

APPEARANCES OF ECOSYSTEM SERVICES IN ENVIRONMENTAL IMPACT ASSESSMENT – LEARNINGS FROM TWO SWEDISH CASE STUDIES

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Abstract

Ecosystem Services is an increasingly used concept to understand and describe the dependencies of socio-technical systems on the ecosystems in which they exist. We have studied to what extent ecosystem services are appearing in Environmental Impact Assessments (EIA) in two Swedish cases, the improvement of ecological status in a river used for small scale hydropower and the mining operations of the MM mine. In neither of the two cases ecosystem services have been intentionally included in the work with the EIAs. The goal of the studies has been to examine to what extent ecosystem services are appearing anyway in the EIAs, to what extent data in the EIAs are sufficient to perform more structured ecosystem service assessments, and if the use of a more structured ecosystem services review during the EIA process could have contributed positively to the EIA work.

Both EIAs in this study holds some information on impacts on ecosystem services, and more information on affected ecosystem functions that could be translated into ecosystems services and probably to full ecosystem service reviews with additional data gathering. Cases of ecosystem functions and services impacting other ecosystem functions and services, sometimes in several stages, were found, indicating that such functions or services could be of special importance to protect and / or support.

Keywords

Ecosystem services, Environmental Impact Assessment.