

Cross-border Sediment Relocation Pilot to Prevent Sediment Disbalance in the Scheldt Estuary

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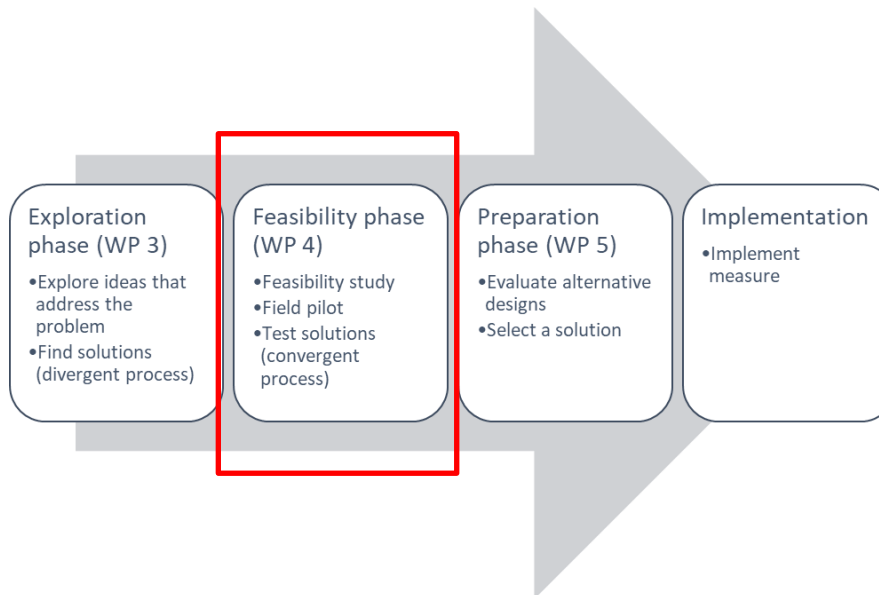
SedNet 2021 Conference Presentation



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... as part of IMMERSE

IMplementing MEasuRes for Sustainable Estuaries



More information ?

<https://northsearegion.eu/immerse/>
North Sea Region Estuary Managers group

Scheldt Estuary

Western Scheldt – Lower Sea Scheldt



Overzichtskaart Schelde-estuarium



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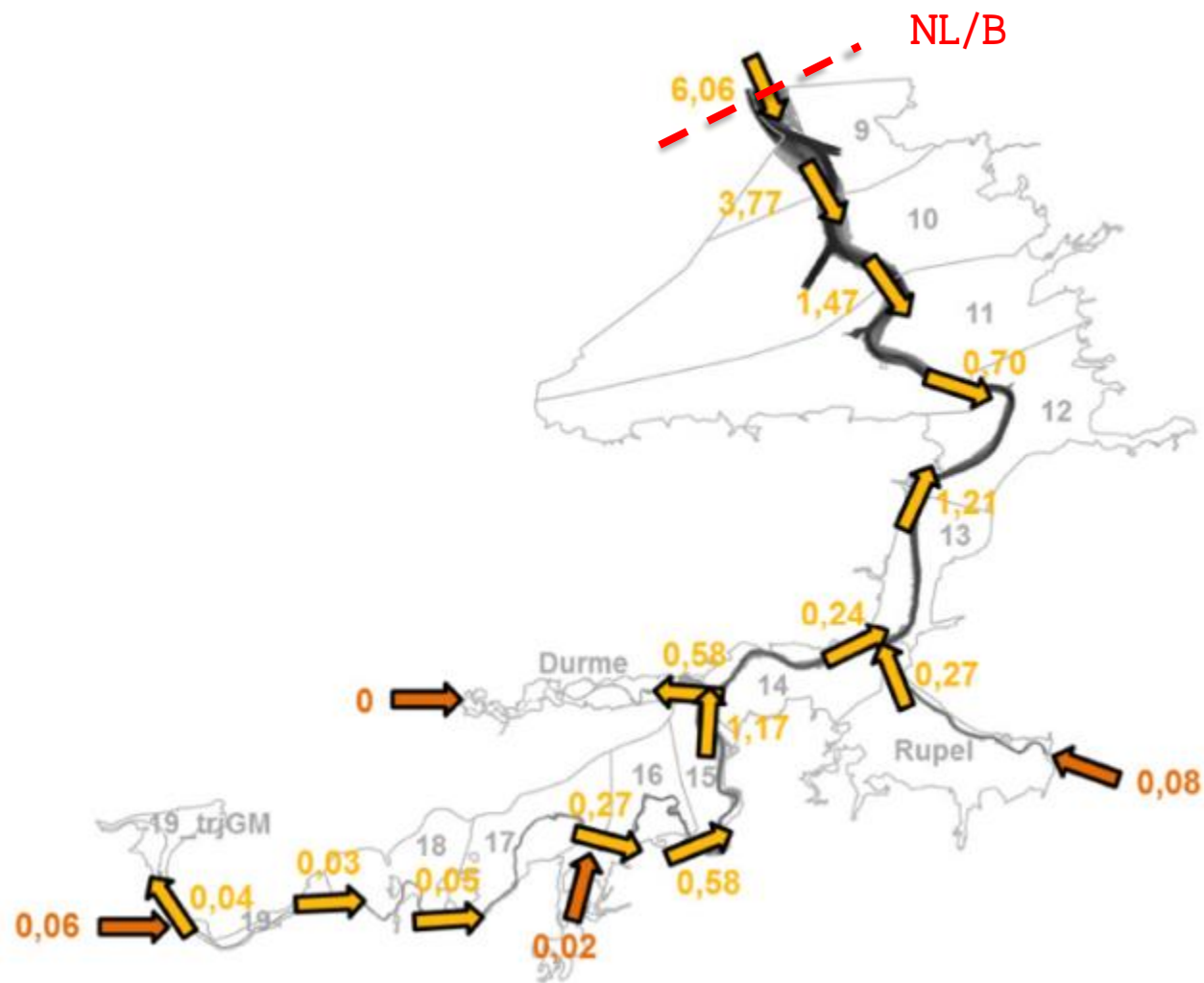
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IMMERSE report - Systeemanalyse Schelde Estuarium
Illustrations by A. Zuidhof (rvo.nl)

