

Cormier, S. M. and G. W. Suter. 2008. A framework for fully integrating environmental assessment. *Environmental management* **42**:543-556.

Summary

In Cormier and Suter (2008) "A Framework for Fully Integrating Environmental Assessment" they identify the need for an overarching environmental assessment, and propose a four-step framework that emphasis planning, analysis and synthesis for each step. The first of the four steps is assessing the condition, for example, determining the presence of an impairment. The second is the causality of the impairment, which determines the probable cause and the source for impairment. The third is assessing the trade-offs of alternative decisions while minimizing risk. The fourth is evaluating the outcome of the process, monitor and if needed, begin with step one of assessing the condition.

Cormier and Suter present three case studies illustrating the integrated framework using the case of an impaired river, remediation of a superfund site, and the reregistration of the pesticide Carbofuran. The author's purpose is to present a framework that integrates the current disconnected assessments from US Federal Agencies. The authors clearly expose the need for this framework, and have the credentials to state it as they work for the US Environmental Protection Agency.

Reflection

Cormier and Suter's (2008) article made me reflect on three main issues: breaking and creating paradigms, long term versus short term vision, and the role of companies in environmental assessments. I will expand on each of these below.

First, coming from a developing country, when I read articles like Cormier and Suter's (2008), I stand in awe as I see public resource management utopia in person. It seems almost impossible to implement the framework because of the cost and the inherent inefficiencies of public institutions. While in theory the framework seems appropriate, it does not take into account reality. In the acknowledgements section of Cormier and Suter's (2008) article, they listed five people that disagreed with the authors in some respect. I would be interested in reading about other points of view, and the conflicting issues.

However, if it is not for the authors that cry-out-loud for the need of an integrated environmental framework, the state of business would not necessarily change. In fact, change comes from people that push the frontier of what is accepted: breaking and creating paradigms. At the beginning they might be rejected. With time and work, frameworks like the one proposed herein are going to be adopted and succeed.

Second, to comply with federal mandates, Cormier and Suter's framework seem to be appropriate. However, this is also the framework's greatest weakness. What happens if it is not mandated? Is an assessment carried out that has an environmental impact but is not Federal mandated? It seems that the framework only addresses something that has occurred (e.g. oil spill) or something that might be violating a federal mandate (e.g. health and water risk due to a pesticide). However, it is not exploring long term issues that are hard to see in a short time, but nevertheless have a great impact. What is the risk of not exploring these?

For example, in Colombia I see that national mandates are created all the time. Government officials seem proud to pass these mandates. However, they stay in paper and never get implemented. It would cost a fortune to implement, although they are using the best available science and political will to pass them. Of what use is it to a community that is suffering from a municipal landfill to have a national mandate and nobody enforcing it?

Third, Cormier and Suter's (2008) and Bennett et al's (2011) article are almost complementary in how they view assessments and science. Academics research the first two steps of Cormier and Suter's (2008) framework – assessing conditions and establishing causal and source pathways – and the assessing trade-offs step is carried out by companies, and then it is up to the Federal Agency (who presumably funds the assessment) to oblige the companies to give their data and procedures to academics who can monitor, determine the effectiveness and re-assess if need be. So if academics and Federal Agencies are on-board, then what is missing? Are the companies pressuring the government to not require disclosure on methods and procedures?