



Ecosystem Services

- LC/SG 37/INF.27
- “Ecosystem Services and Dredging and Marine Construction”

World Organization of Dredging Associations



Western Dredging Association (WEDA)
Central Dredging Association (CEDA)
Eastern Dredging Association (EADA)



Ecosystem Services

- CEDA Information Paper
- Objective: raise awareness and understanding of the ecosystem services concept in the dredging community
- Published July 2013



Ecosystem Services

- The objective of Ecosystem Services is to classify, describe, and assess a value to natural resources and ecosystem services in order to make it possible to link the environment to human well-being.
- Definition: Benefits people obtain from ecosystems



Categories of Ecosystem Services

- Provisioning services, e.g.,:
 - seafood, game, crops,
- Regulating services
 - flood control, air purification, carbon sequestration
- Supporting services
 - Habitat, navigation, nutrient uptake
- Cultural services
 - recreation, aesthetic experiences, boating, fishing, educational



Ecosystem Services

- The dredging industry has often encountered the economics versus environment debate.
- The Ecosystem Services concept offers a new opportunity to consider proposed dredging projects in a cost-efficient and ecologically sound way by assigning value to both the project and the ecosystem that may potentially be impacted.



Ecosystem Services

- Ecosystem Services concept requires that a multi-disciplinary project team takes 3 important steps:
 - Assessment/identify the relevant ecosystem services
 - Valuation of services and potential impacts of the proposed dredging project
 - How to place value on services
 - Consider existing regulations
 - Develop values with stakeholders
 - Design of the project: integrate the assessment of services and potential project impacts. Not balance, but harmony.



Ecosystem Services

- Ecosystem Services is a work in progress. The concept is relatively new, and often quite abstract.
- One of the primary issues is how to value ecosystem services. How to monetize ecological functions.....more research is needed.
- The concept of Ecosystem Services offers a better way to make informed decisions about projects and for evaluating the potential impact of commercial and industrial activities, including possible mitigation.