When undertaking any work on or adjacent to coastal and estuarine flood embankments it is essential to consider possible impact on wildlife and habitat features many of which have legal protection.

Before you apply for flood defence consent.

The Environment Agency needs all relevant information before consents can be determined and issued.

If it is not shown that ecological features have been considered and where necessary, appropriate measures included to minimise or avoid impact, issue of consent is likely to be delayed or declined.

A guide to the consenting process can be found at the end of this factsheet.

What this factsheet is for:

• Raise awareness of ecological features likely to be encountered

• Highlight the impact of engineering works.

• Suggest possible actions - mitigation measures that can be included in your project.

• Provide information on how the consenting process works.

What this factsheet is not:

• The information contained here is not an exhaustive list of measures. Appropriate action to protect ecological features may vary depending on location.

• This is not intended as a do-it-yourself guide. In most cases a qualified ecologist will be required to undertake surveys and oversee mitigation works.

Staying the right side of the law.

Causing damage to protected species or habitat is a criminal offence. Some species are also protected against disturbance. Offenders can be prosecuted, fined and equipment confiscated.

Permission to undertake works under other legislation does not remove the need to comply with wildlife law.
Protecting wildlife and habitats

Important Ecological Features

Coastal flood embankments represent an extended corridor of grassland habitat. A number of rare and endangered species are found in, or associated with this habitat.

**Nesting birds**

All nesting birds, their nests (while in use or being built) and their eggs are protected by law. Some bird species have additional protection making it an offence to disturb them whilst nesting. Grassland along coastal defences is used by birds that nest on the ground such as skylarks and pipits, nests may be on the rear folding or wall itself. Adjacent dykes and ditches may contain nesting waders, warblers and wildfowl.

Actions:

- Avoid working at times when birds are nesting - generally accepted to be 1st March to 30th August.
- Undertake a breeding bird survey within working areas and access routes and commence work only if nesting birds are absent

**Wintering birds**

This feature should be considered in relation to adjacent wetland habitat which is designated as important for migrating birds.

Our estuaries and marshes can support a notable proportion of the global population of certain bird species during the winter. Disturbance at important feeding and roosting areas can have a significant impact on their survival.

Actions:

- Undertake work outside wintering period, avoid working October to March.

However, if it is necessary to work in winter:

- If possible, avoid working in January and February when wintering birds are particularly vulnerable
- Implement a voluntary stop of work if temperatures fall below freezing on 7 consecutive days
- Limit working at locations used as high tide roosts
- Coordinate construction activity in an estuary to limit overall disturbance
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Reptiles
Flood embankments are often home to adders, grass snake, slow-worm and common lizard. These species are protected against killing and injury. From late autumn to early spring, reptile species may be hibernating in turf layers – it will not be possible to move them at this time without risk of injury.

Actions:

- Undertake a survey of the site to confirm presence or likelihood of reptiles being present.

- Avoid working during the hibernating period for reptile species, November to March, unless appropriate mitigation has been completed. If reptiles are unlikely to be present, winter working will be possible.

- In appropriate conditions, undertake a phased removal of vegetation in order to encourage movement of reptiles to designated areas of refuge adjacent to working areas.

- Provide compensatory habitat as part of scheme if reptile refuge areas lost.

Water voles
Water voles and their burrows are protected. This species has suffered a catastrophic decline in recent decades. It is likely water voles will be living in fresh marsh dykes. This species needs to be considered especially where borrow dyke edge is to be disturbed.

Actions:

- Exclude any works activity in areas at least 3m from the edge of borrow dykes or other open freshwater features.

- It may be possible to undertake localised habitat management to encourage temporary dispersal of water voles from work area. This needs to be planned in advance is time critical and may require a license from Natural England.

Presence or absence of water voles should be validated by an experienced person.
Snails

The narrow-mouthed whorl snail (Vertigo angustior) is found on coastal flood embankments in Norfolk and Suffolk. This protected species is one of Britain's rarest snails and occurs at only a few locations in the UK. It is in serious decline in Europe.

Actions:

- Determine likelihood of this species being present through early contact with EA ecologist or Natural England. There may be need to support this with a survey.
- Minimise disturbed area and mark off restricted zones as refuge areas. Attempt to maintain continuity of habitat along the embankment.
- If significant areas are to be disturbed (>30m) consider preserving turf sections.
  a. For single short sections, turf can be put aside and replaced on re-profiled sections.
  b. For longer sections, consider moving turf in phases along the wall.

Important: these works must be overseen by an ecologist and following consultation with Natural England. Projects should be considered in context of estuary as a whole.

Other Species...

Depending on the location, nature and extent of works, access routes and additional work such as tree and scrub clearance, there may be other species and regulations relevant.

Bats:

All bat species and their roosts are fully protected. Bats may be using trees that have suitable characteristics in which to roost or to hibernate. If there is need to modify or fell any large trees it may be necessary to check for bats prior to cutting.

