



## Frequently asked questions

### **Q: What does the project involve?**

A: The project aims to restore the Otter Estuary to a condition closer to that which existed two hundred years ago, working with natural processes to create a less managed site. We would make gaps in the embankments that separate the marshes from the river and estuary. The marshes would flood at high tide, draining again at low tide. This would greatly increase the area of inter-tidal habitats such as saltmarsh and mudflat. We also expect to see more reed develop. More wildlife will return to use the new habitats and the environment would be enhanced.

The project will also improve public access. Breaches in the existing embankment footpaths would be bridged, and new improved and raised access created on the footpaths on the western edge of the marsh. We are seeking to either raise South Farm Road, or create a new bridge to ensure continuity of access to existing businesses and residents.

The old refuse tip would be reinforced to prevent erosion by flood flows and the capping could be improved. The trees have to be cleared as they pose a risk to the power lines; wildlife rich scrub will be encouraged to develop. A new path on the tip could provide pedestrian access across the floodplain during flooding.

### **Q: Why are you doing this?**

A: It is becoming ever more difficult to maintain the current banks and footpaths. Climate change is causing sea level rise (currently 1.5mm/year, up to 600mm by 2110) and increasing storminess (flood flows in the river are more frequent), which cause more overtopping and erosion and are likely to lead to unintended failure. The project recognizes these risks and seeks to deliver a more sustainable way of managing the area, working with natural processes rather than trying to control them. We also believe the project can deliver real benefits for people and wildlife.

### **Q: Besides the currently proposed scheme, and 'doing nothing', have any other solutions to the estuary's management been considered?**

A: Clinton Devon Estates commissioned a report by 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 the managed realignment proposal arose.

LOWER OTTER RESTORATION PROJECT

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Other ways to address some of the issues that we face 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 as part of our ongoing project development. However, we have to work within the existing rules and priorities. Securing funding for ongoing maintenance is difficult and works to reduce flood risk have to demonstrate significant benefits compared to costs.

**Q: Will I still be able to walk along the embankment?**

A: Yes. We know how highly valued the path along the embankment (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, it may be difficult for Devon County Council to find funds to effect repairs, but as part of the project we want to put footbridges over the planned breaches. Water would flow in and out under the bridges and at high tide walkers would find themselves surrounded by water.

We hope to be able to improve visitor facilities with additional hides and viewing platforms. We also want to upgrade Footpath 12 at the western edge of the marsh from its current narrow, muddy condition. This will mean a wider, better surfaced path suitable for wheelchairs and buggies. .

**Q: How would the project impact on access along South Farm Road for businesses and residents?**

A: In initial discussions with residents and businesses at South Farm we made the risk of tidal flooding of the road clear should the embankments fail accidentally. This project presents an opportunity to prevent and mitigate against this eventuality in advance.

There was a clear desire from all parties, including the Estate, for access that does not flood. Our preferred option at this time is for a bridging structure. We are currently investigating the feasibility and costs of raising the road or constructing a bridge. This is likely to be complex and costly. We are also looking at alternative access routes to the land to the east of the estuary.

**Q: What about the wildlife that is there already?**

A: As part of developing the project, we will carry out surveys and assessment of the impact of flooding the marshes with salt water. We have begun these surveys already. We expect mobile species to move upstream to use the wetter grazing marsh and out to the drier margins around the site. There will be some loss of trees within the area subject to tidal flooding and we will seek to mitigate this with new planting. The non-native plantation woodland on the old refuse tip is going to be cleared anyway as it poses a risk to the power line running through it. It will be replaced with scrub and encouraged to develop into a more wildlife rich habitat. Birds that currently use the plantation as a roost site are expected to move the short distance to the woodland on the river cliffs.

**Q: Will it make flooding to properties worse?**

A: No. The project will have to demonstrate, through a flood risk assessment, that it will not increase flood risk to properties of third parties. If it cannot do that, it is very unlikely to obtain the required planning consent. The project is not primarily intended to reduce flood risk, but may do so in a minor way. Currently, when the river is in flood, upstream water levels rise until they can spill over the embankments. This has the effect of raising levels further upstream. The project would lower sections of Little Bank and Big Bank to floodplain level, reducing this backwater effect and allowing flood flows to pass down the floodplain.

