

South Efford Marsh Habitat Creation Project

Introduction

Following our public exhibition on 7 July we have received a significant amount of feedback, principally in the form of 36 completed questionnaires (roughly half the number handed out on the night). Of these responses, 9 are strongly supportive, 3 mildly supportive, 6 mildly against and 17 strongly against.

We have also received a letter from the Aune Conservation Association setting out their opposition to the project and indicating that they had invited their members to write individually, which may have had an effect on the views received.

We have listened to what people said they wanted to see, and we have modified our proposals to fulfil as many of these desires as possible. We have also discussed the future of the project with Environment Agency colleagues and senior managers at our area, regional and head offices.

We are still under pressure to contribute to meeting the national targets that Defra has set us. However, in response to local concerns about the South Efford Marsh project we now have reworked the proposal to significantly reduce the extent of tidal inundation to less than half the potential area, retaining the remaining area as freshwater marsh, which we would plan to enhance by small scale modification and management. Water would enter and leave the site by replacing the existing flapped outfall with a self-regulating tide-gate; we no longer intend to construct a second outfall, resulting in significant cost savings.

The reduced area subject to tidal flooding provides a greater area to store water draining to the marsh from behind the defences and to ensure the continued operation of sewage treatment facilities.

Future management of the site would be carried out in partnership with another suitable body and we are in discussion with various potential partners. It is likely that conservation grazing would form part of the site management. Low key visitor facilities will be provided e.g. a hide / viewing platform and controlled access to some parts of the site.

Responses to questions from Aveton Gifford Parish Council

Q1) Not one Councillor had received a substantial, satisfactory answer to the question, 'How would the salt marsh project benefit the Estuary'?

A1) Overall, we don't expect the estuary to be very noticeably different to its current form, as the proposed works, in both original and revised form, are not intended to have a major impact on the estuary's morphology.

The initial studies by Halcrow include some numerical modelling that indicates small scale, localised physical effects including erosion and deposition, resulting from changes in current speeds. Although realignment by breaching the banks was modelled; the morphological impact of regulated tidal exchange would be similar, but the reduced volume of water entering and exiting the site should also reduce the effect. Maximum water levels in the estuary were shown to reduce very slightly, but we would not expect this to reduce flood risk significantly.

The project will deliver an increased area of saltmarsh within the marsh which will more closely reflecting the original, natural conditions that occurred prior to the reclamation of South Efford marsh for agricultural purposes around 1760.

We don't anticipate any deterioration in water quality as a result of the project. Indeed, saltmarsh acts as a sink for many pollutants, which are adsorbed onto sediments and effectively removed from the system. There is also evidence that indicates that nutrient cycling within saltmarshes release nitrogen and, to a lesser degree, phosphorous, which may help to increase the estuarine plankton community.

Initial surveys of the site show that the grazing marsh has changed since the County Wildlife Site survey of 1992, with an increasing brackish influence indicated by the plant species present. The site has also been in Countryside Stewardship for the last ten years and this appears to have resulted in increased diversity.

Allowing the site to flood tidally will create saltmarsh, a nationally rare habitat. The variety of species will depend on the frequency of tidal inundation, which we are able to control by the way we operate the tide-gate.

We expect saltmarsh to develop fairly quickly following inundation; recent inspection of a breach realignment site on the Erme Estuary shows that almost the whole site has changed from pasture to saltmarsh in only five years. Bird use of this site appears to be greater, with ducks, waders and herons all present in good numbers. Invertebrates are also present in large numbers in the saltmarsh, with micro-moths, hover flies and bees much in evidence during the recent visit, particularly in the upper saltmarsh where sea aster is a significant component of the plant community.

In the longer term, development of saltmarsh and the deposition of sediment in the new inter-tidal area will result in gradual increase in land levels, contributing to greater resilience to rising sea levels.

Q2) There is a conflict of objectives with EA, Natural England and AONB aiming to maintain and extend grazing marshes, whereas this project takes away a significant established grazing marsh.

A2) The basic targets of most Biodiversity Action Plans (BAPs) are for no net loss, together with some creation. This is true of the plans for both saltmarsh

and grazing marsh, which is what is creating an apparent conflict. However, this must be considered in the context of historic changes to the natural environment.

Inter-tidal habitats – which includes both saltmarsh and mudflats - can clearly only develop below the high water mark of tides. There is a long history of reclamation of these habitats, largely for conversion to agricultural use.

Typically this has been a gradual process, with the enclosure by embankments followed by drainage and agricultural improvement. This often led to the development of grazing marsh, with a network of ditches and a mosaic of different habitats.