Sediment disbalance ?

Cross-border sediment relocation pilot as a mitigation measure

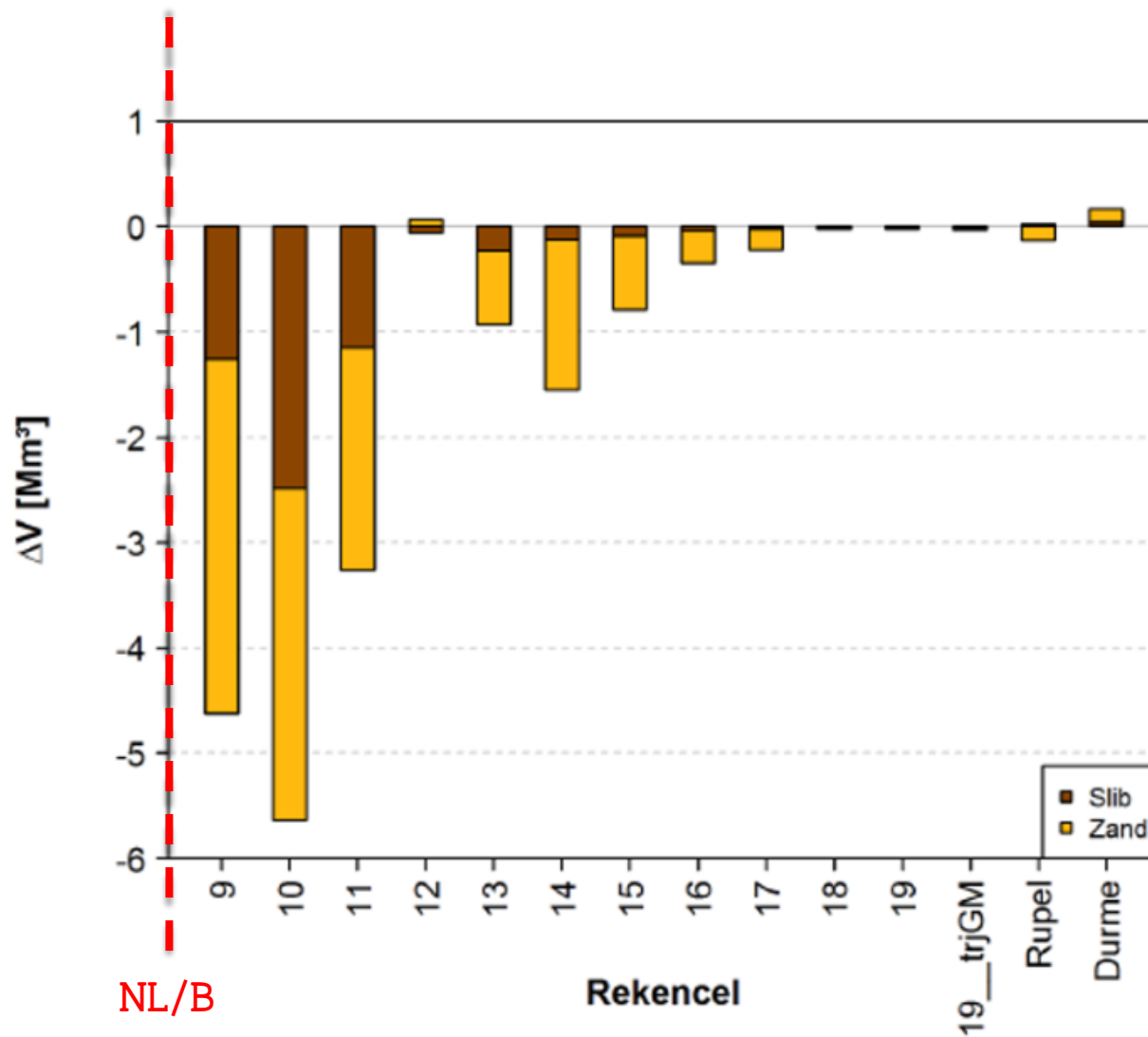


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WL (2017) Sediment balance Sea Scheldt

