

Strategic Dredging Disposal Plan: Update
Report by Director of Operations

Summary: This report sets out the progress in the implementation of the dredging disposal strategy, which seeks to identify a series of sites for the development of a strategic network of licensed disposal areas to support future dredging programmes. It concludes that the strategy is no longer appropriate, and suggests an alternative way forward. Members' comments and views are welcomed.

1 Background

1.1 In the Broads Plan 2004 there was a recommendation that

“the Authority continue working towards a Dredging Disposal Strategy”.

There were five recommendations of which one was

“identify volumes of silt requiring disposal to land sites versus reuse, e.g. in flood bank strengthening, in order to produce a phased plan for a network of disposal sites”.

The Sediment Management Strategy has delivered all the other elements other than this element which was identified as a priority action within the Authority's Sediment Management Strategy Action Plan.

1.2 At its meeting on 26 September 2008 the Broads Authority approved expenditure from the General Account to award a contract to consultants to help develop the project as part of a wider initiative to build organisational capacity. Outputs from Phase 1 of the project to scope strategic disposal sites were reported back to the Navigation Committee in June 2009 and subsequently to the Authority.

1.3 A second phase to review a short list of possible sites, undertake site investigations and negotiations with landowners and seek the required consents was agreed necessary to follow up on the initial work.

1.4 In the Broads Plan 2010 the objective was refined to 'NA1.4 *‘Seek to establish network of appropriately licensed disposal sites to ensure viability of future dredging programmes’.*

2 Outputs from Phase 1

- 2.1 The primary output of the works was a GIS based mapping tool, which collated all existing information regarding constraints to dredging disposal within the Broads e.g. conservation designations etc.
- 2.2 This was used to produce a series of detailed maps covering the Broads area and used to aid the review of sites. A long list of possible sites, which satisfied the criteria developed by the project, was drawn up.
- 2.3 All other known opportunities were also added into the GIS model, including set back areas arising from the Broadland Flood Alleviation Project, so the locations and capacities could be mapped against the dredging need as identified within the Sediment Management Strategy.

3 Progress in Delivery

- 3.1 As part of the Prisma funding application, officers incorporated proposals to purchase land using the Sediment Management Strategy to identify the forthcoming priority dredging sites, as lead by this strategy, in order to initiate the creation of a network of disposal sites. Additionally, novel techniques for the reuse of dredged material were also prioritised, to understand the potential for alternative options to be incorporated into the strategic approach.
- 3.2 Officers have therefore been engaged in investigating the opportunities for land purchase in these areas, with access to Prisma funds.
- 3.3 However, without exception, the response from landowners has been that they are not willing to sell land at the current rates advised by NPS as being a fair market valuation. Additionally, only one landowner has been willing to enter in to a long term lease, with the most common preference instead being a willingness to potentially enter into ad hoc, short term agreements for the duration of a single dredging project.
- 3.4 Without the support of landowners it is not possible to develop a strategic framework for creating the network of disposal sites which was considered necessary to maintain an accelerated programme of dredging and to provide long term security for delivery of the dredging programme.
- 3.5 Since the award of the grant the Authority has undertaken the following dredging work:

Year	Total Volume of material dredged (m ³)	Volume disposed to BESL setback (m ³)	Volume disposed to Licensed tip site (m ³)	Volume disposed to land/ bankside (m ³)	Volume used in novel techniques/ land recreation opportunities (m ³)
09/10	49,219	49,219	0	0	0
10/11	49,773	47,670	500	808	795

11/12	47,039	33,767	13,232	0	40
12/13	48,432	27,161	0	10,000	11,271
13/14 completed to end Oct 2013	20,460	20,460	0	0	0
13/14 programmed work – Nov – end March 2014	31,000	3,000	0	18,000	10,000
14/15 (planned)	50,000	34,000	(4,000 – Plan B)	0	16,000
Total	295,923	215,277	13,732 (17,732)	28,808	38,106

3.6 It can be seen that almost 73% of the disposal/ reuse has been achieved using the BESL setback areas, with only 13% incorporated into novel techniques and 10% to land.

4 Way Forward

- 4.1 Over the last five years the Authority has gained valuable experience in alternative dredging, transport and disposal techniques which has resulted in additional opportunities for reuse of material whilst moving away from the traditional approach. Additionally, working with BESL, the opportunities for partnership working in use of dredged material within flood alleviation works, has increased as understanding the potential benefits of using this material has improved and successful projects have been completed.
- 4.2 Whilst previous budget allocations had been made for contributions into a dredging disposal site fund, members agreed in 2011 to make this fund more widely available for projects to enhance the navigation, such as purchase of moorings, due to the lack of success in securing land. This position was noted and confirmed that further contributions to this reserve would not be made during the recent consideration of the Asset Management Plan.
- 4.3 Creation of disposal opportunities such as the construction of lagoons at Heigham Sound and Salhouse has been funded by Prisma over the last three years, reducing the true cost of dredging schemes to the Authority. However, the Prisma project comes to an end in June 2014 and these funds will no longer be available.
- 4.4 The majority of BESL works should be completed in the next year, with the project moving into a maintenance phase for its remaining years. The Sediment Management Strategy has identified a further potential for 488,000m³ for disposal in this way, and it is possible that this could be increased if BESL accept the suitability of this material for topping up works.

However, this is restricted to the project area, and does not cover the upper reaches of the river system.

- 4.5 It is therefore proposed that the Authority should no longer focus on the development of a network of licensed disposal sites as its strategy, but amend the strategy to instead concentrate on the restoration or recreation of river banks and island features which have been lost to erosion, whilst being receptive to land purchase or flood alleviation opportunities which may arise in the future.
- 4.6 This will require the dredging budget provision to be maintained at current levels at minimum, to fund construction materials, although the majority of works can be completed by in-house staff. It should also be noted that our experience over the last 2 years has shown that the construction of alternative reuse options impacts on the time available to undertake dredging work, and that therefore the annual target for dredging may need to be amended accordingly.

Background papers:	Sediment Management Strategy Jan 2007 Dredging Disposal Strategy June 2009
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Broads Plan Objectives:	NA1.4
Appendices:	None