Lower Otter Restoration Project

Produced by Environment Agency and Clinton Devon Estates

Q1. What does the Lower Otter Restoration Project (LORP) involve?

A1: The project will restore the Lower Otter Valley to more natural conditions closer to those that existed two hundred years ago. The restored site will require less future management against the impacts of climate change.

To achieve this we will make a 70 metre breach in the embankment that currently separates agricultural land and Budleigh Salterton Cricket Club from the river and estuary. With the embankment breached, land in the floodplain as far north as Big Bank (and up to Little Bank on extreme spring tides) will flood at high tide, draining again at low tide.

This will create approximately 55 hectares of mudflat and saltmarsh, and create a new wildlife reserve of international conservation value. The breach in the embankment will be bridged to allow continued access along the South West Coast Path. Improved and raised access will also be created on the footpath on the western edge of the marsh below South Farm Road (this is currently part of a planning permission granted to FAB Link). The western footpath above South Farm will be subject to flooding on some spring tides. South Farm Road will be re-aligned to the south and raised to safeguard the future access of the businesses and residents of the South farm community.

An old refuse tip which currently lies in the floodplain and presents an environmental liability will be protected from erosion, with an additional pedestrian access route also created. This will replace the impassable and disused existing public right of way spur immediately south of the tip. Further sections of the embankments known as Big Bank and Little Bank will be lowered to allow floodwater to pass and better connect the River Otter to its floodplain.

Under the scheme Budleigh Salterton Cricket Club will be relocated to a new site outside the floodplain (this is covered by a separate planning application, which has already been approved).

Q2. Why are you doing this?

A2: Although much loved in its current form the Lower Otter Valley is heavily modified by human hand. Several embankments, a road, a disused municipal tip, an aqueduct and an old railway line are artificial structures restricting natural processes and water flow. They are becoming ever more difficult and expensive to maintain, impede the ability for flood water to ebb and flow and reduce habitat quality and biodiversity. The River Otter itself is now disconnected from its floodplain.

Current climate scenarios predict a rise in sea level (currently 1.5mm/year) of up to 600mm by 2110 and increasing storminess with flood flows in the river becoming more frequent. This is causing more frequent over-topping and erosion and is likely to lead to embankment failure. In 2018, for example, the embankment was within one tidal cycle of breaching catastrophically and it was only due to rapid and

expensive public agency interventions that it was repaired. The footpath was closed for six months at this time as a result.

At present, ground to the west of the embankment mainly drains to the sea through a pipe that takes flow from the 'trunk drain' at the west side of the floodplain. This ends close to the low tide mark on the beach and is prone to blocking with shingle. The outfall is regularly cleared, but sea level rise will make clearance harder in the future. Another small outfall drains into the estuary but this is at a higher level and is frequently tidelocked.

This project recognizes these risks and seeks to deliver a more sustainable way by adapting to climate change and managing the area by working with natural processes, rather than trying to control them. As a result we believe the project can deliver real benefits for wildlife and societal health and wellbeing.

Q3. When will work start and how long will it take?

A3: Should planning permission be granted in early 2021 preparatory work will begin in spring 2021 with main construction works starting summer 2021. There will be very dramatic landscape changes in the first phase of the project as vegetation is removed and temporary access roads are built to facilitate works. Works will be completed by March 2023 with all temporary infrastructure removed at this time.

Thereafter we anticipate that it will take a period of around five years for the new habitats to develop and the site to make its full transition from terrestrial to inter-tidal ecology. This is based on experience from other similar schemes such as at Steart on the Somerset coast. The greatest habitat changes will be seen in the first few years after the breach is made.

Q4. Who is involved and what's in it for them?

A4: The scheme is a partnership initiative between Clinton Devon Estates (the Estate) and the Environment Agency.

Clinton Devon Estates has a long history of good stewardship of its land, enabling public access and management for habitats and species. It believes that climate change is real and threatens coastal communities and that early adaptation to climate change is more cost effective and can bring greater societal and wildlife benefits than delayed adaption or inaction. The Estate wishes to be recognised for its support of wildlife. As a result of this scheme, a wetland reserve of international significance will be created. This will enhance the Estate's environmental reputation. In addition, the Estate's management of the land in the Lower Otter Valley will become more sustainable with associated businesses protected. The Estate supports local businesses including those at South Farm, Otterton Mill and the King's Arms in Otterton, all of which are tenanted enterprises. We believe that this project can help support the wider local economy going forward, including those businesses already operating

