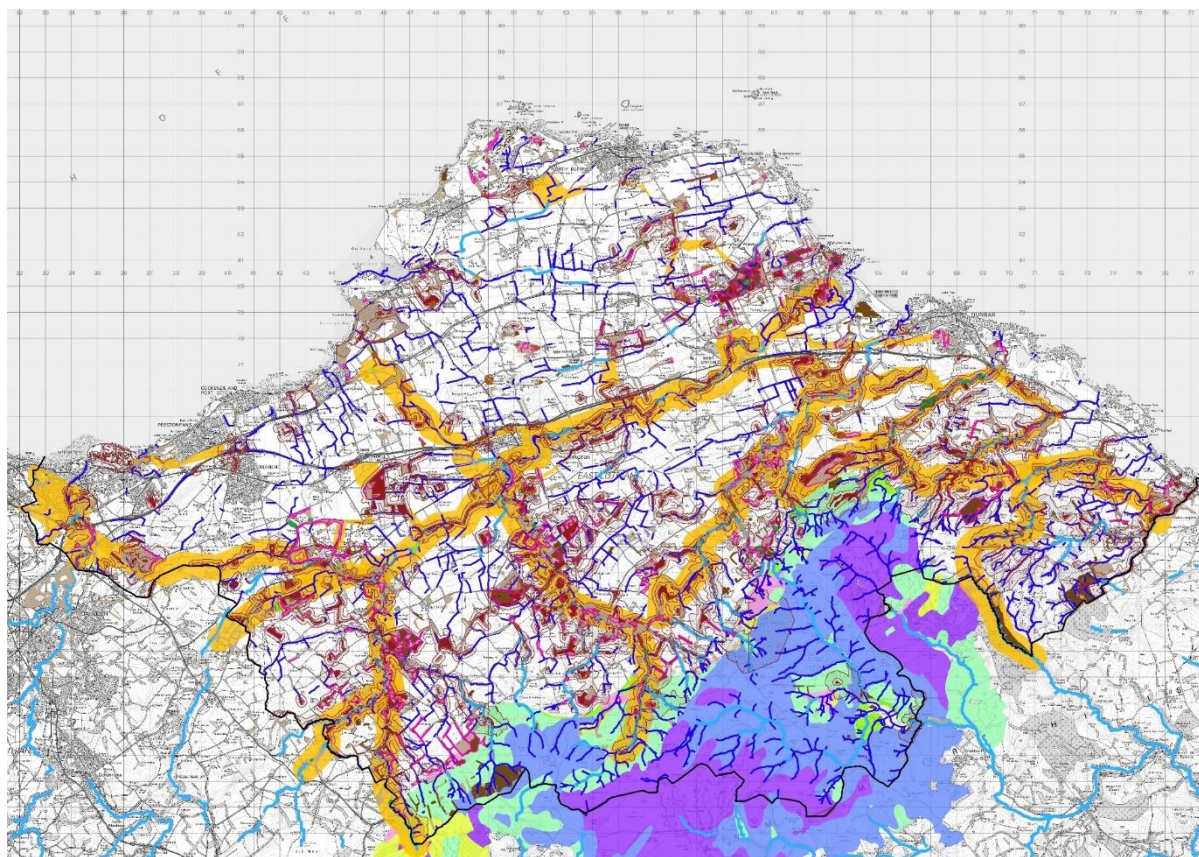


Figure 2 Native Woodland Expansion Opportunities map

### Identification of potential LSE on QI birds from sieved sites

The following species occur in one or more of the SPAs identified as potentially having LSE. Table 4 below shows the results of whether LSE were considered possible for that species. This was used to inform the consideration of LSE for the sieved sites identified (shown in Tables 5 – 11 below).

TABLE 4 Pathway for LSE on different bird qualifying interest species					
Species	LSE?	Reason			
		Direct habitat loss?	Supporting habitat loss	Impact from changes to water quality	Changes to risk of fire, spread of invasive species or pathogens
<b>Seabirds</b> Arctic Tern <i>Sterna paradisaea</i> , Common Tern <i>Sterna hirundo</i> , Gannet <i>Morus bassanus</i> , Guillemot <i>Uria aalge</i> , Kittiwake <i>Rissa tridactyla</i> , Manx Shearwater	No	No	No	No	No

<p><i>Puffinus puffinus</i>, <b>Puffin</b> <i>Fratercula arctica</i>, Razorbill <b><i>Alca torda</i></b>, Roseate Tern <i>Sterna dougallii</i> Sandwich Tern <i>Thalasseus sandvicensis</i>, Shag <b><i>Gulosos aristotelis</i></b></p>					
<p><b>Comment:</b></p>		<p>Changes to water quality would be unintentional, localised and short term. As noted previously, duty to follow SEPA General Binding Rules will prevent pollution of coastal sites by run-off. If it did occur, it would have negligible effect on the marine habitat overall. Risk of spread of pathogens already exists via birds that flock together and would not significantly increase. Neither fire nor change to invasive species distribution are concerns due intervening sea. ncreased risk of pathogens is unlikely to occur as woodland birds and seabirds have different ecological niche so little interaction.</p>			
<p><b>Seaducks and waterbirds not using inland habitat</b> <b>Common Scoter</b> <b><i>Melanitta nigra</i></b>, <b>Eider</b> <i>Somateria mollissima</i>, Long-tailed Duck <b><i>Clangula hyemalis</i></b>, Scaup <b><i>Aythya marila</i></b>, Velvet Scoter <i>Melanitta fusca</i></p>	<p>No</p>	<p>No</p>	<p>No</p>	<p>No</p>	<p>No</p>
<p><b>Ducks using inland sites</b> Mallard <i>Anas platyrhynchos</i> <b>Great crested grebe</b> <i>Podiceps cristatus</i>, Red-breasted Merganser <i>Mergus serrator</i> <b>Red-throated Diver</b> <i>Gavia stellata</i>, <b>Shelduck</b> <i>Tadorna tadorna</i>, <b>Slavonian Grebe</b> <i>Podiceps auritus</i>, Wigeon <i>Anas penelope</i></p>	<p>No</p>	<p>No</p>	<p>No</p>	<p>No</p>	<p>No</p>
	<p>Yes</p>	<p>No</p>	<p>Yes</p>	<p>No</p>	<p>Yes</p>

<p><b>Wading birds using inland habitat of potential value as high tide roosting/feeding sites</b>  <b>Bar tailed godwit</b>  <i>Limosa lapponica</i>  <b>Curlew <i>Numenius arquata</i></b>, Golden Plover <i>Pluvialis apricaria</i> Grey Plover <i>Pluvialis squatarola</i>, Lapwing <i>Vanellus vanellus</i>  <b>Oystercatcher</b>  <i>Haematopus ostralegus</i>,  <b>Redshank <i>Tringa totanus</i></b></p>		<p>These birds use inland areas for roosting, almost entirely within 5km of the coast, some more locally (see mapping in Appropriate Assessment). Creation of woodland, especially around the coastal area, could reduce the amount of habitat available for this. There could also be increased cover for predators, which would risk either loss of some birds or their reduced ability to use the habitat that is left.</p> <p>A reduced amount of habitat may mean that more birds come together in a smaller area. This could increase the risk of transmission of disease.</p> <p>Any increase in woodland birds due to increase woodland coverage will not increase risk of transmission of disease as these birds are in different ecological niches.</p>				
<p><b>Wading birds not using inland sites for foraging/roosting</b>  Dunlin <i>Calidris alpina</i>, Knot <i>Calidris canutus</i>, Turnstone <i>Arenaria interpres</i></p>	No	No	No	No	No	<p>These birds generally stay around the intertidal/foreshore/marine area</p>
<p><b>Gulls using inland sites for feeding</b>  <b>Black-headed Gull <i>Chroicocephalus ridibundus</i></b>,  <b>Common Gull <i>Larus canus</i></b>,  Herring Gull,  Lesser black-backed gull <i>Larus fuscus</i></p>	No	No	No	No	No	<p>Increasing woodland cover would lead to some loss of supporting habitat however as gulls are opportunistic feeders and eat a wide variety of food this will not affect the conservation objectives of the sites.</p>
<p><b>Gulls not using inland sites for feeding</b>  <b>Little Gull <i>Hydrocoloeus minutus</i></b></p>	No	No	No	No	No	<p>Little Gull rarely use inland areas other than water bodies which will not be affected by the TWSEL</p>
<p><b>Waterbird</b>  <b>Cormorant <i>Phalacrocorax carbo</i></b></p>	No	No	No	No	No	<p>Cormorant have been gradually shifting their wintering quarters inland, using lowland waterbodies and rivers. The TWSEL aims to improve riparian habitat which should benefit cormorant. Therefore, there is no LSE.</p>
	No	No	No	No	No	

<b>Sea duck: Goldeneye</b>		Goldeneye nest in holes in old trees, so there may be some eventual benefit for this species. Otherwise as 'Seaducks'			
<b>Goose Pink footed goose Anser brachyrhynchus</b>	Yes	No	Yes	No	Yes
		There is potential for loss of supporting habitat if woodland or hedgerow is created in agricultural fields. If more birds come together in reduced habitat areas, there may be more risk of disease.			
<b>Seabird assemblage</b>	No	No	Yes	No	No
		Herring Gull is part of the seabird assemblage.			
<b>Waterfowl assemblage</b>	No	No	No	Yes	No
		Pink footed goose and wading birds are part of the waterfowl assemblage.			

### Likely Significant Effects: Conclusions

The following tables indicate whether there are considered to be LSE, with reference to potential pathways and the Conservation Objectives of the site. The sites to be examined are:

- Fala Flow SPA
- Firth of Forth SPA
- Forth Islands SPA
- Gladhouse Reservoir SPA
- Outer Firth of Forth and St Andrews Bay Complex
- River Tweed SAC
- St Abb's Head to Fast Castle SPA

The following tables, one for each site, show the conclusions of whether there are LSE and the qualifying interest involved.

#### Fala Flow SPA

TABLE 5: LSE CONCLUSION, FALA FLOW SPA	
Conservation Objective	Appraisal
To avoid deterioration of the habitats of the qualifying species or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained;	<p>Direct effect: None, the site is in Midlothian.</p> <p>Indirect: disturbance: the Strategy supports an increase in access to woodland however this will not increase disturbance at the site as it is outwith the area and proposals to increase access to the adjacent area are not included. Indirect: landcover change: The habitats on site will not suffer deterioration due to an increase in invasive species, changes to water quality or increase fire risk as there is 2km of intervening land including the A68 and a wayleave for high voltage pylons between this site and East Lothian.</p> <p>Indirect effect: there will be no risk of deterioration of water quality from tree or woodland planting activity as and no part of East Lothian drains into the site.</p>

<p>To ensure for the qualifying species that the following are maintained in the long term:</p> <ul style="list-style-type: none"> <li>• Population of the species as a viable component of the site</li> <li>• Distribution of the species within site</li> <li>• Distribution and extent of habitats supporting the species</li> <li>• Structure, function and supporting processes of habitats supporting the species             <ul style="list-style-type: none"> <li>• No significant disturbance of the species</li> </ul> </li> </ul>	<p>The qualifying interest of this site is pink footed goose, which use supporting habitat on farmland in East Lothian. There could be reduction in the amount and quality (for the geese) of this habitat which could affect the population of the qualifying interest at this site. There may be an increase in recreational disturbance to the species when using supporting habitat through promotion of increased access to woodland. The species may also be disturbed by an increase in predators due to increased woodland and reduction in size of farm fields.</p>
<p>Conclusion</p>	<p>Likely Significant Effect Loss of supporting habitat: Pink Footed goose</p>

### Firth of Forth SPA

**TABLE 6: LSE CONCLUSION, FIRTH OF FORTH**

Conservation Objective	Appraisal
<p>To avoid deterioration of the habitats of the qualifying species or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained;</p>	<p>Direct effects: There will be no direct effect on the habitats on site from the Strategy, as the site is intertidal and trees will not grow there.</p> <p>Direct: recreation: The Strategy aims to increase access to woodland. There may be a marginal decrease as some people choose to recreate in woods rather than the beach, however this (positive) effect will be limited by the inherent attractiveness of the coast as a destination.</p> <p>Indirect: invasive species: the type of invasive species which an increase in woodland cover may encourage (deer, rhododendron &amp;c) will not affect this site as it is in the intertidal zone with different ecology.</p> <p>There is a small chance that activity related to this could lead to the release of sediment or pollutants into the sea. Any effect would be localised and short term. This is not the intention of the strategy, and if good practice is followed, it will not occur. Other regimes including grant funders and EIA regulations, would provide for assessment at project level that would include measures to ensure normal good practice is followed.</p> <p>There is no LSE from these pathways.</p>
<p>To ensure for the qualifying species that the following are maintained in the long term:</p> <ul style="list-style-type: none"> <li>• Population of the species as a viable component of the site</li> <li>• Distribution of the species within site</li> <li>• Distribution and extent of habitats supporting the species</li> <li>• Structure, function and supporting processes of habitats supporting the species             <ul style="list-style-type: none"> <li>• significant disturbance of the species</li> </ul> </li> </ul>	<p>Qualifying interest: Pink footed goose. Pink footed goose from this site use inland habitat in East Lothian. See 'Fala Flow'.</p> <p>Qualifying interests: waders. Waders from the site namely Bar tailed Godwit, curlew, redshank, oystercatcher, grey plover, golden plover and lapwing use supporting habitat inland, namely open land and agricultural land. See Appendix 2. There will be some loss of this to woodland creation and tree planting under the strategy. The TWSEL may lead to increased recreation in woodland. This could also lead to loss of supporting habitat through</p>

	<p>increased disturbance. This is a likely significant effect.</p> <p>Indirect effect: pathogens: the Strategy may lead to an increase in the number of woodland birds; however, it is unlikely that there will be an increase in transmission of pathogens because of this as the birds have different ecological niches. Reducing the amount of habitat might push the birds pushed into smaller remaining areas of habitat. However, these birds are generally gregarious in any case, so this is unlikely to increase transmission of pathogens.</p> <p>Qualifying interest: duck and grebe species. Some of the ducks (Mallard, Goldeneye, Red-breasted Merganser, Great crested and Slavonian Grebe) may also use areas of inland water while at the site. The Strategy aims to increase riparian woodland to improve water quality, and this would benefit these species using inland water sites.</p>
<p>Conclusion</p>	<p>LSE: Loss of Supporting habitat:</p> <p>(a) Pink footed goose</p> <p>(b) Waders: bar tailed godwit, curlew, oystercatcher, redshank, lapwing, golden plover, grey plover</p>

### Forth Islands SPA

TABLE 7 LSE CONCLUSION FORTH ISLANDS SPA	
Conservation Objective	Appraisal
<p>To avoid deterioration of the habitats of the qualifying species or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained;</p>	<p>Direct: None. There will be no change to the habitats on site from the implementation of the TWSEL. Woodland creation is not supported on this site, and for many parts is impossible due to the characteristics of the site. Policy 13 provides that proposals cannot go forward unless they meet the Habitat Regulations test.</p> <p>Indirect: disturbance. The Strategy promotes increase access to woodland, however there is no woodland on the site. As Forth Islands SPA comprises islands and the marine area, any general increase in recreational visitors to the area would not increase recreational disturbance here as the site cannot be accessed other than by air or water. There is no pathway for disturbance from any other source.</p> <p>Indirect: increase in invasive species: he main invasive species which has caused issues is mallow which prevents puffins from forming burrows. Though seeds of invasive species or pathogens could be spread from the mainland by mobile species however increased woodland or change in its distribution would not alter risk of this.</p> <p>There is no additional fire risk as the site is separated by the sea.</p>

	<p>Direct: water quality Sea birds can be affected by changes to prey availability, water quality including pollution by oil, organochlorides, or microbial pathogens. No activity on the site is promoted so there will be no change to water quality from activities there. The intervening sea between the site and the activity would mean there is no effect on the QI of the site.</p>
<p>To ensure for the qualifying species that the following are maintained in the long term:</p> <ul style="list-style-type: none"> <li>• Population of the species as a viable component of the site</li> <li>• Distribution of the species within site</li> <li>• Distribution and extent of habitats supporting the species</li> <li>• Structure, function and supporting processes of habitats supporting the species</li> <li>• No significant disturbance of the species</li> </ul>	<p>Indirect: water quality: there is a small chance that activity related to woodland creation on the mainland could lead to the release of sediment or pollutants into the sea. Any effect would be localised and short term. This is not the intention of the strategy, and if good practice is followed, it will not occur. Other regimes including grant funders and EIA regulations, would provide for assessment at project level that would include measures to ensure normal good practice is followed. As there is intervening sea between any incident and the site this is not a likely significant effect.</p> <p>Qualifying interests: Herring Gull. Herring Gull is in Favourable Maintained condition at this site. For Herring Gull see 'St Abb's to Fast Castle'. There will not be an effect on the conservation objectives as regards this bird.</p> <p>Qualifying interest: Cormorant. Cormorant increasing use inland areas in winter. The Strategy contains proposals on riparian planting which aims to improve water quality of rivers, which will improve the habitat for fish, which cormorant feed on. This bird is Green listed in Birds of Conservation Concern.</p> <p>The remaining qualifying interest birds are seabird. There is no other pathway for impact on those birds.</p>
<p>Conclusion</p>	<p>No LSE</p>

### Gladhouse Reservoir SPA

TABLE 8 LSE CONCLUSION GLADHOUSE RESERVOIR

Conservation Objective	Appraisal
<p>To avoid deterioration of the habitats of the qualifying species or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained;</p>	<p>Direct effects: none, the site some 14 km west of East Lothian.</p> <p>Indirect effect: disturbance: the Strategy supports an increase in access to woodland however this will not increase disturbance at the site as it is outwith the area and proposals to increase access to the adjacent area are not included. Indirect: landcover change: The habitats on site will not suffer deterioration due to an increase in invasive species, changes to water quality or increase fire risk as there is 2km of intervening land including the A68</p>

	and a wayleave for high voltage pylons between this site and East Lothian. Indirect effect: there will be no risk of deterioration of water quality from tree or woodland planting activity as and no part of East Lothian drains into the site.
To ensure for the qualifying species that the following are maintained in the long term: <ul style="list-style-type: none"> <li>• Population of the species as a viable component of the site</li> <li>• Distribution of the species within site</li> <li>• Distribution and extent of habitats supporting the species</li> <li>• Structure, function and supporting processes of habitats supporting the species</li> </ul> No significant disturbance of the species	As 'Fala Flow' above.
Conclusion	Likely Significant Effect Loss of supporting habitat: Pink Footed goose

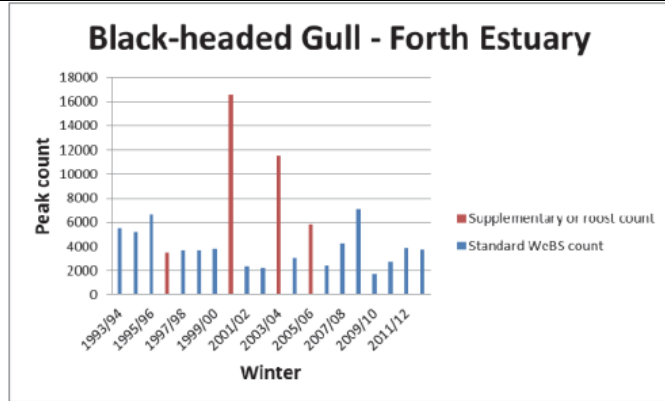
### Outer Firth of Forth and St Andrews Bay Complex SPA

TABLE 9 OUTER FIRTH OF FORTH AND ST ANDREWS BAY COMPLEX SPA

Conservation Objective	Appraisal
1. To ensure that the qualifying features of the Outer Firth of Forth and St Andrews Bay Complex SPA are in favourable condition and make an appropriate contribution to achieving Favourable Conservation Status.	There will be no direct effects on the site. The parts that overlap East Lothian are at the edge of the intertidal zone or rocks and sandbanks submerged at low tide, where trees cannot grow. Indirect effect: water quality. There is a small chance that woodland creation activity related to the Strategy could lead to the release of sediment or pollutants into the sea. Any effect would be localised and short term. This is not the intention of the strategy, and if good practice is followed, it will not occur. Other regimes including grant funders and EIA regulations, would provide for assessment at project level that would include measures to ensure normal good practice is followed. There will be no impact on favourable conservation status through impacts at the site.
2. To ensure that the integrity of the Outer Firth of Forth and St Andrews Bay Complex SPA is restored in the context of environmental changes by meeting objectives 2a, 2b and 2c for each qualifying feature:  2a. The populations of qualifying features are viable components of the site.  2b. The distributions of the qualifying features throughout the site are maintained by avoiding significant disturbance of the species.  2c. The supporting habitats and processes relevant to the qualifying	Qualifying interests: Herring Gull: as St Abbs to Fast Castle SPA. The gull is 'Favourable Maintained' at this site. Qualifying interest: Black-headed gull; this species is Amber listed in Birds of Conservation Concern. It is 'Favourable Maintained' at this site. The following extract from NatureScot (2015b) Commissioned Report 804 shows the winter peak counts are relatively stable, though, breeding numbers have declined in Britain, for unclear reasons.

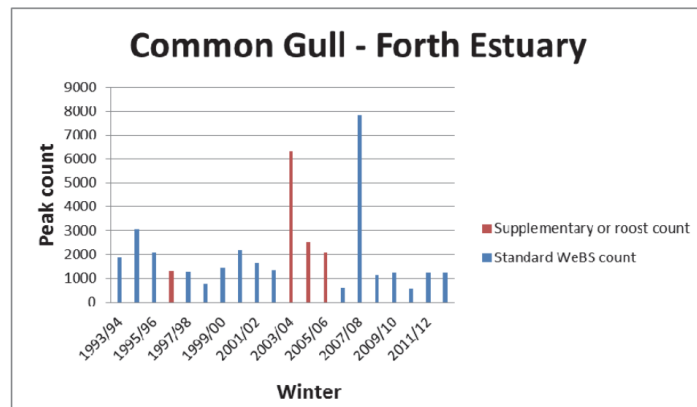


features and their prey/food resources are maintained, or where appropriate restored, at the Outer Firth of Forth and St Andrews Bay Complex SPA.



Black-Headed Gull is omnivorous but eat mainly aquatic and terrestrial invertebrates, and human food sources. Black headed gulls do sometimes feed on farmland and open ground, and some of this habitat will be lost to woodland or tree planting. The strategy has a target for 300 ha of woodland in support of agricultural production, which is likely to be on farmland. There will also be some planting in urban areas to increase canopy coverage.

Given the large amount of farmland habitat available, and the availability of other food sources, this loss is negligible. No LSE. Qualifying Interest: Common Gull. The common gull is Amber listed in Birds of Conservation Concern, and Favourable Maintained at this site. The extract from NatureScot Commissioned Report 804 below suggests relative stability of peak winter numbers. The bird is described as widespread and numerous in both the inner and outer areas of the Forth.



Common Gull is omnivorous, and eats mainly earthworms, insects, aquatic and terrestrial invertebrates and small fish. As with Black headed gull, the bird is likely to forage on farmland and open ground inland. As noted above for Black Headed gull, the loss of farmland will be minor, and the effect on the species negligible. No LSE.

Little Gull: this bird feeds by picking food items off the surface of water, so does not use farmland as the other gulls might.

