Devon Wildlife Trust

Protecting Wildlife for the Future

27 February 2020

Consultation Co-ordinator
Parson's Tunnel to Teignmouth Resilience Project
Network Rail Ltd
167-169 Westbourne Terrace
London
W2 6JX

By email to: SouthWestRRP@networkrail.co.uk

Dear Sir/Madam

Parson's Tunnel to Teignmouth Resilience Project consultation – DWT comments

Thank you for the opportunity to respond to the consultation on the Parson's Tunnel to Teignmouth Resilience Project. Devon Wildlife Trust limits its comments to elements relating to biodiversity and related environmental issues.

Sustainable transport and climate

DWT recognises the huge economic value that the mainline railway link provides to the south west. Public transport also has an increasingly critical role to play in reducing private vehicle use, reducing transport-related carbon emissions and encouraging active and sustainable travel. The climate emergency has brought this into sharp focus. However, the current emergency is one of both climate and biodiversity[1], with many of the solutions for climate change coming through restoration and re-creation of natural and semi-natural habitats. Proposals should seek to tackle issues around climate alongside securing nature's recovery.

Net gain

We consider that the proposed project, including the mitigation measures put forward, will result in a net loss of biodiversity – please see the following six sections. The National Planning Policy Framework requires that the vast majority of development in the UK produce a net gain in biodiversity. Current policy proposals have set out the inclusion of a net gain requirement for all sectors within the upcoming Environment Bill, which is likely to come into force within the lifetime of this project.

DWT consider it is not acceptable for this project to seek only to mitigate losses of biodiversity but must move to providing a clear net gain for biodiversity from the outset.

[1] https://nbn.org.uk/stateofnature2019/

Tel: (01392) 279244
Email: contactus@devonwildlifetrust.org
Devon Wildlife Trust, Cricklepit Mill,
Commercial Road, Exeter, Devon, EX2 4AB

www.devonwildlifetrust.org

Impact on designated habitats
We consider that the proposed works are likely to have a significant effect on surrounding nationally and internationally designated wildlife sites, including:

- Exe Estuary SPA, SSSI, Ramsar Site, Important Bird Area
- Lyme Bay and Torbay SAC
- Dartmoor SAC
- Torbay MCZ
- East of Start Point MCZ

We recognise that the potential impacts on the majority of these sites has been recognised in the Scoping Report, but we would emphasise the importance and vulnerability of these sites in terms of their habitats and species. The permanent loss of seabird foraging habitat, affecting birds associated with the Exe Estuary, should be avoided and where this is not possible, offsetting options should be pursued.

Impact on sub-tidal habitats
Local sub-tidal habitats are likely to be heavily impacted by sediment, boat movements and anchoring and potential changes in water movements. Wider coastal process are also likely to be affected. This must be thoroughly investigated, and steps taken to avoid such impacts. See below for impact on marine species.

There is a large area described as seagrass beds immediately alongside the site[2], based on grab sample results from 2005 which informed the 2010 DBRC Lyme Bay Biotope Map. While seagrass beds in the UK are usually associated with lower energy systems, this should be thoroughly investigated with maximum protection afforded any seagrass found. This also represents an opportunity for the project. Restoring and re-creating seagrass beds (if a feasibility study suggests this is possible) could not only offer some suitable mitigation for habitat lost within the footprint of the project, but also seagrass beds offer some natural protection against storm activity, together with being a very effective carbon sink.

Annex 1 reef habitats are also present alongside the site at Holcombe, which will need protecting.

Impact on marine species

- The coastal waters of south west England are important for a number of marine mammal species, including a coastal population of bottlenose dolphin, a Lyme Bay population of white-beaked dolphin, with other dolphins, minke whale and grey seal regularly seen. Noise, vibrations and sediment are all likely to impact a wide area of Lyme Bay, affecting these species.
- Lyme Bay, including the area near the site, is a nursery area for inshore fish species, particularly mackerel. The sedimentation of seabed habitats, sediment plumes, noise and vibration are likely to impact these species.
- As recognised in the Scoping Report, Atlantic salmon and sea trout (and possibly European eel) migrations may be affected by noise, vibration and sediment.

[2] https://explore-marine-plans.marineservices.org.uk/

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European eel will also potentially be affected by the new sea wall blocking access to the Holcombe Stream – this species is known to travel over other beaches in South Devon to access watercourses behind (e.g. Slapton).

- As recognised in the *Sabellaria* Report A02, *Sabellaria* in the locality will likely lose hard substrate habitat during the construction phase – although we recognise that potentially this will increase once the project is completed.
- Seabird nesting sites along the coastal cliffs of the site will be impacted during works and altered following works affecting species such as fulmar, great cormorant, shag, and herring gull.
- Seabird foraging habitat will be lost within the footprint of the site. As recognised in the Scoping Report, foraging habitat in the area will be impacted through noise, vibration and marine sediment affecting seabirds ability to forage, but also affecting prey species.
- Sensitive marine species protected under the Wildlife & Countryside Act 1981 including pink sea fan are found near the site (see marine explorer website). These are sensitive to sedimentation, boat traffic, anchoring and changes in water movements.