The Environment Agency's involvement in the project stems from a need to provide compensatory habitat for losses identified in the Exe Estuary Flood and Coastal Erosion Risk Management Strategy. The Exe Estuary is a Special Protection Area

(SPA), designated under the European Union (EU) Birds Directive and an internationally-designated Ramsar site. Part of the Exe Estuary is also a Special Area of Conservation (SAC) designated under the EU Habitats Directive. Maintaining and improving existing flood defences will result in the loss of European designated intertidal habitat caused by coastal squeeze (the loss of existing intertidal habitat as a result of rising sea levels that drown out the habitat). This will adversely affect the integrity of the Dawlish Warren SAC and Exe Estuary SPA and Ramsar site. Under the Habitats Regulations, it is therefore a statutory requirement for the Environment Agency to create habitat to compensate for that lost. The partnership with Clinton Devon Estates was created due to the synergy of both organisations' objectives, with the scheme enabling the aspirations of both organisations to be fulfilled.

Q5. What is the cost of the scheme and where is the money coming from?

A5: The cost of the scheme will be about £15 million with the majority of costs relating to infrastructure removal/adaptation/relocation, raising of South Farm Road, installation of new footbridge, earth moving to create new habitat area and the protection of the disused municipal tip.

Funding will come from the Environment Agency and Clinton Devon Estates with the project also supported by the European Interreg VA France Channel England programme through a project called Promoting Adaptation to Changing Coasts (PACCo). Within this project the Lower Otter Valley is partnering the Saâne Valley in Normandy, France.

The objective is to demonstrate that early adaptation to climate change is desirable, brings greater benefits to society than inaction and to create a model of adaptation for other estuarine areas to follow. While Britain is no longer a member of the European Union (EU), during the transition period up to the end of December 2020 the UK remains a participant in EU-wide programmes in the same way as we did when we were a member. We were therefore able to apply successfully for funding under the programme. Regardless of our status in Europe and associated trade deals, this funding will be honoured until March 2023. The total value of the PACCo project is €25.7million, with a contribution from the European Regional Development Fund (EDRF) of €17.8m. The Lower Otter Restoration Project will receive around £8m through PACCo)

Q6. Besides the currently proposed scheme, and 'doing nothing', have any other solutions to the estuary's management been considered?

A6: The idea for the Lower Otter Restoration Project initially rose from a desire by the landowner, Clinton Devon Estates to manage the Lower Otter Valley as sustainably as possible in the face of a rapidly changing climate. A report was commissioned in 2009, which was carried out by Haycock Associates. It suggested a number of future ways of managing the Lower Otter and was presented to many interested parties on completion. It was out of that presentation that this scheme arose.

Other ways to address some of the issues have been suggested; dredging the river channel for instance, or carrying out works to improve drainage from the southern

marshes. These different options have been reviewed and discounted as part of the project development on sustainability, technical, legal or funding reasons. Within the existing scheme a list of options was developed including full scale restoration, assisted natural recovery and partial floodplain restoration. An options appraisal concluded that the preferred option for the scheme was the restoration of the floodplain associated with Big and Little Marsh. This process was guided by consultation with statutory and non-statutory consultees.

Q7. What engagement has been undertaken to date?

A7: There has been extensive stakeholder consultation and public engagement alongside professional engineering and environmental work throughout the design of this scheme. This has helped to identify the preferred option and contributed to the detailed design.

A Stakeholder Group, set up in 2013, provided an interface between the project team and interested parties, including community representatives. This group was involved in the development of the short list of options.

In 2014 a public consultation was held with events taking place locally at community centres and at parish and town council meetings. These have been held to highlight the issues, understand stakeholder and public perceptions of the problems, assess their reaction to outline proposals and options, gather information on alternative strategies and to ensure the local community has had a chance to help shape the broad form of the project.

Since 2015 an essential component of the scheme's communications work has been through its website (www.lowerotterrestorationproject.co.uk). This website places key documents in the public domain, including the project's rationale and vision, minutes of the Stakeholder Group meetings, the Risk Register, factsheets and proposed timelines. It also advertises key engagement events, with outcomes from public consultation available for viewing.

A long list of options was discussed with specialists from the Environment Agency and the Estate on 7 March 2017, and with the Stakeholder Group on 15 March 2017. With the exception of the Granary Lane resident group, the main stakeholder groups gave their conditional or tentative support for floodplain restoration through managed realignment.