Conclusion

No LSE

## St Abbs Head to Fast Castle SPA

TABLE 10 LSE CONCLUSION ST ABB'S HEAD TO FAST CASTLE SPA	
Conservation Objective	Appraisal
To avoid deterioration of the habitats of the qualifying species or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained	<p>Direct effects: none, the site is outwith East Lothian. Indirect effects; the TWSEL will not increase disturbance from recreation at the site. There may be a marginal decrease as some people choose to recreate in woods rather than the beach, however this effect (which would be positive) will be limited by the inherent attractiveness of the coast as a destination.</p> <p>The habitats will not suffer deterioration due to invasive species or changes to water quality as they are separated from areas of change by intervening land.</p>
<p>To ensure for the qualifying species that the following are maintained in the long term:</p> <ol style="list-style-type: none"> <li>3. Population of the species as a viable component of the site</li> <li>4. Distribution of the species within site</li> <li>5. Distribution and extent of habitats supporting the species</li> <li>6. Structure, function and supporting processes of habitats supporting the species</li> <li>7. No significant disturbance of the species</li> </ol>	<p>Kittiwake and guillemot are seabirds that do not use areas of supporting habitat within East Lothian. There is no pathway for an effect on these birds. Herring gull are red listed in Birds of Conservation Concern. This bird uses inland sites for foraging. With mean range of 10km to forage, and a maximum of 92km, East Lothian is within daily reach. The policies and actions of the Strategy identified as having a potential effect were because they promote woodland creation. There is a target of planting 2 million trees, which does not arise from this strategy but is endorsed by it, along with mapping setting out where new woodland should and should not occur. Woodland creation is not in itself a threat to the gulls however this could lead to loss of farmland habitat, on which they may feed. Herring gull is an opportunistic, feeder (JNCC), being a predator and a scavenger. It primarily feeds at the coast, but takes waste from the fishing industry and landfill sites also.</p> <p>The Strategy recognises the food production value of agricultural land and seeks woodland creation on agricultural land only in support of this. It proposes that 300ha of farm woodland would be created. In the context of the amount of agricultural land in East Lothian, the effect on food supply for Herring Gull is negligible.</p> <p>There are no other pathways that could affect this conservation objective.</p>
Conclusion	No LSE

TABLE 11 LSE CONCLUSION RIVER TWEED SAC	
Conservation objective	Appraisal
<p>To avoid deterioration of the qualifying habitat (listed above) thus ensuring that the integrity of the site is maintained and the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features</p>	<p>Direct effects: None, the site as it is not in East Lothian.</p> <p>Indirect effects, Water Quality: the Strategy has a target for increasing riparian woodland. This would help avoid deterioration of habitat by improving water quality, both of the watercourse themselves and by trapping pollutants from further afield which might otherwise enter the watercourse.</p> <p>The area which is shown as draining into the River Tweed is an area which is marked 'Sensitive' on the Constraints map. Much of this area contains potentially contains peaty or potential peat soil. Policy 15 of the Strategy prefers peatland restoration to woodland creation in such areas so large-scale tree planting which might lead to silt run off or polluting incidents is not supported there.</p> <p>The Native Woodland Opportunities shows it as mostly an area suitable for Scots Pine with Heather, or Peatland with scattered birch/pine/scrub trees, and for riparian woodland around watercourses. A small part of the area, which drains in to the Whiteadder Reservoir is shown as suitable for upland oak. The area around this is controlled by Scottish Water to protect drinking water supply, so pollution here is unlikely, and if it did occur, the reservoir forms a barrier between the incident and discharge into waters draining into the Tweed.</p> <p>In addition, Policy 13 and supporting text requires that proposals consider the effect on European sites, specifically mentioning drainage into this site.</p> <p>Policy 4 requires that tree planting should aim to reduce soil disturbance. Policy 9 Seed and Tree Stock Sourcing prefers natural regeneration from seed in the soil.</p> <p>There is a small chance that activity related to woodland creation could lead to the release of sediment or pollutants into water environment. Any effect would be localised and short term. This is not the intention of the strategy, and if good practice is followed, it will not occur. Other regimes including grant funders and EIA regulations, would provide for assessment at project level that would include measures to ensure normal good practice is followed. For tree planting that is not controlled through other regimes or grant schemes, the TWSEL will increase publicity of good practice.</p> <p>Therefore, the effects of the Strategy will be positive.</p> <p>Indirect effect; fire risk. Increased woodland cover, and woodland connectivity in combination with climate change, could change risk of wildfire. It is not the intention of the strategy that it should increase, and how the risk will change is not obvious. At the moment land in the Lammermuirs is managed for grouse moor and wind farm development. Grouse moor requires muirburn, which carries a risk of fire becoming out of control</p>

	(though this is balanced against risk of accidental fire on land which has not been burnt, and hence has a higher load). Woodland creation or forestry may reduce fire risk as there is not the risk of a controlled fire spreading. It could also increase it through greater availability of flammable material, and increased connectivity.
<p>To ensure for the qualifying habitat that the following are maintained in the long term:</p> <ul style="list-style-type: none"> <li>• Extent of the habitat on site</li> <li>• Distribution of the habitat within site</li> <li>• Structure and function of the habitat</li> <li>• Processes supporting the habitat</li> <li>• Distribution of typical species of the habitat</li> <li>• Viability of typical species as components of the habitat <ul style="list-style-type: none"> <li>• No significant disturbance of typical species of the habitat</li> </ul> </li> </ul>	<p>Other than via the water environment noted above, there is no pathway for an impact on extent, distribution or structure and function of habitat on site.</p> <p>As noted above, the TWSEL will improve water quality through Riparian woodland creation. This would help the processes supporting the habitat by improving water quality. It would support the viability of typical species as components of the habitat. It would help avoid disturbance of typical species by expanding the amount of habitat for cover from predators.</p>
<p>To avoid deterioration of the habitats of the qualifying species or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained and the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features; and</p>	<p>The main route for adverse impact on habitat is via water quality. The TWSEL contains policy and actions aimed at improving water quality, and this is reflected in the spatial mapping. This will help avoid deterioration of the habitat.</p> <p>The TWSEL does support recreation in woodland however this is a remote location with limited car access, so it is unlikely that recreation would increase as a result.</p>
<p>To ensure for the qualifying species that the following are maintained in the long term:</p> <ul style="list-style-type: none"> <li>• Population of the species, including range of genetic types for salmon, as a viable component of the site</li> <li>• Distribution of the species within site</li> <li>• Distribution and extent of habitats supporting the species</li> <li>• Structure, function and supporting processes of habitats supporting the species</li> </ul> <p>No significant disturbance of the species</p>	<p>As above, the TWSEL should lead to an improvement in water quality which would support the population of species including salmon. It will not affect the distribution of species within the site. The Strategy will increase the distribution and extent of habitats supporting the species outwith the site, as well as the structure and function of supporting process.</p>
Conclusion	No LSE

## In combination effects

### Other Relevant Plans & Projects

TABLE 12 RELEVANT PLANS AND PROJECTS	
National Plans & Projects	
National Planning Framework 4	HRA undertaken. This guides the Local Development Plan. No policies or proposals identified that would have 'in combination' effects with proposals in this strategy
River Basin Management Plans	HRA undertaken. Will improve river SACs. No minor residual effects identified.

UK Biodiversity Action Plan	Guides habitat and species management, benefits European Sites
Scottish Forestry Strategy	No HRA undertaken. High level strategy that encourages sustainable management of woodland and resilience in woodlands
<b>Local Plans &amp; Projects</b>	
East Lothian Local Development Plan 2018	HRA undertaken and concluded no adverse impacts on site integrity. No parts of the plan are considered to have in combination effects with the policies within this document
Core Paths Plan	No HRA undertaken. This details all the core paths across East Lothian and provides protection for them
Climate Evolution Vision	HRA undertaken. No likely significant effects found.

## 5. Appropriate Assessment

The proposals identified as having LSE, either alone or in combination with other plans and policies, require an Appropriate Assessment. The test which the appropriate assessment must answer is whether or not the plan will have an adverse effect upon the integrity of a European site. No method is proscribed for how to determine this. Scottish Government circular 6/95 Habitats and Birds directives states that integrity of a site is “the coherence of its ecological structure and function across its whole area which enables it to sustain the habitat, complex of habitat and/or the levels of populations of the species for which it was classified”. This assessment must be made in terms of the conservation objectives set out for each site.

Background information has been collected on the conservation status of each qualifying interest that might be affected. Survey information has been collected in the form of WeBS counts and information given to the council by nature Scott on the distribution of pink footed goose and waders across East Lothian. This has been supplemented by survey information collected by the Council on pink footed goose.

### Loss of Supporting habitat – pink footed geese – Firth of Forth, Fala Flow, Gladhouse Reservoir

Pink footed goose was identified as potentially being impacted by the Strategy.

#### *Pink footed goose characteristics and requirements*

Pink footed goose is a medium sized goose. The geese breed in Greenland, Iceland, from where they arrive in autumn, moving southward making use of sites down the coast and on inland waters as they go, before returning in Spring. The strong seasonal movements within Britain mean there is a connection between the forage available on agricultural land in East Lothian and series of SPA designated for pink footed goose as a whole. The pink footed goose is a qualifying interest for Firth

of Forth, Fala Flow and Gladhouse Reservoir SPAs, as well as ones further distant. The assessment has considered only sites within 20km, based on the information from Mitchell (2012) which suggests that the birds using fields in East Lothian are associated with those sites.

The geese are herbivorous, feeding on improved grassland, cereal stubble and vegetables. Use of fields by pink footed goose is influenced by what is grown in the field and it will change through the winter in response to the availability of food. Bell (2018) reports research showing there is a preference for stubble fields in autumn and early winter and grassland later on. In East Lothian the peak numbers of pink feet are recorded in autumn where the preferred food is spilt grain in stubble fields. Unharvested potatoes are an important secondary source especially around Aberlady. Pink feet tend to feed first in the fields closest to their roost site, moving further afield as they eat up the food supply or are disturbed. Disturbance plays a big role in the choice of feeding sites with the geese preferring to use fields away from roads. Many birds including geese will tolerate predictable movements along roads and paths but are less tolerant of pedestrians, or dogs, walking through fields.

A key issue is whether the distribution and extent of foraging areas in East Lothian are currently, or could become, a limiting factor for the goose populations. Pink footed geese usually feed close to their roost site. Roost sites are generally in estuaries or waterbodies. The geese roost at Fala Flow, Gladhouse Reservoir, and usually in large numbers at Aberlady Bay in East Lothian. There is some roosting at Tynninghame Bay. The geese are highly gregarious, feeding and roosting in large flocks. NatureScot advise that the core range is 15 – 20 km. They may occasionally fly more than 20km to find suitable forage.

The range of foraging sites is suitable agricultural fields potentially across East Lothian, most of which is outwith the SPA boundaries. The whole of the area is within the foraging range from one or more sites. Broadly, the core foraging area is concentrated north of the A1 extending roughly northeast from Longniddry. High concentrations have been recorded between Longniddry and Aberlady in the area north of Coates farm and inland from Gullane, Dirleton and North Berwick. However they have also been recorded in significant number elsewhere. This is shown in the mapping below, based on information supplied to the Council by NatureScot around 2015 and survey information collected by the Council between 2011 and 2016 by means of survey and collection of ad hoc records.

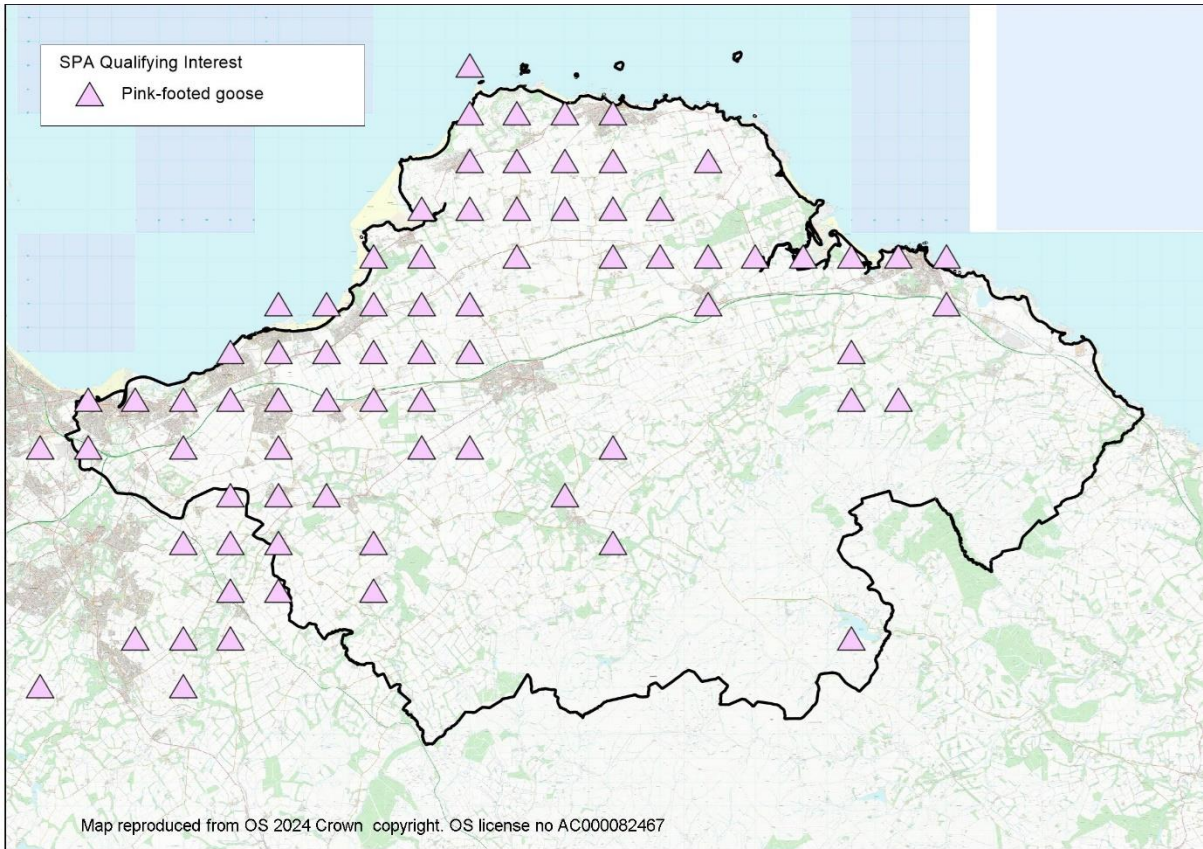
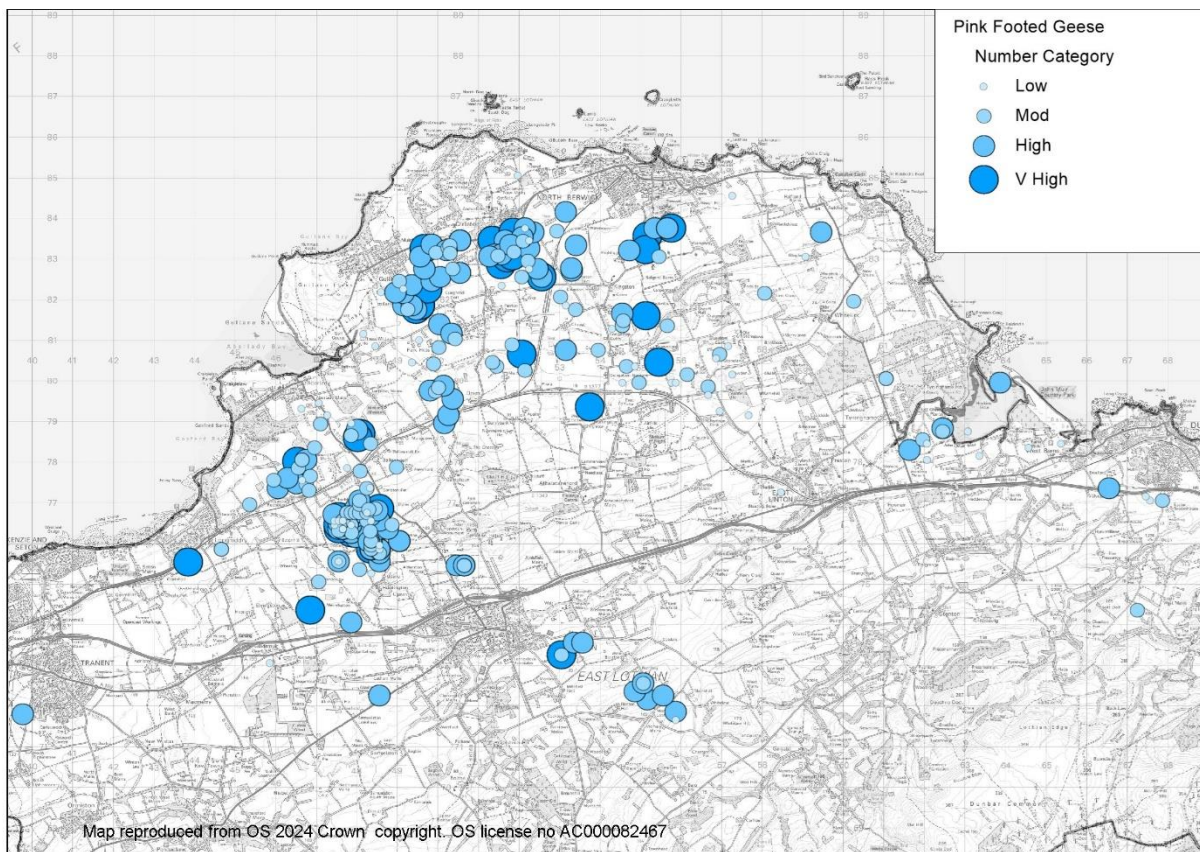


Figure 3 Pink foot records by tetrad, based on information from NatureScot



*Figure 4 East Lothian Council pink footed goose records*

The maps below show the distribution of feeding records of Pink Footed Goose from Mitchell, 2012. This shows the wide distribution of potential forage. Although the geese appear to prefer to forage closer to the roosting site, they can range further afield, and there are a range of areas close to the sites they could use.



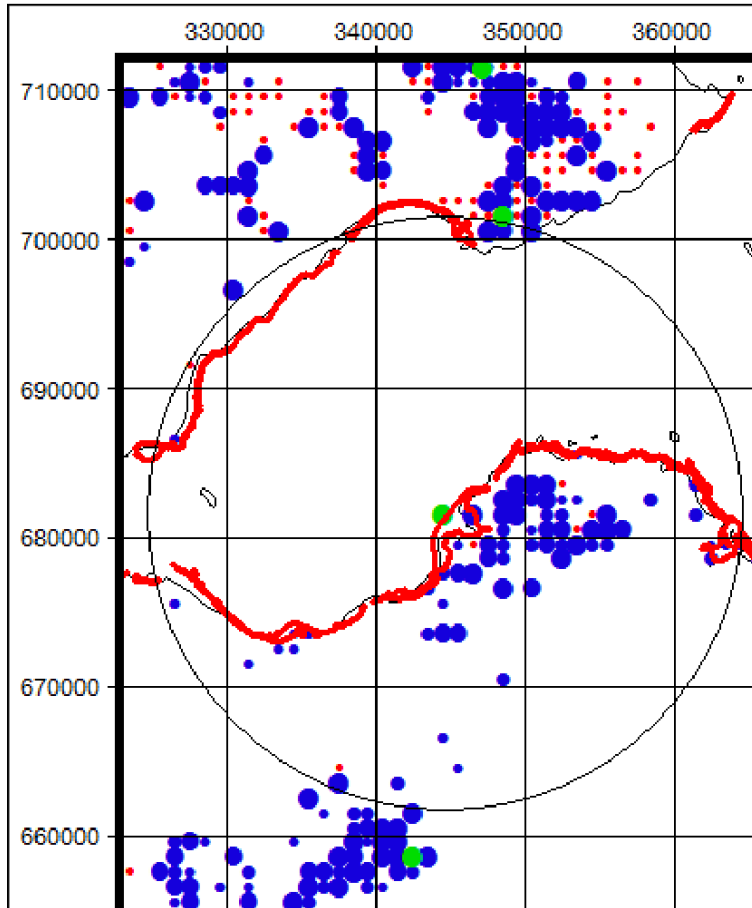
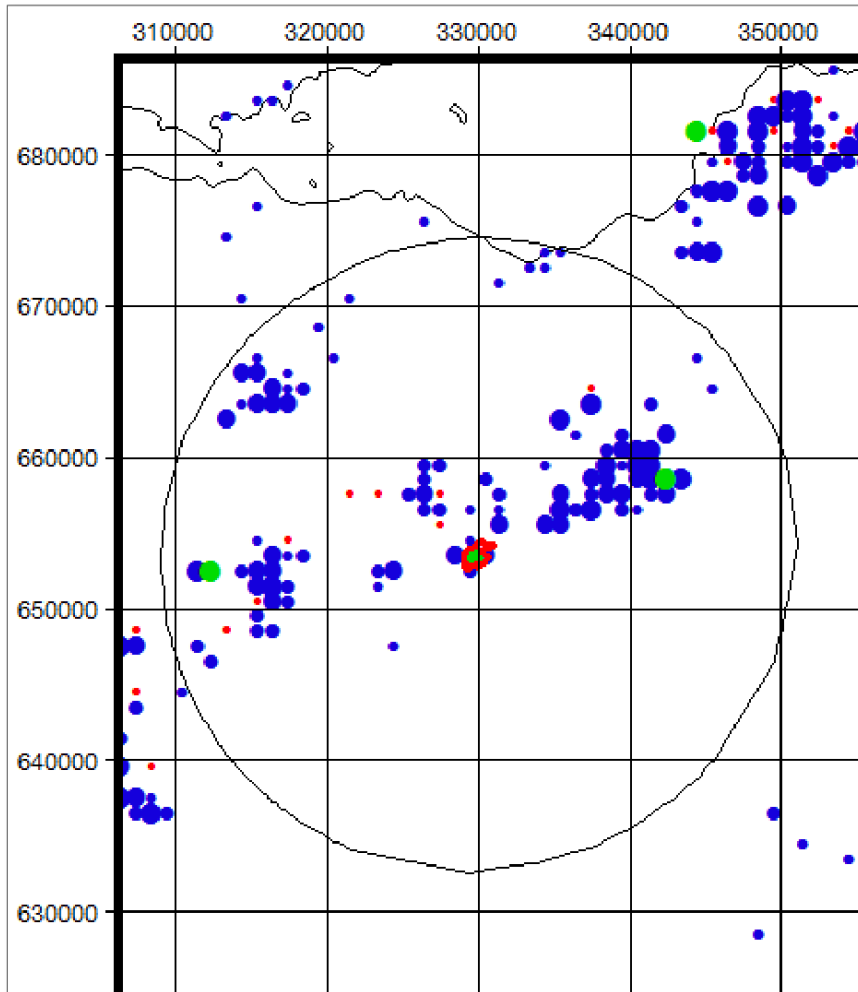


Figure 5 Feeding distribution (1986/87 to 2011/12 – all records) of Pink-footed Geese in relation to the Firth of Forth (Aberlady Bay roost) SPA, Mitchell 2012



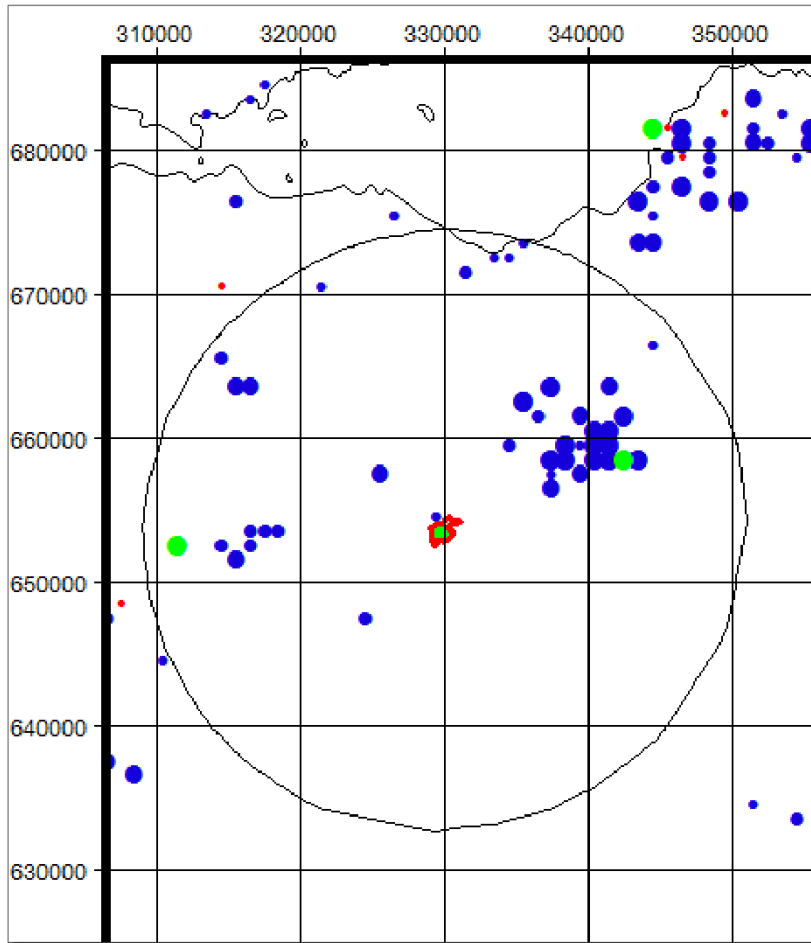


Figure 6 Feeding distribution (2007/08 to 2011/12 – all records) of Pink-footed Geese in relation to the Gladhouse Reservoir SPA Mitchell 2012

