

PRISMA Project Bid: PRomoting Integrated Sediment MAnagement
Report by Director of Operations

Summary: This report sets out the details of the sediment management project funding bid for Interreg European funding, the decision for which is expected shortly. The project seeks to provide match funding for a series of activities for the development of sustainable dredging techniques, treatment and disposal with a series of European partners. If successful this work will improve the Authority's capacity to support future dredging and dockyard development programmes.

Recommendations:

- (i) That members agree to the establishment of a ringfenced reserve account to manage the PRIMA income and expenditure, in line with previous arrangements set up to manage STEP.
- (ii) That the Chief Executive has delegated powers to authorise expenditure from this reserve account, in accordance with the project activities shown in paragraph 4.2

1 Background

- 1.1 The Broads Authority has recently been successful in developing a European partnership for the Sustainable Tourism in Estuarine Parks (STEP) project, achieving significant Interreg funding towards sustainable tourism initiatives.
- 1.2 As part of the discussions between partners and the Project consultants further areas of commonalities were identified between the partners, which included sediment management. A meeting was held in 2009 at which the Authority presented the Sediment Management Strategy, and outlined a number of practical projects such as the development of Duck Broad Island that we were looking to complete. Potential projects from other partners were similarly presented, and a number of synergies were identified.
- 1.3 As a result of these discussions it was agreed to develop a further Interreg bid. Project partners include:
 - Waterways and Seacanal, Belgium (Lead partner);
 - Hoogheemraadschap van Schieland en den Krimpenerwaard, Netherlands;
 - ARMINES agissant via le Centre de Douai, France;
 - Lille Metropole communauté urbaine, France.

1.4 The revised bid, with a total fund application of €3,204,226.00 across all partners, was submitted on 20 January 2011.

2 Project Development

2.1 In the Sediment Management Strategy 2007 there were a series of options considered for the dredging and disposal of sediments within the Broads system.

2.2 Since then a number of developments have been implemented to increase the Authority's delivery of the recommended actions, such as acquiring the Dockyard operation and investing in new equipment. Following this the Authority is achieving an accelerated programme of dredging but current resources are fully committed in keeping up with this increased output.

2.3 Additionally, with regard to resolving the problems of dredging disposal, Phase 1 of a project to scope strategic disposal sites was undertaken by consultants as a desk based study, as looking at a number of sites has demonstrated the difficulties of dealing with this issue at a local level without the benefit of a strategic framework. A second phase to review a short list of possible sites, and undertake negotiations with landowners has commenced, but as yet with limited success. Further work to complete site investigations and seek the required consents will also be necessary to follow up on the initial work.

2.4 These issues have guided officers when designing projects for this funding application, to ensure that priority work areas would be supported in line with the Authority's policy on external funding applications.

3 Project Plan

3.1 At Appendix 1 members can see the matrix of activities that the PRISMA project includes. In order to ensure that cross border cooperation and transnational benefits are achieved, the programme of work is designed to work in partnership. There are three 'primary work packages' covering the areas of:

- development and testing of adapted dredging techniques;
- development and testing of new treatment methods; and
- development and trials of beneficial reuse opportunities.

3.2 The works also include a series of joint activities such as completing joint studies, participating in expert exchange/ workshops and conferences, and completing a number of communication projects.

3.3 Additionally, as part of Activity 3, joint work to undertake an assessment and comparison of the interpretation of statutory provisions on the dredging processes in the four countries, including recommendations on consistent applications in relation to EU Directives, will also be completed.

3.4 The Broads Authority is responsible for coordinating all work within Activity package 1, as well as contributing significant trial works within packages 2 and 3. The Lead Partner is providing all overarching project management support via an external consultant, and significant coordinating activities relating to the activity packages and joint communication work.

4 Funding Implications

4.1 The match funding requirements of the programme is 50% of the costs, which can be a combination of cash and staff time. Appendix 2 sets out the budget breakdown for the project and members will note that expenditure already incurred since February 2009 can be included as part of the bid.

4.2 The total value of the proposed Broads local activities is €1,843,120 (£1,627,910.26). In total €921,560 has been applied for, and equal match funding contributions are required as shown below which is equivalent to £813,955.13 at current exchange rate.

