

Building confidence in EIA: Key environmental auditing assumptions in the South African EIA system



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Introduction (1)

- EIA is a successful policy innovation, supporting environmental protection and sustainable development.
- Confidence in the EIA process is a key to the success thereof
 - dependent on clear and transparent policies, strong partnerships, and effective stakeholder participation and consultation
 - can promote collaboration, improve outcomes and support sustainable economic development
- Effective EIA processes contribute to trust in the process
 - where clear policies are implemented consistently and there is meaningful stakeholder collaboration and participation.

Introduction (2)

- EIA effectiveness is under constant scrutiny (Morgan, 2012)
 - concerned with how well the **process** works, what **benefits** it delivers and which **factors contribute** to its success or shortfall (Sadler, 1996),.
- The focus of effectiveness evaluation is primarily on the decision-making process,
 - failing to acknowledge that most environmental impacts only occur post-decision-making, during project implementation, when mitigation activities are implemented.
- The failure to acknowledge the importance of post-decision-making activities, such as environmental auditing, in evaluating EIA effectiveness, may compromise the effectiveness evaluation, the expected environmental assessment outcomes and hence also confidence in EIA.
- A better understanding of environmental auditing effectiveness is therefore vital in the EIA effectiveness debate and in building confidence in the EIA process.

Introduction (3)

- Only a few studies have evaluated the effectiveness of environmental auditing to date (Evans *et al.*, 2011) and my research addresses this gap.
- To encourage holistic evaluations of EIA effectiveness, Loomis and Dziedzic (2018) called for more multidimensional and integrative studies that highlight linkages between the various effectiveness dimensions.
 - My research applies a multi-dimensional Theory of Change (ToC) approach to evaluate environmental auditing effectiveness.
- This presentation will briefly discuss the proposed ToC evaluation framework for environmental auditing in the South African EIA system, before focussing on the key assumptions that will be tested to evaluate the effectiveness of environmental auditing.

The Theory of Change (ToC) approach to evaluation



ToC Overview (1)

- ‘Theory of change’ (ToC) simply stated
 - is a theory of how and why an initiative works (Weiss, 1995).
 - applies critical thinking to the design, implementation and evaluation of initiatives and programmes, intended to support change in their contexts;
 - is a participatory dialogue-based process, where stakeholders articulate long-term goals and identify the conditions they believe have to unfold for those goals to be met;
 - generates a *‘description of a sequence of events that is expected to lead to a desired outcome’* (Vogel, 2012);
 - usually captured in a diagram and narrative, providing a guiding framework that model conditions as desired outcomes, map these in causal pathways and map interventions (activities & outputs) to the outcomes pathway.

ToC Overview (2)

- A ToC approach to evaluation is “*a systematic and cumulative study of links between activities, outcomes & contexts*” (Connel & Kubisch, 1998)
 - clarifies research questions and helps to identify what should be evaluated;
 - facilitates the development of a conceptual evaluation framework for complex policy instruments or programmes that is already designed and implemented, which can be used to test hypotheses and assumptions about what actions bring about the intended outcomes;
 - not an evaluation method, but an outcomes-based approach to evaluation;
 - relies upon familiar methodological tools for information collection and analysis to measure outcomes and activities and strengthen the credibility of conclusions.
- Globally ToC has been increasingly applied as an evaluation method in the monitoring and evaluation of policy and programme implementation;
 - South African Government has selected ToC as its preferred method for such evaluations.



Methodology to develop a Theory of Change (ToC) model for evaluating environmental auditing