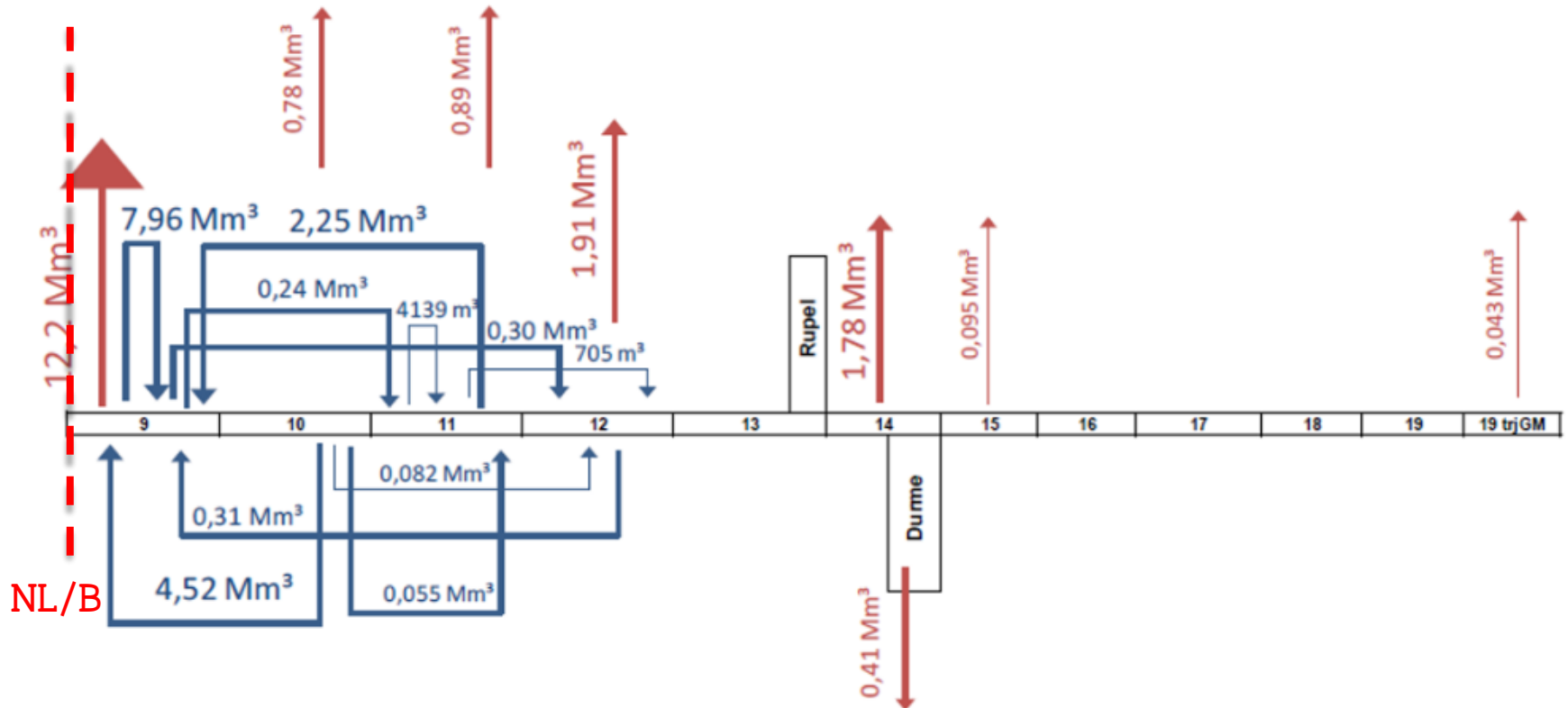


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WL (2017) Sediment balance Sea Scheldt



