

DECISION ITEM



REPORT OF	MEETING	DATE	ITEM NO
DEVELOPMENT SERVICES DIRECTORATE	OPERATIONAL MANAGEMENT COMMITTEE	31 MAY 2016	4
LONG TERM MANAGEMENT OF LYTHAM ST ANNES DUNES			

PUBLIC ITEM

This item is for consideration in the public part of the meeting.

SUMMARY

The report concerns the long term management of the Lytham St Annes dunes system which is a primary soft sea defence protecting the Fylde coast from flooding and coastal erosion. The report details the work of the dunes steering group in delivering the sand dunes management action plan and provides feedback on the progress and success of the dunes project through the geomorphological study.

The geomorphological study also makes recommendations for the long term management of the dunes which have been conveyed onto an overall masterplan. Finally, the report outlines works to reduce wind-blown sand by re-profiling the dunes at North Beach car park and looks to draw down monies from the capital programme to deliver this element of the project.

RECOMMENDATIONS

1. To note the progress of the Sand Dunes Management Action Plan.
2. To endorse the recommendations within the geomorphological study.
3. Authorise the procurement route and subsequent Capital Expenditure totalling £17,000 (£15,000 from the approved 2016/17 capital programme and £2,000 that is being requested as slippage as part of the Outturn report to the Finance and Democracy Committee in June) to deliver the remodelling of the dunes to the rear of North Beach car park.

SUMMARY OF PREVIOUS DECISIONS

The Lytham St Annes Dunes Management Plan was adopted by the Executive Committee on the 18th May 2005.

Cabinet resolved on the 17th February 2010 to adopt the Sand Dune Management Action Plan.

CORPORATE PRIORITIES	
Spending your money in the most efficient way to achieve excellent services (Value for Money)	√
Delivering the services that customers expect of an excellent council (Clean and Green)	√
Working with all partners (Vibrant Economy)	√
To make sure Fylde continues to be one of the most desirable places to live (A Great Place to Live)	√
Promoting Fylde as a great destination to visit (A Great Place to Visit)	√

REPORT

Background

1. The Fylde coast has 18km of coastline stretching from Starr Gate to Savick Brook which is protected by a range of soft and hard sea defences.
2. The Fylde coastline consists of a mix of natural and built defences which defend the hinterland from coastal erosion and flooding. The northern section has a long wide stretch of sand dune which provides protection. However, these sand dunes are in a poor condition in some areas and if not managed may increase the risk of coastal erosion and flooding to properties.
3. The sand dunes to the south of St Annes pier are afforded some protection by strategic headlands which generally support good beach levels and provide erosion protection to nearby properties and the Ribble estuary.
4. The sand dunes provide an important habitat for a variety of specialist plants and animals and include Sites of Special Scientific Interest, Ramsar Site, Biological Heritage Sites, and a Local Nature Reserve. They also adjoin the internationally protected Ribble and Alt Estuary Special Protection Area.
5. They also provide a very valuable tourism and recreational resource.
6. The North West England and North Wales Shoreline Management Plan 2 (SMP2) is part of the Flood and Coastal Erosion Risk Management planning framework. The SMP2 sets the long term policy for the management of the coast and is taken forward through shoreline strategies and projects.
7. The short term SMP2 policy (to 2030) for the dunes between Squires Gate and St Annes pier is for managed realignment to allow for the management of the dunes as a natural defence system and to sustain important and protected habitats.
8. Longer term SMP2 policies are to “hold the line” by managing the dune system as the primary defence and maintaining secondary defences to an adequate standard.

Sand Dunes Management Action Plan

9. In 2010 Cabinet adopted the Sand Dunes Management Action plan with the following aims –
 - Improve the efficiency of the dunes and salt marsh as soft sea-defences.
 - Enhance the nature conservation interest of the coastal habitats and surrounding habitats of the Ribble Estuary.
 - Enhance public appreciation and enjoyment of the dunes.

