

S.O.S. – SAVE OUR SEDIMENTS

Sediment shortage in river-sea-systems causes dramatic impacts, such as drowning deltas, worldwide. EU research can inform solutions.

Why we need to act

Human interferences, such as damming, have disturbed the sediment continuum in river-sea systems, worldwide. These interferences result either in a surplus or a lack of sediment. A surplus causes the siltation of reservoirs with negative effects on hydropower production and water storage; causes siltation of waterways with negative effects on navigation; and causes hyper-turbidity in estuaries resulting in the decline of ecosystem health. A lack of sediment causes coastal erosion and retreating or drowning deltas; causes erosion of river beds and degradation of channel morphology with impacts on river habitat and floodplain groundwater; and causes a lack of suited spawning material.

What we will gain

If scientists and stakeholders are given the opportunity, e.g. under EU Framework Programme 9, to team-up in research and innovation (R&I), this R&I can inform solutions that we urgently need to mitigate the societal, economic as well as ecological impacts resulting from either a surplus or from a lack of sediments in river-sea systems.

Key research areas

Sustainable and resilient solutions to disturbed sediment continua should be sought at the entire river-sea system scale. Presently, there are on-going R&I activities which only partially target “end-of-pipe” management solutions. Up to now, hardly any concerted R&I action is taken on the entire river-sea systems scale. R&I is needed which:

- Addresses entire river-sea systems, so crossing geographical as well as political borders;
- Carefully balances social, economic and environmental values;
- Involves stakeholders;
- Embraces the entire soil-sediment-water system (integrated solutions);
- Respects natural processes and functions;
- Not results in unwanted impacts elsewhere in the river-sea system (up- or downstream), not now, nor in the future;
- Recommends early solutions to decision makers where they can be implemented.

How to become active?

Contact your INSPIRATION national contact at www.inspiration-agenda.eu to identify joint funding options. For further information, in favour to see this topic in FP9 and/or want to suggest ingredients for the topic, then please contact Jos Brils (jos.brils@deltares.nl).