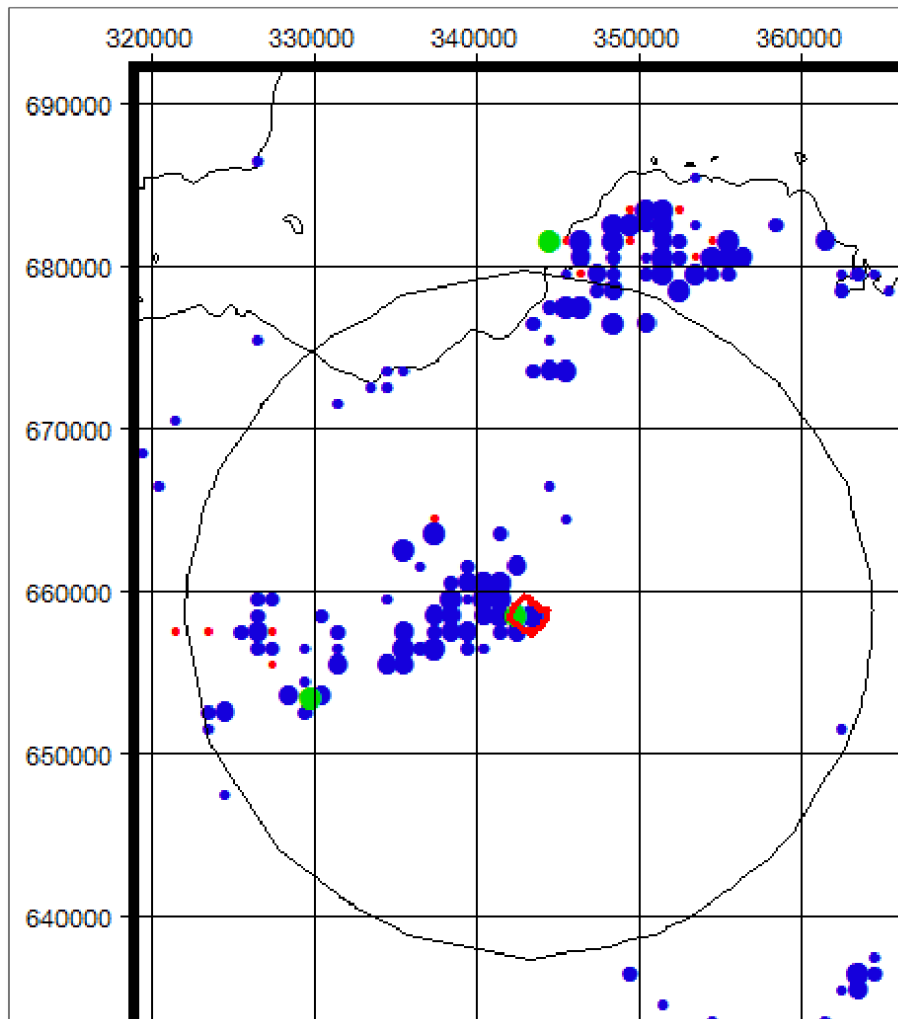
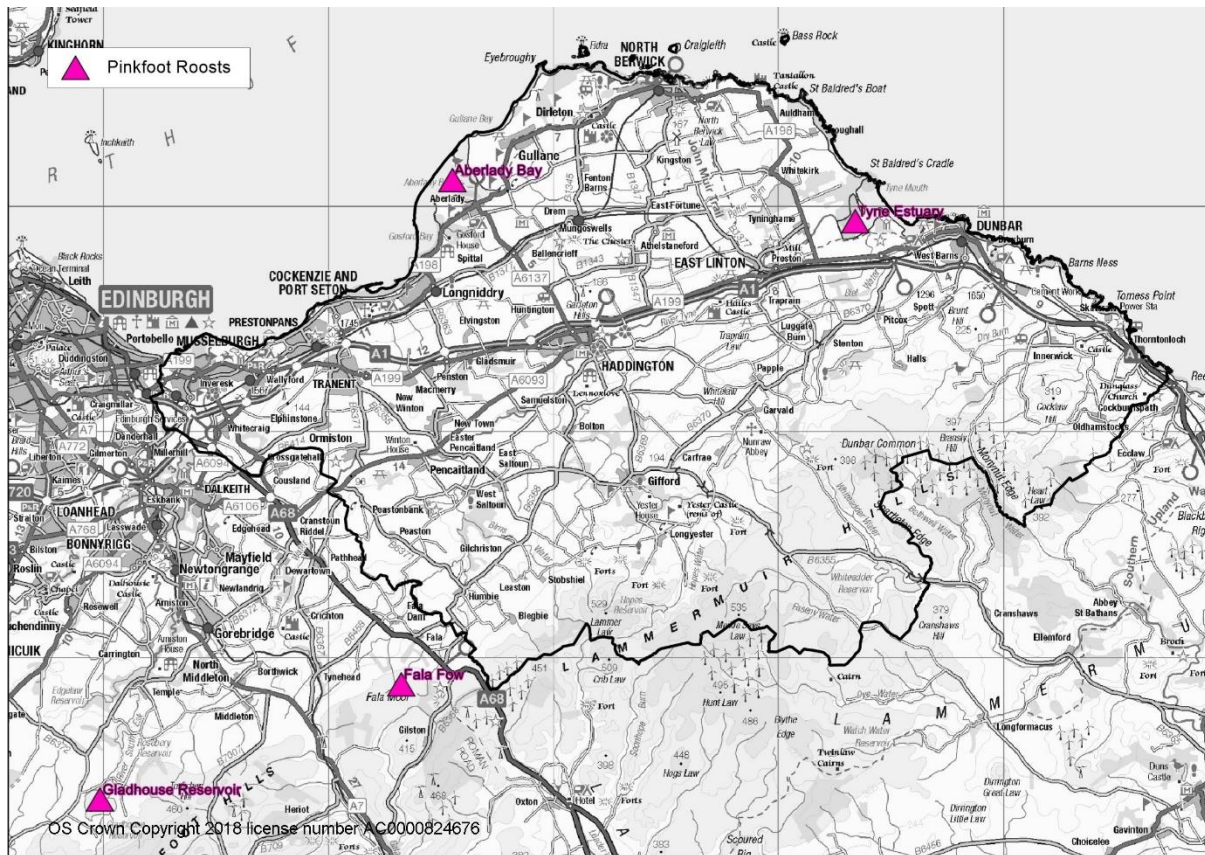


Figure 7 Feeding distribution (1986/87 to 2011/12 – all records) of Pink-footed Geese in relation to the Fala Flow SPA, Mitchell 2012.

The main pinkfooted goose roost in East Lothian is in Aberlady Bay within the Firth of Forth SPA, but some birds also roost in the Tyne Estuary. Fala Flow and Gladhouse Reservoir are also roost sites from which geese may forage within East Lothian (see map below). The Tree and Woodland Strategy will not directly affect the availability of roost sites in East Lothian as trees cannot be planted within intertidal areas. There are some watercourses through and near the main roost sites. The riparian area around watercourses is shown on the Native Woodland Opportunities mapping as areas where woodland expansion is supported subject to project level assessment. However, the riparian areas of watercourses in or near the SPA have been excluded from this mapping. This is to avoid change close to the roost site and also avoid impact on the most important high tide roost sites for inland waders.

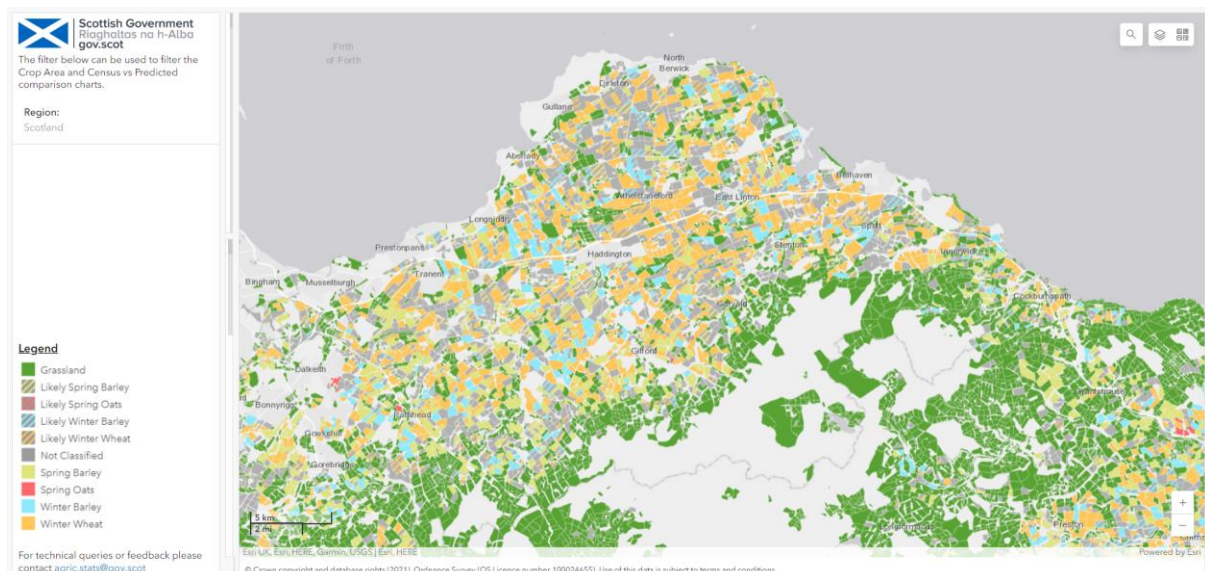
The Tree and Woodland Strategy will not increase levels of disturbance at roost sites. This would be likely to be to reduce it rather than increase it through provision of alternative areas for outdoor recreation including dog walking. Although due to the intrinsic attractiveness of the coastal area any effect is likely to be marginal, the strategy would if anything reduce disturbance through provision of alternative areas for recreation including dog walking. This could also make management measures in such areas more acceptable.



The Scottish Crop Map

<https://scotgov.maps.arcgis.com/apps/dashboards/f9216efc72e44b7e9093cfae08f6f861> shows the extent of land down to specific crops in 2019, which were mainly grassland, oats, barley and wheat.

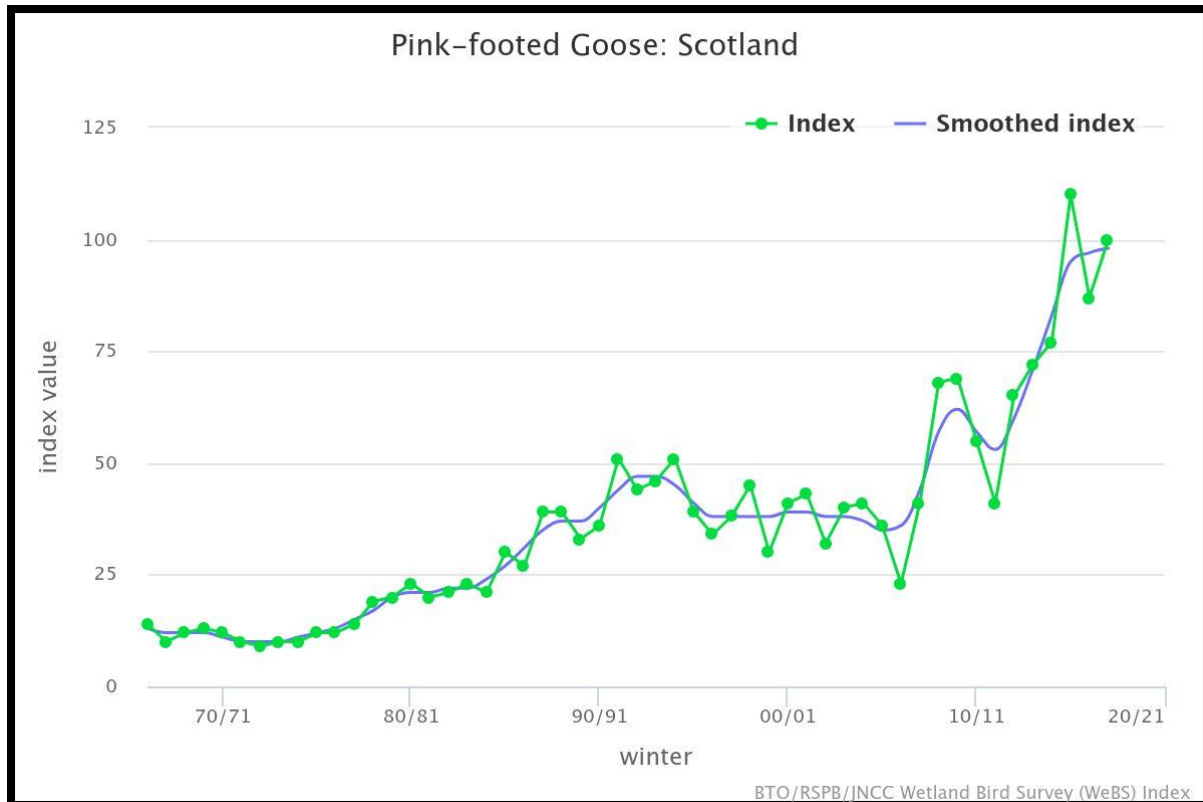
The following is an extract of this map:



The exact crops grown from year to year vary with agricultural rotation. However, there is a wide availability of potentially suitable fields including close to the roost sites. There is relatively little woodland around the Firth of Forth SPA, other than to the north, so there are likely to be few restrictions on goose movement in this area.

### Conservation Status

The conservation status of the species is of Least Concern. Population in the site at Gladhouse Reservoir at designation 1990 was 10,500, at Fala Flow the population was 2400, and at Firth of Forth 10,852. Data for the Forth Estuary show that goose numbers fluctuate considerably from year to year. The current 5 year mean for the Forth Estuary is 17392. Population numbers are based on winter roost counts.



### Outcomes of the Tree and Woodland Strategy

The policies, actions and sections of the Spatial Mapping that have been identified as having Likely Significant Effect are all so identified because the intended outcome is that woodland is increased. There is an overall target of 2 million trees. Although this target was set in the Climate Change Strategy Update, it is endorsed by the Tree and Woodland Strategy. There are also targets for woodland connectivity which could result in woodland creation in areas used by geese. Much of this woodland creation is expected to occur in areas not used by the geese for forage, such as cleughs.

The Strategy contains a target of 300 ha of farm woodland. There is a wide choice of locations where this could come forward, including on land that may be suitable for forage in terms of land cover but that is subject to disturbance so is not used. However, the Strategy seeks to retain most farmland in agricultural use because of its value to food and drink production. The Strategy identifies arable farmland which is not covered by another designation that would make it 'Sensitive' as 'Potential'. This potential refers to woodland that will come forward to support agricultural production, rather than instead of it.

The Tree and Woodland Strategy also aims to increase hedgerow planting by 10% through a Hedgerow Strategy. Pink footed geese require large open areas with clear sight lines for foraging and roosting. Hedgerow planting can affect pink footed goose habitat by reducing sightlines and the size of fields, even though the actual physical area of farmland habitat removed is not great. The Hedgerow Strategy would also require to be subject to Habitat Regulation Appraisal. The Tree and Woodland Strategy itself is not proscriptive about where hedgerow planting would come forward.

Native woodland expansion within/adjacent to feeding areas could also impact sightlines and reduce suitability of feeding sites. Both could increase cover for predators, making the geese wary of using fields as they prefer large fields with good visibility. The Tree and Woodland Strategy promotes riparian planting of native woodland, and planting of native woodland to allow for climate migration. Some of this planting is in areas used by pink footed geese, in particular some areas south of Dirleton and to the east of the Longniddry/Haddington railway walk which contain watercourses which are currently unwooded where increased native tree cover is promoted.

The Strategy will increase woodland on farmland to a small degree, if successful, against the current position. It is not clear that the Strategy will increase woodland creation in farmland over and above what would occur without it. There is considerable public enthusiasm for tree planting linked to concern about climate change. There have been concerns that, welcome though this is, some of the planting may be taking place in less than optimum places, including on prime agricultural land. The Strategy only supports woodland creation on agricultural land where it aids agricultural production, in recognition of the importance of this function of land. The Strategy may therefore have the effect of reducing the amount of planting carried out on agricultural land. Provision for a Hedgerow Strategy could coordinate the planting of new hedgerows to avoid areas where there could be an impact on supporting habitat for pink footed geese.

Overall, if the Tree and Woodland Strategy is implemented as set out, there will be some loss of supporting habitat for pink footed goose. Increased cover for predators could potentially lead to some losses of individual birds.

#### *In-built Mitigation*

The TWSEL identifies Special Protection Areas and SSSIs themselves, as 'Sensitive' on mapping. This means tree planting and woodland creation is not encouraged there. Policy 13 Protection of European Sites of the Tree and Woodland Strategy specifically reiterates that projects that are likely to have a significant effect on a European Site must undergo assessment. It further provides projects that have an adverse impact on the integrity of the site can only go ahead in the circumstances set out by statute.

#### *Conclusion*

Pink footed geese are in very good condition overall, and have occurred at far greater numbers than at the designation of the site. They use a wide range of sites across much of arable East Lothian. There is a large amount of agricultural land which is potentially suitable for forage, and the amount that will be lost is small. It would seem logical then that there is sufficient forage to sustain a larger population at the sites than at designation. Pink footed geese have a large daily foraging range and are used to changing where they go due to changes in availability of forage according to crops grown

from time to time. This means they will be able to find alternatives within the area, should a small part of the supporting habitat not be available. A minor loss of supporting habitat, were that to occur, would displace geese to different fields but not affect the Conservation Objectives of the relevant sites. It would not result in a change to the distribution of geese across the SPA, or the population of the species as a viable component of the site.

There will be no

Given

- the pink footed goose is not of conservation concern overall and is listed at the Firth of Forth and Fala Flow as 'Favourable Maintained': lack of supporting habitat is not mentioned as a site pressure on any of the SPAs
- Although the feature is assessed as 'Unfavourable Declining' at Gladhouse Reservoir SPA the Tree and Woodland Strategy cannot influence the site pressures listed of water management or lack of proactive management there or at Fala Flow
- numbers fluctuate significantly at the sites from year to year and availability of forage is also influenced by crops grown
- there is enough suitable foraging habitat to support a larger population than was there at designation
- the loss of supporting habitat is minor in comparison to the overall availability of suitable foraging habitat and may actually be less than what would occur without the Strategy
- Policy 13 of the TWSEL requires project level assessment of impact on European Sites through project level assessment
- The roost sites for pink footed geese will not be affected

In terms of the Conservation Objectives for the site:

There will be no deterioration of the habitat or increase of disturbance to the species within the site boundary any of the relevant SPAs themselves. The population of the species as a viable component of the sites will not be affected by the strategy as the current overall population is strong and does not appear to be limited by lack of forage outwith the site. Daily foraging distances of the geese are up to 20km, and mapping shows that the geese do forage over a fairly wide area within East Lothian. The Strategy will not affect roost sites, and sufficient foraging habitat will remain over a wide area. Therefore the distribution of the species within the site will not be affected. There will be minor loss of distribution and extent of habitat supporting the species outwith the site, but the species will remain supported. There could be an increase in disturbance arising from recreational use of woodland created however due to the amount of suitable habitat remaining this is not anticipated to affect the species within the sites.

It can be concluded there is no adverse integrity on the Pink-footed Goose qualifying interest of the Fala Flow SPA, Gladhouse Reservoir SPA or Firth of Forth SPA. However, at project level the competent authority should satisfy themselves that sufficient unfragmented fields suitable for forage for pink footed goose remain if a proposal were to go ahead.

Impact on wading birds is considered below.



## LSE – Loss of Supporting Habitat for Inland Waders

Seven qualifying interest species of the Firth of Forth SPA were identified as potentially using inland areas for either roosting, feeding or both. Activity is almost all within around 5km of the coast, and for some species (Bar tailed godwit, Grey Plover, Redshank) there are few if any records of use of areas other than the intertidal, foreshore and immediate hinterland. This does not mean they are not used however.

The map below shows the Constraints map (which identifies 'Potential' and 'Preferred' areas for woodland creation) overlaid with a) the land 5km from Firth of Forth SPA and b) areas that drain into the River Tweed SPA. The area within 5 km of the Firth of Forth is shown as this area, where there is suitable habitat, has potential to be used by wading birds.

Mapping of records is shown for each species from both The Wildlife Information Centre and NatureScot (other than bar-tailed godwit, for which only TWIC information is shown). The NatureScot data was based on limited survey visits, potentially on only a single date. It is now almost a decade out of date. It is more useful for showing where birds are, or have been, than where they are not. There were no known inland roost sites for wader species. Although this does not mean there are none, given amount of bird recording, formal and informal in East Lothian, it is reasonable to assume that if there were areas that were used often by large numbers of birds, this would be known.

Pressures and trends were identified from NatureScot's Site Condition Monitoring, with reference to their Commissioned Report 804, 2015, "A Review of Literature on the Qualifying Interest Species of Special Protection Areas (SPAs) in The Firth of Forth and Development Related Influences." British Trust for Ornithology's website contains reports on WeBS counts, and this was referred to with regard to overall trends and whether site specific factors were affecting the species.

For all qualifying interests, the targets, policies and actions, as well as spatial mapping, identified as having Likely Significant Effect are those that lead to creation of woodland and tree planting, including potentially at the coast. This could lead to direct loss of supporting habitat to woodland creation. The strategy supports 300ha of new farm woodlands. It also supports riparian planting, some of which would be in farmland. Open farmland and grassland and wetland are the main inland habitat types used by the qualifying interests.

There could also be indirect functional loss if species are deterred from using remaining habitat e.g. by loss of sightlines or increase in predators. The Strategy encourages improving access to woodland (partly by woodland creation). Increased disturbance arising from an increase in use of woodland adjacent to supporting habitat by people and potentially dogs could also cause loss of function. Improving access to woodlands would provide alternative areas for recreation to the coast. In theory this could reduce disturbance there. However, given the intrinsic attractiveness of the coast this is unlikely to be significant.

A coastal mosaic of habitat is encouraged by the strategy, which respects other coastal habitat including saltmarsh and coastal grassland. This does not necessary include more woodland planting, as the strategy recognises the value of other habitats, including for qualifying interest species of the

SPA. The aim of the strategy is therefore that at least some of this habitat remains. Council management of important sites at Musselburgh Lagoons, Aberlady Local Nature Reserve and John Muir Country will also help to secure this. Proposal MH16 in the East Lothian Local Development Plan promotes habitat creation to the east of Lagoon 6 at Musselburgh. This area is outwith the SPA boundary and is being managed for the benefit of qualifying interest species of the SPA. This will act to offset any loss of wader arising from development proposed in the LDP and will ensure that suitable habitat for them remains.

The Strategy should be considered relatively low risk in terms of European sites as there will be a second round of consultation and consideration when individual proposals are looked at. If a planting or woodland regeneration proposal impacted an important wader area, it could be re-designed or re-considered at that point. Policy 13 of the Strategy provides for assessment under the Habitat Regulations at project level and reflects the statutory position as to whether they can go ahead. The competent authority for individual woodland creation/regeneration proposals will need to consider cumulative losses of wader habitat (and consider whether it is necessary to refuse proposals on specific roost sites) to prevent this limiting qualifying wader populations.

#### *Bar tailed godwit*

Bar-tailed Godwit are large wading birds, which overwinter in the UK, or pass through to sites further south after breeding in the Arctic. They mainly eat marine worms, but also shellfish, marine snails, and shrimp. Naturescot (2015) describe them as highly gregarious in winter, forming large flocks, and relatively sensitive to disturbance compared to other waders. They therefore mostly feed on mudflats, preferring the outer part of estuaries, and join mixed wader roosts at high tide.

The following map is of records of Bar Tailed Godwit © The Wildlife Information Centre, produced by the Council under licence. This shows Bar Tailed Godwit have been recorded mainly tight to the coast, at Aberlady Bay and the Musselburgh wader scrapes, as well as at North Berwick, John Muir Country Park and sporadically down the southeastern part of our coast. The records are in the intertidal or foreshore area, or immediately inland from there.