Badgers:

This protected species may build setts within embankments. If any burrows are suspected to be used by badgers, contact EA in the first instance for advice. It may be necessary to obtain an additional license from Natural England before work can proceed.
Protecting wildlife and habitats

Habitat features

Saltmarsh

It is likely that inter-tidal areas in front of flood defences will be within a protected area, SSSI, SAC, SPA or Ramsar site (see below for definition). Saltmarsh and inter-tidal mud are listed features within these site designations and legally protected from damage. When applying for consent it will have to be shown how damage will be avoided.

Action:

Confine all activity to the embankment only and prevent material from ending up in front of the defence.

Grazing marsh

This habitat landward of the defence may be included within a designated site and be protected accordingly. Grazing marshes are important breeding areas for ground nesting birds, some of which may be protected against disturbance. In winter these areas may be used by migrant birds to feed and roost.

Further considerations

Removal of trees:

If more than 5 cubic metres of timber is to be felled in order to facilitate the work it will be a requirement to obtain a felling licence from Forestry Commission.

www.forestry.gov.uk/england-fellinglicences
Landscape and access

Many coastal defences lie within areas designated for their natural beauty. Works such as tree clearance or modification of defences altering their appearance may have a visual impact on the landscape. It may be necessary to consult with the local planning authority if this is the case. (ref: www.suffolkcoastandheaths.org).

Any work that impacts even temporarily on public rights of way along defences will need permission from the highways authority (County Council).

Archaeology

It is possible that some locations where work is proposed could have historical significance. This may include below-ground features or deposits, earthworks or other historic landscape features. Irreversible damage can be caused as ground is broken and features destroyed.

It is important that the local authority Archaeology Department has adequate opportunity to comment before work takes place. Site information can be found online, for example at: www.suffolk.gov.uk/libraries-and-culture/culture-and-heritage/archaeology/historic-environment-record

Relevant legislation

The species and habitats mentioned in this factsheet are covered by a number of regulations. These laws list many species not mentioned here that might also be relevant depending on location.

Principal wildlife regulations include:

Wildlife and Countryside Act 1981 (as amended)
Conservation of Habitats and Species Regulations 2010 (as amended)
Protection of Badgers Act 1992

Penalties for breaking these laws can result in a fine up to £5,000 and up to 6 months in prison.

In certain circumstances it is possible to obtain a license from Natural England to undertake activities that would otherwise result in a breach of these laws.

Protected site designations:

UK:
SSSI – Site of Special Scientific Interest. Designated under Wildlife and Countryside Act 1981

International:
SAC – Special Area of Conservation - EC Habitats Directive (92/43/EEC)
Ramsar site – designated under treaty of Convention on Wetlands of International Importance, Ramsar, Iran 1971
Other licenses that may be needed

**Marine Licence** – A license from the Marine Management Organisation may be required. Applicable to any area which is submerged at mean high water spring tide, including the waters of every estuary, river or channel where the tide flows at mean high water spring tide. Relevant to construction and improvement works, dredging and deposition of materials and other activities. Some exemptions may apply.

www.gov.uk/marine-licensing-application-process

**Ordinary Watercourse Consent** – application must be obtained from the local County Council or relevant Internal Drainage Board for any work which may temporarily or permanently affect the flow in any watercourse (other than a main river).


**Planning Consent** – Depending on the scale of work and especially for new structures, formal permission may be required from the Local Planning Authority. Formal permission may also be required for excavation of materials.

www.suffolkcoastal.gov.uk/yourdistrict/planning/devcontrol/permission

**Waste Exemption or Transfer licence** – This may be relevant if certain materials needed for or resulting from construction are sourced or moved on or off site, within or between sites.

www.gov.uk/manage-waste-on-land-guidance-for-land-managers

**Protected species license** – A license will be needed for certain procedures such as those resulting in disturbance to water voles and their burrows, disturbance to badgers and their setts and other works impacting on protected species. Early contact with Natural England and EA teams will help to identify the need for these licenses.

www.gov.uk/wildlife-licences
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A guide to Flood Defence Consent application

How do I check if my works require Flood Defence Consent?

Any structure or works in, under or over the main river channel (including the river banks) may require Flood Defence Consent, as well as any operation which may affect the flow of water to and from the main river channel.

The Environment Agency also consents works along the coast (not covered by the Coastal Protection Authority, Harbour Authority or Port Authority).

There are a few minor operations and works which are exempt from the consenting process. If you are unsure if your works required consent then please contact: fdccoastal@environment-agency.gov.uk

Who is responsible and how does the law apply?