From here, a Short List of options was developed, and, a public exhibition was held on 5 July 2017 at the Temple Methodist Church hall in Budleigh Salterton to seek the views of the local residents on LORP options. The exhibition was attended by 144 people and 105 feedback forms were received, which helped inform the outline design of the scheme. 73% of responders were supportive of LORP objectives and 62% were most in favour of the option that has become the preferred option. This option, restoration of Big and Little Marsh floodplain, was subsequently taken forward for design development, with an Environmental Impact Assessment (EIA) being carried out alongside the design stages. During this process, the project team has continued to engage with key stakeholders.

Q8. What will happen to the wildlife and landscape that is there already?

A8: Restoring the floodplain of the River Otter to a condition similar to that previously found prior to the construction of the embankments will involve very significant landscape change.

The largely pastoral aesthetic, which has dominated the valley since the early 1800s, will be replaced by an inter-tidal or estuarine landscape of mudflats, saltmarsh, reedbed and, at its upstream limits, grazing marsh. This is the habitat that dominated prior to the 1800s and the many human modifications.

There will be very significant habitat changes resulting from the scheme. This includes loss of grazing marsh, grassland, trees and hedgerows. However, these losses will be offset by the multiple beneficial effects from the creation of new rare saltmarsh and mudflat habitats within the floodplain and the natural transition from intertidal to coastal grazing marsh higher up the valley. Those hedgerows, trees and areas of scrub lost under the scheme will be compensated for through the creation of new areas. In the long term the initiative will restore the natural ecological order of the estuary.

The biodiversity, marine ecology and fish impact assessment has identified that without mitigation there is potential for the scheme to impact on species protected by legislation. Some of these impacts will be avoided through mitigation including making changes at design stage to avoid the impact and putting in place measures to protect areas of habitat. Mitigation for protected species will be undertaken in accordance with legal requirements and seeks to enhance the integrity of populations where possible to do so.

By reinstating natural processes to the Lower Otter Valley we expect significant long term benefits for species and habitats with an uplift in overall ecological value. One group of species we expect to benefit significantly are wading birds.

Q9. Might the project harm the beavers?

A9: No. The River Otter beavers are thriving and the decision by Defra to allow them to remain is one of the great wildlife success stories of recent years. Clinton Devon Estates is proud to be part of the River Otter Beaver Trial.

Although beavers have been seen within project areas to be impacted by tidal inundation we do not expect local populations to be impacted adversely by the scheme. Beavers have been known to occupy salt water and inter-tidal environments but only for short periods of time - usually whilst passing from one site to another. They need a source of fresh water to live.

We anticipate that there may be minor movement of local beavers as the site finds its new ecological equilibrium and the beavers find the habitats of greatest value to them. Such habitat is plentiful throughout the catchment. The scheme is based around the principles of supporting natural processes and ecological recovery. This is the same philosophy that drove the River Otter Beaver Trial.

Q10. Will I still be able to walk along the embankment?

A10: Yes. We know how highly valued the path along the embankment between Lime Kiln car park and White Bridge (Footpath 1 and 2) is by residents and visitors alike. It is one of the busiest footpaths in Devon, with up to 250,000 visits a year. If the embankments breach accidentally, as they almost did in 2018, it may be difficult for Devon County Council to find funds for repairs.

As part of this project we will put a footbridge over the planned breach to safeguard this access. If the path on the embankment has to be closed to allow works to proceed, diversions will be put in place to ensure continued pedestrian access up the valley and along the South West Coast Path.

Q11. How would the project impact on access along South Farm Road for businesses and residents?

A11: Access to South Farm and the South West Coast Path will be secured against future climate change under the scheme.

At present the road floods and is in a deteriorating condition. Under the proposals it will be raised with pedestrian access added. In initial discussions with residents and businesses at South Farm the risk of tidal flooding of the road was emphasised should the embankments fail accidentally. This project presents an opportunity to prevent and mitigate this eventuality in advance. There is a clear desire from all parties for access that does not flood. During works access to South Farm will be maintained with the existing road kept open whilst the new one is built. There will have to be a short period of closure when the new road is connected to the old road, but we will reduce the length of this closure as much as possible.

Q12. Will it make flooding to properties worse?

A12: No. Although the project is not primarily intended to reduce flood risk it must nevertheless demonstrate through a comprehensive flood risk assessment that it will not increase flood risk.

Q13. What will happen to the cricket club?

A13: The Budleigh Salterton Cricket Club has flooded many times in the past and this will continue if it stays at its current site. Climate change means flooding is likely to be more frequent.