Methodology

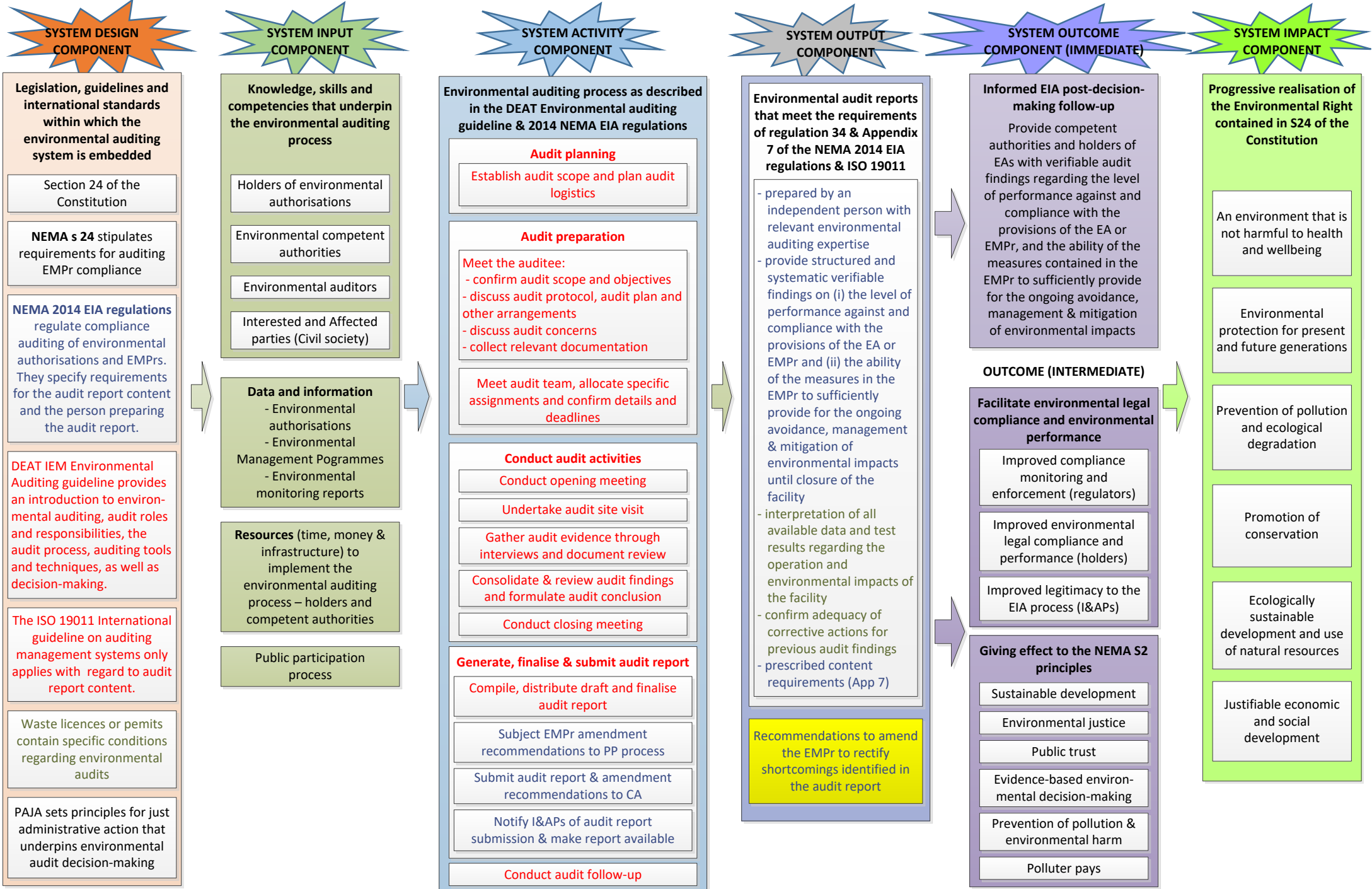
- Literature study to research the environmental auditing related policy and legal framework, as well as relevant environmental auditing guidelines in the South African EIA system.
- Developed a concept Theory of Change evaluation framework, based on the author's understanding of the design framework and extensive environmental auditing experience;
- Refined the TOC framework for environmental auditing evaluation through workshops and discussions with environmental auditing and TOC specialists and academic colleagues;
- Busy finalising the key assumptions and evaluation framework;
- Will use the TOC framework to evaluate environmental auditing case studies.

Environmental auditing ToC evaluation framework



Environmental auditing ToC evaluation framework

- The evaluation framework is structured around six components:
 - **What was environmental auditing designed to do** in the SA EIA system? (*Design*) i.e. which criteria specify the design?
 - **What must be in place** to implement environmental auditing in the SA EIA system? (*Inputs*) i.e. what investments/resources are required?
 - **What needs to be done** to conduct environmental audits in the SA EIA system? (*Activities*)
 - **What is produced** during the environmental auditing process in the SA EIA system? (*Outputs*)
 - **What is achieved** by environmental auditing in the SA EIA system, either immediately or in the medium term? (*Outcomes*)
 - **What will the ultimate effect/s** of environmental auditing in the SA EIA system **be**? i.e. long-term outcomes (*Impacts*)



Narrative causal logical statement

- Environmental auditing is embedded in legislation and related guidelines (*design component*).
- It relies on certain levels of skill, competence and experience of auditors, auditees and government officials (*input component*)
 - to conduct and close-out systematic, independent and documented processes for obtaining audit evidence and evaluating it objectively, to evaluate the adequacy and effectiveness of environmental management measures and determine the extent to which the audit criteria are fulfilled (*activity component*).
- Audit results are documented in audit reports,
 - with recommendations for addressing the audit findings (*output component*),
 - to improve environmental management measures, environmental compliance and environmental performance (*outcome component*) and
 - contribute towards integrated environmental management and the progressive realization of the environmental right in the SA Constitution (*impact component*).