In some cases, the process continued, with further drainage and land reprofiling resulting in improved pasture or even arable. It can be very difficult to recognise some of these areas as former inter-tidal habitat. However, maintaining these new uses often requires ongoing efforts and, if these cease, reversion to a more natural situation can occur.

When considering habitat creation, our options for where to create saltmarsh are obviously limited. We have to look at areas that have the potential to be covered by the tide. Inevitably, this includes some of those areas – like South Efford Marsh – where reclamation has taken place in the past. Our options are less restricted for creation of grazing marsh, as this extends to those areas above the high water mark and the tidal limit.

In addition to our efforts to create inter-tidal habitat, therefore, we are also seeking opportunities to create additional grazing marsh elsewhere, for example on the Salcombe-Kingsbridge, Teign, Tamar and Exe estuaries.

Working in this way should allow us to create a more natural transition between inter-tidal and freshwater habitats that will allow them to move and respond to sea level rise.

The replacement of grazing marsh and other freshwater habitats by inter-tidal habitats is a widespread issue in our efforts to respond to climate change, and the need to provide replacement grazing marsh is recognised in the revised BAP targets.

Saltmarsh is a much rarer habitat than grazing marsh and is declining faster. The UK BAP gives figures for the extent of both habitats, as reported in 2008: saltmarsh 45820 hectares (ha) (UK) 32462 ha (England); grazing marsh 230882 ha (UK) 170000 (England). Analysis of our coastal habitat mapping data shows that there is roughly 2.5 times more grazing marsh than saltmarsh at South West, Devon county and South Hams district levels.

Past and ongoing losses of saltmarsh nationally are estimated at 100 ha per annum, hence the need for targets for habitat creation. These are for 800 ha of new BAP habitat by 31 March 2011, of which 300 ha should be inter-tidal

habitat. We are on course to meet the target for non-tidal habitat, but the inter-tidal target is proving much harder to deliver.

We would not have considered South Efford Marsh as a suitable site for habitat creation without careful consideration. The site was surveyed in 1992 prior to its recognition as a County Wildlife Site and is described as open improved grassland (NVC MG6 or 6a), dominated by perennial ryegrass and clover. In the intervening period it has been visited by several ecologists and its relatively low species diversity acknowledged. A recent survey indicates that diversity has increased somewhat since 1992, with a number of species indicative of brackish influence now present. It is likely that less intensive management of the site under the Countryside Stewardship scheme has contributed to this trend.

Q3) The lack of any continuing management plan confidently supported by funds causes concern.

A3) If the project proceeds the production of a management plan will form part of the work to be done over the next few months. We intend to engage another body to manage the site for us and have already started preliminary discussions. This could be done through a dedicated local group, Devon Wildlife Trust, the South Devon AONB team or another organisation.

We would need to agree with the community and successful body how the site would be managed and we will provide funds for doing so. Funding for the long-term management is a recognised requirement for such projects and will come out of the project budget. We see this as a real opportunity for the community to engage in the project by., for example, making use of the land for environmental education.

Q4) There are parts of the Parish that see the threat of flooding in their insurance premiums, many parishioners keep a constant watch on tide levels, wind direction, atmospheric pressure etc. Can there be firmer assurance about the project not impacting a higher level of flood risk.

A4) This scheme will only proceed if we can demonstrate that it will not increase the risk of flooding. The project will require Environment Agency Flood Defence Consent and will be subject to careful scrutiny to prove that flood risk will not increase.

The properties most susceptible to changes in flood risk are those at the rear of the marsh (i.e. South Efford Barns, Butterwell and South Efford House). We will work closely with the residents to ensure their concerns are addressed and any additional works required to prevent increased risk of flooding from known sources of water (i.e. estuary, surface or foul water) are provided accordingly.

We are aware that some areas of Aveton Gifford are currently at risk of flooding, but as this project is not a flood alleviation scheme, it will not reduce this risk. What we can guarantee is that the project will not increase flood risk from any known source

In addition, during the public exhibition a resident indicated that as a result of the breach in the defence during the second world war, there was a longer duration of inundation of the tidal road during the period 1943 to 1956. We are currently investigating the possibility of this happening as part of our ongoing work, but believe that the restricted volumes that will enter and leave the site under a regulated tidal exchange regime are unlikely to cause a problem.

Q5) The PC need to know what alternatives there are for the EA now that the Marsh has been acquired.

A5) The funding for this project is specifically for doing work that helps deliver our habitat creation targets; our options are therefore somewhat restricted.