The Environment Agency is responsible for consenting works under:

- Section 109 of the Water Resources Act 1991 (as amended by Floods and Water Management Act 2010 (FWMA10)) which covers any structure in, under or over a main river (as depicted on a main river map).
- Section 210 and Schedule 25 of the Water Resources Act 1991 (as amended by FWMA 2010) which is the ability of The Environment Agency to make regional byelaws. For Anglian region we have the Anglian Land Drainage and Sea Defence Byelaws. Byelaws refer to a range of activities including spoil on the flood plain, animal on walls, fences on walls, jetties and vessels impeding the flow of water. Land Drainage Byelaws cover works in and surrounding the main river channel. Whereas the Sea Defence Byelaws are applicable to any wall, bank, embankment (including natural or artificial high ground which forms part of or makes a contribution to the efficiency of the defences) etc.

The Environment Agency is not liable for the design of the works; we are responsible for assessing the impacts of the works on the surrounding area.

The Local Authority or Internal Drainage Board are responsible for consenting works which may temporarily or permanently affect the flow in any watercourse (other than a main river).

How much does it cost?

There is a £50 fee associated for structures or works in, under or over the main river channel. For Byelaws consents there is no fee. If you are unsure which category your works fall into then please email: fdccoastal@environment-agency.gov.uk

How long does it take?

The Environment Agency has up to 2 months to determine a Flood Defence Consent, which includes a 28 day statutory period for consulting Natural England for works in environmentally sensitive areas.

What happens if the application is approved?

The consent certificate will be sent to the agent or applicant. The consent will contain a number of conditions and informatives that relate to how the work is carried out. Conditions in the consent
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must be adhered to. The Environment Agency has the right to withdraw the consent certificate if the conditions have not been followed. The applicant may also be required to return the site to its original condition at their expense.

Informatives in the consent outline any recommendations that the Environment Agency has for carrying out the work in a sustainable or environmentally sensitive way.

What happens if the application is refused or withdrawn?

The Environment Agency may advise you to withdraw your consent and revise your proposals for the works. If you reapply for consent within 6 months, and have paid a fee for the application, then you will not be required to pay again if you reapply.

Your consent application may be refused if you do not provide enough information or if the works could increase flood risk and the outcomes could be achieved through another proposal that does not adversely impact the site. If the application is refused then you will be required to pay the fee again.

If you believe that consent has been unreasonably withheld then you have a right of appeal to an independent arbitrator or Government Minister as appropriate.

What does a Flood Defence Consent application need to contain?

- Application form – All boxes should be completed with as much information as possible.
- Method statement and map – How will you be carrying out the works? What machinery will you be using? Where exactly will the works be taking place? (include grid refs if possible)
- Detailed scheme design – Do you have any drawings or photographs to support your application?
- Timing and duration – When will you start and finish the works? How long will the works take? When considering impact on wildlife, the best course of action is to avoid sensitive times for particular species. It might be possible to work during these times but only if additional mitigation is in place.
- Details of access – How will you, and any machinery, get to the works site? Will you need to access the site across private land?
- Ecological statement - Please include:
  1. Evidence you have considered all species likely to be relevant in work area.
  2. Any survey information, including survey method and results to support the above, preferably undertaken by a professional ecologist.
  3. Detailed method statement of any mitigation proposed especially if this includes modifying habitat where protected species occur.
  4. Details of timing of any mitigation works and how this relates to construction times
     It is your responsibility to show you have taken or will be taking reasonable steps to ensure impact on protected species will be avoided or kept to a minimum otherwise we cannot issue a consent. Environment Agency staff will be happy to advise at any stage in this process. Early planning of ecological requirements can avoid later delays.
- WFD Assessment – If a WFD (Water Framework Directive) Assessment is required then this should be completed prior to the application. Have you demonstrated that you considered impacts of your works on the waterbody?
A guide to getting a Flood defence Consent (FDC): who does what.

Seek pre-application advice from EA and NE. Contact: fdccoastal@environment-agency.gov.uk

Collect site and scheme information:
- Is scheme in or near a designated site? (SSSI/SPA etc)*
- Details of relevant species, ecological report
- Agreed design and method of working with contractors etc

Do you need FDC?

Apply to EA for Flood Defence Consent. Your application should include:
- A completed Flood Defence Consent application form
- A detailed scheme design
- Method statement and map
- Timing and duration of the works
- Details of access to and around the site
- Ecological Impact Assessment - if required
- WFD Impact Assessment - if required

Work can commence: mitigate for impacts on ecology as in this factsheet

Applicant provides more information or changes proposal

EA receives formal application with supporting information*

EA advise applicant to discuss possible changes

Flood risk issues raised

Consent refused

EA sends consent certificate. Work can commence; may be subject to conditions

Assessment made of flood risk impact by EA FR team

Application OK as submitted

Mitigation measures possible

EA advise applicant to discuss possible changes

Assessment made of ecological impact by EA conservation team

Ecological issues raised

Consent refused

EA consult NE if SSSI etc

Mitigation measures possible

Application OK as submitted

No mitigation

Not OK

EA sends consent certificate. Work can commence; may be subject to conditions