

# Living with the shingle ridge

## A guide to owners and occupiers of houses and caravans

### Shingle Ridge flood protection between Heacham and Snettisham.

#### What is the Shingle Ridge?

The shingle ridge is a raised line of shingle and sand that stretches from Snettisham to Heacham, the composition of which changes along its length. The ridge forms the primary means of reducing the risk of tidal flooding to the people, houses and caravans along North Beach, South Beach and Jubilee Road as well as Snettisham Beach. It also offers protection during storms from wave spray and high winds.

One of the ways the Environment Agency protects the ridge is by regulating certain activities that are undertaken on or near the flood risk management assets.

This is done through the Environmental Permitting Regulations (EPR) which requires landowners to apply for a Flood Risk Activity Permit, or FRAP, before they can carry out any work. The main aim of these permits is to ensure that flood risk assets are not compromised.

More information regarding Flood Risk Activity permits can be found at [Flood risk activities: environmental permits - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/topics/flood-risk-management) or by emailing us at [PSO.EastAnglia@Environment-Agency.gov.uk](mailto:PSO.EastAnglia@Environment-Agency.gov.uk)

#### When is a permit required?

Due to the flood risk function of the sand dunes and shingle ridge, most activities within 16m of the ridge will likely require a permit. Activities could include small works such as, installing signs, retaining walls and fences, as well as larger works such as removing any material from the ridge or erecting a house extension close to the flood defences.

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### Why?

Although the ridge appears solid and immovable, it can be fragile, and small alterations can have large impacts. The repetitive wave action during high tides or storms will exploit small weaknesses in the ridge causing it to fail. Removal of sand/shingle from the top or sides of the ridge also increases the chance of the ridge being overtopped and breached.

A single breach in the shingle ridge will place a large proportion of the area behind the defence at risk, not just the area immediately behind it. In some areas there is a secondary flood risk management asset formed by an earth embankment. This secondary earth embankment offers protection to the village of Heacham however, in a tidal flood event, it constrains any flood water between the shingle ridge and the earth embankment. In a large flood event, the area between the two lines of defence could fill with seawater until the tide recedes, or until the secondary defence is also compromised. This is why it is important that the sand/shingle ridge is not weakened and why a FRAP application is required to be submitted to the Environment Agency should any landowner wish to undertake works within 16metres of the ridge.

### What do you need to do to obtain a permit?

A permit is a legal document so the process of gaining a permit may seem a daunting task when faced with all the forms to complete and the evidence to provide. However, we do strive to make the process as simple as possible, only asking for the information required to ensure that the work won't increase the risk of flooding to yourselves or your neighbours. We are also on hand to provide advice throughout the process.

Before applying for a permit, please review the table below to determine whether an activity is likely to be permitted.

### What will and will not be permitted?

Activity	Permission likelihood	Why?
Removal of windblown sand from decking, driveways and other	You do not require a permit for this activity as long it is only sand	We understand the need to clear windblown sand from your property and

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<p>areas located alongside the ridge or dune.</p>	<p>that has been blown onto the decking, driveway etc is removed and that not sand from the ridge itself.</p>	<p>doing it sensitively should not harm the ridge.</p>
<p>Removal of sand/shingle from the ridge.</p>	<p>A permit application will be required, and we are unlikely to grant approval for such work.</p>	<p>Removing material from the top or side of the ridge reduces the stability of the embankment and reduces the effectiveness of the ridge in a flood event. Removing the top layer also results in vegetation removal. The grass and other plants act to anchor and bind the sand and shingle, making it much more resilient to wave and wind action. The grass is also an important part of the coastal habitat and landscape.</p>
<p>Steps and ramps over the ridge.</p>	<p>A FRAP application should be made. Steps and ramps cut into the ridge will not be permitted. Demountable structures may be allowed dependent upon location and design.</p>	<p>Any action to dig into the ridge will weaken it (See removal of sand/shingle).</p> <p>Demountable steps or ramps that can be installed without excavating into the ridge maybe suitable in areas where existing footfall is causing erosion to the ridge.</p>

