



01

Scientific knowledge should contribute to sediment management

Scientists recognized the relevance of the sediment budget in coastal evolution for more than a half a century

Strategies that integrate the sediment budget analysis are relatively recent



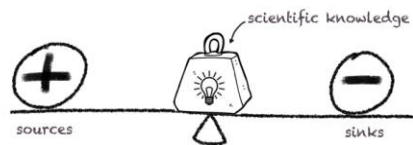
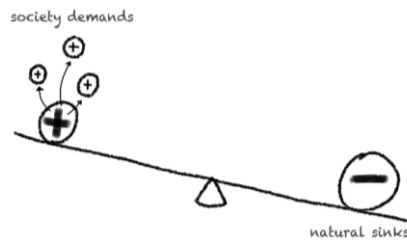
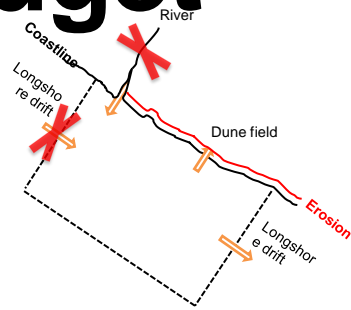
Sediment

budget

the balance between sediment volume entering and leaving a particular section of the coast

Evaluation of sediment fluxes and in the identification of the sources and sinks

Sediment budget





02

...but often disagree on the solution

Monodisciplinary view that only attends to the physical dimension of the problem

Sustainable coastal development must be supported in the equilibrium of social, economic and environmental values

Climate change will aggravate the problem



03

Regional sediment management arises as one of the most consensual approaches to coastal erosion

However, finding the solution does not guaranty its implementation

It has to be put in practice by coastal managers



04

**Transfer scientific knowledge to coastal managers
which is NOT the same thing as delivering the solution**

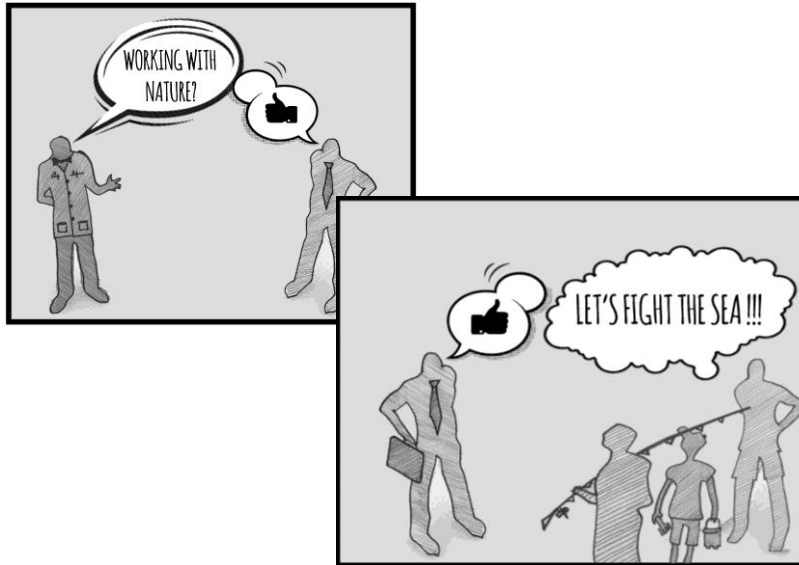
**Sharing also the motivations, effects of the proposed
solution and consequences of the alternatives**

Engagement



05

The implementation of coastal measures very often depend on the interaction between political leaderships and institutions, and society



05

Because the implementation of coastal measures very often depend on the interaction between political leaderships and institutions and society

Scientists have to communicate with coastal managers as well as with society as a whole