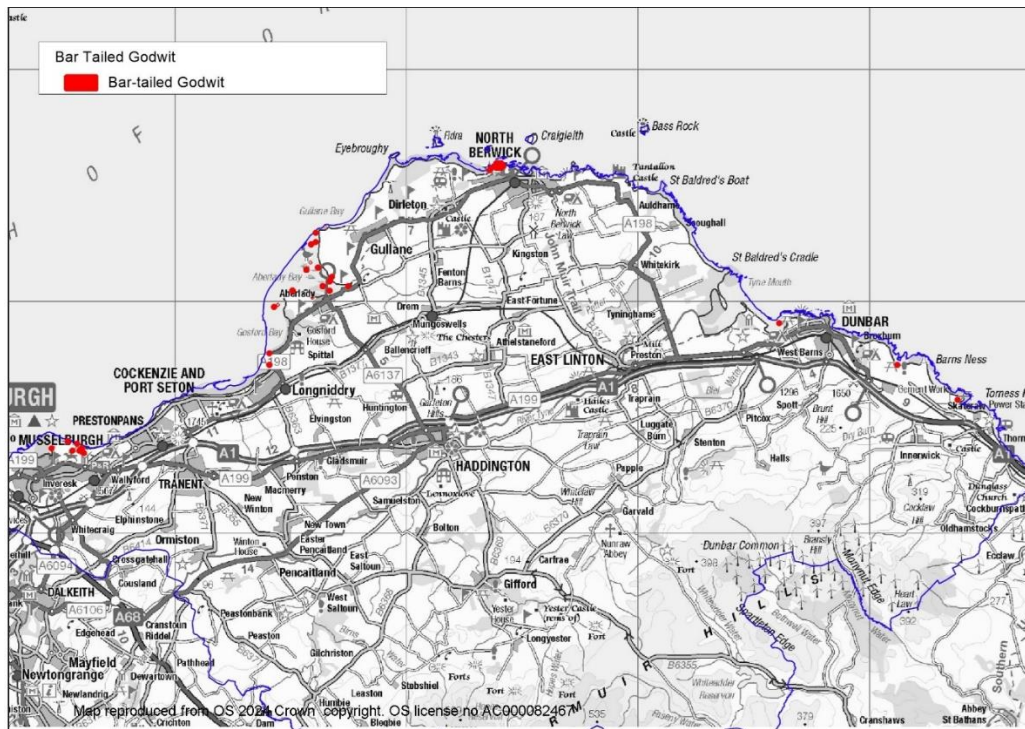
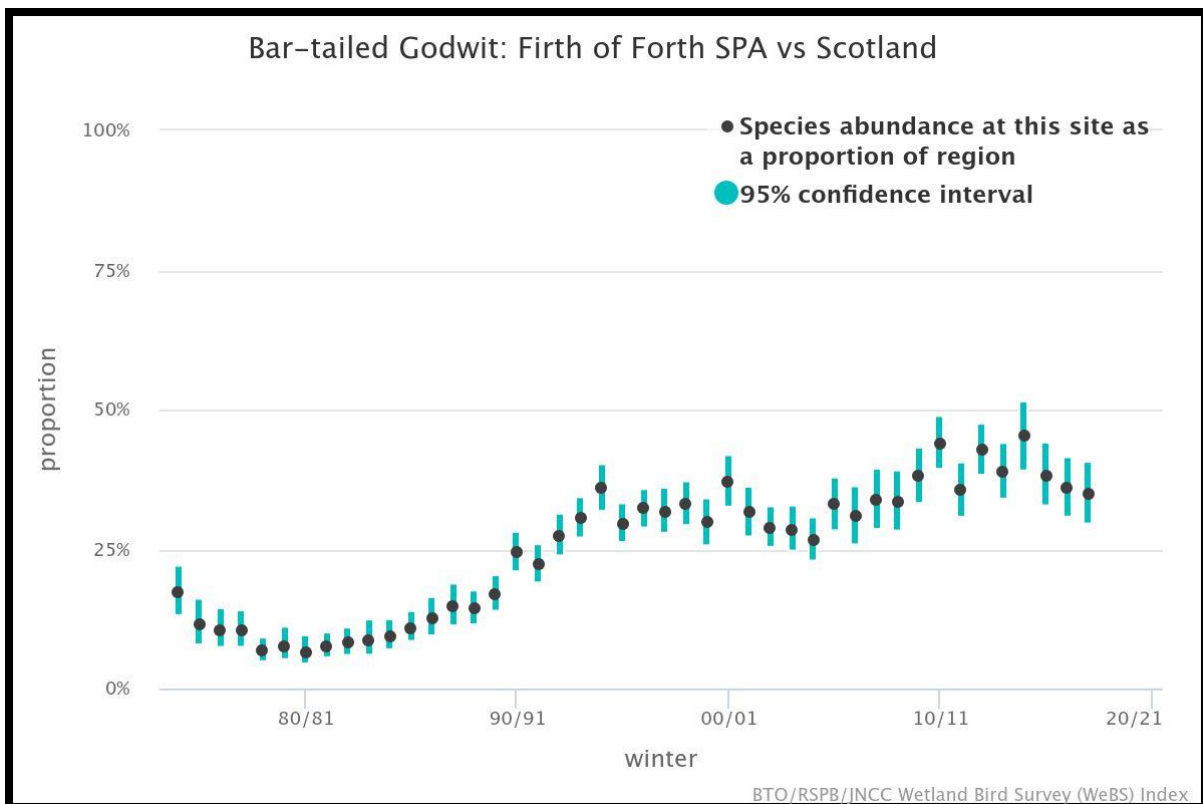
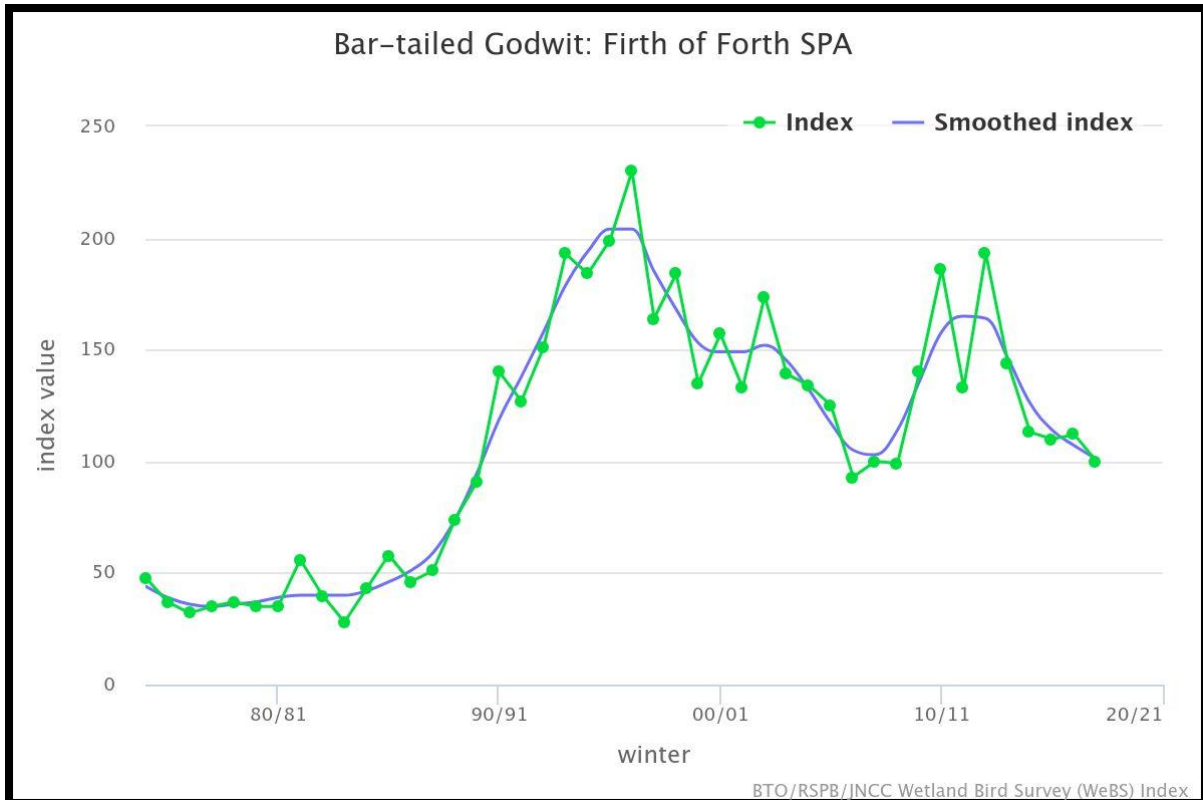


Figure 8 Bar-tailed Godwit records, (c) The Wildlife Information Centre

NatureScot site condition monitoring shows Bar-tailed Godwit as Favourable Maintained. Noted pressures on the site were recreation/disturbance from walking and dog walking.

The population at designation was 1974, the current rolling 5-year average from BTO WeBs counts is 996. Numbers of this species over-wintering within Scotland have been decreasing long term. The site trend is for increasing numbers compared to Scotland as a whole, suggesting environmental conditions remain relatively favourable and the site is becoming increasingly important on a regional basis. Although an Amber Alert has been issued for Bar-tailed Godwit due to a 48% decline, this should be treated with caution as numbers fluctuate over the long term, and changes in numbers underpinning this are within the range typical for this site.



NatureScot (2015) note that pressures on the site are disturbance of feeding flocks and especially roosts by walkers and dogs.

As noted above the main source of LSE is through woodland creation and encouragement of access to woodland. Where woodland is next to sites used as high tide roost, this could increase disturbance both from walkers and dogs.

The council takes measures through management of its coastal sites to avoid conflict, for example discouraging public access at Levenhall wader scrapes so birds are not disturbed, and restricting availability of parking at Aberlady Bay as well as reminding visitors of the need to control dogs.

Records of Bar-tailed Godwit shows that the distribution of this species is predominantly coastal. Woodland creation cannot take place in the foreshore or intertidal. Records of use of terrestrial areas are focussed on the Musselburgh lagoons, Aberlady Bay, John Muir country Park and the golf course at North Berwick. The first three of these are sites managed by the Council, while the last is one that will retain open space as it this is needed for its golfing use. As the Bar-tailed Godwits diet is from intertidal rather than land-based sources, any loss of supporting habitat would not affect its supply of food. The strategy will not increase disturbance of feeding flocks.

By improving outdoor access to woodland, there may be a drop of visitors to the Firth of Forth SPA, including those with dogs, though given the intrinsic attractiveness of the coast this is unlikely to be significant. Musselburgh lagoons are well used by walkers and dog walkers. At Aberlady Bay management measures by the Council include reduced parking spaces and requests to keep to paths and control dogs.

Given:

- the background of the species being in favourable maintained condition at this site and BTO view that Amber alert may reflect long term fluctuations
- the species is increasing here as a proportion of regional trends
- the species uses sites mainly very close to the coast, mainly managed by the Council; the Council will take into account impact on the species in its management
- the strategy may marginally reduce recreational disturbance at the coast
- Policy 13 seeks to protect European Sites through project level assessment
- The council will continue to manage important coastal sites at Musselburgh, Aberlady Bay Local Nature Reserve and John Muir Country Park, Dunbar

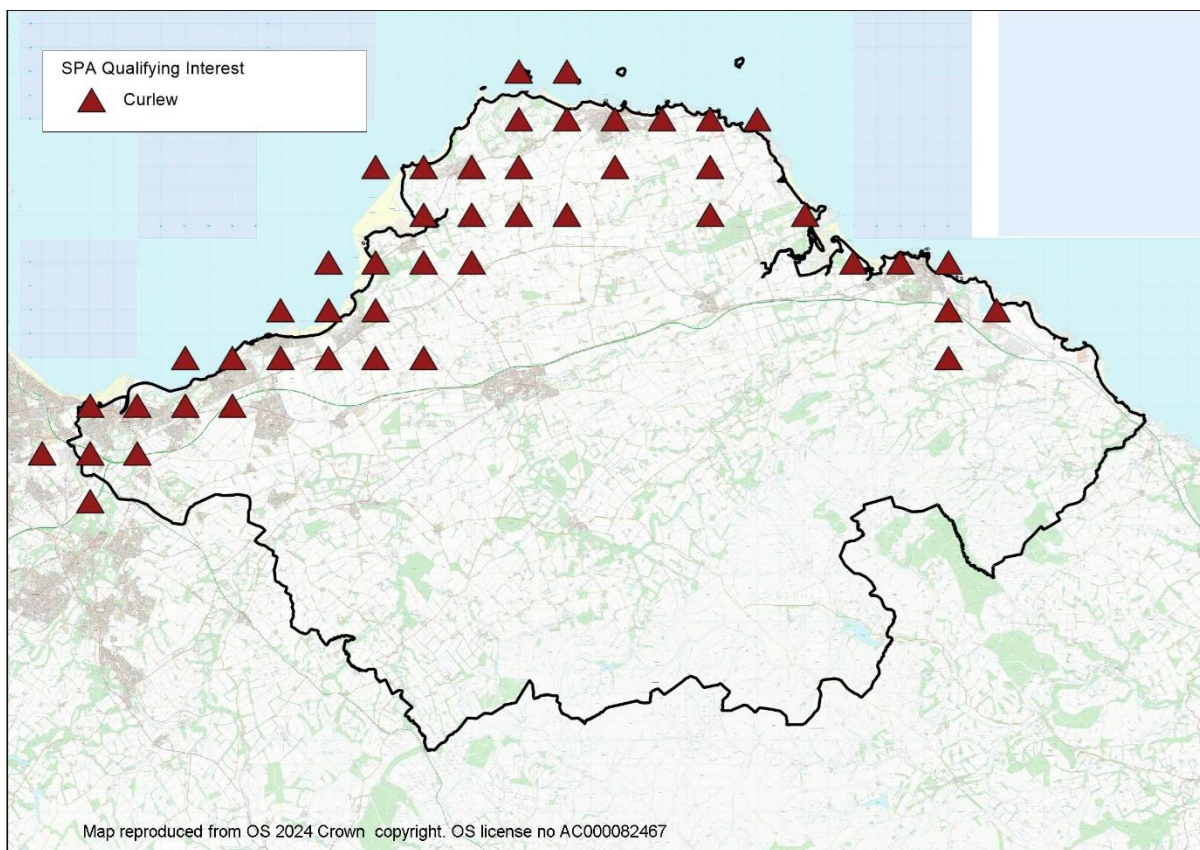
The Strategy will not affect habitats or disturbance levels within the Firth of Forth SPA itself. The maintenance of the population of the species as a viable component of the site or distribution within the site will not be affected as the areas of supporting habitat used are very close to the coast; around the coast in general 'coastal mosaic' is proposed to allow for supporting habitat to be retained. The riparian area of the Peffer Burn at Aberlady Bay, which is a high tide roost, is excluded from the Native Woodland Opportunities mapping so the Strategy does not support woodland expansion there. The distribution and extent of habitat supporting the species is not affected.

It can be concluded there is no adverse integrity on the Bar-tailed Godwit qualifying interest of the Firth of Forth SPA. As the areas used as supporting habitat are very close to the coast, and woodland expansion is not proposed there, there are no minor residual effects.

### Curlew

Curlew is Europe’s largest wading bird. It is found in estuaries in winter, migrating to breeding grounds on upland moorland, wetlands and rough pasture both here and in Scandinavia, in the summer. NatureScot (2015) describe them as gregarious in winter, and sensitive to disturbance. They eat invertebrates, including intertidal worms, crustaceans, and molluscs, but also molluscs and earthworms. Although they feed mainly in the muddy shores of estuaries, some birds also forage in fields inland. They roost at high tide in mixed wader flocks.

Mapping from NatureScot and TWIC records show that the species is concentrated around the coast, but does use some inland sites. Bell (2018) in the Habitat Regulation Appraisal of East Lothian Local Development Plan 2018 noted that Curlew are widely distributed both around the shores of the Firth of Forth and around the East Lothian coastline, and this is reflected in mapping of records from The Wildlife Information Centre and Naturescot below. Curlew have been recorded some distance inland, though not more than around 5km from the coast, as well as on upland sites in the Lammermuirs. The records in the Lammermuirs are likely breeding rather than over-wintering.



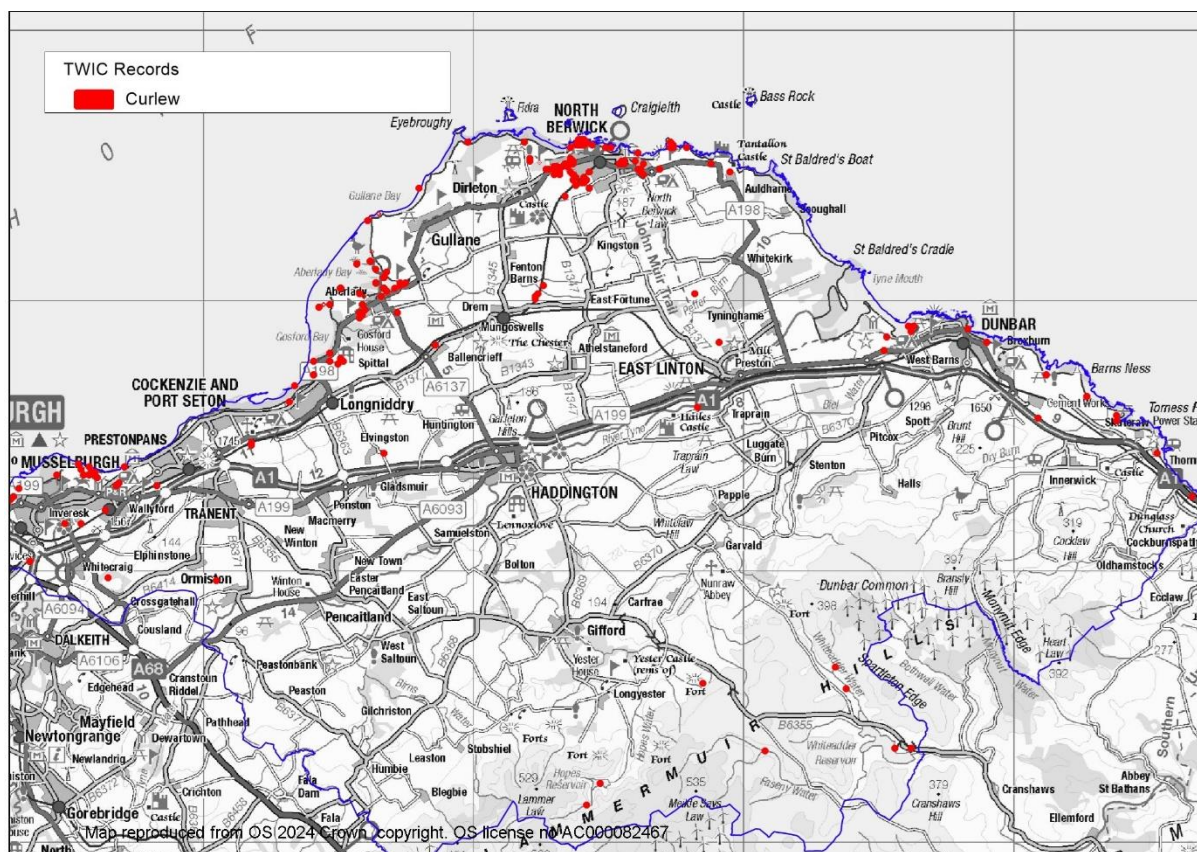


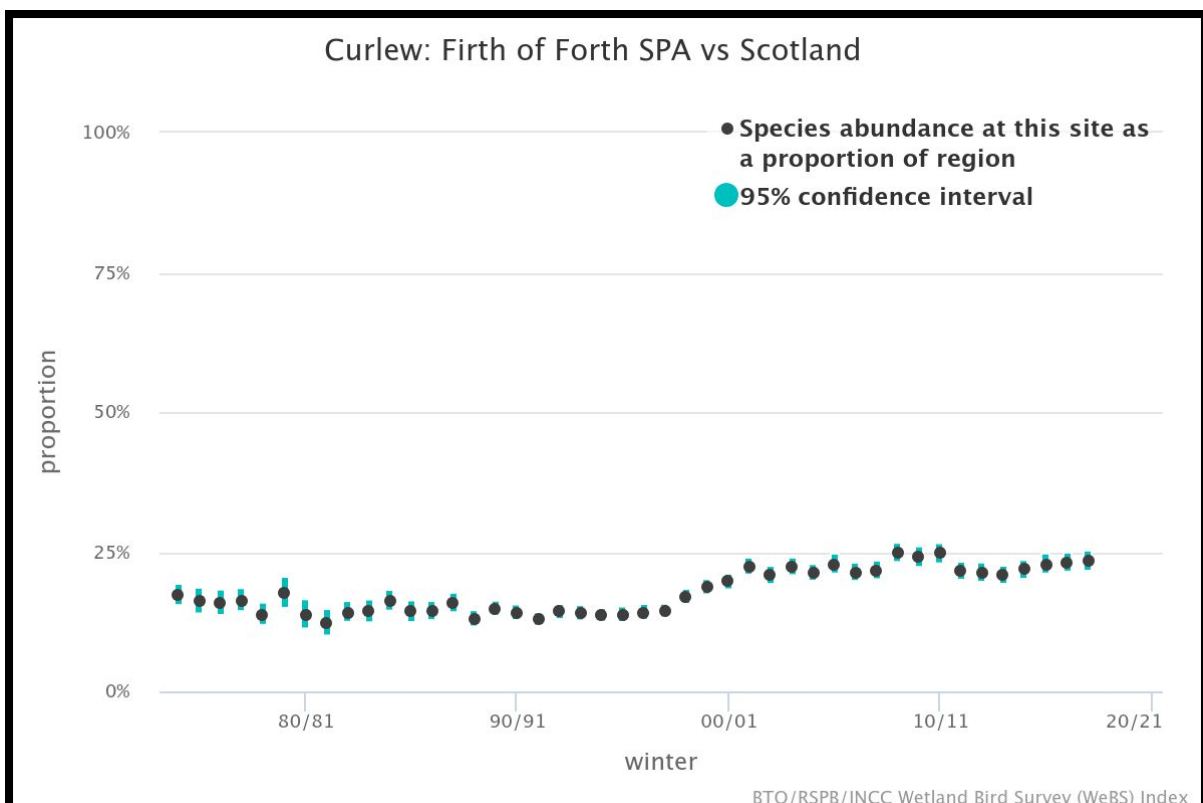
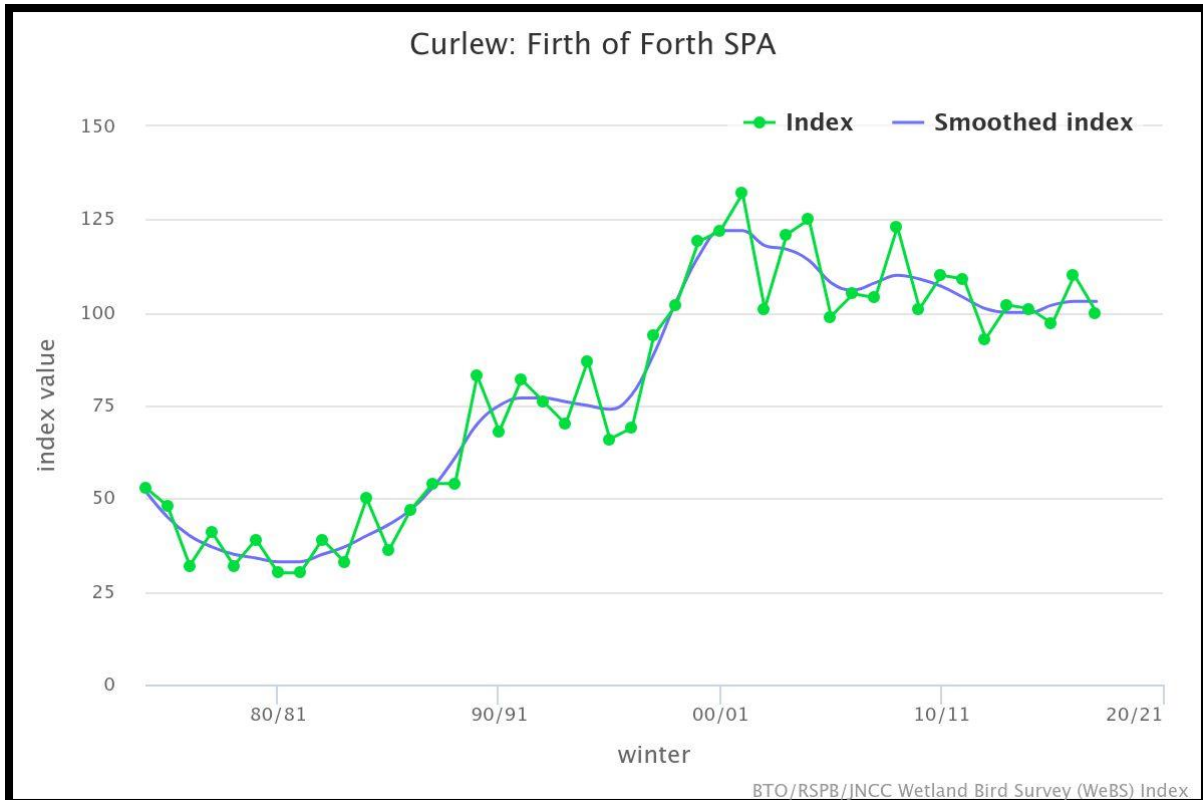
Figure 5 Curlew records (c) The Wildlife Information Centre

NatureScots site condition monitoring shows Curlew as Favourable Maintained. The population at designation was 1928, against a current 5 year mean of 3040. The pressures on this species are noted as recreational disturbance from walkers and dog walking, and climate change.

