



Broads Authority

The Broads - a member of the
National Park family

Sediment Management Strategy

Action Plan 2007/08



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1. Introduction

The Sediment Management Strategy published by the Broads Authority in 2007 sets out the known issues and principles, for addressing the task of sediment management. The Strategy also identifies for the first time the volume of sediment that requires removal to achieve ideal user waterway specifications and favourable condition for open water bodies. This allows the Authority to take a proactive, rather than a reactive, approach to the dredging of the navigation area.

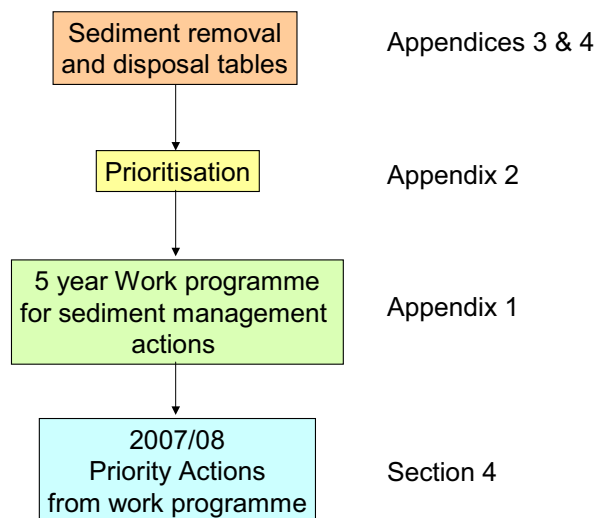
This Action Plan assumes that the reader is familiar with the Strategy and simply sets out what needs to be done to achieve the objectives of the Strategy in terms of priority, timescales, costs and partnerships involved.

The Action Plan identifies the work programme for sediment removal, disposal and source control needs (Appendix 1). These needs are prioritised using measurable criteria. (Appendix 2)

Detailed analysis of sediment removal and disposal within the navigation area and isolated water bodies has been undertaken to inform this work programme. This detail is presented in Appendix 3 and 4. The 2007/08 Priority actions from the work programme are presented in Section 4. The flow chart below explains how the information in the Appendices feeds into the 2007/08 Actions.

The Action Plan and Appendices will be updated annually to review progress and incorporate new information or changing circumstances including changes to the waterways specifications where they are agreed, that may affect prioritisation or delivery of works. These updates will be reported to the Navigation Committee and put on the Broads Authority website.

Flow Chart of information and decision making for sediment management



2. Sediment removal and disposal tables

Each table (Appendix 3 and 4) collates data within each management unit as identified within the Sediment Management Strategy, for both navigation area and isolated water bodies. This enables the scale of both removal and disposal issues to be considered.

The removal information is defined by the comparing the hydrographic survey and waterways specifications for users as well as lake restoration objectives. Details of these data can be seen within the removal tables (Appendix 3). The disposal capacity information includes all known sites e.g. Postwick Tip etc and details of the calculations can be seen within the disposal tables (Appendix 4). Further opportunities for bank side disposal, incorporating into washlands or spreading to agricultural land will be developed, but these are not included at this stage as they are subject to detailed consenting procedures.

The removal and disposal requirements in each management unit (Figure 1) demonstrate that the present known available capacity for silt disposal is significantly less than the amount requiring removal. This is the case within every management unit of the Broads and new disposal options urgently need to be sought. This issue is brought forward in the 2007/08 Priority Actions table.

Further work is required to identify opportunities for removal from one management unit and disposal in adjacent management units. Management units will also require subdivision prior to site-specific dredging project development, which will form the basis of the maintenance dredging element of the works programme.

