

Nutrient Management Tools

Update

8 May 2023



Ministry for the
Environment
Manatū Mō Te Taiao

Purpose of this slide deck

To update you on the OverseerFM review work programme to assist with your preparedness and support



Introduction



Read the report:

[Government response to the findings of the Overseer peer review report | Ministry for the Environment](#)



1. Overseer update

Overseer redevelopment programme - detail

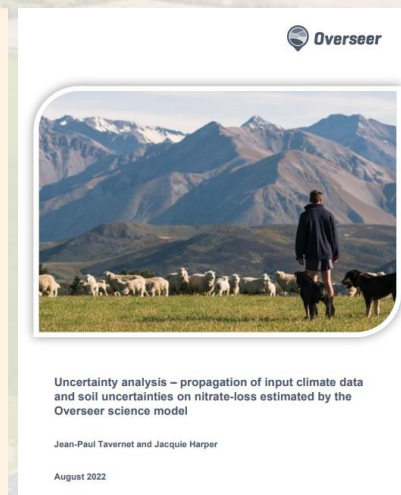
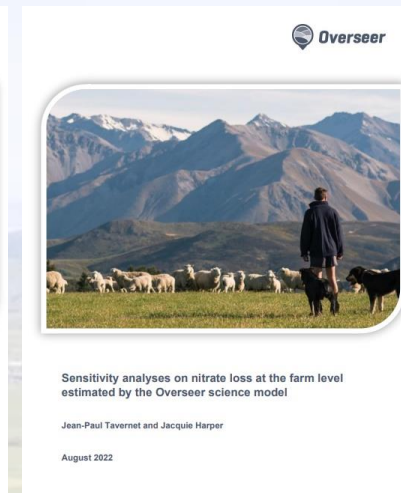
The redevelopment programme included:

- daily climate data and long-term averages
- soil N (nitrogen) mineralisation and immobilisation and, crop model developments
- model testing - sensitivity, uncertainty and sensibility
- multi-layer hydrology sub-model
- model transparency



The programme has been completed - almost

- Overseer is in the process of evaluating the new components for inclusion into the model
- Overseer has published some redevelopment material on its website
- Overseer and AgResearch are working on validation
- Once validation is completed the work will be officially closed off with a final report



There has been some validation of the model

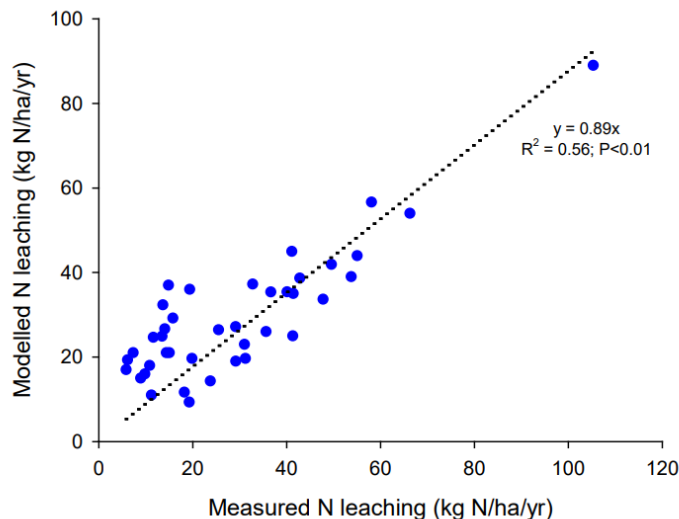


Figure 1: Relationship between measured and modelled annual nitrogen leaching loss (kg N/ha/year) based on measured data from New Zealand paddock-scale grazing system studies and modelled data using OVERSEER.