Under the scheme the club will be relocated out of the floodplain. Planning permission has already been granted for this. This move provides the club with a secure long-term future, free from flooding. Although this was a separate planning application, funding of the new club ground and facilities depends upon being able to deliver the allied broader scheme of which it is a part.

Q14: What does the project mean for local farmers?

A14: The Estate sees both farms impacted by the project (South Farm and Pulhayes Farm) continuing as key agricultural businesses. The Estate supports food production as well as wildlife support.

The project will mean significant changes to the floodplain land and necessitate a change in land management practices. Agreements have been reached with the tenant farmers for the release of land significantly impacted by the scheme. Continued support will be given to restructure and support them as required.

Q15: Could the project attract mosquitoes which pose a risk to health, and could toxic material leak from the former landfill site?

A15: Experts from Public Health England believe that the increased health risks from this scheme associated with biting insects is low if there is careful design and management. The type of habitat created under the scheme is generally unsuitable for invasive mosquito species.

Research conducted at the site showed no current evidence of *Aedes detritus*, which is the common nuisance species associated with brackish habitat. *Anopheles claviger* was common and associated with the flooded grassland and freshwater ditches. This isn't associated with nuisance biting. If the intertidal zone is regularly flooded and drained then mosquito suitability will remain low. The key factor that will determine future mosquito pressure related to habitat changes is drainage. The project is therefore acting on information supplied by PHE and also the outputs from the Wetlands LIFE project to help guide detailed design, thus minimising the likelihood of increased risk from mosquitoes.

Surveys, including water and gas samples, have been taken from, within and adjacent to the old tip. In addition trial pits have been excavated to establish the content, condition and stability of the tipped material. There is no evidence of any toxic materials currently leaching from the site into the surrounding environment. Under the scheme part of the western section of the tip will be removed. The sides of the remainder of the disused tip will be protected by a combination of rock revetment, erosion protection matting and extended side slopes depending on the speed of flow in each area. Due to the extent of the tip it will not be possible to remove it in its entirety.

Q16. Won't this attract a lot more people – how will they be managed?

A16: A Visitor Management Strategy has been developed under the scheme. This balances the needs of wildlife and people so visitors can enjoy the area and its wildlife with minimal impact on the local environment.

The design of the scheme includes provision for new low key visitor infrastructure such as viewing platforms, whilst minimising the potential for disturbance to the new habitats and associated wildlife.

Wildlife interest in the site will be greatest in the winter months when the wading birds are present. This is when existing car park capacity at Lime Kiln car park is under-utilised. Under the scheme current informal parking along South Farm Road and that which illegally incurs into the existing SSSI will be designed out. It will be replaced by a new car parking area.

An increase in visitor numbers, while requiring management, will benefit many local businesses and is expected to lead to increased employment opportunities for local

people. The strategy is available to view on the project website: http://www.lowerotterrestorationproject.co.uk/resources.html

Q17: What is the relationship of this project to FAB Link?

A17: The FAB Link project is a proposal to build an electricity interconnector, subsea and underground, between France and Great Britain via the island of Alderney. The project is being jointly developed by RTE and FAB Link Limited, with support from the French and UK governments. The point where the cable will come ashore at the British end is in Budleigh Salterton, at Lime Kiln car park. There is geographical overlap between FAB Link and LORP in three places.

At present there is no certainty that FAB Link will progress. If approvals and finance for FAB Link are agreed, the project is expected to start construction in early 2023, meaning that the majority of Lower Otter Restoration Project (LORP) will have been completed before FAB Link commences. LORP designs have been agreed with FAB Link.

We are still discussing the preferred solution for the footpath at the western side of the floodplain between Granary Lane and South Farm Road. FAB Link has planning permission to raise this footpath, but LORP will need to implement works that allow FAB Link to install their cables and maintain public access in the interim. However, because the solution for this area is not yet agreed, it is not part of this planning application. There will need to be a subsequent planning application or amendment to cover these works.

Q18: What happens if you don't get planning permission?

A18: If planning permission is not granted the scheme will not be able to progress. Should council officers or members require further information before making a decision, we will provide it as swiftly as possible.

Q19: Why aren't you having an exhibition in a hall?

A19: Given the Coronavirus pandemic and current government guidelines associated with this public health situation we must explain our proposals online rather than in person.

Full details on the planning application can be found at: https://planning.eastdevon.gov.uk/online-applications/

Produced by Environment Agency and Clinton Devon Estates
September 24, 2020