Sustainable Management of Dredged Material

State of the art knowledge of the CEDA network

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Content

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• What is or could be Sustainable Management
• What is CEDA’s role in management of DM
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What is CEDA?

- an independent, non-governmental, non-profit professional association for the dredging community
- interest includes all aspects of dredging
- members are drawn from many different fields (individual and corporate)
What is CEDA?

• is a vital network for the exchange of knowledge and experiences in dredging
• is a centre for communication and training about environmental aspects of dredging
• is a platform for promotion of dredging as a tool for sustainable development
Aims of Ceda’s Environment Committee

- To promote the education and instruction of its members and others in those fields concerned with dredging and dredging-related activities.
- To generate and disseminate quality information on dredging and associated matters.
- To develop or contribute to the development of guidelines relating to good practice.
- To stimulate (and join) the initiation of and/or support research relevant to dredging activities.
- To be pro-active in providing expertise in relevant policy making activities.
- To develop close links with NGOs.
Activities

- Workshops/seminars
- Taskgroups
- Participating in LC, OSPAR, Danube Commission
- WFD Navigation Task Group
- Marine Strategy FWD
- Positioning papers
- Own guides
- Other guides
- Environmental Day on Wodcon
The London Convention

Is one of the first global conventions to protect the marine environment from human activities and has been in force since 1975. Its objective is to promote the effective control of all sources of marine pollution and to take all practicable steps to prevent pollution of the sea by dumping of wastes and other matter. Currently, 86 countries are Parties to this Convention.
London Convention

- Specific Guidelines on Assessment of DM
- Guidance for the development of Action Lists and Action Levels for Dredged Material
- Low tech training set on assessment of DM
- Science Day on Use of Dredged Material
Sustainability (Wikipedia)

Is the capacity to endure.

In ecology, the word describes how biological systems remain diverse and productive over time. Long-lived and healthy wetlands and are examples of sustainable biological systems. For humans, sustainability is the potential for long-term maintenance of well being, which has environmental, economic, and social dimensions.
Sustainable Management of Dredging

- Cleaning up contaminants
- Minimising transport (energy, air pollution)
- Using dredged materials
- Closed balance of material
- Do nothing!
- Sensible decisions (emotion)
- Use available knowledge
The experience of CEDA

- Most of dredged sediments are not contaminated.
- Dredging is a part of the solutions and a dredging decision has to be taken based on a management plan.
- Source control is the first option for a real solution of a problem where contaminated sediments are involved.
- Placing dredged material back into the estuarine or coastal system can be the best solution to safeguard the ecological conditions.
The experience of CEDA

- Treatment of dredged material can be considered as a last resort. Not as a standard solution. First beneficial use, than storage and finally treatment.

- The only operational treatment techniques are separation and dewatering. Treatments for decontamination is in general no option because not feasible.
The experience of CEDA

• The decision what to do in case of contaminated sediments has to be risk based. One should not forget to include the do-nothing option in the risk analysis.

• Often the risk of this option is not fully understood. Sometimes it is better to implement a reduced risk solution than to strive for the perfect solution that cannot be reached.
The Experience of CEDA

• In long term management plans beneficial use is the only long term sustainable option. Any storage volume is finite and often siltation is an ongoing process with continuously growing quantities. Even in case of disposal one should take care for the beneficial use of the site after completion of the disposal operations.
Encountering dilemma’s

• How do we make desicions in a balanced way?
• How do we handle if we do not have all the knowledge (precautionary principle)
• What is more important nature or safety?
Conclusion and recommendations

- There is a lot of knowledge available so use it and do not try to find out the wheel again.
- There are organisations who can help in finding the right knowledge.
- Also more knowledge exchange is essential.
- There are still uncertainties so research and discussion is needed.
- There are no blueprints.
- More cooperations.