## The EU environmental policy shift towards sustaining of ecosystem services and its possible implications for sediment management

## Jos Brils<sup>1</sup>

<sup>1</sup>Deltares, PO Box 85467, 3508 AL Utrecht, The Netherlands

Phone: +31 (0) 6 22 7 99 183 E-mail: jos.brils@deltares.nl

A quick scan analysis of 30 year of EU environmental policy development (figure 1) shows a clear shift from a focus on: conserving of single species (1979)  $\rightarrow$  conserving status of communities of species (1992-2000)  $\rightarrow$  enhancing connectivity between communities of species (2002)  $\rightarrow$  sustaining of Ecosystem Services (2006-2008).

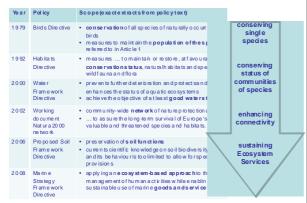
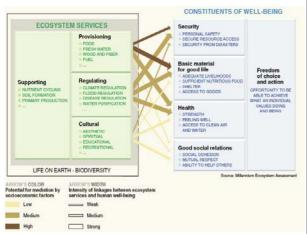


Fig. 1: EU Environmental policy shift.

Ecosystem services (ES) can be defined as "The benefits people obtain from ecosystems" or as the "services of nature"[1]. ES fall in different categories (figure 2) and are regarded as essential for human wellbeing [2 & 3].



**Fig. 2:** ES and human wellbeing [3].

Biodiversity is seen as the basis to ES (figure 2) and sustaining of these services has become the primary objective of EU environmental policy: "From an

economic perspective, biodiversity provides benefits for present and future generations by way of ES. ... It is difficult to put precise monetary values on these services worldwide, but estimates suggest they are in the order of hundreds of billions of Euros per year. These services underpin EU growth, jobs and wellbeing [4]".

In my presentation I want to elaborate on (and as far as possible discuss with the audience):

- this observed shift
- what the ES concept comprises
- potential appealing aspects of an ES approach in general\*
- implications for sediment management
- \* For me appealing aspects, amongst others, are:
  - System based and oriented approach
  - Dynamic concept (fitting to dynamic nature of river systems)
  - Calls for the joint development of system understanding (multi discipline scientists, stakeholders, locals etc.)
  - Provides a nice basis for development of a common 'systemic' language
  - May facilitate the joint implementation of different environmental policies

I estimate that this approach will – to some extend – leave its traces in the 1<sup>st</sup> update of WFD River Basin Management Plans (i.e. in 2015).

Thus it may be a very interesting concept to further consider within SedNet: what is the importance of sediment ES?

References: [1] Ranganathan et al. (2008) "Ecosystem Services, A Guide for Decision Makers", World Resources Institute. ISBN 978-1-56973-669-2; [2] Van der Meulen & Brils (2008) "Ecosystem Services in river basin management", available at: <a href="https://www.riskbase.info">www.riskbase.info</a> [3] Millennium Ecosystem Assessment (2005) "Ecosystems and Human Wellbeing: Synthesis". Island Press, Washington, DC; [4] EC Communication SEC(2006)621 (2006); "Halting Biodiversity Loss by 2010 – and Beyond: Sustaining ecosystem services for human well-being".