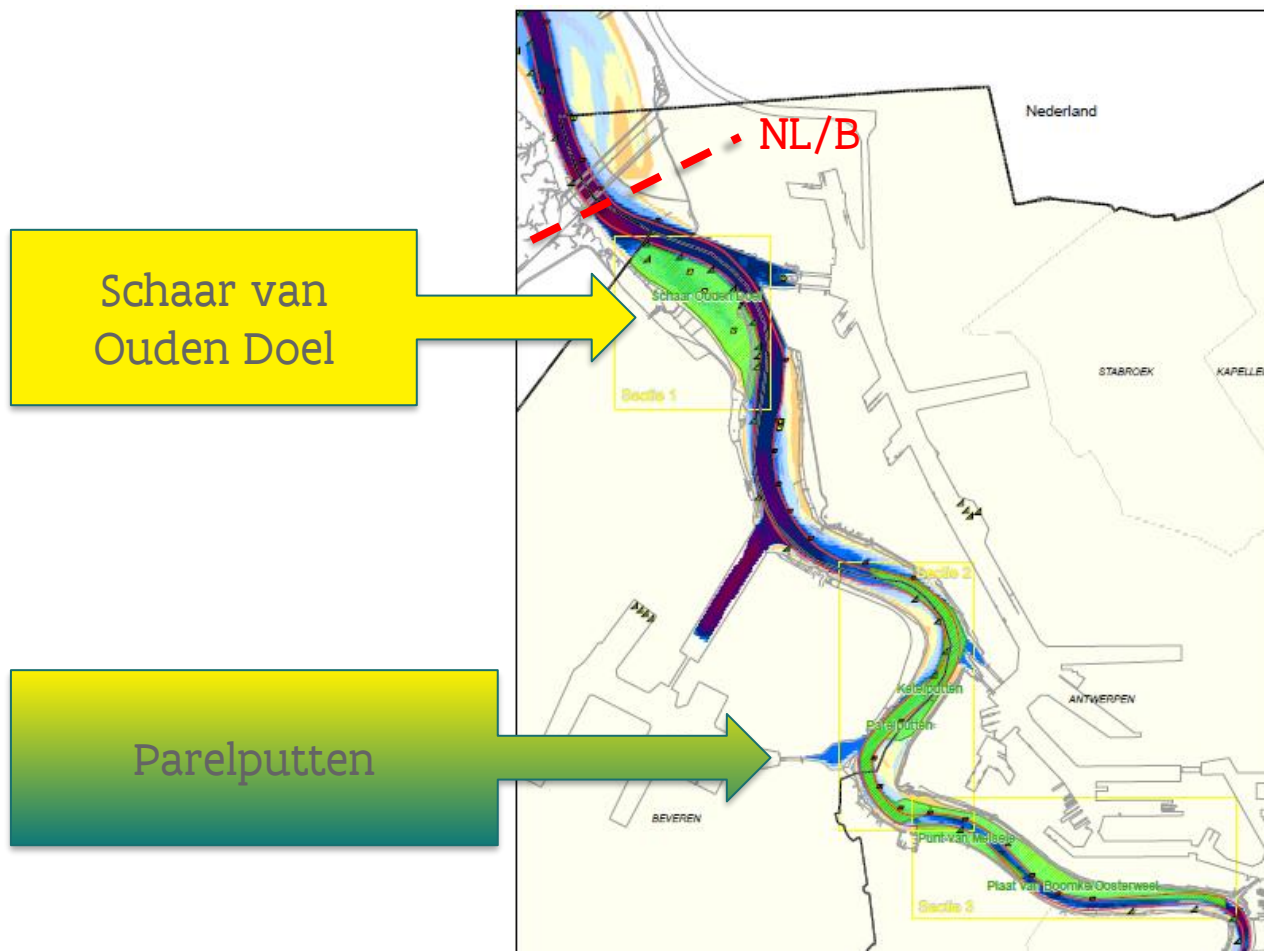
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WL (2017) Sediment balance Sea Scheldt

