

# Valuing the benefits of remediating contaminated marine sediments – a case study from Grenlandsfjorden, Norway

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## Introduction:

Planning remediation of contaminated marine sediments in Norway has with few exceptions ignored the potential magnitude of market and non-market benefits to different fjord users. With a case study from the Grenland fjords Norway (2005) we demonstrate the use of household surveys of use intensity and willingness to pay to remove fish consumption advisories. We show how results are validated internally and externally against similar studies from similar sites (“so called “value transfer” testing), and argue that accounting for non-market benefits is an important basis for prioritising remediation actions between sites, alongside the more common concerns of cost-effectiveness in complying with abiotic and biotic limit values. Non-market valuation methods – such as contingent valuation used in the case study - have not gained common acceptance as relevant decision-support for sediment remediation in Norway. We discuss several reasons and possible ways forward for authorities to make decisions that are better informed about the user populations preferences (as a complement to expert opinion). Finally we discuss the usefulness of pre-remediation household opinion polling independently of concerns about willingness-to-pay estimates for given remediation policies.

**Methods:** The body of text should be formatted using the *Standard* template (*Times New Roman 10 pt*). The sections *Introduction*, *Methods*, *Results*, *Discussion*, *References*, *Address* should start with the respective section header in bold and the text in the same line as indicated.

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**Fig. 1:** Use the template *Caption* for labelling.

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**Results:** Please save the file in the \*.doc format and name it using the name of the first author according to the convention *Last\_First\_Nr.doc*.

**Discussion:** Please put Acknowledgements after the discussion section.

**References:** [1] SedNet et al. (2003) *J Soils Sediments* **11**:111-122; [2] Dimas et al. (2004) *Wasserwirtschaft* **22**:222-233.