10. In 2012 Blackpool Council, in partnership with Fylde Council and the Lancashire Wildlife Trust, secured £470,000 of funding from the Environment Agency for a 5-year project to deliver the aims of the Sand Dune Management Action Plan.
11. A steering group was established at the start of the project. This meets on a quarterly basis and includes Fylde Council, Blackpool Council, The Environment Agency, Lancashire Wildlife Trust and Natural England.
12. The project is now in its final year of delivery and a great deal of progress has been made on widening the dunes towards the sea, improving the habitat and increasing public appreciation, involvement and enjoyment of the dunes.
13. In order to assess the success of the project, better understand the natural processes that are occurring with regards to sediment movement on the coast, and enable decisions to be taken about the long term management of the dunes the Dunes Steering Group commissioned a geomorphological study.
14. JBA Consulting were engaged to undertake the commission on behalf of the Dunes Steering Group. Following extensive consultation with Environment Agency, Natural England, Fylde Council, Blackpool Council, Lancashire Wildlife Trust, councillors and residents the geomorphological study has now been concluded. (See Appendix 1)

The main findings of the Geomorphological Study are –

- The foreshore and dune system is accreting as a whole, with an overall modest gain of approximately 70,000m³ per year.
- A strategy that promotes dune widening, on the basis of creating additional dynamic embryo and foredunes, in the context of a positive sediment budget and generally accretive forces, at least in the short term, is one that can usefully support both enhanced biodiversity and improved resilience and adaptive capacity to flood and erosion risk in the medium term.
- Whilst the underlying trend indicates that the dunes are accreting and migrating seaward, a number of locally focussed areas of erosion or 'blow-outs' were noted. These breached the dunes and reduced the width and height. The development of blow-outs clearly needs to be managed carefully to reduce the risk of flooding to the property and infrastructure behind the dunes.
- There are several significant constraints where hard infrastructure (properties, roads etc.) have created very narrow dunes or gaps.
- While the dunes are currently accreting, the cyclical nature of dune development may result in a switch to an erosive trend in the future. Consequently, it is important to compound the growth of the dunes while the sediment feed is relatively plentiful. Dune growth can be increased by promoting accretion and dune procession within the dunes and trapping sediments within the mid-dune, particularly where vulnerabilities associated with blow-outs are showing signs of increasing. In addition, this will aid in preventing the loss of sediment on property and infrastructure, and enable constructive dune formation. It will also benefit future flood and erosion risk, biodiversity, landscape and amenity, whilst enabling the dune to evolve as a natural form of defence, in line with SMP2 policy.

Overall, the primary recommendations from the study are:-

- A frontage wide approach to dune management involving a scheme of multiple layers of dune fencing, thatching and planting of appropriate species such as

marram and lyme grass, to enable procession of the dunes seawards and the establishment of new embryo and fore-dunes.

- Localised options to address localised problems, including realignment of access routes
- A formal sand clearance programme, centred on public safety at public property and infrastructure on a biannual basis or needs basis.
- Reorientation and inclusion of dog legs in access routes to avoid sand accumulation and wind-blow onto property, car parks and roads.
- A five yearly fence maintenance programme to ensure fences are adequately maintained to maximise sediment trapping.

15. Following completion of the geomorphological study, the council has commissioned Lancashire County Council environmental team to produce an illustrative master plan for the area from Starr Gate to St Annes pier which will be used to demonstrate to residents what is proposed as part of the long term management of the dunes project and how this will affect the area concerned. (See Appendix 2)
16. Environment Agency funding for the dunes project ends in March 2017. The dunes steering group is bidding for circa £500k Environment Agency continuation funding to progress the project for the next 5 years.

Sand Dunes Remodelling - North Beach Car Park

17. The council has previously approved £20,000 within the 2015/16 capital programme to remodel the dunes at North Beach car park.
18. The work includes the reduction in height of the dunes backing onto North Beach car park due to its potential health and safety risk and to reduce the impact of wind blown sand on the housing at Summerfields.
19. Lancashire County Council's environmental team has been engaged to work up detailed proposals to undertake the dune remodelling work. (See Appendix 3)
20. The proposal is to undertake the remodelling work in house, using the expertise of the coast and countryside team in partnership with Lancashire Wildlife Trust.
21. The work will involve the widening of the dunes towards the sea to the north of the coastguard station, which will naturally reduce the height of the dune against North Beach car park, some localised remodelling of the high dune on North Beach car park, re-stabilisation of the dune using a biodegradable planting mat and then replanting of the dune with marram grass.
22. A timber post and rail fence is proposed on the line of the dunes fronting North Beach car park.
23. Cost breakdown of the scheme

Description of works	Cost
Hire of Plant and Equipment	£2,700
Materials	£8,000
Plants	£2,300
Fencing	£2,000
Contingency	£2,000
Total	£17,000

24. The method and cost of financing the scheme

The 2015/16 approved capital programme budget of £20,000 for sand dune remodelling at North Beach car park will be used to fund the works. At budget Council this programmed expenditure was rephased (£5,000 in 2015/16 with the remaining £15,000 in 2016/17).