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<p><b>Steps or ramps over the concrete wall.</b></p>	<p><b>A FRAP application should be made. No permanent structures will be permitted but demountable steps and ramps are permissible dependent upon their design and location.</b></p>	<p><b>Access to the concrete flood and wave walls is required at all times for inspection and maintenance. Demountable structures that are removed when not in use are acceptable unless the area needs to be kept clear for operational reasons such as areas near demountable barrier locations.</b></p>
<p><b>Fences over/along the ridge.</b></p>	<p><b>New structures – Unlikely to be approved.</b></p> <p><b>Replacement – may be approved depending upon the impact of the existing fence, the design of the new fence and the method used to install it.</b></p>	<p><b>Fencing acts as a barrier to maintenance and inspection activities. They also collect windblown sand causing maintenance issues for the landowner and their neighbours.</b></p> <p><b>Where there is an existing fence, we will consider the impact the current structure has to determine whether a replacement structure is acceptable. We may ask for design changes to mitigate the known impacts of the structure. Where the current structure is having an unacceptable impact, we may refuse</b></p>

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		the permit and ask you to remove the existing structure.
<b>Signposts.</b>	<b>FRAP application should be submitted and will potentially be granted – dependent upon location, scale, method of installation and rationale.</b>	<b>Although we try to avoid placing signs onto the ridge, if there is clear justification to do it and the method and scale means that the ridge stability is not impacted or access impaired, then a permit will be granted.</b>
<b>Removal of the material from the ridges toe (the area where it meets the ground), or erecting structures at the base of the ridge/dune.</b>	<b>Unlikely to be permitted – limited to the removal of windblown sand.</b>	<b>Removal of the material from the toe of the flood defence will result in slippage, reducing the crest height and further erosion.</b>  <b>See removal of windblown sand for information on what will be acceptable.</b>
<b>Housing extension toward or onto the toe of the flood defence.</b>	<b>Unlikely to be permitted (or gain planning approval).</b>	<b>The encroachment toward, onto, or over the ridge will impact the future stability of the defence and restrict access for inspection and maintenance.</b>

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Once you have determined that a permit will not be refused in principle, you will need to complete the application forms, including any relevant plans/evidence required to support your submission.

To determine a permit, we need some relatively basic information:

**Who is undertaking the works** – is it the homeowner or a contractor undertaking the work? Who will be responsible for something that goes wrong? That person is called the ‘operator’ and will be the person named on the permit. This can be the person undertaking the works if you are hiring a contractor.

**Where is it being carried out** – We need to be able to clearly identify the location and extent of the works. We request that a location plan is submitted – this needs to include landmarks so we can find the site. A site map which shows the exact location of the structure or activity is also useful. If the works are near flood defences, the location of the work in relation to the structure should be clear.

**How the works are being carried out** – we are as interested in how the works are going to be undertaken as to what the works are. The enabling works are often a permissible activity themselves and need to be included in the permit. We need a schedule of the works to be undertaken starting from site mobilisation to leaving the site. Note: we do not review the method in terms of health and safety, so a H&S method statement is not required.

**When the works are being undertaken** – There are times in the year when no work is allowed to take place, normally when maintenance activities are being undertaken but also due to environmental constraints. We will advise you of this if it is an issue, when we receive the permit application.

### **What happens if I do works without a permit, or against the conditions on a permit?**

It is a legal offence to undertake works that fall under the definition of a Flood Risk Activity without a permit.

If there has been inadvertent damage to the shingle ridge, then we will ask you to repair the damages voluntarily at your cost. If this work isn’t undertaken voluntarily then we may take enforcement action which could result in the EA undertaking the repairs at your cost.

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For minor infringements of the regulations or the permit we will issue guidance and monitor work carried out by the operator to ensure no further unpermitted works are carried out. Repeated failures to comply with the regulations could result in enforcement action and restrictions on the ability to apply for permits in the future.