

# **Instow Sand Dunes – Dune Pen Trial 2020**

**Joint Position Statement by Natural England, Environment Agency,  
Devon Highways, Instow Parish Council, the North Devon Biosphere  
Reserve and the Christie Estate**

**May 2020**

## **Current situation**

Instow Beach is a sandy beach that lies near the confluence of the Rivers Taw and Torridge. It is largely owned by Christie Devon Estates. Other stretches of the foreshore are owned by the Crown Estate and are generally managed by Instow Parish Council under a foreshore lease. The beach and dunes at Instow form part of the Taw Torridge Estuary Site of Special Scientific Interest (SSSI) which is designated for its overwintering bird population and the large areas of mud and sand flat habitats which support them.

The sand at Instow is there only temporarily and is remobilised during high energy conditions or, in future, under the effect of relative sea level rise. The process of sand circulation around the estuary mouth area is crucial to the estuary's response to sea level rise and therefore protection of homes and property. Any action to inhibit this circulation or reduce sand accretion in the inner estuary would result in increased wave erosion along the shoreline, and changes in the sediment budget available to other parts of the estuary. Therefore all of the sand is important to the health of the estuary.

The quantity and position of sand on Instow beach has fluctuated historically. In recent years, the trend has been an increase in volume. Although this is a natural process, it has undesirable social consequences i.e. sands spills from the beach over onto the highway and blocks springs, streams and surface water drainage, and restricts access to businesses and residences.

For this reason, the Taw Torridge Estuary Technical Officers group researched options and worked with a group of relevant stakeholders to agree a dune management trial which involves a natural flood management approach to reduce sand blow. This is a multi-agency trial which is being delivered by the Biosphere Reserve on behalf of all of the organisations in this briefing. Initial installation of the fences for the trial took place in March 2020.

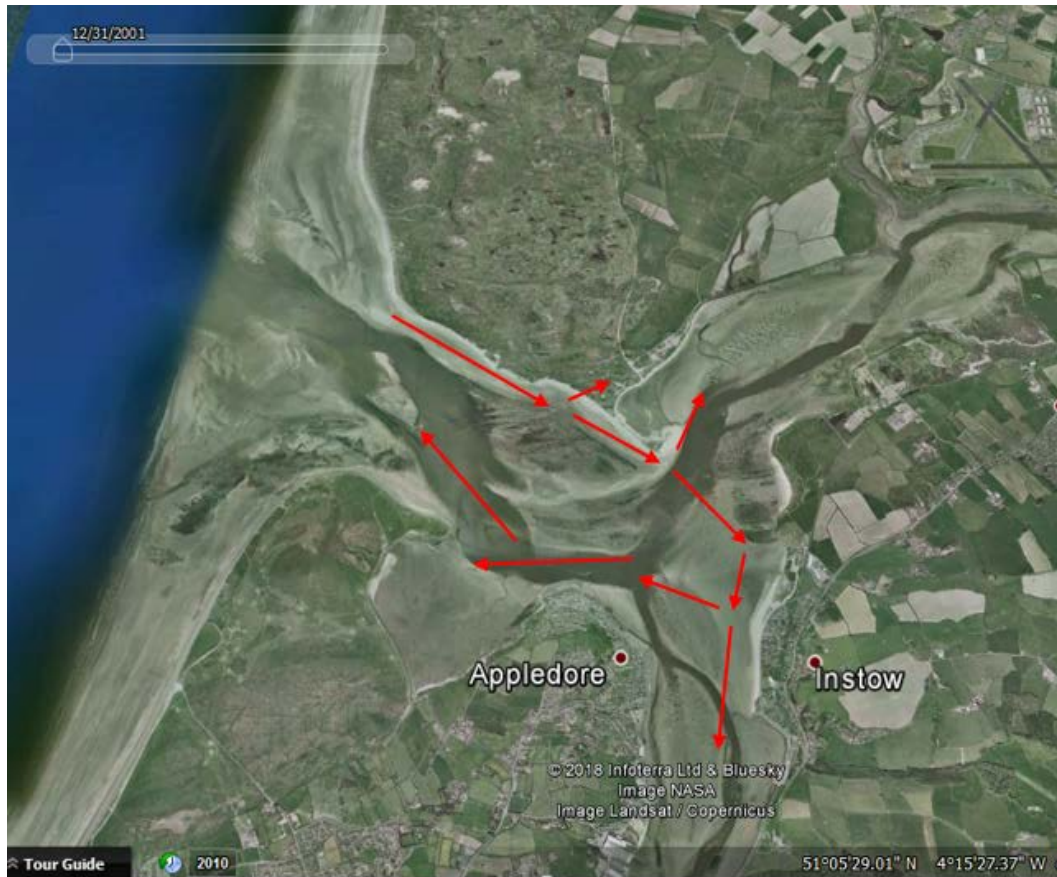
In addition to reducing sand encroachment onto the road, the dune management trial objectives are to:

- Use natural solutions to reduce flood risk, and learn how utilise these techniques as effectively as possible
- Understand the other (non-flood) benefits this approach can deliver, and try to quantify these to inform future projects
- Learn by doing and contributing to local and national knowledge base to enable more work like this to happen in the future

- Achieve the above in a collaborative manner with partners and communities.

