

Using Sediment As a Resource

SedNet 5th of April 2019, Dubrovnic Croatia



<u>€ 200 million/year</u>











Waste or Resource?





Purpose

With USAR we demonstrate the potential to use sediments as a resource for new materials

USAR introduces the principles of the circular economy in the field of sediment management.

- new products and processes

- Provide watermanagers with the necessary knowledge and tools



Outputs



- Inventory catalogue of possible uses of sediment

- Recycling strategies based on local potential for uses of sediment

- Operational Sediment Management System (OSMS) - ICT-tool for watermanagers to make business cases and management decisions for recycling sediment





Restauration Floodplain

Use Sediment for Dikes







Restauration Floodplain



Dredging and restauration sites

Use Sediment for Coastal Defence

a mine or spletcastado interestado en estado en est		
60m wide saltmarsh>	6m high crest	
Cost £400 / m of seawall		
4m high crest wall	D6m wide saltmarsh	
Cost £500 / m of seawall	Cost £1,500 / m of seawall	
Son high crest wall	12m high crest	
Cost £800 / m of seawall	Cost £5,000 / m of seawall	150
		Brightlingsea Harbour Commissioners

Use Sediment for Coastal Defence

Numbers

- 35.000 m3 sediment
- Restoration 3.0 ha saltmarsh
- Improved 2,8 km of coastline

Advantages

saltmarshes are natural coastal flood defences Internationally important wetland habitats



Interreg 2 Seas Mers Zeeën USAR European Regional Development Fund ieland en de Krimpenerwaard

Upcycling of Sediment

Use Sediment for Land Improvement









Numbers

- 25.000 m3 sedimerit
- 25.000 m3 manure
 - Green waste



Use Sediment for Land Improvement

Advantages

- Stop land subsidence
- Reduce GHG emission
- Start circular economy





2 Seas Mers Zeeën USAR

Characterisation of sediment

Legislation

Scientific and academic research



Wikised

Cost-benefit analysis



Need inspiration on how to use sediment as a resource?

Example projects



www.hhsk.nl/usar



Recycling Strategies

Using Sediment As a Resource