The money is for the creation of new habitat, not enhancement of existing. This applies to both inter-tidal (e.g. saltmarsh) or freshwater (e.g. grazing marsh) habitat. This makes it difficult to either make improvements to the grazing marsh or to protect the existing estuarine saltmarsh as some respondents have requested. However, by adopting the approach outlined above (partial tidal inundation of South Efford Marsh) we should be able to both create new habitat, enhance existing habitat and provide access and recreation improvements. Note that funding is not available through this route for work on the existing saltmarsh in the Avon Estuary; this may be worth pursuing under the new Water Framework Directive programme of measures.

We were able to purchase the land in March 2010 using funding that became available to us from projects that were under spending in other parts of the country. If the project does not proceed, we are likely to be obliged to sell the land on the open market, with the proceeds being given up to form part of the savings we are now required to deliver at a national level.

Q6) The quantity of unknown factors was too great for any certainty to be applied to making a decision 'in favour' of the project.

A6) We understand this position and hope we have now clarified some of these unknown factors. We would also like to meet with the members of the Parish Council at a date to suit you. We are happy to include representatives of other organisations if that is your wish.

Q7) There is some amazement that this project is not subject to similar planning and development requirements that are applied to other smaller developments e.g. building a new Memorial Hall.

A7) The South Efford Marsh project is subject to planning and development requirements, however the local planning authority, South Hams District Council, has indicated that it is likely to fall into the following category:.

- Part 15 (Development by National Rivers Authority) of the Town and Country Planning (General Permitted Development) Order 1995, permits, without the requirement of planning permission, "development in, on or under any watercourse or land drainage works and required in connection with the improvement, maintenance or repair of that watercourse or those works", providing that the development does not include the construction of a reservoir.

This means that although we will need to apply to the District Council for a Certificate of Lawfulness for the proposed development the work would not need planning permission as it is considered to be an improvement to a watercourse, in that it will create wildlife habitat.

The public would be consulted during our environmental assessment process under the Environmental Impact Assessment (Land Drainage Improvement Works) Regulations (SI 1999/1783 as amended). This would involve preparation of an environmental report and advertisement of the proposed works. There are two separate rounds of public consultation; one at the scoping stage and a second at the publication of the environmental report.

We are confident that these arrangements provide adequate opportunities for public scrutiny and comment.

Q8) The amount of cash involved in this project should be assessed again bearing in mind the cuts that are being applied to other core services.

A8) Although the project costs are comparable with other inter-tidal habitat creation projects of a similar size, we recognise the level of concern about this issue. Our revised proposal to reduce the scale of the project will significantly reduce the project cost.

The funding is part of our Flood and Coastal Risk Management Grant-in-Aid from central government allocated specifically for this type of project. If the project does not go ahead and the budget is not spent, the funds are likely to be given back to source. The level of funding for this and other types of project is subject to constant review and may well be reduced in the future.

Q9) There remains the suspicion that this project simply would not happen without a target being set, and the money being made available. The completion of a Key Performance Indicator is being laid at our door.

A9) All of the Environment Agency's projects and priorities are largely determined and funded through Government objectives, targets and budgets.

Our habitat creation targets are not produced on a whim, but have been derived from the UKBAP targets, which are long established and developed based on need following extensive discussion among experts in the relevant field. There was a broad consensus on what needed to be achieved and by when. We and other relevant organisations now have an obligation to deliver projects that contribute to these targets wherever we can.

The England Biodiversity Strategy '*Working with the grain of nature*' recognised the need to embed biodiversity into all policies and programmes. As a result, Defra produced the targets that we are trying to achieve.

Habitat creation programmes have been developed for all of our regions and our progress on delivering these projects and targets is regularly monitored. South Efford Marsh is seen as a high priority for delivering the South West regional contribution to the target. The deadline to meet this current target is 31 March 2011. It is important to emphasise these targets are not set for their own sake but are used as an indicator to monitor the delivery of regionally and nationally important habitat. Failure to meet targets may reflect on the Environment Agency's performance and may affect future funding.

Q10) How will the EA proceed once all the Consultation responses have been received and assessed?

A10) We have analysed the responses and revised the project objectives in line with the views expressed but, as explained above, our options are limited.

We hope to achieve general support from the local community for what we still believe to be a worthwhile project in its revised form. We are unlikely to proceed if there is a strong balance of local opinion against the project.

We will continue to focus on liaison with the established democratic bodies, in particular the Parish and District Councils and Gary Streeter MP.