- A report was published for MPI in 2021 that includes some validation work comparing Overseer modelled nitrate loss with observations
- The work used a number of different farm locations across New Zealand – these are outlined in the study
- Overseer and AgResearch are looking at how this work can be incorporated into the current validation work
- **This will require additional discussion when the validation work is complete**

2. Risk Index Tool (RIT) update

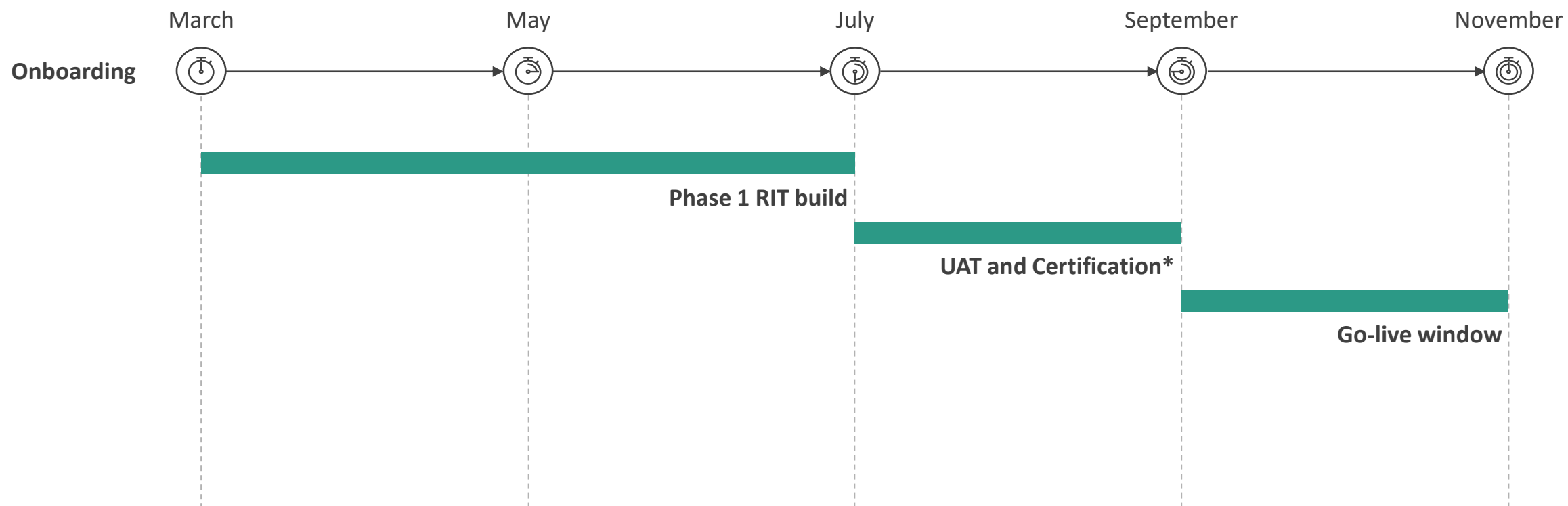


Key messages

Nov 2022 – Mar 2023 update

- RIT prototype delivered at the end of Nov 2022 - Rework required to enable its wider use
 - Council portal delivered and determined to not be fit for purpose
- After input from Subject Matter Experts (SME) group and Technical Working Group, significant workflow/data input changes were identified, scoped and agreed with vendor
 - Finalisation of User Interface / Calculation Service design (Dec 2022)
- New vendor with different skill set and approach on-boarded (Mar 2023)
- Reach agreement with new vendor for delivery of Operator Portal

Proposed phases schedule 2023



*UAT (User Acceptance Testing). Accreditation and Certification is a systematic procedure for evaluating, testing, and authorising go-live activities, as well as ensuring business as usual (BAU) support and monitoring processes are in place.