651,480€	Staff costs	Includes a new 3yr fixed term project manager, time allocated via Construction Team, and costs of necessary admin support and supervision
22,500€	Admin costs	Planning permission fees etc
197,790€	External consultants	European project managers, research activities
598,495€	Suppliers	Purchase and hire of materials, plant and supplies to carry out pilot works e.g. construction of Duck Broad and publicity materials
23,000€	Travel and accommodation	Partner meetings, workshops, conference and study trip
82,855€	Equipment	Purchase of specialist equipment such as data collection instruments, and new wherry (subject to depreciation)
247,000€	Investment	Purchase of land for dredging disposal trials, and workshop development at Dockyard
20,000€	Audit costs	For independent auditing of the project
1,843,129€	Total match funding requirement 50%	

4.3 Because of the complexities of record keeping it is proposed to set up a special reserve account for the PRISMA Project, meaning that the impact on the revenue account will be cost neutral. The income will be received from the EU and then transferred into the reserve account as an 'in and out'. Expenditure from the revenue and other reserve accounts which is being used as match funding will also be transferred into this account. This will ensure

that the PRISMA accounts are transparent and will enable officers and members to identify income and expenditure and monitor progress.

- 4.4 By tailoring this project to support the Authority's programme of planned work it has been possible to identify match funding from our existing navigation expenditure budgets as set out below. The activity packages include for the purchase of land and equipment against which we have already established reserves, which as well as being used for match funding will provide a lasting legacy, increasing our capacity and ability to complete future dredging programmes. However, members should note that this project will commit the Authority to four years of work and budget requirement (2009 and 2010 already completed).

	2009/10 already incurred	20010/11 budgeted/ incurred	2011/12 budgeted	2012/13 budgeted	2013/14	Total
Dredging disposal site reserve	-	60,000	60,000	60,000	-	180,000
Dockyard maintenance reserve	-	30,000	30,000	30,000	-	90,000
Vessels and Equipment replacement fund	42,000	60,000	60,000	60,000	-	222,000
Staff time from salary budgets	108,000	80,000	80,000	30,000	-	298,000
Equipment/survey costs	8,000	10,000	10,000		-	28,000
Materials				14,000	-	14,000
Travel and Accomodation	5,000				-	5,000
Total	163,000	240,000	240,000	194,000	-	£837,000

Match funding required	£813,955.13	Match funding identified	£837,000	surplus in case of exchange rate fluctuations	<u>£23,044.87</u>
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- 4.5 Officers have drawn the projects identified from the Sediment Management Strategy as noted above, in order to ensure that we would be committing to work priorities already agreed by the Authority. Additionally, the budgets have been reviewed and aligned using the three year forecast developed by the Navigation Finance and Tolls Review Group, thereby in line with member's previous recommendations.

4.6 Detailed project costings are shown in Appendix 2 for information, although are subject to change.

5 **Outputs/ Outcomes**

5.1 The project would provide the following outputs:

- New equipment (2 x cranes, tug, JCB already purchased) new wherry designed and built, hire or purchase of dewatering equipment, contribution towards the material costs of construction of Duck Broad island and other similar trials.
- Development of the Dockyard facilities including new workshop for the adaptation and modification of equipment to improve the sustainability of dredging techniques.
- Purchase of land for the development of dredging disposal sites demonstrating the beneficial reuse of sediment.
- Completion of a number of trial dredging projects, contributing to the targeted 50,000m³ per year.

5.2 Outcomes would include:

- the improved environmental performance of the dredging process;
- identification of further beneficial reuse opportunities;
- increased expertise and understanding in all matters relating to dredging activities, including technical, environmental and legislative aspects; and
- improved understanding by local communities and partners of the requirement to, and importance of, undertaking sediment management activities including the benefits to the wider environment.