BTO note that estuaries support internationally important wintering communities of wading birds, and that these ecosystems are under pressure from development and agricultural intensification. Curlew do not breed at this site, so pressures affecting breeding sites only will not be affected by the Strategy.

Curlew are listed included as Red on the List of Birds of Conservation Concern, due to significant declines. It has recently been listed as globally near-threatened, one of the few British species on this list, and is one of our most rapidly declining breeding bird species. Possible reasons for this decline are thought be (BTO, 2024) increases in predators reducing breeding success, afforestation of marginal hill land, changes in farming practices reducing habitat quality, and climate change.

However, numbers of curlew overwintering at the Firth of Forth SPA have been stable in the medium term following a previous increase. No Alerts have been issued for this species at this site. The trend on site does not appear to be tracking that of the region or Britain as a whole, leading to an increasing proportion of the regional and British population being supported by this site. This suggests environmental conditions remain favourable here.



NatureScot (SNH) noted in Commissioned Report 804 that pressures on the site are agricultural intensification, afforestation and predation threatening breeding birds. Disturbance at feeding and especially roost sites by walkers and dogs was also noted. In general, the species prefers to use high tide roost sites that are on fields or open areas just above high tide mark and close to major feeding



areas. Sue Bell continues that research has shown a preference for use of improved grassland on farms in winter, and permanent pasture. Curlew also use playing fields in urban areas.

There are records of curlew in areas shown as 'Potential' or 'Potential farmland' in the Strategy. There are a lot of records around North Berwick, including at playing fields there. There are also some records at Newhailes, Gosford and Carberry Designed Landscapes. There are also large numbers of records at Aberlady Nature Reserve and Musselburgh Lagoons, as well as John Muir Country Park.

As noted above the main source of LSE is through woodland creation and encouragement of access to woodland. In addition, the strategy encourages increasing access to woodland. Where woodland is next to sites used as high tide roost or for foraging, this could increase disturbance both from walkers and dogs.

The Strategy supports a small amount of woodland creation in farmland. It does not support woodland creation on other priority habitats such as grassland. However, the agricultural land used by curlew is not in general priority habitat. Therefore, woodland creation could take place there.

The Hedgerow Strategy would increase hedgerow planting. Although hedgerows do not take much land, they can reduce sightlines and provide cover for predators, making use of adjacent fields less attractive to curlew. The target of increasing canopy cover in settlement could also lead to areas within parks having trees planted, though this may already occur through the Council's Nature Network programme of biodiversity improvement in our green spaces.

It is possible there is a connection between Curlew in the Firth of Forth and the breeding population in the Lammermuirs. The moorland itself is shown on mapping as 'Sensitive' while in areas which are, or could be restored to peatland, this landcover is preferred under Policy 15: Peatland. Native woodland planting within cleughs and in the riparian area is supported in such areas, however this would be of type supported by NatureScots Native Woodland Model, such as scattered birch.

Increasing tree and woodland cover in supporting habitat would have three main potential impacts. Firstly, loss of supporting habitat directly, by replacement of agricultural land, parkland or moorland in particular in cleughs with woodland and trees. Secondly this could lead to an increase in cover for predators which could lead to curlew not choosing to use adjacent areas. Thirdly, the strategy supports increased access to woodland for all. This may mean that in time people use the new woodland recreationally, or recreate more in existing woodland, increasing disturbance of the curlew in any adjacent non-woodland habitat, including from walkers and dog walkers. There may also be some displacement of walkers and dog walkers from the coast, if an attractive, accessible offer of woodland is available. However, given the intrinsic attractiveness of the coast, this is likely to be limited.

The Strategy includes targets, policies and actions aimed at mitigating climate change, which is noted as a pressure on the site. This will support East Lothian and Scotland's contribution to meeting global climate mitigation targets.

Given

- the background of Favourable Maintained status at Firth of Forth SPA and apparently favourable conditions there
- Small area of loss of supporting habitat compared to the overall habitat available as the strategy seeks to retain most farmland in use as such as well as retaining and restoring peatland
- there is flexibility about where woodland creation and tree planting can come forward for targets to be met
- the strategy aims to mitigate climate change which is noted as a pressure on the site
- Policy 13 seeks to protect European Sites through project level assessment
- The council will continue to manage important coastal sites at Musselburgh, Aberlady Bay Local Nature Reserve and John Muir Country Park, Dunbar

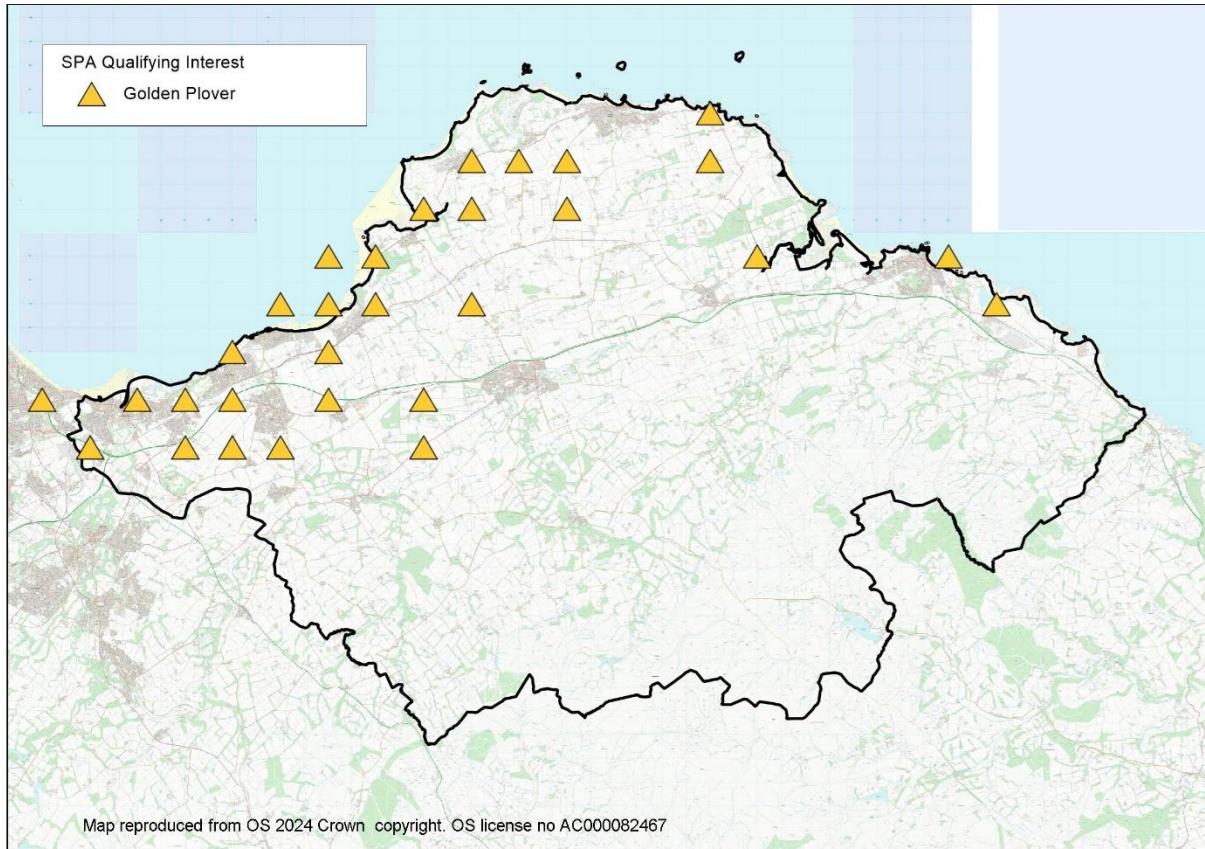
The Strategy will not affect habitats or disturbance levels within the Firth of Forth SPA itself. The maintenance of the population of the species as a viable component of the site or distribution within the site will not be affected. There is wide availability of potentially suitable supporting habitat for roosting and forage. The main areas used are at Aberlady Bay, Musselburgh Lagoons and around North Berwick. Aberlady Bay and the Lagoons are managed by the Council, while the area around North Berwick is not promoted for woodland expansion.

It can be concluded there is no adverse integrity on the Curlew qualifying interest of the Firth of Forth SPA. There will be minor residual effects from reduction in extent of habitat supporting the species and potential from increased disturbance of the species using supporting habitat.

#### *Golden Plover*

This bird is a medium sized wader. They forage both by day and night, eating insects, especially beetles, and some plants. They feed on pasture and arable farmland with mudflats and saltmarsh mainly used for roosting. They prefer grassland, especially permanent arable land, though plough land is often preferred for roosting. Golden Plover show a greater preference for cereals than lapwing. NatureScot (2015) describe them as more tolerant of disturbance than other waders (compare a flight distance of 50m with almost 100m for Redshank or Curlew).

TWIC records of Golden Plover are focussed on Aberlady Bay and Musselburgh lagoons, where there is a known roosting site. There are also records inland. Golden Plover often associate with Lapwing, and there is a large overlap in the habitat used by these species.



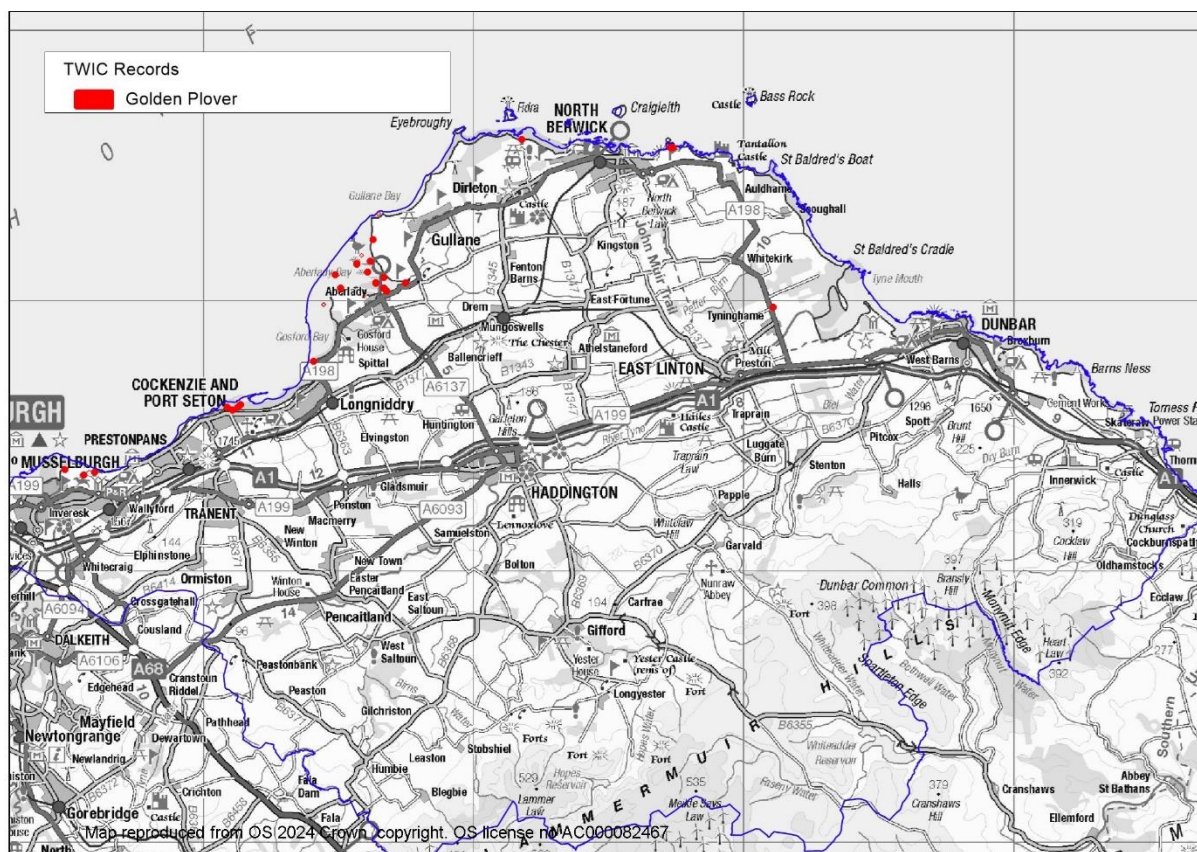


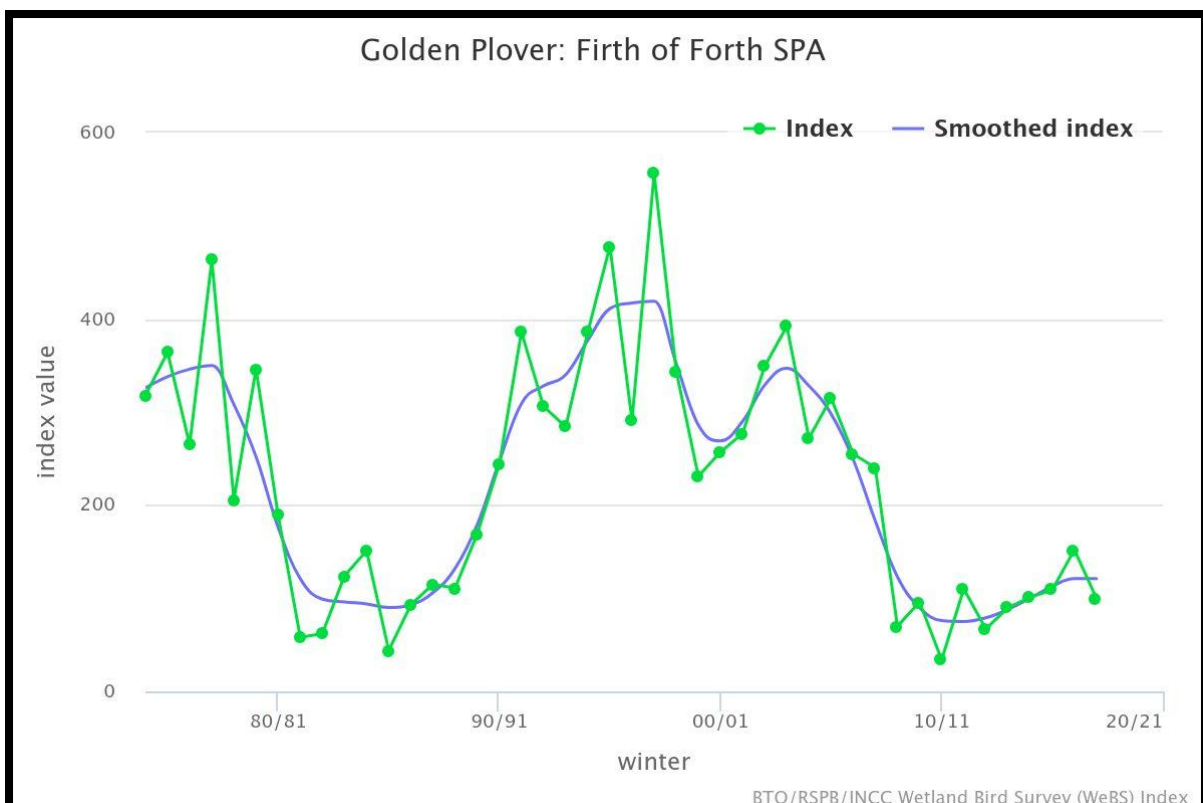
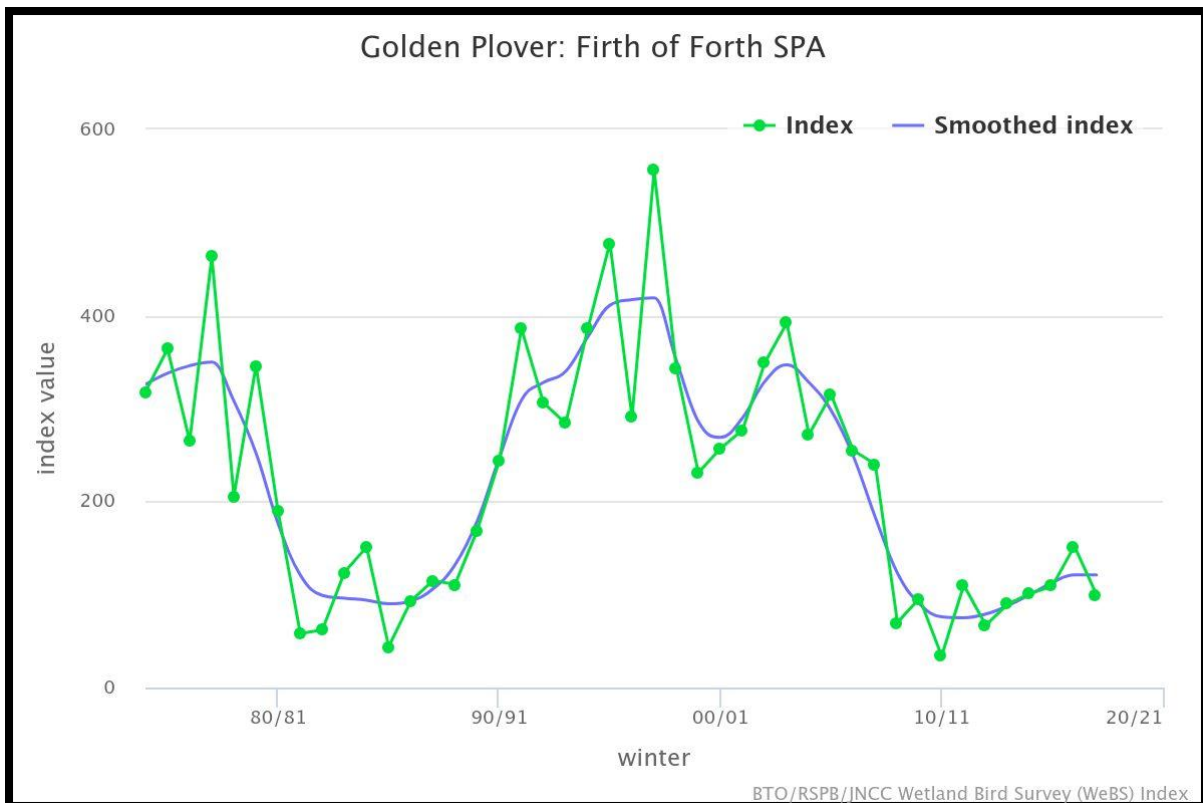
Figure 9 Golden Plover records (c) The Wildlife Information Centre

NatureScots site monitoring information shows this species as Unfavourable Declining. No site pressures are noted. Their Commissioned Report 804 notes that long term declines may be associated with conditions in breeding areas.

Numbers at designation were 2949, while the current 5-year mean is at 1174. The BTO note that numbers of over-wintering Golden Plover have been stable in the short-term following a previous peak.

A BTO Red alert has been issued for this bird following a decline of 71% here. However, this should be treated with caution as this species is not well monitored by WeBS counts. Numbers have fluctuated in Scotland and markedly so in Great Britain since the counts began, making it impossible to interpret underlying trends. However declining proportion of regional numbers supported by this site suggest site specific pressures may be at play.

NatureScot (2015) do not identify any pressures though note that long term declines may be associated with conditions in breeding areas. They note the declining proportion of wintering birds being supported by the site, which suggests conditions are deteriorating for this species.



As noted above, Targets, policies and actions, as well as spatial mapping, identified as having Likely Significant Effect are those that lead to creation of woodland and tree planting, including potentially at the coast. A coastal mosaic of habitat is encouraged by the strategy. In addition, the strategy encourages increasing access to woodland. Where woodland is next to sites used for foraging, this

could increase disturbance of the species both from walkers and dogs. Roost sites at the coast are less likely to be affected as less suitable for growing trees.

The Strategy aims to deliver 300 ha of farm woodland, as well as riparian planting which could also be on farmland. The riparian areas immediately next to the coast at Aberlady Bay and the Tyne estuary were excluded from the Native Woodland Opportunities mapping to avoid encouragement of woodland creation there. There is likely to be some loss of habitat, although this target applies to land across East Lothian and not just the more coastal areas used by this species. As noted for Curlew, the strategy may lead to *less* woodland being created in areas of suitable habitat for Golden Plover than would otherwise have occurred, as woodland creation is more coordinated and awareness of this constraint is raised.

The Strategy contains Policy 13 which reflects the statutory position that HRA must be considered at project level.

Given:

- that long term declines may be associated with changing conditions in breeding areas and no site-specific pressures are identified by NatureScot
- Small area of loss of habitat compared to the overall habitat available as the strategy seeks to retain most farmland in use as such
- the flexibility in the strategy over where woodland creation takes place
- the requirement for project level assessment
- concentration of the species at council managed sites
- Policy 13 seeks to protect European Sites through project level assessment
- The council will continue to manage important coastal sites at Musselburgh, Aberlady Bay Local Nature Reserve and John Muir Country Park, Dunbar

The Strategy will not affect habitats or disturbance levels within the Firth of Forth SPA itself. The maintenance of the population of the species as a viable component of the site or distribution within the site will not be affected as the main areas of supporting habitat used are very close to the coast in areas managed by the Council. There is likely to be minor loss of farmland used as supporting habitat inland however there is wide availability of such land including around the coast.

It can be concluded there is no adverse integrity on the Golden Plover qualifying interest of the Firth of Forth SPA. There will be minor residual effects from reduction in extent of habitat supporting the species and potential from increased disturbance of the species using supporting habitat

### *Grey Plover*

The Grey Plover is a medium sized wading bird, usually seen in small numbers as they defend their own feeding territories, though they can flock together at high tide. NatureScot (2015) describes them as sensitive to disturbance by walkers and dogs. They eat mainly marine worms, molluscs and crustaceans, so use inland habitat for roosting rather than foraging.