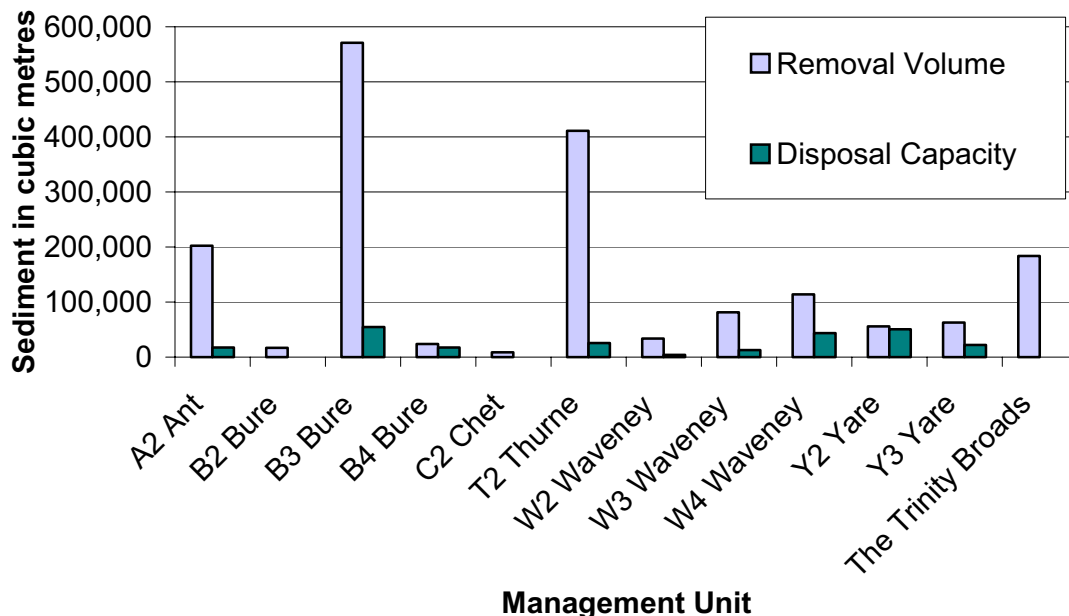


Figure 1. Current total volume of sediment for removal and existing total disposal capacity per management unit

3. Prioritisation of sediment removal

Annual review of the data and projects within the Action Tables will be carried out, to identify new management requirements and disposal opportunities, as well as to record where works have been undertaken. Sediment disposal capacity will subsequently be revised.

Sediment removal has been prioritised by using a priority matrix (Appendix 2), which brings together key criteria for consideration for sediment removal within the navigation area and open water bodies. Clear, objective criteria are required to facilitate initial prioritisation and these will be tested and reviewed after a reasonable period, taking into account any feedback received.

This objective scoring system provides an initial coarse filter, at a management unit scale, to prioritise projects. Individual site-specific issues and projects will require further consideration, such as Appropriate Assessment under the Habitats Directive, and dredging disposal opportunities or constraints. The complete list of detailed factors considered for site-specific projects are listed in the dredging decision making framework in the Sediment Management Strategy.

The navigation area and open water bodies are scored separately within the priority matrix, as the drivers for sediment removal in these areas are generally different. Thus a single scoring matrix is not appropriate for all waterways. The highest scoring sites within the navigation area and open water bodies will feed separately into the 2007/08 Priority Actions (Section 4), except in circumstances where additional information, not used within the priority matrix, becomes available or circumstances change between prioritisation assessments.

Dredging can also result in habitat removal such as spawning sites, or removal of sedentary species such as freshwater mussels. Careful consideration of all these factors is required at the initial prioritisation and detailed design stage.

A developing lake restoration strategy will include a review of sediment removal in the Broads; this review will collate existing evidence on the role of sediment removal in lake restoration on a case-by-case basis.

4. 2007/08 Priority sediment management actions

The 2007/08 Priority Actions table, in this section of the Plan, pulls out the priority 1 actions to be undertaken in the first year, from the 5 year work programme for sediment management actions (Appendix 1). Both tables demonstrate the multi-task approach, including actions for the following areas:

- (i) Maintenance dredging projects
- (ii) Strategic disposal sites
- (iii) Sediment source control measures
- (iv) Research and monitoring projects
- (v) Information management systems

Based on the Strategy objectives for each project, the work programme reports on progress, identifies partnership working, establishes approximate costs for the delivery of projects and highlights the priority of each task.

It is intended that the work programme will be reviewed annually, to monitor the progress of delivery, and ensure actions are appropriately prioritised, given changing circumstances and the ability to progress works. From this an updated annual Priority Actions table will be generated, and consulted upon.