ToC key assumptions

ToC key assumptions

- ToC articulates the assumptions about how change happens during the implementation of a policy or process.
 - Making assumptions explicit is perhaps the most important stage in a theory of change process and also the most challenging.
- Assumptions are
 - the '*theories*' that must be evaluated (Vogel, 2012);
 - '*those conditions in the environment in which the initiative takes place that are important to recognize and which must hold true for the theory to be realised*' (Taplin & Rasic, 2012).
- The ToC evaluation framework contains key assumptions
 - about contextual conditions, the change process (inputs, activities and outputs), as well as the drivers of change that may affect the desired outcomes.
- The assumptions will be tested through well formulated questions and KPIs.

Key environmental auditing ToC assumptions (1)

Element	Evaluation question	Assumptions
Design	What are the objectives of environmental auditing in the SA EIA system and how should it contribute to Integrated Environmental Management?	1. The enabling policy and legislative framework is clear and unambiguous about what environmental auditing is and what it should achieve.
		2. The enabling policy and legislative framework supports the effective planning and conduct of environmental audits, as well as follow-up and close-out of environmental audit findings.
Inputs	To what extent and how do the inputs to environmental auditing contribute to achieving the objectives thereof?	3. Audit criteria are of sufficient quality that they facilitate the effective planning and execution of environmental audits.
		4. There are adequate human resources with sufficient skills and competencies to effectively plan, execute and conclude environmental audits.
		5. Sufficient and adequate data & information are available from auditees to enable and facilitate efficient environmental auditing.
		6. Environmental audits can be executed at a reasonable cost.

Key environmental auditing ToC assumptions (2)

Element	Evaluation question	Assumptions
Activities	To what extent and how is the environmental auditing process effective in achieving the objectives thereof?	<p>7. Environmental audits are planned, executed and concluded in an effective and transparent manner, in line with the enabling legislation framework.</p> <p>8. The environmental auditing process for obtaining audit evidence and evaluating it to determine the extent to which the audit criteria are fulfilled is systematic and objective.</p> <p>9. Standardised auditing methodologies comply with professional standards, reflect the key principles of quality assurance and quality control and facilitate effective audits.</p> <p>10. Environmental auditing practices ensure the integrity of the audit through practical negotiation and construction between auditors and auditees.</p> <p>11. Environmental audit recommendations to amend the EMPr and/or EA, to rectify shortcomings identified in the audit report, is subjected to an appropriate and approved public participation process.</p> <p>12. The holders of environmental authorisations submit environmental audit reports to the competent authority for the period during which the EA & EMPr remain valid.</p> <p>13. Potential & registered interested & affected parties are notified of the submission of the environmental audit reports.</p> <p>14. Environmental audit reports are immediately made available on request.</p> <p>15. Environmental audit findings are effectively followed-up and closed-out.</p>