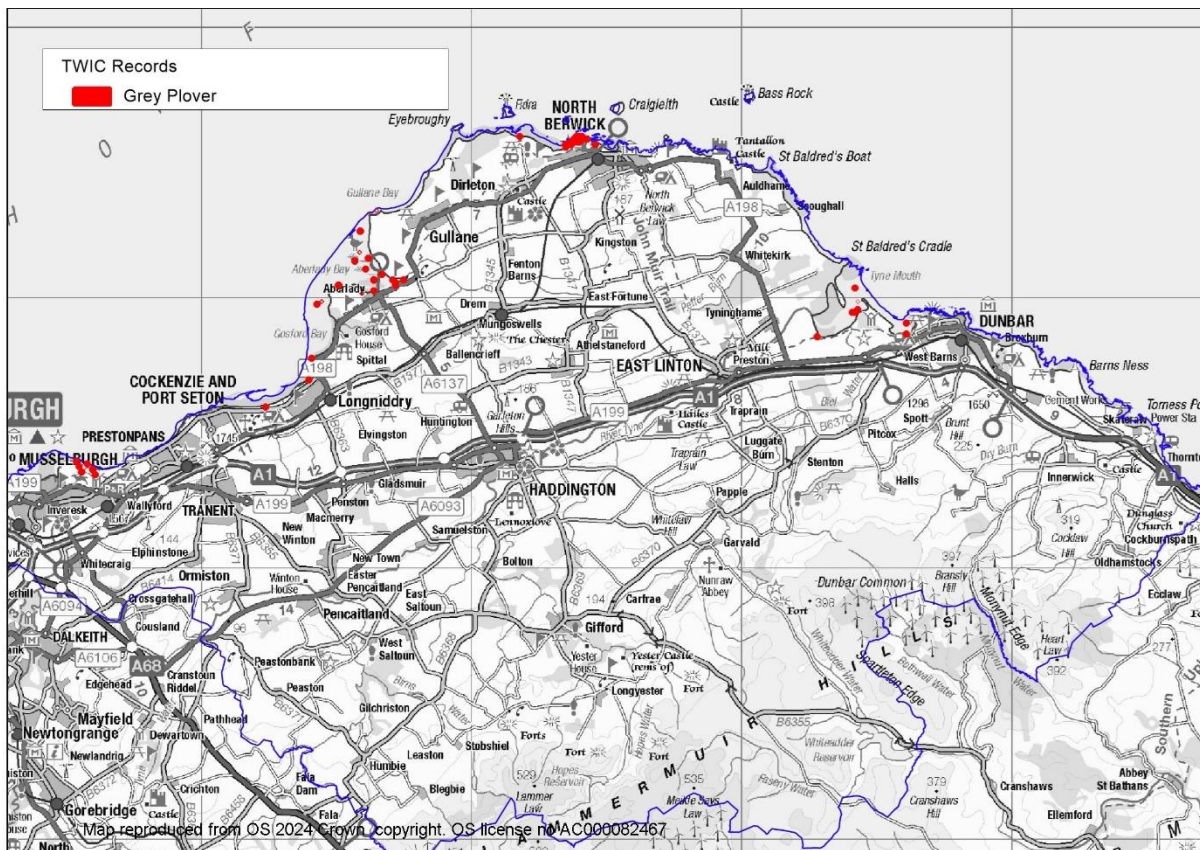
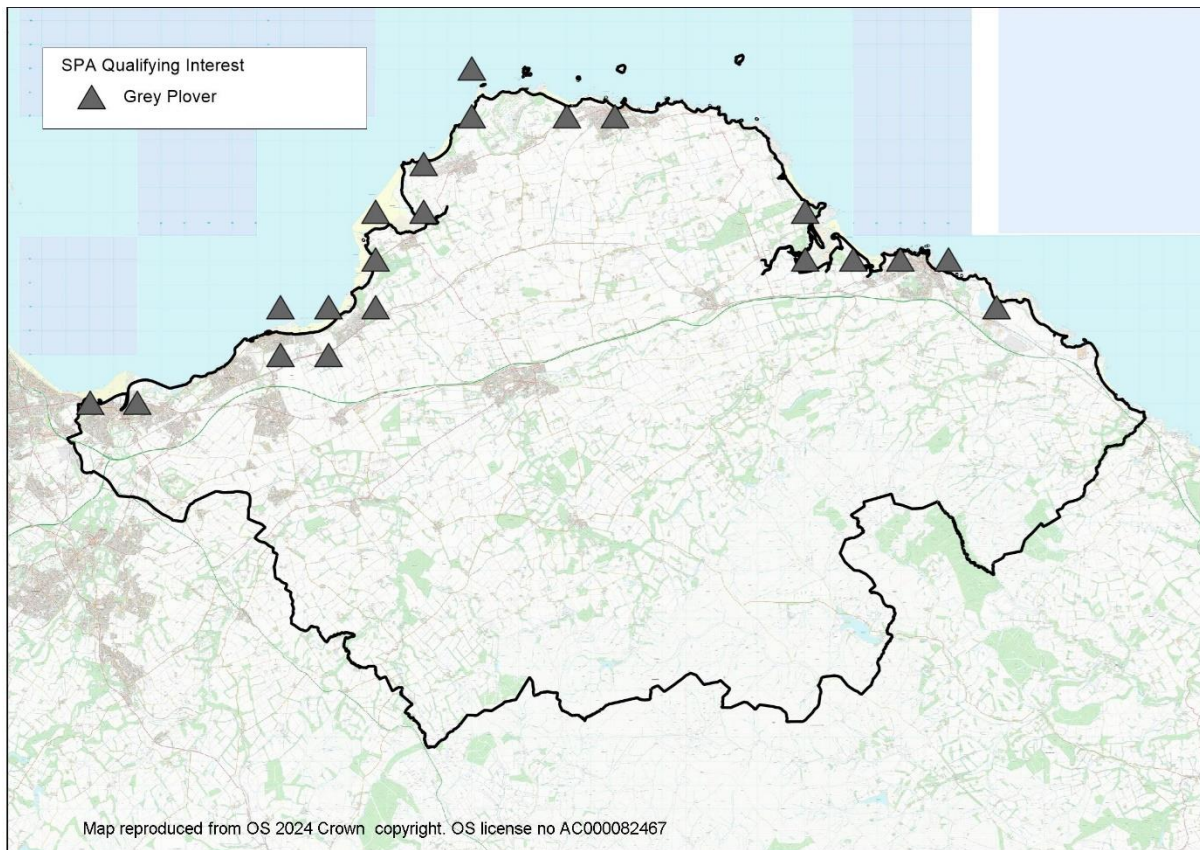
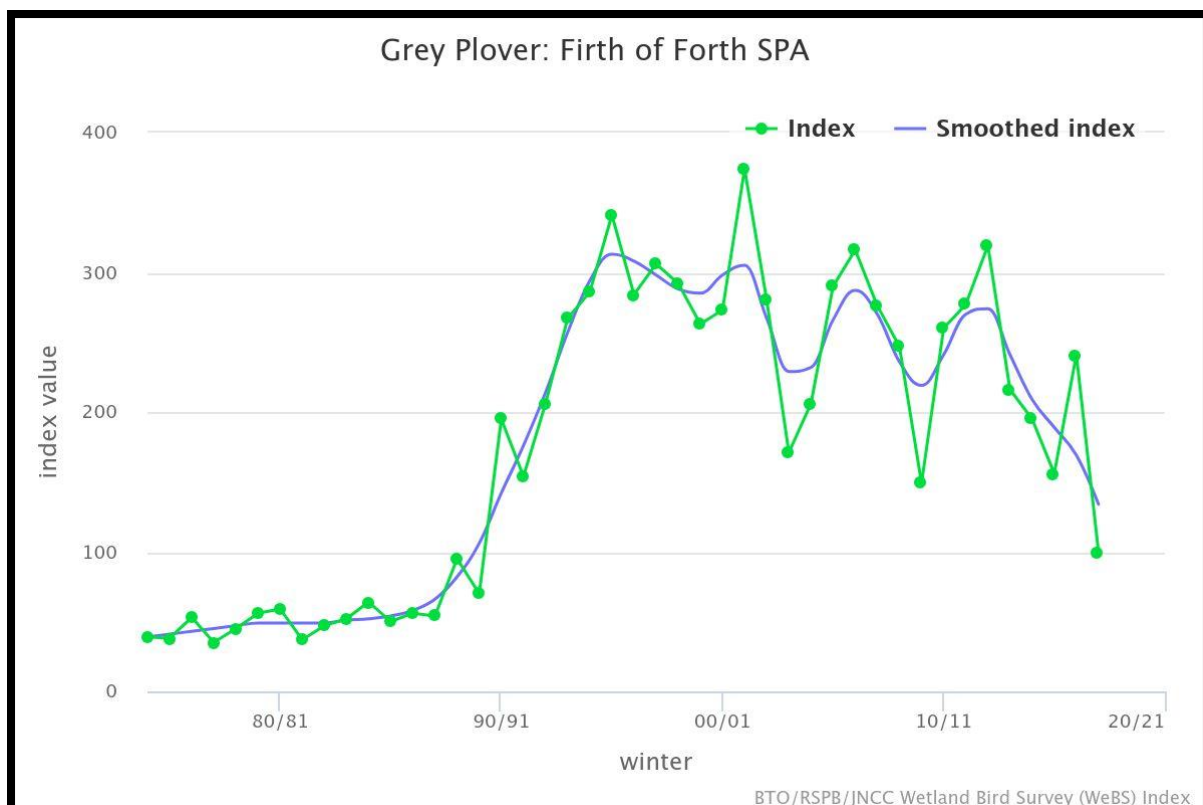


Figure 10 Grey Plover records (c) The Wildlife Information Centre

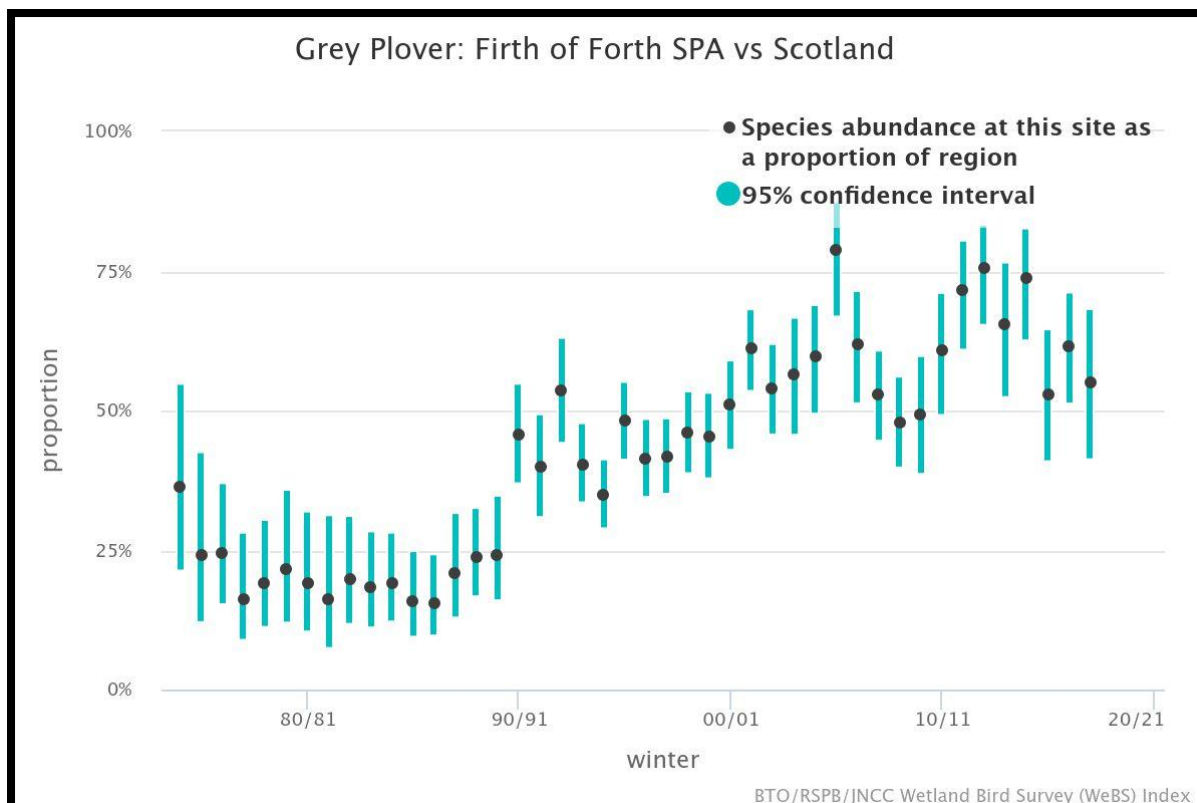
Nature Scots Site Condition Monitoring gave the status of this species as Favourable Declining. Pressures on this species at this site were noted as recreational disturbance including from dog walking, and climate change. Their Commissioned Report 804 noted that there is some evidence the distribution of this species is moving north-eastwards in response to climate change.

Numbers were 724 at designation, against a current 5 year mean of 178. A WeBs Amber alert has been issued following a decline of 46%.

[BTO note](#) that as with Golden Plover numbers have fluctuated since the WeBS counts began, making interpretation of trends difficult, so the Alert issued should be treated with caution. Numbers over wintering within Scotland have been decreasing having previously peaked. The increasing proportion of regional numbers supported by this site that the overall decline is due to broadscale population trends. This suggests environmental conditions remain favourable here and the site is becoming increasingly important on a regional scale for grey plover.







As noted above, woodland creation was identified as having Likely Significant Effect. The distribution of Grey Plover in East Lothian is almost entirely at the intertidal/foreshore and the immediate hinterland. The intertidal/foreshore will not be affected by woodland creation. There may be a small reduction in habitat from woodland planting inland, however the species stays close to the coast where coastal mosaic is encouraged. This, along with council management of coastal sites, means supporting habitat for roosting will remain available.

In addition, the strategy encourages increasing access to woodland. Recreational disturbance is noted as a site pressure. The Strategy will not increase disturbance at the site and may marginally reduce it. However increasing activity in woodland including dog walking could increase disturbance in supporting habitat. Many of the hinterland areas are managed by the Council, which will take the needs of the species into account in line with its Biodiversity Duty.

Climate change is identified as a pressure on this species. The strategy contains targets, policy and actions aimed at mitigating this as part of East Lothian and Scotland’s contribution to global targets.

Given

- overall declines in the species appear not to be attributable to site specific pressures
- the coastal distribution of this species meaning it is mostly found in places where woodland creation cannot occur
- the Strategy may marginally reduce recreational disturbance at the coast, a noted pressure
- the Strategy aims to mitigate climate change, a noted pressure
- Policy 13 seeks to protect European Sites through project level assessment
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## Appropriate Assessment

**Application Name:** Tree and Woodland Strategy

This species is similar to Bar Tailed Godwit in that it is closely associated with the immediate coastal area. The Strategy will not affect habitats or disturbance levels within the Firth of Forth SPA itself. The maintenance of the population of the species as a viable component of the site or distribution within the site will not be affected as the areas of supporting habitat used are very close to the coast. The distribution and extent of habitat supporting the species is therefore not affected.

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

It can be concluded there is no adverse integrity on the Grey Plover qualifying interest of the Firth of Forth SPA. There are no minor residual effects.

### *Lapwing*

Lapwing are a familiar bird of wetlands and farmland and are mainly a bird of passage though some birds do overwinter, with some breeding around the estuary. They can gather in large flocks, often in association with curlew. They are widespread in lowland areas, feeding mainly on pasture, wet meadows and arable farmland in winter. Lapwing eat a wide range of invertebrates, including beetles and earthworms, and can feed by night as well as by day. They roost in fields or on saltmarshes. NatureScot (2015) notes that estuarine sites can become important in cold weather when other sites freeze.

Mapping shows records of these birds at some distance from the coast, but also have been found at a range of sites along the coast.

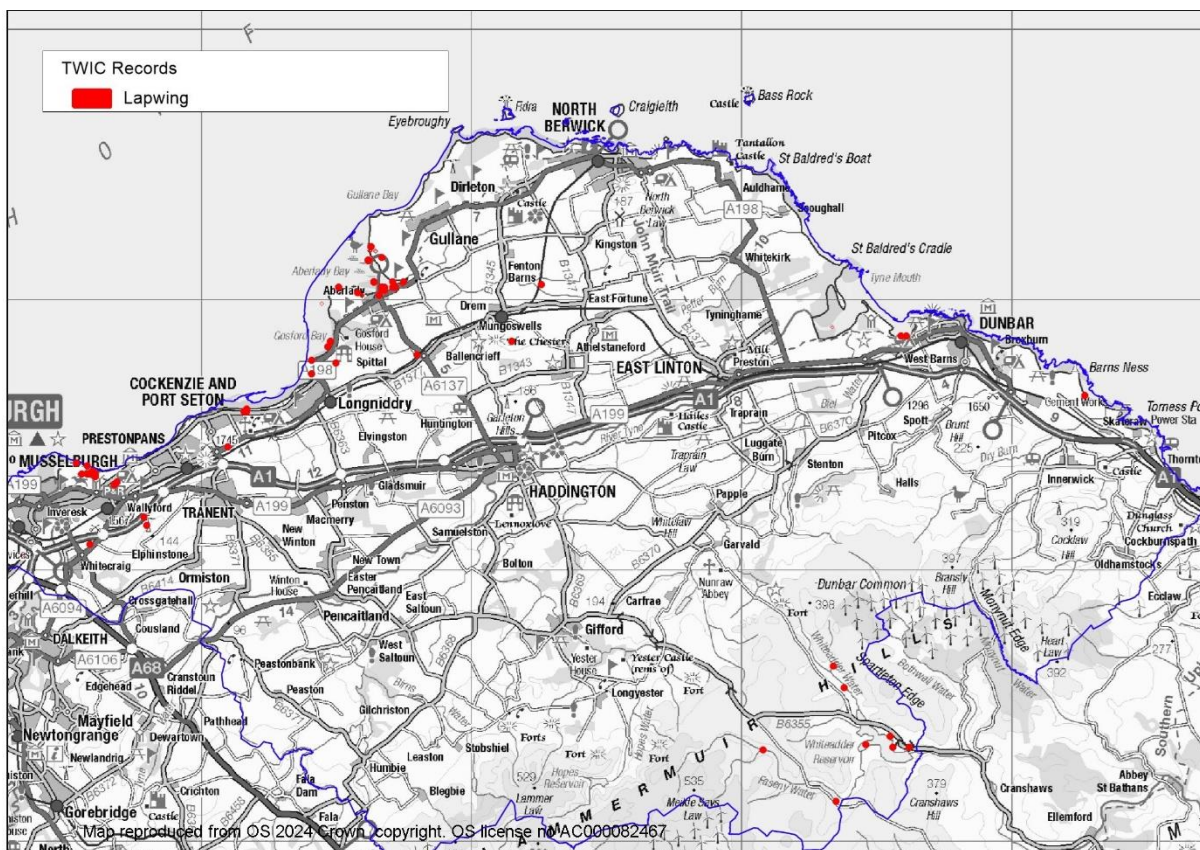
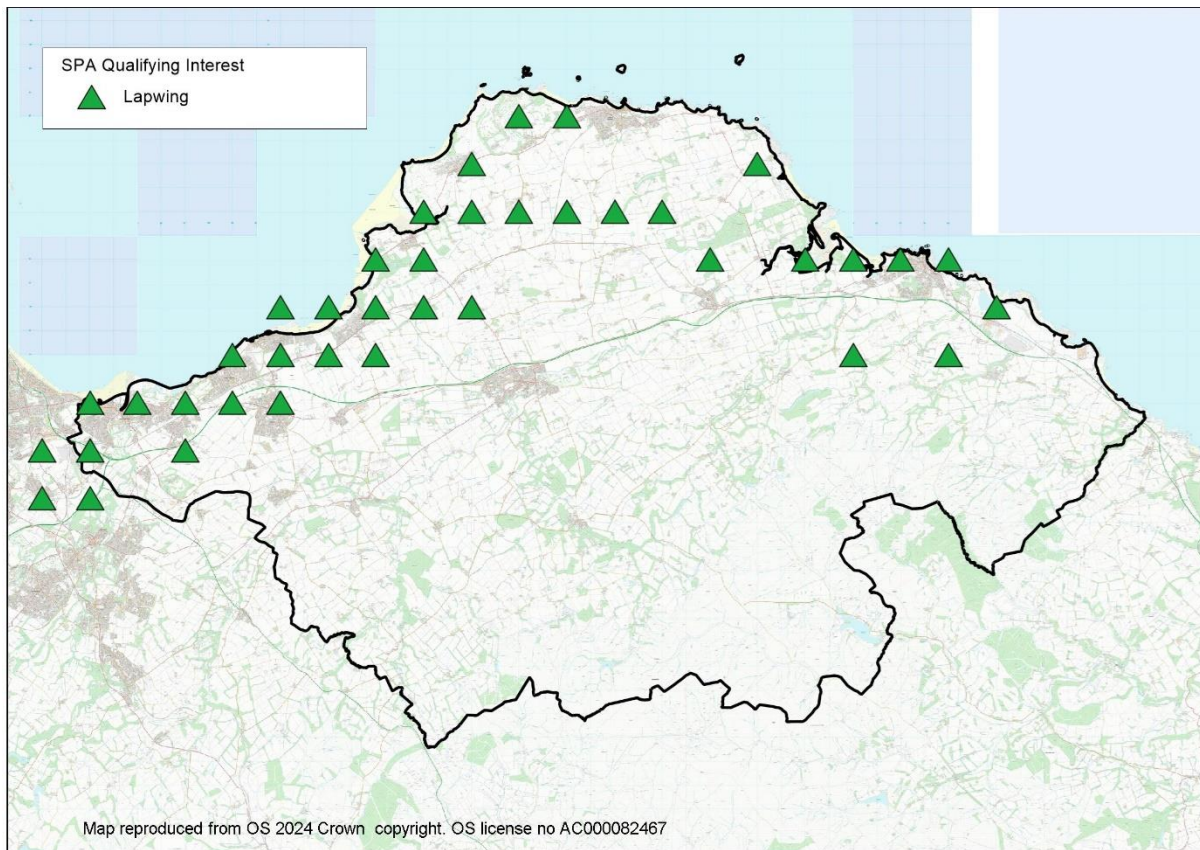
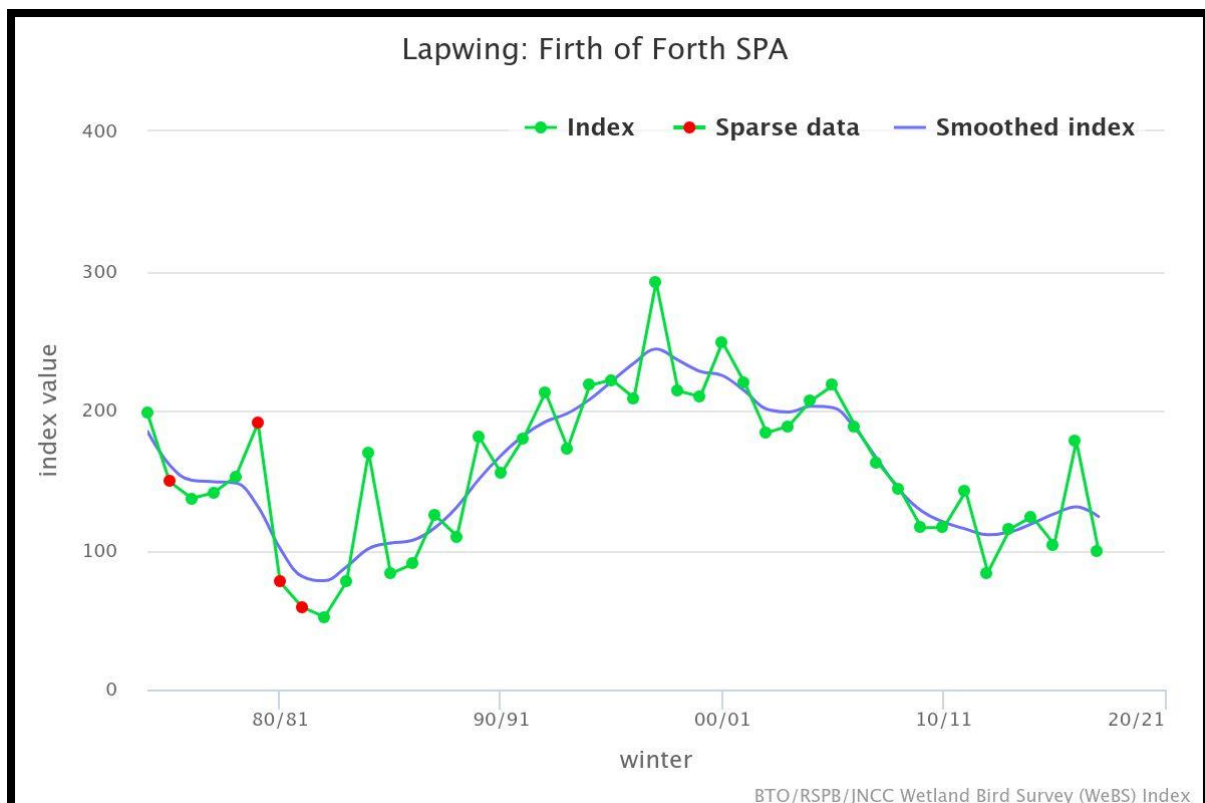
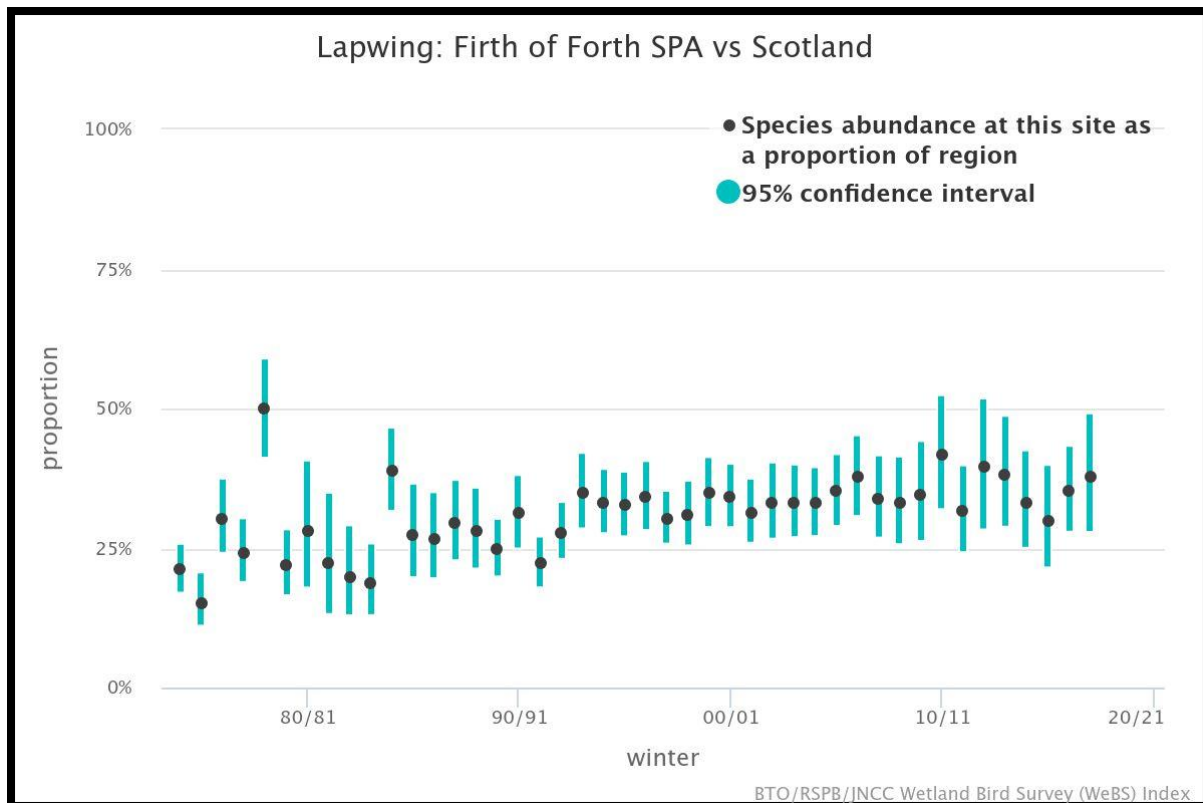


Figure 11 Lapwing records (c) The Wildlife Information Centre

NatureScot Site condition monitoring shows this species as Favourable Declining. No site-specific pressures were noted in the report. Their commissioned report 804 notes that steep declines in western Europe have been linked to agricultural intensification and the climate change may further reduce the value of Scottish sites as a winter destination.