Background papers: Sediment Management Strategy, January 2007 (previously supplied)
Sediment Management Strategy Action Plan, March 2009 (previously supplied)

Author: Trudi Wakelin
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Appendices: APPENDIX 1 – Activity matrix
APPENDIX 2 – Detailed project costings

APPENDIX 1

<p>Activity Packages →</p> <p>Topics/sub actions ↓</p>	<p>AP 1: actions and investments to develop and test adapted methods in order to improve the dredging process</p> <p>Broads Authority to coordinate</p>	<p>AP 2: actions and investments to develop and test innovative methods for the treatment dredge spoil</p> <p>WenZ to coordinate</p>	<p>AP 3: actions and investments to develop and test re-use possibilities and to stimulate re-use of sediments</p> <p>WenZ to coordinate</p>	<p>Joint actions, communication and dissemination</p> <p>WenZ to coordinate</p>
<p>Sub action 1</p>	<p>Broads: Investigate current dredging techniques to assess impacts, suggest improvements on traditional dredging techniques by adaptation/ development, considering sustainable development, feasibility, carbon costs and environmental impacts and trial recommendations.</p>	<p>Joint study to develop a decision framework model considering dredging and sediment treatment taking into account the economic, logistic, technical and environmental (dis)advantages. Case studies by each partner will validate the model</p>	<p>Broads: Testing several techniques for the construction of islands, adapting farmland and providing river defences by means of dredge spoil, and produce best practice guidance</p>	<p>General Joint Actions:</p> <ul style="list-style-type: none"> - Joint European excursion to Toulon (partner institute EDM) - Joint community engagement project, and local community engagement activities
<p>Sub action 2</p>	<p>EDM, Broads and HHSK: Developing and testing adapted mobile dewatering methods, including pilot trials aiming to reduce volume before transport to re-use destination</p>	<p>Case study to validate the decision making model as above</p>	<p>WenZ: To design and build a dike core(flood embankment) from dredged materials using geotextile bags; afterwards, testing and monitoring the strength and effects</p>	<p>Specific Joint Actions in relation to the local actions and investments:</p> <ul style="list-style-type: none"> - Three Master classes on the issues of dredging methods, sediment treatment and re-use possibilities by workshops, local excursions and evaluation reports - Exchange of experts
<p>Sub action 3</p>	<p>Lille M: Local and specific case study about innovative dredging methods (Study Plan Blue (working title))</p>	<p>EDM and HHSK: Development and testing in the field of a mobile dredging characterization laboratory.</p>	<p>EDM: searching and testing the re-use of sediment in Civil engineering application (concrete, road)</p>	<p>External Communication activities:</p> <ul style="list-style-type: none"> - Logo and website - Brochure and newsletters - Articles in newspapers, journals and radio - Half year reports
<p>Sub action 4</p>		<p>Testing treatment methods: implementing several pilots, assessment of results (Broads, WenZ and HHSK: development of a new integrated system of dredging storage and treatment methods, including using geotextiles to make the sediment more stable and reusable.)</p>	<p>HHSK: is involved in a consortium that will reuse sediments in making the surface ready for real estate development: HHSK will facilitate various meetings with this consortium to discuss the results of this reuse experiment</p>	<p>Dissemination activities:</p> <ul style="list-style-type: none"> - legacy and final conference, - evaluation reports of AP's - guideline, website, newsletters - external presence within the master classes - European workshop on the issue of AP3 sub action 5
<p>Sub action 5</p>			<p>Joint study: comparison of the regulations of sediment management in UK, France, Flanders, the Netherlands and the EU (-directives) with the aim to make recommendations to uniform legislation</p>	<p>Internal communication: meetings of the international Steering Committee, Coordination Group and Communication Group, website, newsletters</p>

APPENDIX 2

Project	Approximate budget cost (£)	Comments
Duck Broad Ph1	84,000	Feasibility and trial costs
Duck Broad Ph2	210,000	Includes island construction and dredging of Heigham Sound
Salhouse Broad spit restoration	240,000	Includes bank stabilisation and dredging of middle Bure/ Salhouse Broad
Land based habitat creation	130,000	Includes land purchase, dredging of adjacent water bodies and trial to create wetland habitat/ arable reversion etc
Purchase of equipment and materials	410,000	Purchase or hire of wherry/ excavator/ pump/ modification to machinery
Development costs	326,000	Project manager, Dockyard development for new workshop Bid preparation costs
Support costs	200,000	Publicity, attendance at meetings, audit costs, website etc
Total	£1,600,000	