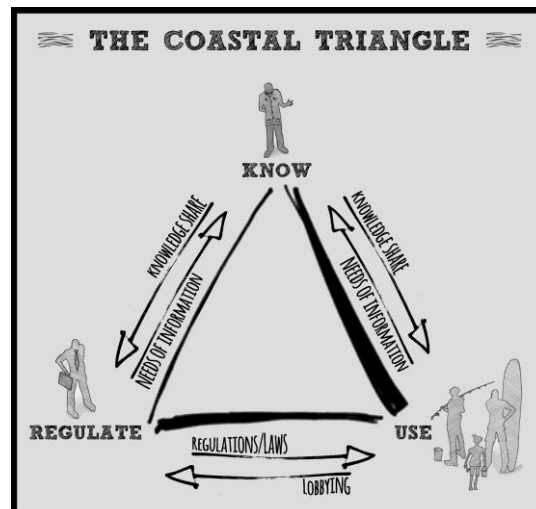
Effectively communicate

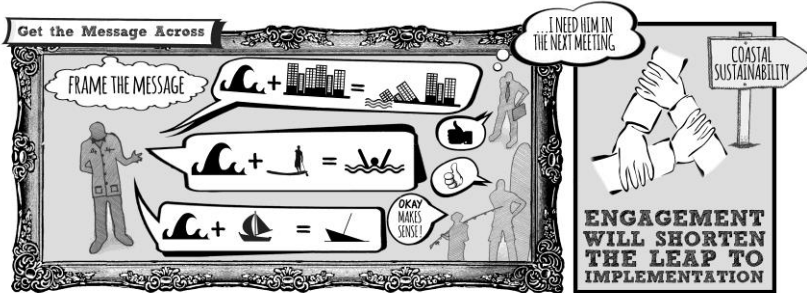
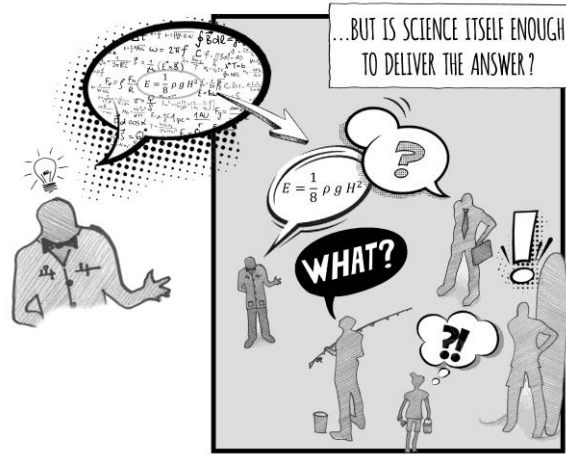


06

Knowing the audience and taking into account also their needs of information

Framing the coastal message to meet the audiences' specific needs and expectations





07

Portuguese experience

Coastal erosion problems due to unbalance sediment budget



sources
www.gaulico.pt/local/noticia/cordao-dunar-de-s-joao-da-caparica-recua-20-metros-com-os-ultimos-tempestades-1624403
pt.algarve-portal.com/www.publico.pt/local/noticia/mar-agitado-derruba-paredao-de-molede-e-deixa-bar-de-prata-preto-por-um-flu-1626955
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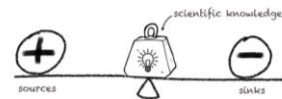
sources
<http://www.oz-norfolk.com/foia/blog/hercules-storm-pg/8/Yghd76ind7w>
<http://zmaf@pascarpa.blogspot.pt/2014/05/tempestade-no-mar-homem-em-terra-ou.html>

07

May 2014: establishment of GTL (*Grupo de Trabalho para o Litoral*)

The definition of priority measures for the coastal zone

November 2014: the need to balance the sedimentary balance (priority areas, volumes)

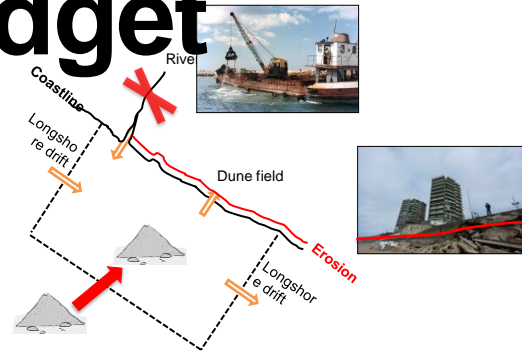


07

**April 2015: establishment of GT (*Grupo de Trabalho*)
focused on the need to balance the sedimentary balance**



Sediment budget



07

Portuguese experience:

Sedimentary balance in the agenda of the Ministry of Environment Spatial Planning and Energy

Sedimentary management as a priority in Coastal Governance



IS SCIENTIFIC KNOWLEDGE ENOUGH?
CONSIDERATIONS ON SEDIMENT MANAGEMENT

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SEDNET CONFERENCE 2015

9TH INTERNATIONAL SEDNET CONFERENCE, 23-26 SEPTEMBER 2015, KRAKÓW, POLAND
SOLVING SOCIETAL CHALLENGES: WORKING WITH SEDIMENTS