**Q: Why can't the existing outfall pipe be modified?**

A: The marshes drain to the sea through a pipe that takes flow from the trunk drain. It ends close to the low tide mark and is prone to blocking with shingle. The outfall is regularly cleared, but access is not always possible. Sea level rise will make clearance harder in the future. Modifying the outfall would be expensive and technically quite difficult. A longer outfall would have to be supported in some way (e.g. on legs) but this arrangement would only provide a partial solution and has associated health and safety risks for swimmers and beach users.

**Q: Why don't you just dredge the river?**

A: Dredging is not a very effective way of increasing discharge in tidal parts of rivers. It creates a deeper (and possibly slightly wider) channel, but the extra capacity is filled by the limitless supply of water from the sea. The Environment Agency could only carry it out if it could be demonstrated to be cost beneficial in terms of reducing flood risk to properties. In addition, dredging is not a one-off solution and has to be repeated regularly. Disposal of dredged material is potentially problematic and costly. Putting a dredging programme in place would increase management, rather than reducing it as the project is expected to do.

**Q: What's in this for Clinton Devon Estates?**

A: The Estate has a long history of good stewardship of its land, enabling public access and management for habitats and species. We want to continue this approach. This project will have a significant cost to the Estate, both through the works required to deliver it, and the changes needed to ensure a future for our farming and other tenants. However, we believe change is inevitable and think that positively managing that change is the best way forward.

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 this project can help further support the local economy going forward, including those businesses already operating

**Q: How will it be funded?**

A. Some funding is expected to come from the Environment Agency. Clinton Devon Estates are also part-funding the project as well as providing the land and other in-kind contributions. Applications are currently being prepared for submission to one of the Interreg Va programmes (there are several possibilities) and to the Heritage Lottery Fund. We may also apply to other, smaller sources of funding such as Sport England and the Landfill Communities Fund.

**Q: What will happen to the cricket club?**

A: The 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. Protecting against flooding cannot be economically justified. The Estate has a long history of involvement with the club and is working with it as part of this project to find a different site where flooding will not normally be a problem.

**Q: What does the project mean for local farmers?**

A: The Estate sees both farms in the project area as key assets in the future and wants to ensure they continue as viable agricultural units. The project would mean significant changes to the floodplain land that would also require changes to the way it is managed. Land will be wetter and more suitable for low input low output grazing, perhaps with traditional breeds. Use of fertilizers and pesticides is likely to be restricted. We anticipate that the land would still be eligible for agri-environment scheme agreements. These are currently under review and details of the new arrangements will become clearer in 2015.

**Q. What is the link between the project and compensatory habitat to allow flood prevention works in Exmouth?**

A: The Environment Agency is legally required by the Habitats Regulations to compensate for habitat lost to coastal squeeze (where rising sea level meets fixed defences) in European designated sites. Unless this compensatory habitat is provided, the Environment Agency cannot deliver the improvements to flood defences that are needed at sites around the Exe Estuary, of which Exmouth is just one.

The Lower Otter Restoration Project was being developed before the Environment Agency indicated that it would like to create this habitat in the Otter Estuary, having been unable to find a suitable site in the Exe for a number of reasons. We believe the many benefits of the project taken in isolation stand up to scrutiny. However, the initiative also has the added benefit of facilitating flood defence works for adjacent communities.

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

A: We have discussed the health risks associated with biting insects with experts from Public Health England, who have visited the site and plan to return in 2016 to carry out additional studies. Their advice is that careful design and management of managed realignment sites, including the lower Otter, can be done so that the risks are not increased. We are also advised that the sort of habitat creation that we envisage is unsuitable for invasive mosquito species. A survey to clarify existing presence of biting insects is planned.

There is no evidence of toxic material in the former landfill site; no reports of pollution in the ditches adjacent to the site have been received and there is no visual evidence of any impact. Surveys are likely to include taking water and gas samples from within the tip and excavation of trial pits to establish the content, condition and stability of the tipped material.

The results would influence detailed design; we believe they are very unlikely to stop the project.

The main risk appears to be from erosion; this can be managed by appropriate protection measures. Again, we believe it is better to implement such protection in a planned way rather than as a response to accidental failure.

**Q: If the consultation and funding applications are successful, when might the project start?**

A. Project development is anticipated to take about three years, with construction planned for 2020 or 2021. However eventual implementation depends on many factors including there being no technical or over-riding public interest reasons why the project shouldn't take place. It also depends on being granted permissions from various statutory bodies.