

Experiences from the project
"Dynamic modelling as a basis for policy decision
– Reducing the gap between modelling and
policies through stakeholder interactions"

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Outline

- Project background
- The model ForSAFE
- Aim
- Methods
- Experiences

Background

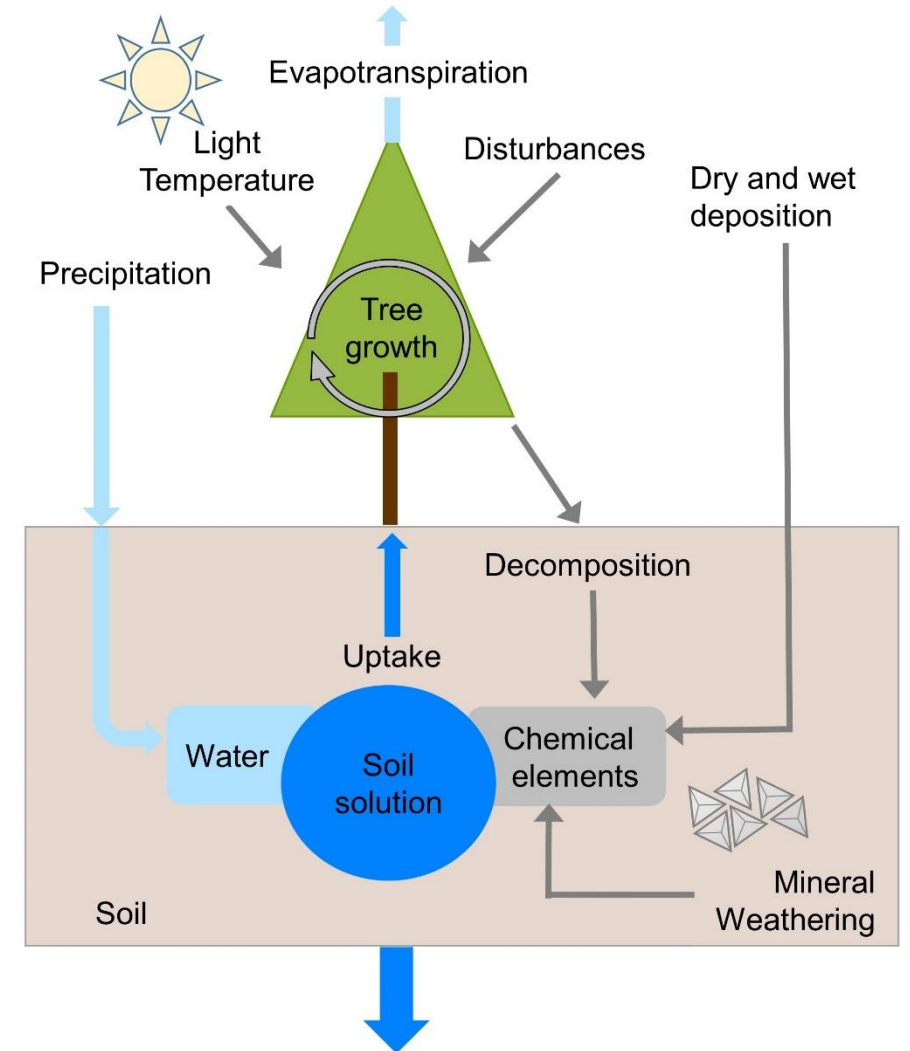
- Increased pressure on forest:
 - Important to be able to predict the effects on forest soils and runoff water in the future, for optimizing decisions about forest management and emissions reduction.
 - Increased need for holistic approaches, tools as dynamic ecosystem models for predicting combine effects on forest.

Background

- The national agencies do use results from dynamic models, as a basis for evaluation and for management recommendations, however
- ..not using their full potential
- Discussions about uncertainties related to models dominate over the discussions about dynamic effects and process understanding.

The ForSAFE model

- Simulates the response of forest ecosystems to environmental changes
- Indicators:
 - Biomass production
 - Carbon sink/stock
 - Total runoff and water quality indicators
 - Deadwood(biodiversity)
- In-depth view by analyzing the dominating drivers



Aim

- to identify barriers that prevent dynamic modelling from being utilized to its full capacity in a policy context, and to develop, test and evaluate methodologies for improved stakeholder interactions.

Stakeholders

- Salar Valinia, Naturvårdsverket, Natural Acidification Only
- Andreas Drott, Skogsstyrelsen Umeå, Soil specialist
- Hillevi Eriksson, Skogsstyrelsen, Climate and bioenergy specialist
- Mats Svensson, Havs och Vatten myndigheten, Unit Manager - Unit for Analysis and Research
- Emmelie Johansson, Havs och Vatten myndigheten, Zero Eutrophication
- Per Olsson, HAV



Methods – Stakeholder interaction

1. Individual interview -“before”

- Purpose: How models are used and looked at today?
- Get to know each other

2. Joint workshop

- Purpose: Increase the usability of the dynamic models in a policy context
- Goal: together choose a number of indicators and scenarios that we will model

3. Follow ups

4. Final workshop “after”

Some outtakes from the interviews

- Usability hindered by e.g. lack of trust for the model if results and uncertainties is not communicated well
- Use results from dynamic models:
 - Together with monitoring
 - To make an overview of the knowledge situation, together with other sources
- All but one has research background – effects the communication

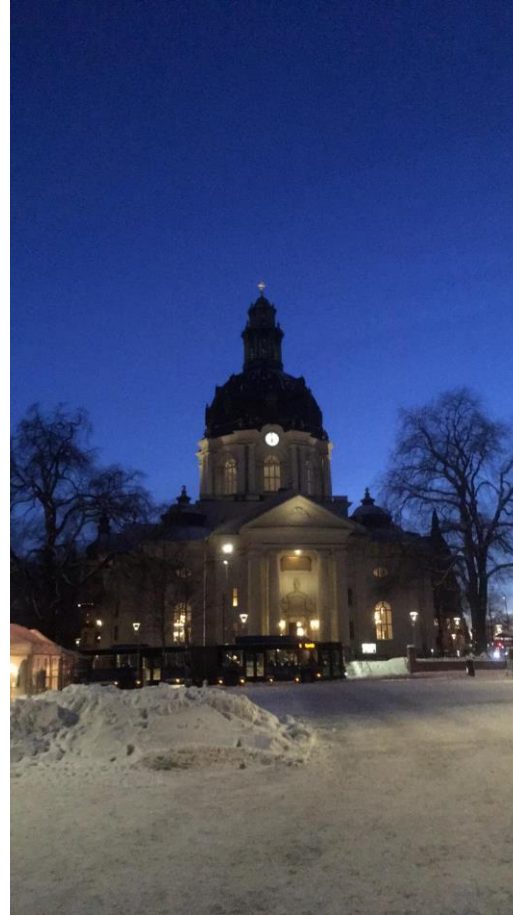
Some reflections from the workshops

- Prioritized issues : water stress, nitrogen fertilization, need for optimizing management, biodiversity
- Present the results with a broader base can help in decision-making
- The broader base of the results can help in decision-making
- Scientists need to understand the decision situation, e.g. long term vs. short term

Other reflections

- Creating trust reduces the barrier for utilization (but person sensitive)
- Trust enables this kinds of interaction
- What is my role going into a project like this?
- What happens to research when you are not afraid to take in input during the trip?
- Be prepared and open for changes!

Thank you! Questions? Comments?



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