Current relocation sites (sand)



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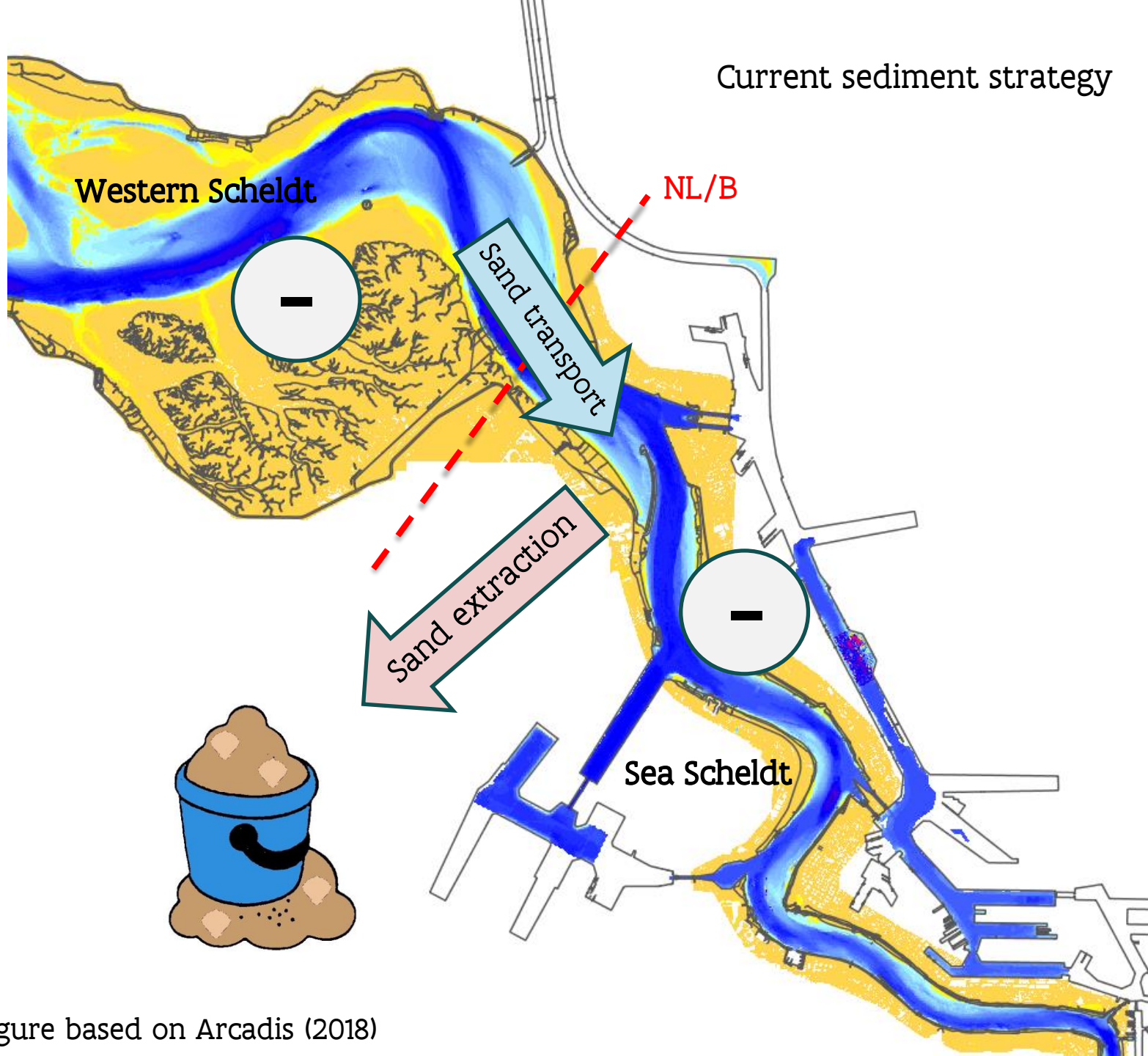