A figure of £5,000 was identified to be spent in 2015/16. £3,000 was spent undertaking initial design with a £2,000 slippage request for 2016/17 which is being considered by the Finance and Democracy Committee in June.

25. Future revenue budget impact

There are no long term revenue implications to the council in implementing this scheme.

26. Relevant value for money Issues

The council's coast and countryside team will deliver the project with the assistance of hired in plant and machinery. A contractor will be engaged to install the post and rail fencing based on 3 quotations. Value for money can be demonstrated as the majority of the costs will be material only.

27. Risk assessment

The project presents a low risk to the council. A detailed risk assessment will be produced by the coast and countryside team prior to works commencing on site.

Planning consent would not be required as the works are covered within the Council's permitted development rights.

28. Viable alternative

The use of a specialist environmental contractor was considered to undertake the remodelling works. However, the coast and countryside team have the skills, knowledge and experience to deliver an environmentally sensitive project.

29. Objectives, outputs and outcomes

The objective of the project is to reduce the height of the dune fronting North Beach car park. This will be achieved by encouraging the dune to accrete towards the sea which will have the long term effect of reducing the height of the dune system. Chestnut paling wind trap fencing will be used to achieve this as identified at Appendix 3.

In the short term mechanical intervention is required to reduce the height of the dune, this will be stabilised using a biodegradable planting mat and supplementary marram grass planting.

A post a rail fence will be installed fronting North Beach car park. The post and rail fence will prevent people from walking up the dunes frontage.

Conclusion

30. In conclusion the importance of the dunes and foreshore as a primary sea defence can't be underestimated. With a predicted sea level rise of 0.70m over the next 100 years the accretion of the dunes and foreshore to protect the Fylde coast from flooding and coastal erosion has never been more important. Fylde is in the very fortunate position that the dunes and foreshore are accreting and not eroding like many parts of the country and that the Environment Agency are financially and technically supporting the dunes project. The project is in its fifth year of delivery and has made significant progress in accreting the dunes towards the sea effectively bolstering the soft sea defence and protecting the area for flooding and coastal erosion. Environmentally, much of the dunes are classified as a Site of Special Scientific Interest and were previously identified as being in an unfavourable condition and unlikely to improve.

As a result of the dunes project Natural England has recently re-assessed the designation and has now re-categorised the area as favourable but recovering.

Sustaining the management of the dunes and foreshore along the whole frontage and building on the successful work to date will be essential for enabling effective natural flood defences, supporting nationally and internationally recognised habitats and ensuring that the local community and economy are able to benefit from the dunes as a valuable local resource and attraction.

IMPLICATIONS	
Finance	This committee is requested to authorise the remaining expenditure budget of £17,000 for the 2016/17 Capital Programme (£15,000 Budget for 2016/17 as per the Capital Programme and the remaining £2,000 that is being recommended for slippage by the Finance and Democracy Committee in June as part of the MTFS Financial Outturn report.)
Legal	No Legal implications.
Community Safety	No Community Safety implications.
Human Rights and Equalities	No Human Rights and Equality implications
Sustainability and Environmental Impact	The project will ensure the long term sustainability of the dune system as a soft sea defence and improve the dune habitat long term
Health & Safety and Risk Management	The project presents a low risk to the council. A detailed risk assessment will be produced by the coast and countryside team prior to works commencing on site.

LEAD AUTHOR	TEL	DATE	DOC ID
Darren Bell	01253 659465	Date of report	12 th May 2016

LIST OF BACKGROUND PAPERS		
Name of document	Date	Where available for inspection
Cabinet agenda and minutes	17 th February 2010	https://fylde.cmis.uk.com/fylde/MeetingsCalendar/tabid/70/ctl/ViewMeetingPublic/mid/397/Meeting/473/Committee/32/Default.aspx

Attached documents

1. Appendix 1 Geomorphological Study
2. Appendix 2 Dunes Master plan 1 -3
3. Appendix 3 Dune remodelling North Beach Car Park