In terms of monitoring, drone surveys are planned every 2 months and results will inform decisions on the next steps for the trial.

## Location



Aerial image with arrows to show prevailing sediment movement within the Taw Torridge Estuary.

Easting = 247238 Northing = 130772. National Grid Field No = SS 4730 2377  
Latitude = 51°3'19.46"N Longitude = 4°10'47.84"W

### **North Devon Biosphere Reserve's role and responsibilities**

The Biosphere Reserve team convenes the Taw Torridge Estuary Technical Officers group which consists of the coastal engineers and flood defence managers in all of the agencies with a statutory interest in flood and coastal risk management along the north Devon coast. The Technical Officers group initially commissioned the design of the scheme and will review its success.

The Biosphere Reserve team are acting on behalf of the statutory authorities to design and improve the scheme under the guidance of the Technical Officer Group and will commission the drone monitoring.

### **Environment Agency's role and responsibilities**

The Environment Agency is responsible for managing the risk of flooding from main rivers, reservoirs, estuaries and the sea. It works to increase the resilience of people, property and businesses to the risks of flooding and coastal erosion.

The Environment Agency is a member of the Taw Torridge Estuaries Technical Officers group that initially suggested the scheme and will review its success.

The Environment Agency is the Competent Authority for the permitting processes for flood management schemes, and aids the Coastal Authority (North Devon Council) in the creation of Coastal scheme, under its Supervisory Duties.

The Environment Agency fully supports the use of natural processes to help improve flood resilience and manage climate change (sea level rise), if they are suitable for that location and the flood risks. We will also ensure that existing sea defences are not compromised by this dune training scheme.

### **Natural England's role and responsibilities**

Natural England's remit is to ensure the natural environment is conserved, enhanced and managed sustainably.

Natural England is a statutory consultee for any development proposals that may affect SSSIs. Its advice assists the relevant authorities in deciding on any such proposals. In this case Natural England provides nature conservation advice regarding the relevant designated sites (Taw Torridge Estuary SSSI, Northam Burrows SSSI, Braunton Burrows SSSI, Braunton Burrows Special Area of Conservation (SAC), and Bideford to Foreland Point Marine Conservation Zone) and advice or licencing for any protected species work.

Regarding Instow sand dunes, Natural England has consistently advised that natural processes should be allowed to proceed wherever possible, and that keeping the sediment in the estuary system is a priority.

Natural England is the consenting body for any management activities undertaken or permitted within the SSSI by the landowner or occupier, that are included in the list of 'Operations Requiring Natural England's Consent (ORNEC) where other statutory authorisation is not required. Natural England is only able to provide consent where the operations are compatible with furthering the conservation and enhancement of the SSSI features.

While Natural England acknowledges that sand blown onto the road can present an issue for the local community, we consider the removal of sand from the site to be detrimental to the estuary SSSIs. Where the movement of sand presents a real Health and Safety issue to road users or the community our advice is that any remedial works should return sand to the dune system.

The current dune training trial is consistent with maintaining the special interest of the SSSIs and SAC in the Taw Torridge Estuary so Natural England has provided consent for the works so far.

Natural England is a member of the Taw Torridge Estuaries Technical Officers group that initially suggested the scheme and will review its success.

### **Devon Highways role and responsibilities**

As the Local Highway Authority Devon County Council (DCC) are responsible to ensure that the highway network is safe and passable by undertaking maintenance or improvement of the highway. As part of these duties DCC has a duty to ensure the highway is clear of obstructions to ensure safe passage along the highway, the depositing of the sand on the highway at Instow is classed as an obstruction. DCC will monitor the site for the build-up of sand, especially following winter storms, and arrange the removal of the sand to a site designated by the land owner and/or Natural England, there will be a delay in removal of the sand therefore to protect the public the road will be closed until such time the sand is removed.

As Minerals and Waste Planning Authority, DCC are responsible for the preparation of Minerals and Waste Plans in Devon, with the responsibility of setting out how and where minerals should be worked in Devon, and ensuring that minerals sites are managed and restored to protect Devon's environment and communities.

### **Christie Estate's role and responsibilities**

The Christie Devon Estate is owner of part of the foreshore and dune system affected by this review. The Estate supports the collective approach from all stakeholders to help alleviate some of the sand management issues which includes the current trial on Sand Dune Training.

### **Instow Parish Council's role and responsibilities**

Instow Parish Council are in contact with local residents and visitors. The Council endeavours to keep the beach in a presentable condition. It maintains up to date information on the [parish council website](#), and can be contacted with questions which they will either answer directly or refer to technical experts, such as the Biosphere Reserve Team, as necessary.