Impact on terrestrial species

The proposed works will also impact upon a wide array of terrestrial species, mainly through the impacts to the soft sandstone cliff areas. Species groups impacted include bats, birds, mammals, invertebrates, and plants. Soft cliffs are important habitats for a range of invertebrates as they offer burrowing opportunities. South Devon has a range of rare invertebrate species associated with soft cliffs and it is important that a full survey is carried out. Protection for rare species will be vital and opportunities for extending potential habitat will be important.

Devon holds several populations of endemic whitebeam (*sorbus*) species, often in isolated coastal cliff sites[3]. Several sites are known in Torbay and Teignbridge. It is essential that surveys are carried out for this group of species and where any are found they are protected, and opportunities sought to expand their range. Many occur as a few individual specimens and these can represent the global population of the species.

Impact on freshwater species

Records show that European otter use the Holcombe Stream. Otters also frequently use coastal waters for both hunting and moving between watercourses. The new sea wall will block access to the Holcombe Stream for otters. As previously mentioned, this is also likely to affect European eel and even potentially migratory salmonids. The new sea wall should retain an opening suitable for the movement of otters and fish.

Permanent loss of habitats

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[3] https://www.devon.gov.uk/environment/wildlife/the-devon-biodiversity-action-plan-bap

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Works will result in the permanent loss of habitats within the footprint of the project site including:

- Intertidal sediments – there will be a significant loss of intertidal habitats, particularly in the central section of the site, including the complete loss of intertidal sediments in the central area (even at low tide no sediment will be exposed).
- Beach – there will be considerable loss of beach habitat along the length of the site.
- Terrestrial habitats – the proposed buttressing to the soft sandstone cliffs using material reclaimed from the Isle of Wight offshore aggregate site represents a considerable loss of habitat. Losses will include a mix of bare sandstone and soil exposures, scrub, grassland and woodlands. As previously mentioned, these cliffs may contain rare species including endemic Whitebeam and invertebrates. The proposal describes an erosion mat being installed that encourages vegetation to grow and personal communications with Network Rail suggest the sowing of wildflower seed. We would suggest that this will require bespoke planting and sowing with bare patches of the original sandstone and associated soils retained. There will also be considerable disturbance to surrounding vegetation, affecting associated species.

We would expect this project to follow the mitigation hierarchy (avoid, minimise, mitigate) in trying to avoid damage to habitats and species, and only where damage cannot be mitigated onsite, and where a net gain cannot be achieved onsite, would we expect offsite mitigation to be considered.

In addition to the direct biodiversity impacts above, we comment on the following aspects of the project that may result in either potential failure of features and/or future biodiversity impacts.

Experience from Start Bay

Through discussions with Network Rail, we understand that there are proposals to include some areas of soft sediment around some of the hard revetments and that these will be planted. We would suggest that the project looks at previous experience from further south in Lyme Bay to understand the likelihood of success for these types of measures.

Slapton Sands in Start Bay has been a focus of works since severe storm damage in 2001. Attempts have been made to carry out large-scale beach replenishments and to build large shingle buttresses to protect areas of this shingle bar feature. However, these have rarely lasted more than a few months and on several occasions the entire works have been eroded in a single event of a few hours. Where hard structures are found alongside sediment areas, this leads to greater erosion.

We would suggest that planting on such areas will require a thorough evaluation from high energy systems where similar plantings have occurred previously.

Resilience against climate change
The proposed works have a suggested life expectancy of 100 years based on UK Climate Projections 2018 (UKCP18). However, the maximum track level rise of 1.21m is only 6cm over the UKCP18 high emission scenario for London in 2100. With the additional suggested intensity of storms, this makes a 100-year life appear optimistic. Providing the new line survives for 100 years, given the current route is 180 years old, and with continuing sea level rise, this project would appear to be only a temporary fix for a very long-term problem, which will have significant impacts. Will further environmental impacts be considered appropriate in another 100 years?

We would advocate a much longer-term plan that is costed against these very long-term projections and impacts.

Proposed jetty
The original proposals suggested the construction of a large jetty for the docking of aggregates ships to facilitate the bringing in of material from the Isle of Wight offshore aggregate site. We feel that such a large structure would have significant impacts on the seabed and associated habitats and could result in disruption to local marine currents, which may have consequences for coastal processes, sediment movements both immediately adjacent to the site and further afield. We could not support this.

Pollution
This project has a high risk of large-scale pollution of marine habitats through:

- Sediment movement and deposition both locally and through plumes moving this further afield.
- Noise and vibration which cause significant impacts in marine environments.
- Use of chemicals, fuels and concrete on a storm-prone shoreline over many years.
- Potential for breaches of the new line either during construction or once in operation. While this was always a risk, particularly through landslips, the bringing in of large quantities of material to construct the buttresses and backfill means there is an unknown impact of this new material on local habitats.

Yours sincerely

Ed Parr Ferris
Conservation Manager
Devon Wildlife Trust