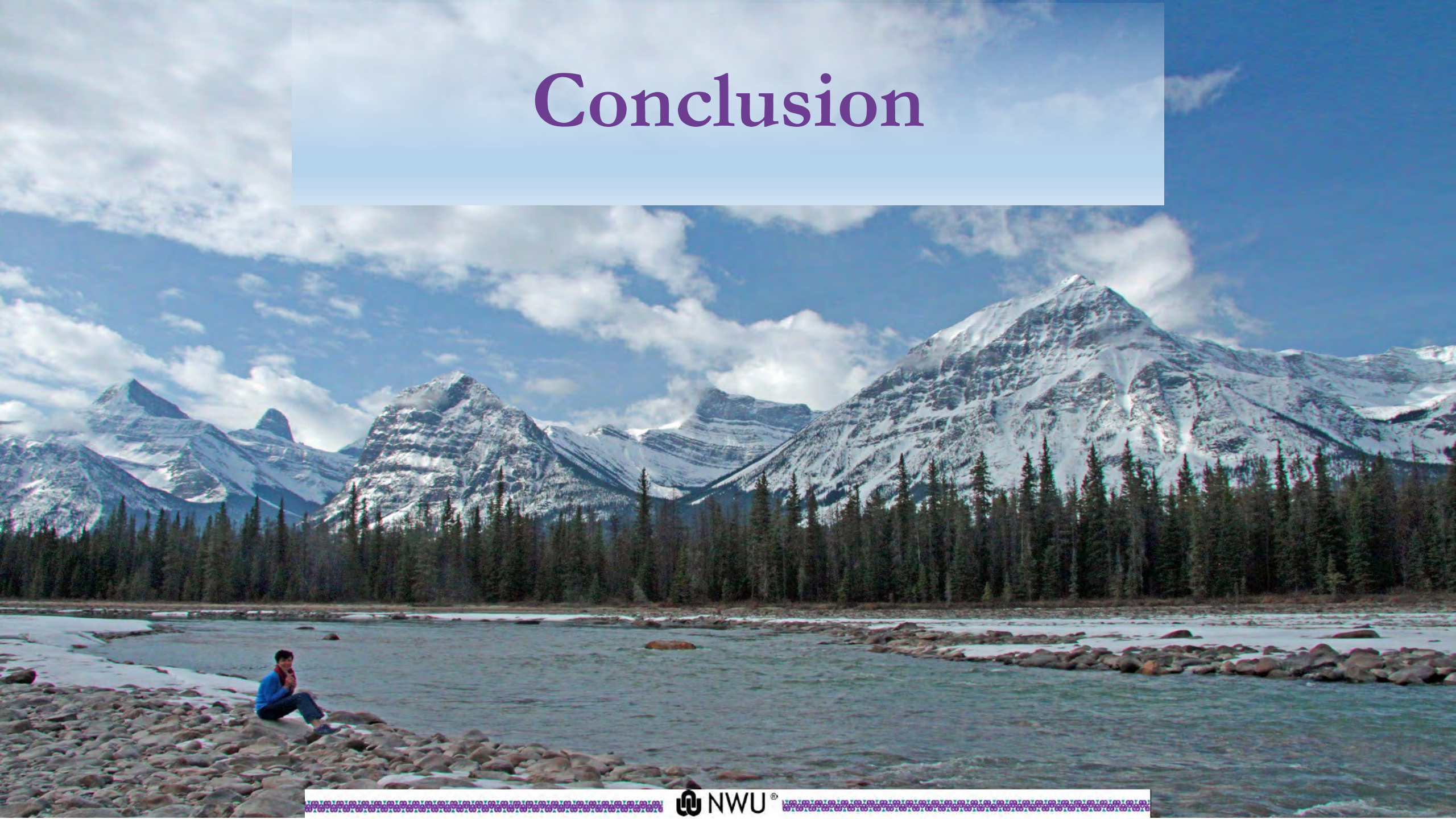
Key environmental auditing ToC assumptions (3)

Element	Evaluation question	Assumptions
Outputs	To what extent and how do environmental audit reports and associated recommendations contribute to effective environmental auditing?	16. Environmental audit reports provide a complete , accurate, concise and clear record of the audit and meet the relevant content requirements.
		17. Environmental audit findings and conclusions are of sufficient quality that they facilitate the effective conclusion of environmental audits.
		18. Environmental audit recommendations to amend the EMPr and/or EA are of sufficient quality to rectify shortcomings identified in the audit report, where the findings indicate insufficient environmental impact mitigation or insufficient levels of compliance.
		19. Environmental audit reports & recommendations contribute to transparency and accountability .
Outcomes	To what extent and how has the environmental auditing system been effective in achieving the objectives of integrated environmental management, improved environmental management, governance & performance?	20. Environmental audits contribute to achieving the NEMA objectives of integrated environmental management.
		21. Environmental audits contribute to improved environmental management and oversight , including reduced environmental risks, better mitigation measures, clearer roles and responsibilities, as well as improved environmental governance.
		22. Environmental audits contribute to improved environmental performance and environmental quality .

Key environmental auditing ToC assumptions (4)

Element	Evaluation question	Assumptions
Impacts	How and to what extent has the environmental auditing system contributed to the progressive realisation of the Constitutional right to an environment that is not harmful to human health and well-being and that is protected through reasonable legislative and other means?	23. Environmental audits contribute to the progressive realisation of the Constitutional right to an environment that is not harmful to human health and well-being and that is protected through reasonable legislative and other means.

Conclusion



Conclusion

- **Understanding environmental auditing effectiveness is vital in understanding EIA effectiveness and improving trust in the EIA process.**
- **My research has -**
 - **developed a ToC evaluation framework for environmental auditing effectiveness;**
 - **identified key ToC assumptions - 2 contextual, 17 process & 4 outcome.**
- **These assumptions will be tested to evaluate the effectiveness of environmental auditing in the SA EIA system.**
- **Research results will improve our understanding of environmental auditing effectiveness and confidence in the SA EIA system.**

Let's continue the conversation

- I will appreciate expert inputs in my environmental auditing research
- If you are willing to join online workshops to reflect on
 - the TOC environmental auditing framework
 - the key TOC assumptions
- Please
 - contact me during the conference;
 - send me an e-mail indicating your willingness to participate; or
 - forward any questions or comments to theunis.meyer@nwu.ac.za