

Geophysical Research Abstracts,  
Vol. 10, EGU2008-A-04470, 2008  
SRef-ID: 1607-7962/gra/EGU2008-A-04470  
EGU General Assembly 2008  
© Author(s) 2008



## **Sediment management at the river basin scale: recommendations of the European Sediment Network**

**P.N. Owens**

Environmental Science Program, University of Northern British Columbia, 3333 University Way, Prince George, British Columbia V2N 4Z9, Canada (owensp@unbc.ca)

One of the main outcomes of the first phase of the European Sediment Network (Sed-Net) was a series of four books, published by Elsevier, entitled *Sustainable Management of Sediment Resources* [1-4]. The fourth book in that series was on the theme *Sediment Management at the River Basin Scale* [4]. This presentation describes this major findings and recommendations of this book. Chapters in this book describe several key requirements for decision-making for the management of sediment at the river basin scale. These include:

- Identifying the many functions that sediment have within river basins, and understanding the behavioural characteristics of sediment that enable it to perform these functions;
- Developing conceptual frameworks for sediment management that address both site-specific and basin-scale needs;
- Understanding and assessing the relevant legislative and non-legislative drivers that influence why and how sediment is, or should be, managed;
- Understanding the movement of sediment and associated contaminants in terms of the sources and pathways of sediments and contaminants throughout the basin;
- Using tools to assemble the information required to understand the sediment-contaminant system, and to assist in balancing the costs and benefits of man-

agement options;

- Identifying stakeholders and involving them in the decision-making process.

This presentation also puts forward an adaptive framework for river basin management, and presents case study examples of recent sediment management initiatives.

**References:** [1] Barceló D & Petrovic M (Eds) (2007) *Sediment Quality and Impact Assessment of Pollutants*, Elsevier ; [2] Bortone G & Plaumbo L (Eds) (2007) *Sediment and Dredged Material Treatment*, Elsevier ; [3] Heise S (Ed.) (2007) *Sediment Risk Management and Communication*, Elsevier ; [4] Owens PN (Ed.) (2008) *Sediment Management at the River Basin Scale*, Elsevier.