CEDA-IADC CONFERENCE

Dredging for SUSTAINABLE INFRASTRUCTURE

CEDA Central Dredging Association

IADC INTERNATIONAL ASSOCIATION OF DREDGING COMPANIES

DredgingToday.com

Workshop 4:
Beneficial Use of Sediments

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Session 4
Seeking Win-Win Solutions Through Beneficial Use of Sediments

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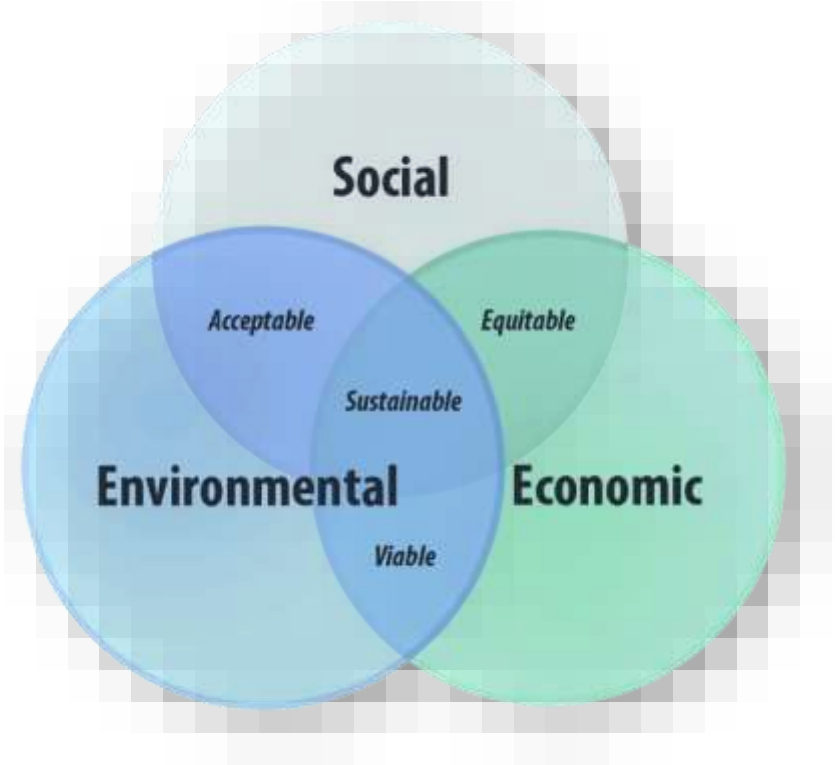
US Army Corps of Engineers

EWN® Engineering With Nature

Sustainability

Sustainability is achieved by efficiently investing resources to create present and future value



A “Sustainability Ledger” for Sediment Management

Efficiency

- Reducing sedimentation in channels & reservoirs
- Reducing transport distances for dredged material
- Reducing dredging time
- Expanding operational flexibility
- Linking multiple projects

Value Creation

- Restoring natural sediment processes to sustain landscapes
- New nature-based features that reduce flood risks
- Budget space for additional infrastructure work
- New habitat for fish and wildlife
- New features that provide recreational and other social value

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Horseshoe Bend Island, Atchafalaya River

- Options for managing DM via shore-based wetland creation were exhausted
- Strategic placement of sediment (0.5-1.8 mcy/1-3 yrs) was used to create a ~35 ha island
- Producing significant environmental and engineering benefits
- Project Awards:
  - 2015 WEDA Award for Environmental Excellence
  - 2017 WEDA Award for CC Adaption
  - 2017 DPC Award for Working, Building, and Engineering with Nature

100% BU

- How do we get to 100% beneficial use of dredged sediments?

100% BU

1. Comprehensive consideration and analysis of the social, environmental and economic costs and benefits of a project is used to guide the development of sustainable infrastructure.

   1Q: How can or should consideration of benefits and project value be deepened, expanded, analyzed, evaluated in order to promote BU and advance practice for BU?

2. Commitments to process improvement and innovation are used to conserve resources, maximize efficiency, increase productivity, and extend the useful lifespan of assets and infrastructure.

   2Q: What advancements in science, engineering, operational practice can/should be applied to dredging projects in order to increase opportunities for BU?

3. Comprehensive stakeholder engagement and partnering are used to enhance project value.

   3Q: How can/should stakeholder engagement be used to promote and expand successful BU?