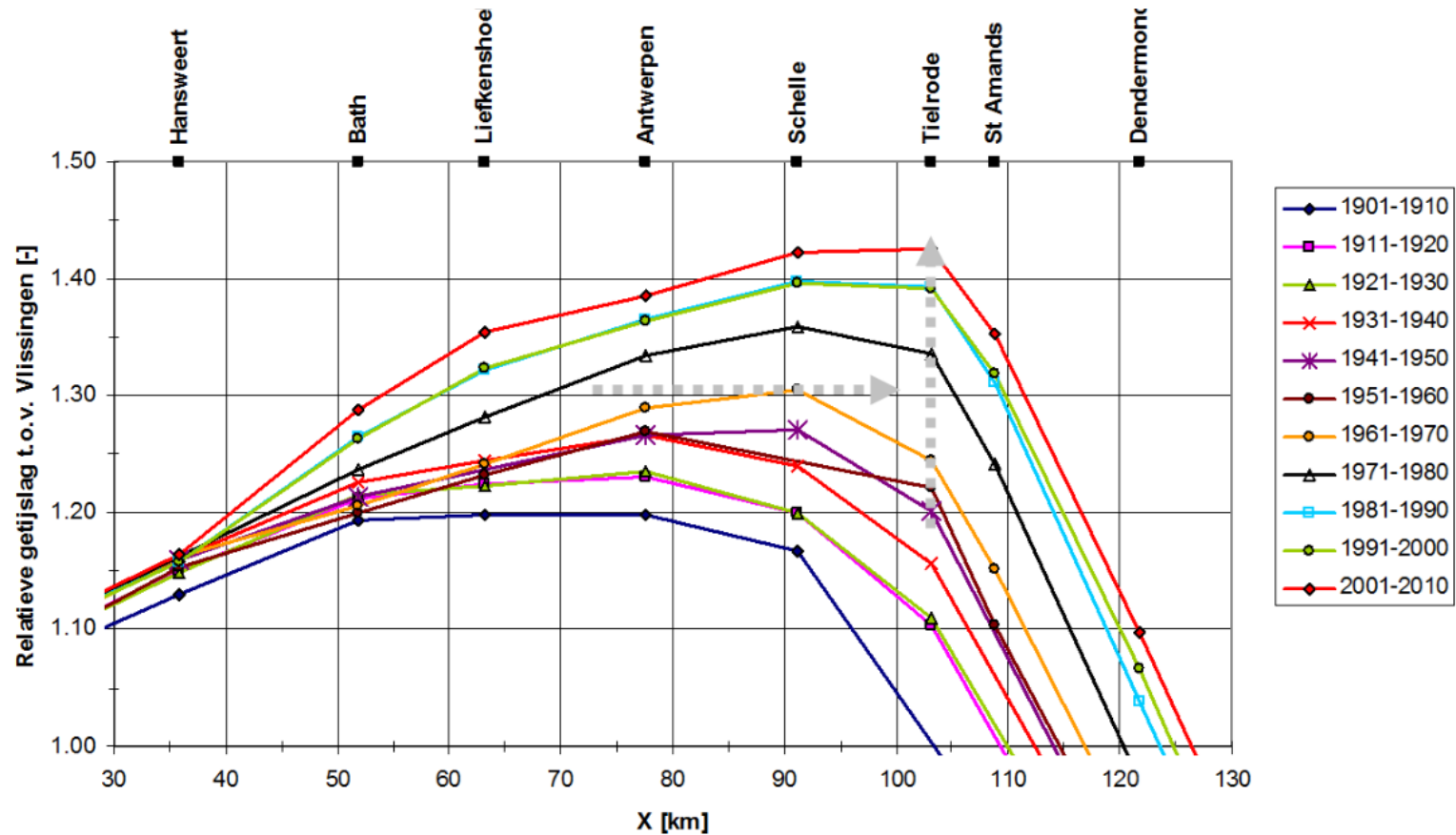
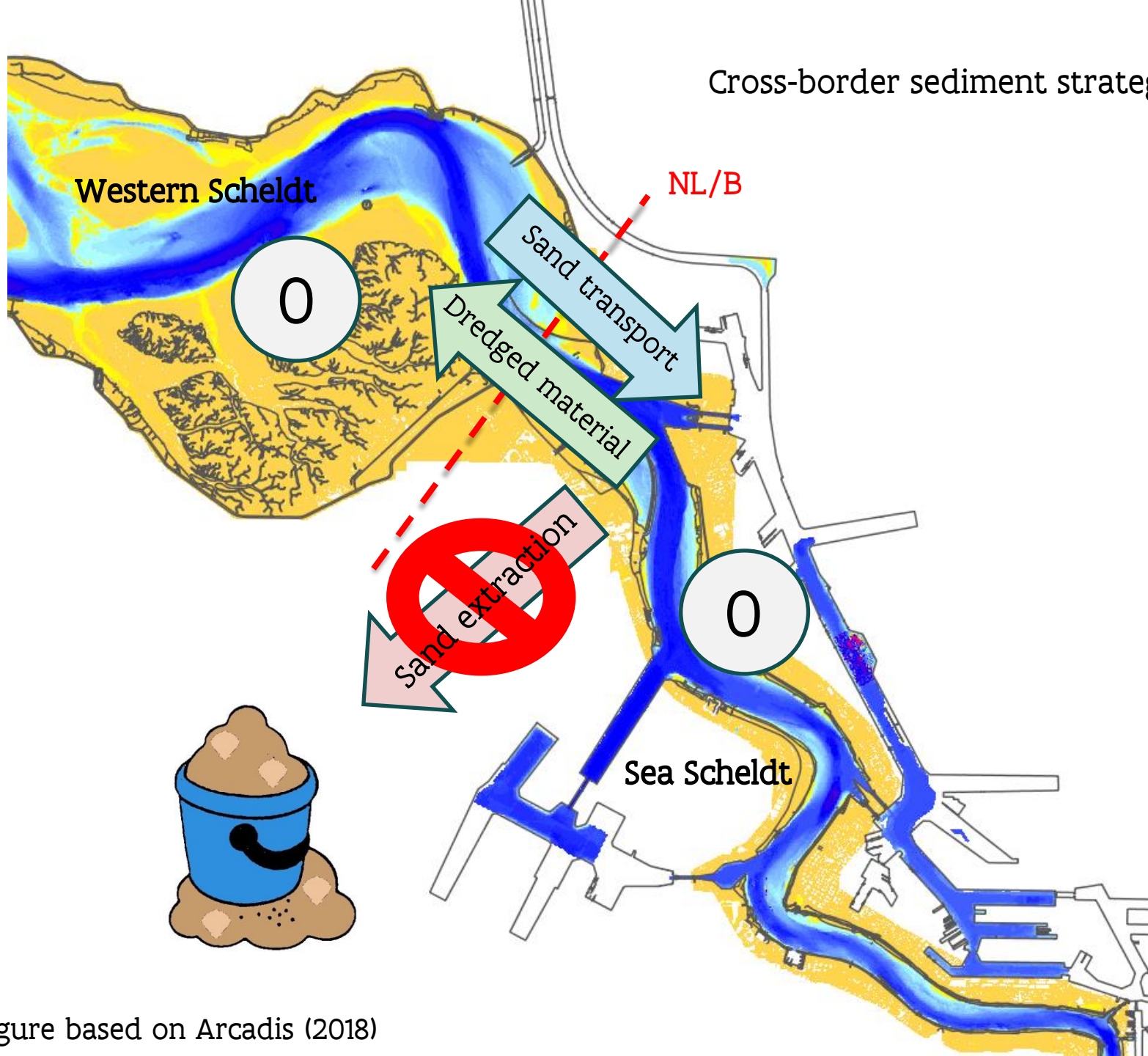