The [BTO note](#) numbers of lapwing overwintering on Firth of Forth SPA have been stable in the short term following a previous peak. An Amber alert has been issued following a 41% decline on the baseline. However, numbers on this site seem to be tracking those for Scotland, though not of Great Britain. The stable numbers on this site suggest that conditions remain relatively favourable here, suggesting that the decline in numbers which triggered the Alert result from broad scale population trends and not specific issues here.





As noted above, Targets, policies and actions, as well as spatial mapping, identified as having Likely Significant Effect are those that lead to creation of woodland and tree planting, including potentially at the coast. Change of farmland habitat to woodland could reduce the amount of forage available, though the amount of habitat that would be lost is small compared to what is available. The Strategy does not encourage woodland creation in general across farmland, recognising its value for food production. The Strategy may reduce the amount lost by guiding current enthusiasm for tree planting to different sites.

A coastal mosaic of habitat is encouraged by the strategy. This and council management of important sites will help ensure some suitable coastal habitat remains.

In addition, the strategy encourages increasing access to woodland. As this species feeds in farmland disturbance arising from increased recreation could potentially affect their ability to forage. However, they can feed by night when recreational disturbance is less of an issue (though predators may be more of a risk). By increasing accessibility of woodland, the strategy may lead to a marginal reduction of recreational pressure at coastal sites.

Given

- that numbers on the site appear to be tracking regional trends suggesting environmental conditions at the site are favourable
- the Strategy aims to mitigate climate change, which is noted as potentially reducing the value of Scottish sites for this species
- there is a large amount of suitable habitat available compared to what will be lost

## Appropriate Assessment

**Application Name:** Tree and Woodland Strategy

- the strategy will not affect coastal roosting sites
- Policy 13 seeks to protect European Sites through project level assessment
- The council will continue to manage important coastal sites at Musselburgh, Aberlady Bay
- Local Nature Reserve and John Muir Country Park, Dunbar

As with Golden Plover with which this species often associates, the Strategy will not affect habitats or disturbance levels within the Firth of Forth SPA itself. The maintenance of the population of the species as a viable component of the site or distribution within the site will not be affected as the main areas of supporting habitat used are very close to the coast in areas managed by the Council. There is likely to be minor loss of farmland used as supporting habitat inland however there is wide availability of such land including around the coast.

It can be concluded there is no adverse integrity on the Lapwing qualifying interest of the Firth of Forth SPA. There is likely to be minor residual effects from loss of extent of supporting habitat and potentially disturbance.

### *Redshank*

Redshank are a small wader, with striking red orange legs. Large numbers of them arrive from Iceland in winter, while those birds breeding in Scotland head south. They are mainly coastal birds, but gather in mixed flocks at high tide, and can also use coastal fields. They are not tolerant of disturbance, with flight distances on disturbance of almost 100m. Disturbance particularly affects them in cold weather. They eat invertebrates, including insects, spiders, annelid worms, molluscs and crustaceans.

Both TWIC and NatureScot mapping shows that they are closely associated with the coast, and are widely distributed along it, though there are some records at sites further inland also. There are large numbers of records at Musselburgh, Aberlady Nature Reserve and North Berwick.

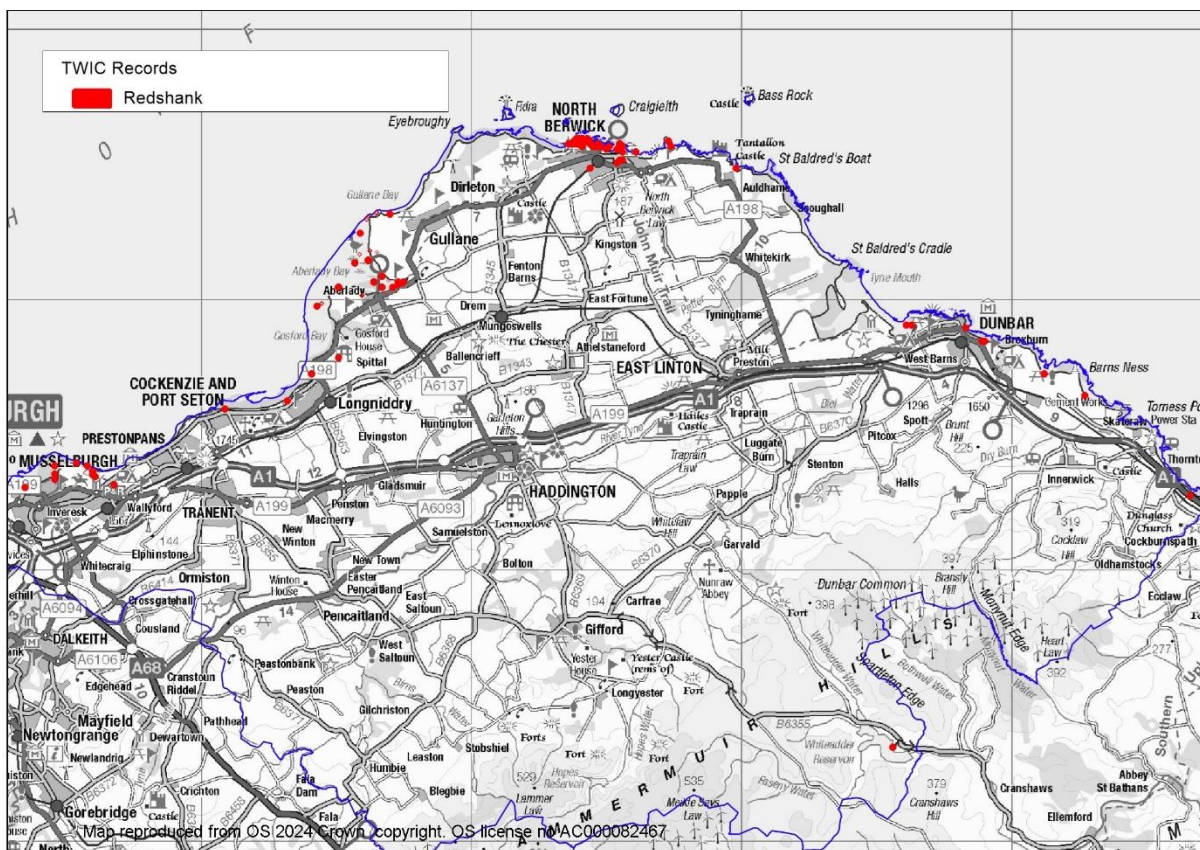
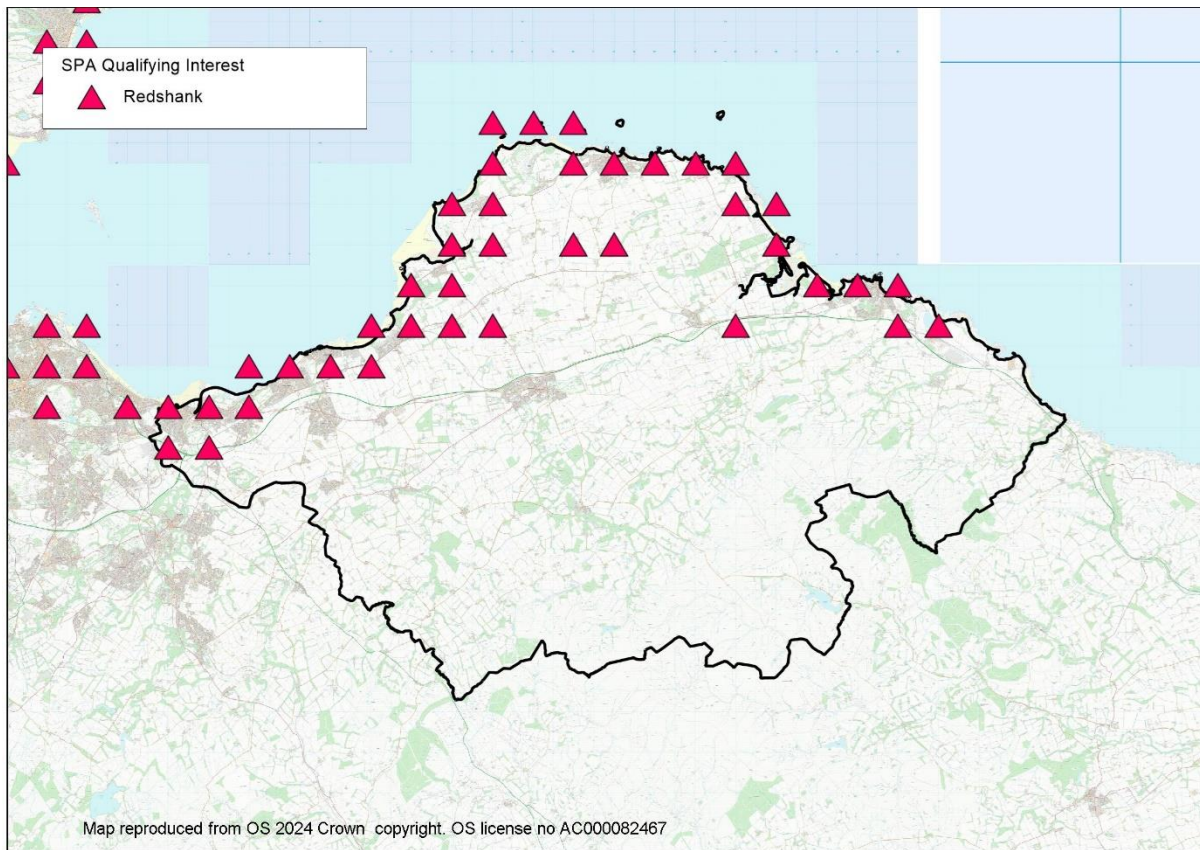
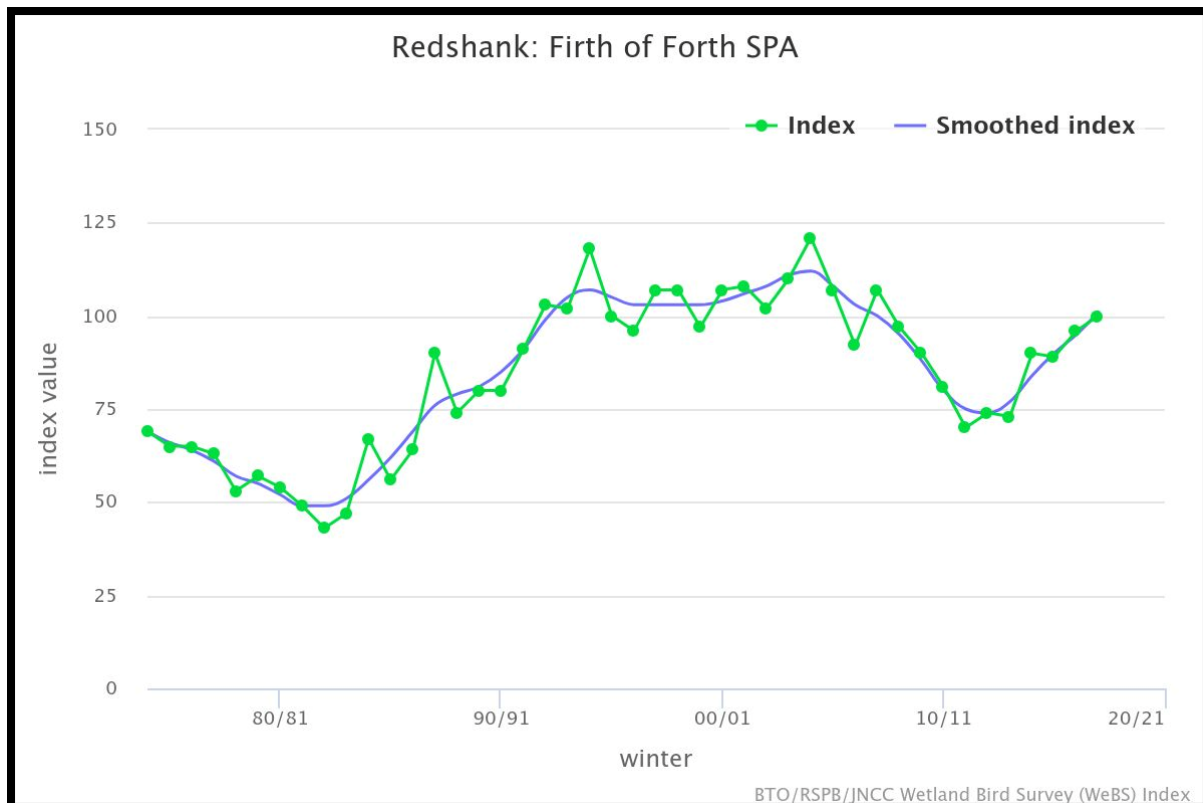


Figure 12 Redshank (c) The Wildlife Information Centre

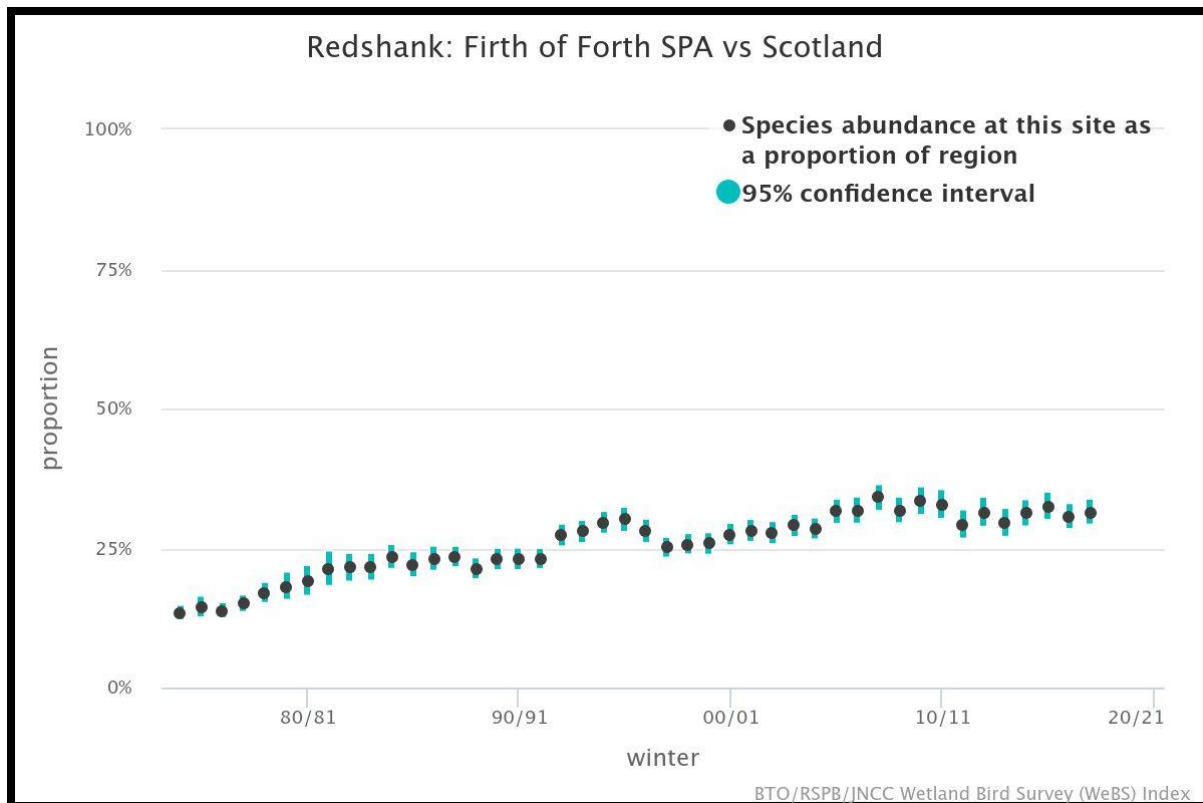
NatureScot site condition monitoring information shows this species as Favourable Maintained. Recreational disturbance is noted as a site pressure. Their Commissioned Report 804 considers that long term declines may be associated with changing conditions in breeding areas.

No Alert has been issued for Redshank. Numbers at designation were 4341, compared to a 5 year mean of 4704.

The [BTO notes](#) that numbers of redshank overwintering at this site have been stable recently following a previous increase. This seems to track Scottish and British trends. The increasing proportion of regional numbers suggest this site is becoming more important for this species.







As noted above Targets, policies and actions, as well as spatial mapping, identified as having Likely Significant Effect are those that lead to creation of woodland and tree planting, including potentially at the coast. The strategy also encourages access to woodland for recreation, which could increase recreational disturbance in supporting habitat, though may marginally reduce it at coastal sites.

A coastal mosaic of habitat is encouraged by the strategy, which respects other coastal habitat including saltmarsh and coastal grassland. The aim of the strategy is therefore that at least some of this habitat remains.

- The background of Favourable Maintained status for this species and 5-year mean numbers above that at designation
- Small area of loss of habitat compared to the overall habitat available as the strategy seeks to retain most farmland in use as such
- Policy 13 seeks to protect European Sites through project level assessment
- The council will continue to manage important coastal sites at Musselburgh, Aberlady Bay Local Nature Reserve and John Muir Country Park, Dunbar

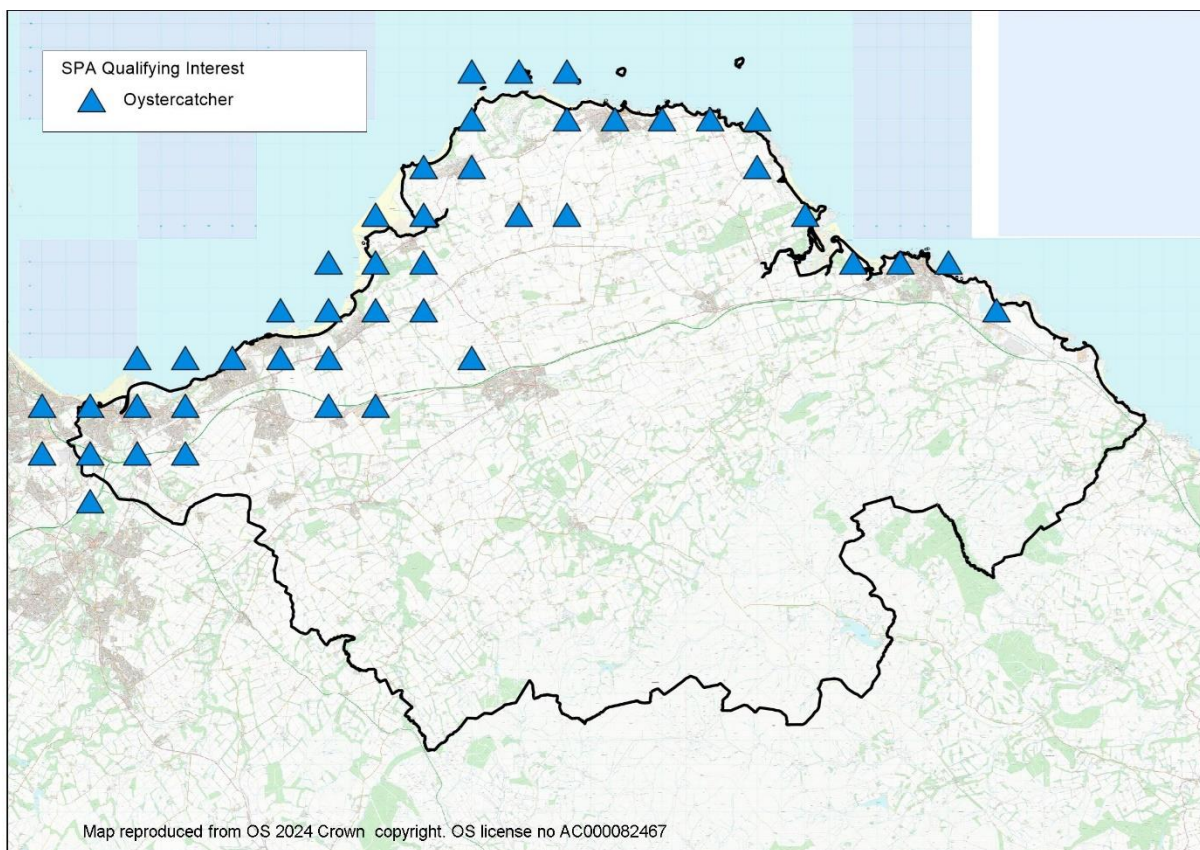
The Strategy will not affect habitats or disturbance levels within the Firth of Forth SPA itself. The maintenance of the population of the species as a viable component of the site or distribution within the site will not be affected as the main areas of supporting habitat used are mostly close to the coast in areas managed by the Council. There is a wide distribution of other suitable farmland habitat including close to the coast, though there is likely to be some minor loss of this supporting habitat.

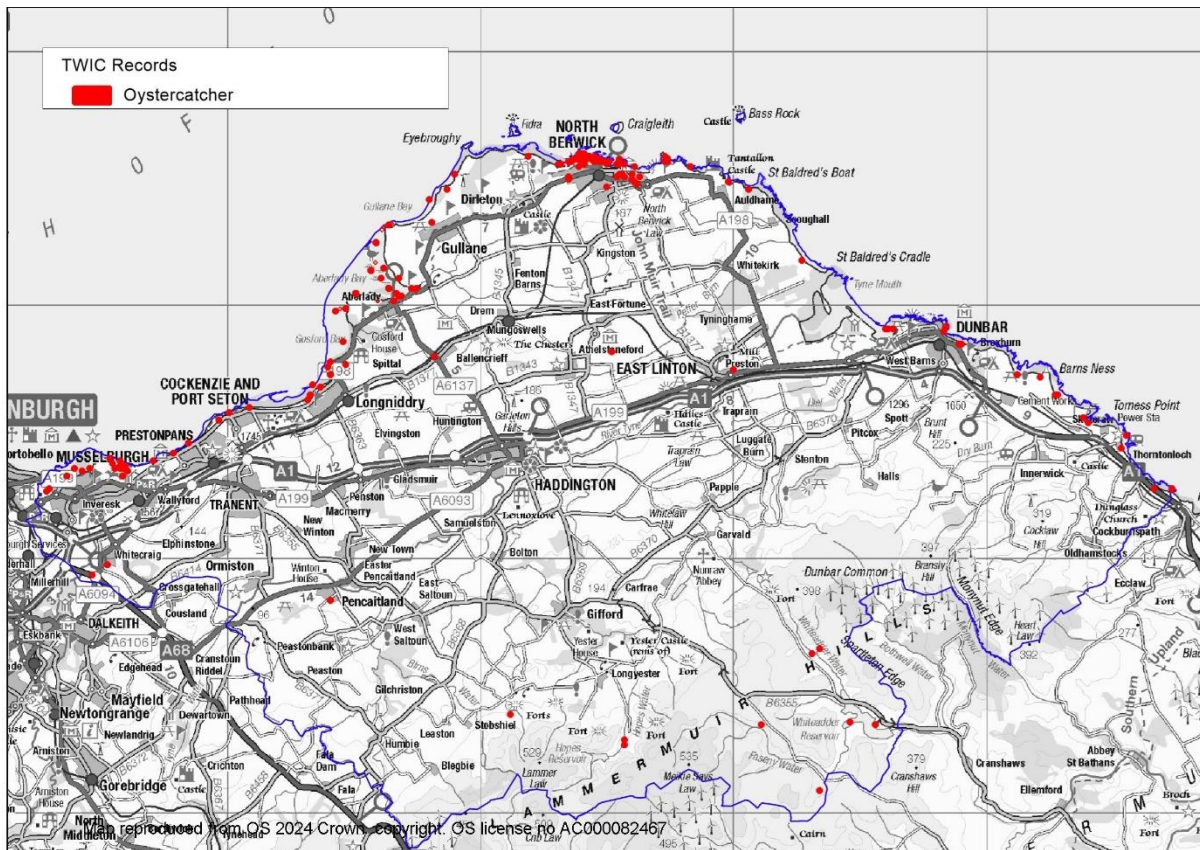
It can be concluded there is no adverse integrity on the Redshank qualifying interest of the Firth of Forth SPA. There are minor residual effects from loss of supporting habitat and potentially disturbance outwith the site.

