



## **Evaluating stakeholder participation in water management: intermediary outcomes as potential indicators for future resource management outcomes**

Gemma Carr (1), Guenter Bloeschl (1), and Daniel (Pete) Loucks (2)

(1) Vienna University of Technology, Centre for Water Resource Systems, Austria (carr@waterresources.at), (2) Civil and Environmental Engineering, Cornell University, Ithaca NY, US

Evaluation of participation programmes, projects and activities is essential to identify whether stakeholder involvement has been successful in achieving its aims. Aims may include an improvement in water resource management such as enhanced ecological functioning, an improvement in human wellbeing and economic conditions, or overcoming a conflict between interest groups. Evaluating against “interest-based” resource management criteria requires that a desirable outcome can be identified, agreed upon and be measured at the time of evaluation. In many water management situations where collaborative approaches are applied, multiple interests and objectives are present, or stakeholders have not yet identified their own positions and priorities. Even if a resource management objective has been identified and strategy agreed upon, resource management changes tend to emerge over longer timescales and evaluation frequently takes place before they can be recognised. Evaluating against resource management criteria may lead evaluators to conclude that a programme has failed because it has not achieved a resource management objective at the time of evaluation. This presents a critical challenge to researchers assessing the effectiveness of stakeholder participation programmes. One strategy to overcome this is to conduct “goal-free” evaluation to identify what the programme is actually achieving. An evaluation framework that includes intermediary outcomes that are both tangible achievements such as innovation, creation of new organisations, and shared information and knowledge, as well as intangible achievements such as trust and network development can be applied to more broadly assess a programme’s success. Analysis of case-studies in the published literature for which a resource management outcome has been achieved shows that intermediary outcomes frequently precede resource management outcomes. They seem to emerge over shorter timescales than resource management outcomes. Furthermore, failure to achieve intermediary outcomes correlates to failure to achieve resource management outcomes. Evaluating intermediary outcomes leads to both a broader assessment of a programme’s achievements at the time of evaluation, and can indicate whether a programme will go on to achieve resource management objectives in the future.