Figure based on Arcadis (2018)

Average tidal range Scheldt estuary



Cross-border sediment strategy



Cross-border sediment relocation

Flemish Lower Sea Scheldt → Dutch Western Scheldt



... however ...



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Regulations

- **Dutch legislations**
 - Water Law
 - Law Nature Protection
- **European legislation – Waste Shipment Regulation**



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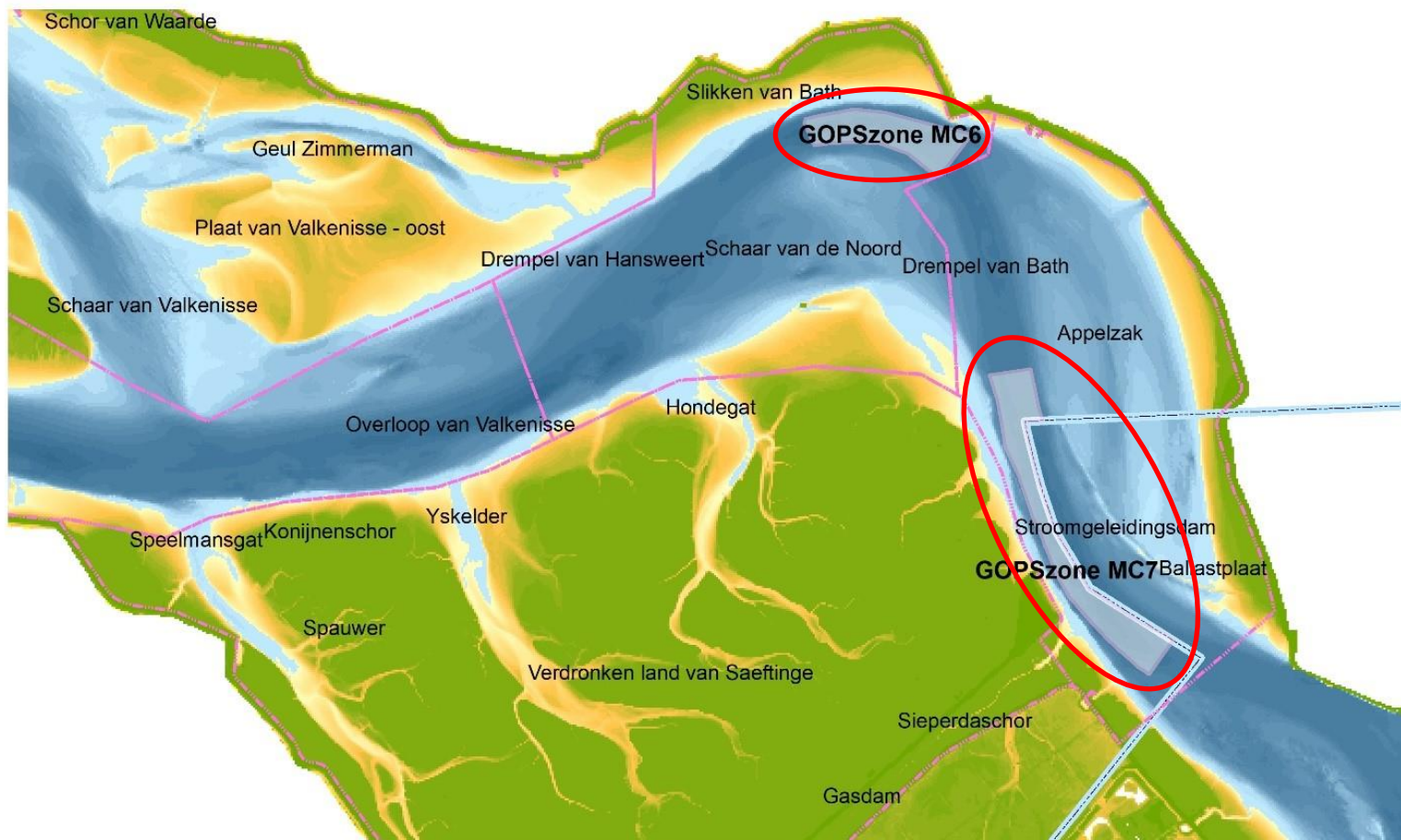
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What are we doing now ?

- **Regular maintenance dredging activities**
- **Relocation to zone GOPS MC7**
- **Extensive monitoring activities**
- **Additional testing of dredging zones**



Westerschelde 2018

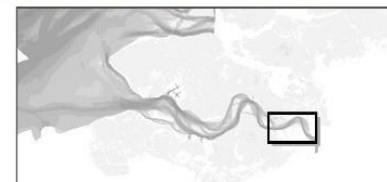
Marocellen

Grensoverschrijdende proefstortzones

Landsgrens

Dieper dan NAP -10 m
NAP -5 tot -10 m
NAP -5 m tot -2 m
NAP -2 m tot 0 m
NAP 0 m tot 2 m
Hoger dan NAP 2 m

0 275 550 1,100 1,650 2,200
Kilometers



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What are we doing now ?

Date	# Trips	Dredging zone	Volume (m ³)
20/01/2021	1	Drempel van Krankeloon	6.219
5-6/02/2021	10	Drempel van Lillo	24.306
18/03/2021	4	Drempel van Krankeloon	18.961
21/03/2021	2	Drempel van de Parel	12.241
11-12/04/2021	6	Ketelplaat	28.117
14/04/2021	4	Drempel van Zandvliet	18.875
	27		108.719

Looking into the future

- **Continue for GOPS MC7**
- **Start with GOPS MC6**
- **Analyse monitoring results**

**How to include cross-border sediment relocation
in the future sediment strategy ?**



Thank you!

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**Interreg North Sea Region project
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<https://northsearegion.eu/immerse/>

