

## Strategic Environment Assessment workshop – October 2013

### KEY PRINCIPLES

#### Public engagement

##### Current challenges

- Public engagement is always costly and draws on human, infrastructure and financial resources. Expense is inevitable.
- In any public engagement process, there are sensitive cultural aspects that need to be taken into account (e.g. gender or indigenous-specific).
- Local hierarchy is difficult to overcome when engaging stakeholders.
- Other (non-indigenous) traditional users are often overseen.
- Local populations are often a confident of what they see, and may believe that a degraded situation is normal. It is sometimes difficult to convince them that there are uncertainties although some well-educated stakeholders are familiar with the notion of uncertainty and willing for these to be stated.

##### Recommendations

- Gathering knowledge on stakeholders prior to conducting engagement is necessary to increase credibility, and it is worth the time invested.
- Separate parallel processes (to regular outreach mechanisms) need to be set up to capture information from some stakeholder groups in a culturally and gender appropriate manner.
- Public meetings are not necessarily the best way to engage; stakeholders should be able to choose their level of engagement. Polls/surveys can be used to establish the views of the silent minorities.
- Continuous and proactive exchange with stakeholders is crucial to maintain interest and support.

<ul style="list-style-type: none"> <li>• Use experts to engage specific stakeholders.</li> </ul>
<ul style="list-style-type: none"> <li>• Remove power hierarchy and include equal representation of decision makers.</li> </ul>
<ul style="list-style-type: none"> <li>• Aerial imagery is a powerful tool to guide stakeholders and work with them on scenarios. Culturally-accurate or sensitive place names are very important - aerial imageries allow stakeholders to give their own names to places, which is crucial in the engagement process.</li> </ul>
<ul style="list-style-type: none"> <li>• The notion of uncertainty in predictions can be successfully conveyed to stakeholders through impact matrices.</li> </ul>

## Cumulative impact assessments

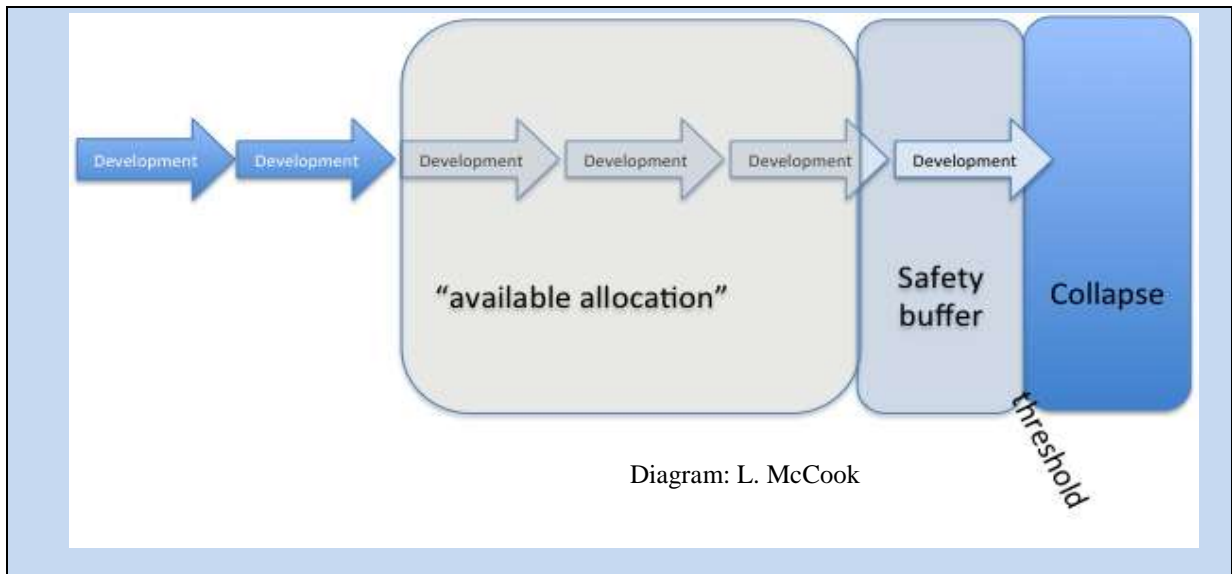
<p><b>Current challenges</b></p>
<ul style="list-style-type: none"> <li>• At present, we advance towards a limit of pressure in a piecemeal, ad-hoc way, based on proposals as they arise. This results in successive proposals bearing the burden of preceding developments; and leading to inevitable conflict when the threshold of system collapse is reached, especially since it is likely to emerge unexpectedly.</li> </ul>
<ul style="list-style-type: none"> <li>• There needs to be a shift in mentality in the environmental management circle to move from a case-by-case assessment approach to longer-term and geographically relevant assessments (= SEA).</li> </ul>
<ul style="list-style-type: none"> <li>• Considering timescales, including past-present-future impacts, and estimating recovery time are essential parameters to assess cumulative impacts; but drawing the line is extremely difficult.</li> </ul>
<ul style="list-style-type: none"> <li>• We will always need expert judgment (and therefore, research) to estimate impacts; as science and methods will never be perfect enough to provide a completely accurate estimate of cumulative impacts.</li> </ul>
<ul style="list-style-type: none"> <li>• The aggregation of an increasing number of impacts can unexpectedly exceed thresholds.</li> </ul>

**Recommendations**

- Consider synergistic and antagonistic effects of pressures, but be candid about uncertainties, especially on interactions between pressures.
- Take into account the vulnerability (sensitivity and exposure to a pressure) and include consideration of the resilience (or recovery) potentials of ecosystems.
- Aim at simple outputs: impact matrices and traffic lights are acceptable to visualise and prioritise pressures; but they should be associated with precautionary thresholds and cross-calibrated accordingly, for instance by using coefficients (for quantitative approaches).
- Models help to estimate confidence level and to explicitly measure uncertainty.
- For data poor areas, use simpler empirical, non-quantitative methods adapted to the context at play.
- Don't wait for the perfect methodology on cumulative impact assessment to implement management actions that take the *concept* of cumulative impacts into account.
- Acknowledge that, given that we lack sufficient robust science to know how impacts are cumulating, we to *estimate* an overall, cumulative pressure carrying capacity (**estimated threshold of system collapse**) for the ecosystem or site being considered.

**A way forward to *manage* cumulative impacts: suggestions for managers**

- One way of way of concretely managing cumulative impacts could be to use this estimated threshold of system collapse (perhaps augmented by a precautionary buffer) to then strategic allocate (=‘sell’) overall, aggregated acceptable pressures to users, considering aspects such as location, timing, proposed offsets, etc. to determine a market price.



- This allocation could optimize benefits to the public whilst protecting biodiversity; foster strategic consideration and planning by developers; and provide a mechanism to avoid crises and adversarial conflicts as the “cut-off” limit is reached.
- This concept could only work with robust, transparent governance and legislative frameworks in place, with strong oversight by governments through the administration of auctions and licence agreements.