### *Oystercatcher*

Oystercatcher are a large, striking black and white wader. Some wintering birds breed in Scotland, but large numbers also come in from Iceland, Norway and the Faroes. They mainly eat large shellfish, including cockles and mussels, but also worms from mudflats and earthworms. Their habitat is mostly on intertidal mudflats, but also roost in mixed flocks at wader roost sites at high tide. There is also some use of adjacent wet fields for foraging earthworms.

NatureScot (2015) describe them as less sensitive to disturbance than other species.

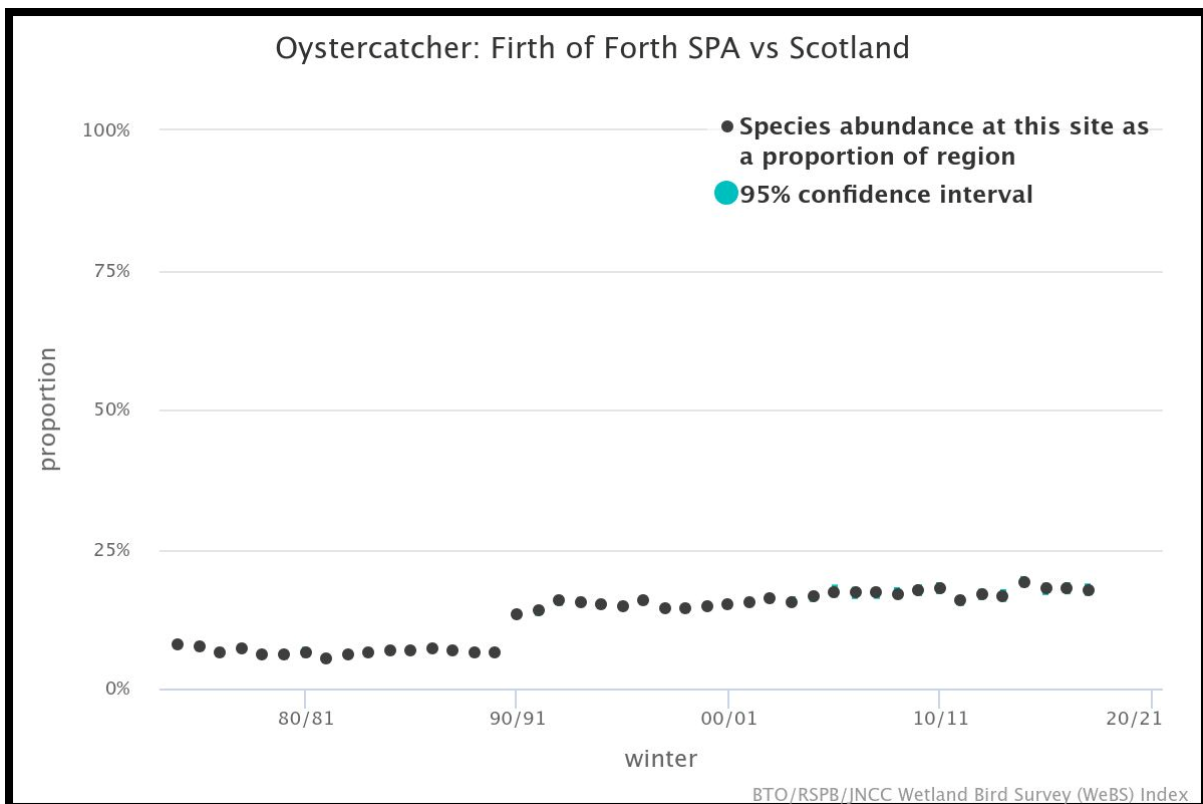
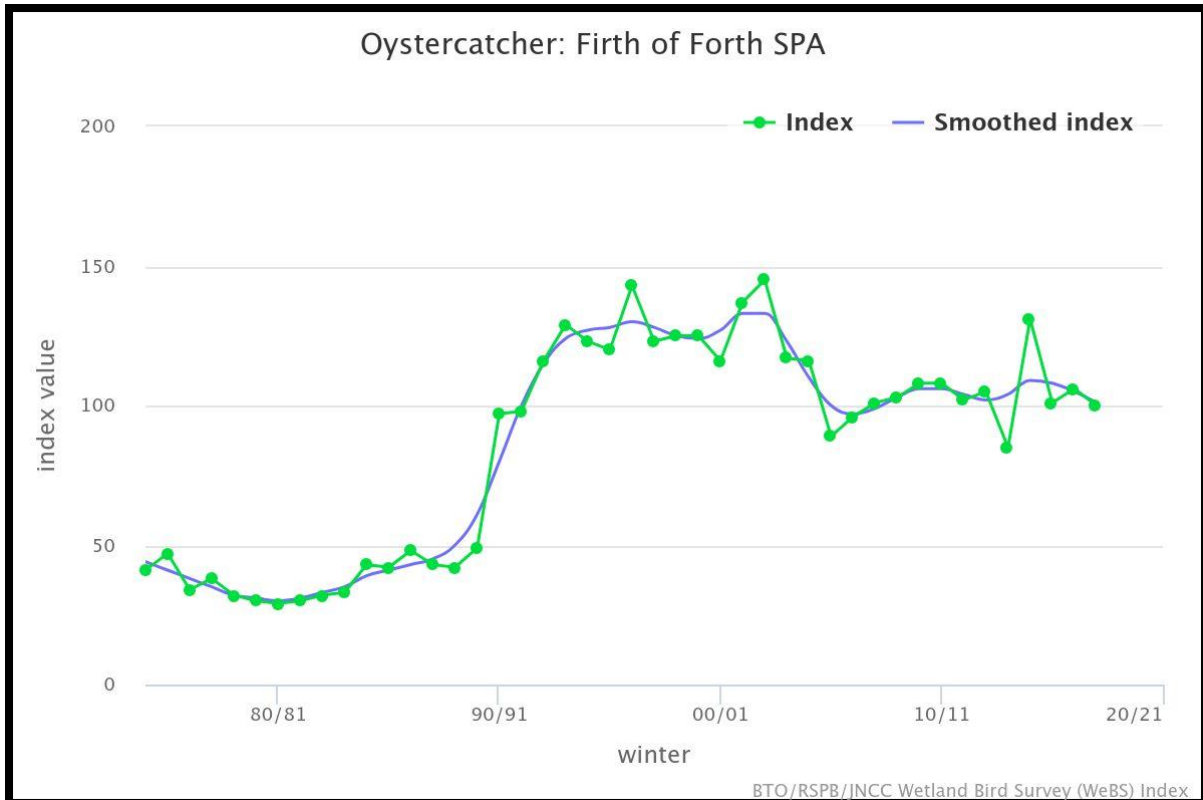




NatureScot site condition monitoring information notes this species as Favourable Maintained. No site-specific pressures were noted. Commissioned report notes dredging for shellfish as a pressure.

Numbers at designation were 7846, compared to a current 5 year mean of 6929. No WeBS Alert has been issued.

The [BTO notes](#) that the number of Oystercatcher over-wintering at this site has been stable in the medium term, following a previous peak, following Scottish trends. The increasing proportion of the overall regional numbers at this site suggest environmental conditions remain favourable and that the site is becoming increasingly important for this species.



As noted above, woodland creation was identified as having Likely Significant Effect. Change of farmland habitat to woodland could reduce the amount of roost sites and forage available in wet field. As the strategy encourages coastal mosaic habitat, which is secured through Council

management of coastal sites, some open land habitat would remain. The Strategy does not encourage woodland creation in general across farmland, recognising its value for food production. The Strategy may reduce the amount of woodland creation on farmland by guiding current enthusiasm for tree planting to different sites.

In addition, the strategy encourages increasing access to woodland. As this species feeds in farmland disturbance arising from increased recreation could potentially affect their ability to forage. However the species is not as sensitive to disturbance as others.

Given:

- The background that status of the species is Favourable Maintained and BTO consider conditions at the site remain favourable
- The Strategy will not influence dredging for shellfish, which is noted as a pressure.
- The strategy seeks to retain most farmland in use as such
- Policy 13 seeks to protect European Sites through project level assessment
- The council will continue to manage important coastal sites at Musselburgh, Aberlady Bay Local Nature Reserve and John Muir Country Park, Dunbar

The Strategy will not affect habitats or disturbance levels within the Firth of Forth SPA itself. The maintenance of the population of the species as a viable component of the site or distribution within the site will not be affected due lack of direct impact on the site and the wide availability of suitable supporting habitat.

It can be concluded there is no adverse integrity on the Oystercatcher qualifying interest of the Firth of Forth SPA. There are minor residual effects on distribution and extent of habitat supporting the species, and potentially disturbance of the species while using supporting habitat, though this is not expected to be significant.

It can be concluded there is no adverse integrity on the Oystercatcher qualifying interest of the Firth of Forth SPA.

## 6. Outcome of Appropriate Assessment

This test of effects on site integrity referenced the Conservation Objectives for each site and considered potential impacts both alone and in combination with other projects and plans.

With the inclusion of mitigation measures included in the Strategy the proposals within the Tree and Woodland Strategy for East Lothian will have no adverse effect on site integrity for the following European sites either alone or in combination:

- Firth of Forth SPA
- Gladhouse SPA
- Fala Flow SPA

At project level, the competent authority for individual woodland creation/regeneration proposals will need to consider:

1. cumulative losses of wader habitat (and consider whether it is necessary to refuse proposals on specific roost sites) to prevent this limiting qualifying wader populations.
2. Whether suitable, unfragmented areas of open, agricultural areas remain suitable for foraging pink footed geese.

## Minor Residual Effects

There are minor residual effects on Pink Footed Geese, Curlew, Golden Plover, Lapwing, Redshank and Oystercatcher. These are

- Reduction in the extent of supporting habitat for foraging and/or roosting due to change of use from arable (and in the case of Curlew, moorland) to woodland
- Potential for increase of disturbance while using supporting habitat arising from recreation in woodland
- Indirect effects of loss of supporting habitat due to fear of predation and/or increase in predation

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## Appendix 1 Targets, Policies and Actions identified as Likely Significant Effect

The following are the Targets, Policies and Actions identified as having LSE. The context of planting 2 million trees in a Climate Forest and included in Target 1, was endorsed by but not originated in this Strategy.

TARGET 2 Improve resilience of East Lothian's environment including by:

- Securing functional native woodland connections through East Lothian to support migration of species under climate change through:
  - A lowland corridor between the eastern boundary with Scottish Borders to the east and Midlothian to the west
  - Corridors between lowland woodland and montane scrub/heathland in the Lammermuirs
- Increasing native riparian woodland by 18%; from 42% of the riparian zone to 60%

This target is linked to Native Woodland Opportunities mapping, which identifies the riparian zone as 30m from every water course, and also identifies corridors for climate migration and connectivity.

TARGET 4: Increase access to trees and woodland for all by:

- Retaining or increasing tree canopy coverage to a working target of 30% in settlements and in the most deprived 30% of SIMD areas.
- Improving and increasing access to woodlands to meet the Woodland Trust's Accessible Woodland Standard so that 99% of properties meet at least one of the Standard's (currently 96%) and increase the number of properties with access to a 2ha wood within 500m from 67% to 80%.
- Developing a Tree Warden Scheme in East Lothian and recruit volunteers from each of our main settlements
- Helping set up and ensure management for a community orchard in each of our main settlements

TARGET 5: Farmland Woodland - Create 300 hectares of new small farm woodlands, shelterbelts, orchards and other agroforestry which align with and support agricultural production

### **POLICY 3 Woodland creation**

Tree planting and woodland creation should comply with the Spatial Guidance Section of this Strategy and the UK Forestry Standard.

Land managers creating new woodland should seek to reduce carbon impacts associated with its creation by using methods of tree planting to reduce soil disturbance or by allowing natural regeneration.

Woodland should be designed to achieve multi-functional benefits

### **POLICY 6 Water Management and Slope Stability**

Use of woodland and trees to improve water quality, reduce flood risk and improve slope stability is encouraged. Planting of new trees and woodland must avoid increasing flood risk.

### **POLICY 20 Productive woodland**

Creation of woodlands for production of wood is generally supported in line with the Strategy

mapping. Management and registration of these with UKWAS is supported. However:

- Plantation on ancient semi-natural woodland sites (PAWS) should be restored to native woodland
- New productive woodland should not be solely softwood
- Restructuring of softwood woodland to improve landscape and biodiversity value is encouraged
- Improving the recreational value of commercial woodland is encouraged

**ACTION 1**

Promote the restoration to native woodland of Plantation on Ancient Woodland Sites (PAWS)

**ACTION 2**

Develop a Hedgerow Plan for retention, replacement, increase and management of hedgerows and hedgerow trees

**ACTION 4**

Work with farmers and landowners to encourage hedgerow and tree planting and woodland creation where appropriate, to help reduce water run-off onto our roads

**ACTION 5**

Work with SEPA, neighbouring authorities and stakeholders to identify where woodland retention, creation and management could most improve water quality, support reduction in flood risk and help increase slope stability

**ACTION 11**

Create and expand native woodlands where there are suitable opportunities, in particular where this will have most benefit for connectivity.

## Embedded Mitigation

The following mitigation is included in the Strategy.

Note after paragraph 10.5 of the Landscape Character section:

“Note: tree planting in some areas may have a significant negative effect on the qualifying bird interest of a European site. Habitat Regulation Appraisal for woodland creation on these sites will be required at project level and may limit what is possible.”

Mapping: the area mapped as ‘Potential - Prime And Mixed Farmland’ notes the following “This is land which has potential to accommodate some woodland expansion respecting agricultural production and the qualifying interests of European sites”.

There is a section starting 6.95 specifically on European sites this contains policy 13 set out below and explains what the European sites are. The text explains that the interest of these sites must be taken into account, specifically mentioning the use of inland areas of East Lothian for foraging and roosting by birds, and the need to avoid accidental spillage of pollutants reaching the water environment

### **POLICY 13 Protection of European Sites**

Proposals that are likely to have a significant effect on a European Site must undergo assessment under The Conservation (Natural Habitats, &c.) Regulations 1994 (‘Habitats Regulations’).

Sufficient information must be provided to allow the relevant authority to carry out this assessment, or failing which, provide sufficient funding to enable the authority to obtain this information. Where an adverse impact on the integrity of such a site is found, the proposal can only go ahead where:

a) there are imperative reasons of over-riding public interest and there are no alternative solutions; and

b) compensatory measures are provided to ensure that the overall coherence of the European Site network is protected.

## Appendix 2 Qualifying Interest of SPA within 20km

	Outer Firth of Forth and St Andrews Bay complex	Forth Islands	Firth of Forth	St Abb's Head to Fast Castle	Gladhouse Reservoir, Fala Flow,
Arctic Tern	✓	✓	x	x	x
Bar tailed godwit	x	x	✓	x	x
Black-headed Gull	✓	x	x	x	x
Common Gull	✓	x	x	x	x
Common Scoter	✓	x	✓	x	x
Common Tern	✓	✓	x	x	x
Cormorant	x	✓	✓	x	x
Curlew	x	x	✓	x	x
Dunlin	x	x	✓	x	x
Eider	✓	x	✓	x	x
Gannet	✓	✓	x	x	x
Goldeneye	✓	x	✓	x	x
Golden Plover	x	x	✓	x	x
Great crested grebe	x	x	✓	x	x
Grey Plover	x	x	✓	x	x
Guillemot	✓	✓	x	✓	x
Herring Gull	✓	✓	x	✓	x
Kittiwake	✓	✓	x	✓	x
Knot	x	x	✓	x	x
Lapwing	x	x	✓	x	x
Little Gull	✓	x	x	x	x
Lesser black-backed gull	x	✓	x	x	x
Long-tailed Duck	✓	x	✓	x	x
Manx Shearwater	✓	x	x	x	x
Mallard	x	x	✓	x	x
Oystercatcher	x	x	✓	x	x
Pink footed goose	x	x	✓	x	✓
Puffin	✓	✓	x	x	x
Razorbill	✓	✓	x	✓	x
Red-breasted Merganser	✓	x	✓	x	x
Redshank	x	x	✓	x	x
Red-throated Diver	✓	x	✓	x	x
Roseate tern	x	✓	x	x	x
Sandwich tern	x	✓	✓	x	x
Scaup	x	x	✓	x	x
Seabird assemblage	✓	✓	x	✓	x
Shag	✓	✓	x	x	x
Shelduck	x	x	✓	x	x
Slavonian Grebe	✓	x	✓	x	x

Turnstone	x	x	✓	x	x
Velvet Scoter	✓	x	✓	x	x
Waterfowl Assemblage (non-breeding)	✓	x	✓	x	x
Wigeon	x	x	✓	x	x

## Appendix 3: Conservation Objectives of Sites

TABLE 3: Conservation Objectives of Sites			
Site Name/ Designation/ Site Area (ha)	Qualifying Interests	Condition	Conservation Objectives
	Firth of Forth WeBS Alert		
	Amber 25% - 50% decline		
	Red 50% decline		
	(n/a) not available		
<b>Forth Islands SPA 979.01</b>	Gannet	Favourable	To avoid deterioration of the habitats of the qualifying species or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained; and
	Guillemot	Maintained	
	Herring gull		
	Lesser black-backed gull		
	Razorbill		
	Arctic tern	Favourable	To ensure for the qualifying species that the following are maintained in the long term:
	Puffin	Declining	
	Seabird assemblage		
	Common tern	Unfavourable	
	Cormorant	Declining	
	Kittiwake		
	Roseate tern		
Sandwich tern			
Shag			
<b>Outer Firth of Forth and St Andrews Bay Complex SPA 272068.1</b>	Arctic Tern	Favourable	<p>No significant disturbance of the species</p> <ol style="list-style-type: none"> <li>To ensure that the qualifying features of the Outer Firth of Forth and St Andrews Bay Complex SPA are in favourable condition and make an appropriate contribution to achieving Favourable Conservation Status.</li> <li>To ensure that the integrity of the Outer Firth of Forth and St Andrews Bay Complex SPA is restored in the context of environmental changes by meeting objectives 2a, 2b and 2c for each qualifying feature:</li> </ol>
	Black-headed Gull	Maintained	
	Common Gull		
	Common Scoter		
	Common Tern		
	Eider		
	Gannet		
	Goldeneye		
	Guillemot		
	Herring Gull		
	Kittiwake		
	Little Gull		
	Long-tailed Duck		

	Manx Shearwater Puffin Razorbill Red-breasted Merganser Red-throated Diver Seabird assemblage Shag Slavonian Grebe Velvet Scoter Waterfowl Assemblage		2a. The populations of qualifying features are viable components of the site.  2b. The distributions of the qualifying features throughout the site are maintained by avoiding significant disturbance of the species.  2c. The supporting habitats and processes relevant to the qualifying features and their prey/food resources are maintained, or where appropriate restored, at the Outer Firth of Forth and St Andrews Bay Complex SPA.
<b>Firth of Forth SPA Ramsar 6313.72</b>	Dunlin	Favourable Declining	To avoid deterioration of the habitats of the qualifying species 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: <ul style="list-style-type: none"> <li>• Population of the species as a viable component of the site</li> <li>• Distribution of the species within site</li> <li>• Distribution and extent of habitats supporting the species</li> <li>• Structure, function and supporting processes of habitats supporting the species</li> <li>• No significant disturbance of the species</li> </ul>
	Eider		
	Grey Plover		
	Lapwing		
	Mallard		
	Bar-tailed Godwit	Favourable Maintained	
	Cormorant		
	Curlew		
	Oystercatcher		
	Pink-footed goose (n/a)		
	Red-throated Diver (n/a)		
	Redshank		
	Ringed plover		
	Sandwich tern (n/a)		
	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 (n/a)			
<b>Fala Flow SPA Ramsar 317.75</b>	Pink-footed goose	Favourable Maintained	To avoid deterioration of the habitats of the qualifying species or significant disturbance to the qualifying species,

			<p>thus ensuring that the integrity of the site is maintained; and</p> <p>To ensure for the qualifying species that the following are maintained in the long term:</p> <ul style="list-style-type: none"> <li>• Population of the species as a viable component of the site</li> <li>• Distribution of the species within site</li> <li>• Distribution and extent of habitats supporting the species</li> <li>• Structure, function and supporting processes of habitats supporting the species</li> <li>• No significant disturbance of the species</li> </ul>
<b>Gladhouse Reservoir SPA Ramsar 186.58</b>	Pink-footed Goose	Unfavourable Declining	<p>To avoid deterioration of the habitats of the qualifying species or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained; and</p> <p>To ensure for the qualifying species that the following are maintained in the long term:</p> <ul style="list-style-type: none"> <li>• Population of the species as a viable component of the site</li> <li>• Distribution of the species within site</li> <li>• Distribution and extent of habitats supporting the species</li> <li>• Structure, function and supporting processes of habitats supporting the species</li> <li>• No significant disturbance of the species</li> </ul>
<b>River Tweed SAC 3742.65</b>	Atlantic salmon	Favourable	<p>To avoid deterioration of the qualifying habitat (listed above) thus ensuring that the integrity of the site is maintained and the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features; and</p> <p>To ensure for the qualifying habitat that the following are maintained in the long term:</p> <ul style="list-style-type: none"> <li>• Extent of the habitat on site</li> <li>• Distribution of the habitat within site</li> <li>• Structure and function of the habitat</li> <li>• Processes supporting the habitat</li> </ul>
	Brook Lamprey	Maintained	
	Otter		
	River Lamprey		
	Rivers with floating vegetation often dominated by water-crowfoot	Unfavourable No Change	
Sea Lamprey	Unfavourable Declining		

			<ul style="list-style-type: none"> <li>• Distribution of typical species of the habitat</li> <li>• Viability of typical species as components of the habitat</li> <li>• No significant disturbance of typical species of the habitat</li> </ul> <p>To avoid deterioration of the habitats of the qualifying species or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained and the site makes an appropriate contribution to achieving favourable conservation status for each of the qualifying features; and</p> <p>To ensure for the qualifying species that the following are maintained in the long term:</p> <ul style="list-style-type: none"> <li>• Population of the species, including range of genetic types for salmon, as a viable component of the site</li> <li>• Distribution of the species within site</li> <li>• Distribution and extent of habitats supporting the species</li> <li>• Structure, function and supporting processes of habitats supporting the species</li> <li>• No significant disturbance of the species</li> </ul>
<b>St Abb's Head to Fast Castle SPA</b>	Guillemot Razorbill	Favourable maintained	<p>To avoid deterioration of the habitats of the qualifying species or significant disturbance to the qualifying species, thus ensuring that the integrity of the site is maintained; and</p> <p>To ensure for the qualifying species that the following are maintained in the long term:</p> <ul style="list-style-type: none"> <li>• Population of the species as a viable component of the sit</li> <li>• Distribution of the species within site</li> <li>• Distribution and extent of habitats supporting the species</li> <li>• Structure, function and supporting processes of habitats supporting the species</li> <li>• No significant disturbance of the species</li> </ul>
	Herring gull	Unfavourable Declining	
	Kittiwake		
	Shag		
Seabird assemblage			