3. Mātauranga Māori

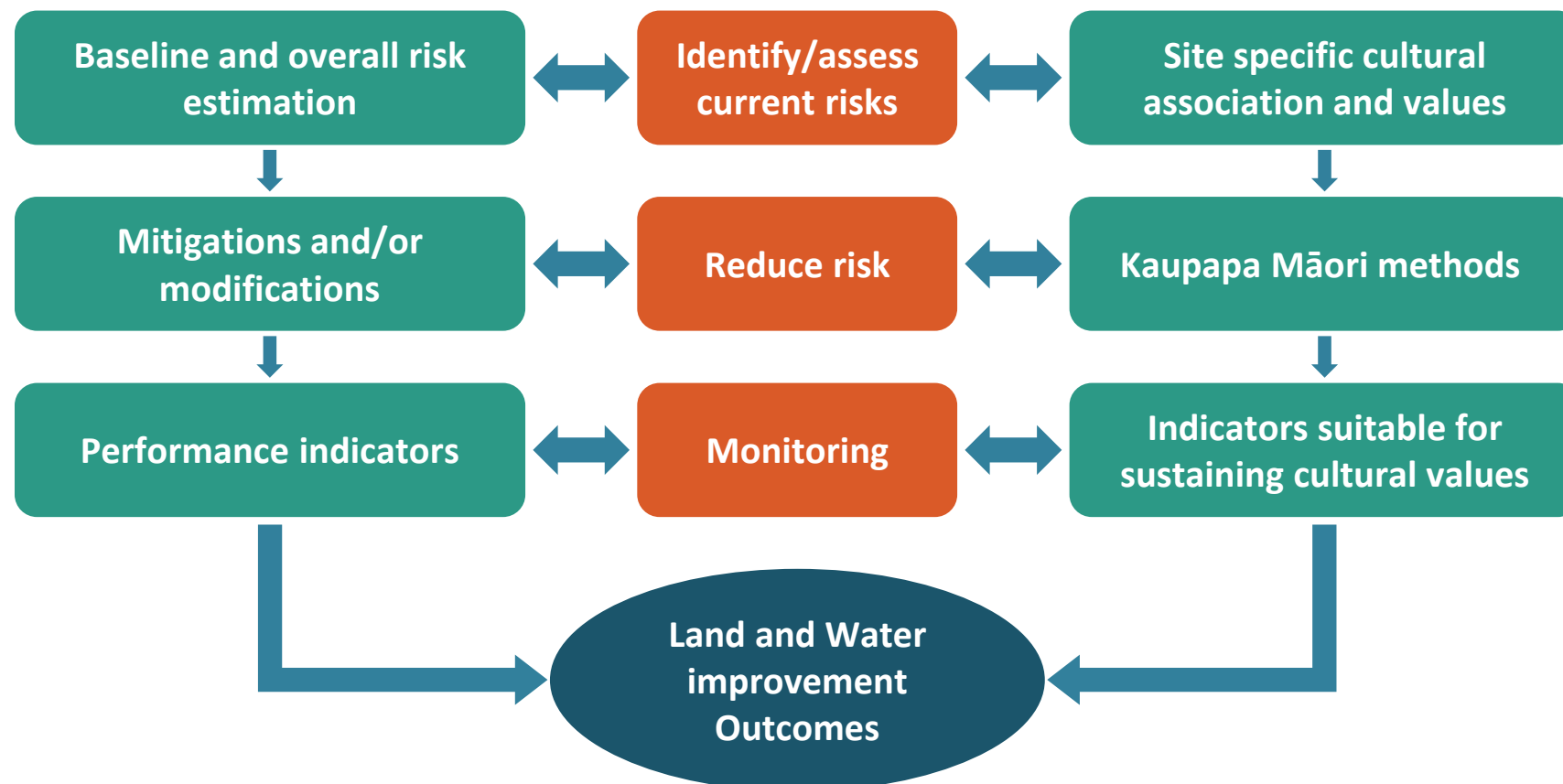


Key messages

To engage tangata whenua and ensure Māori worldviews are included from the beginning when developing tools

Decision support tools

Mātauranga Māori body of knowledge



An aerial photograph of a river meandering through a lush green landscape. The river is bordered by dense trees and grassy banks. In the background, rolling hills and a small town are visible under a clear sky. A large, semi-transparent blue circle is overlaid on the left side of the image, containing the text.

4. Principles, stewardship and governance – rules for tools

Key messages

MfE to own, govern and steward the RIT, in the *interim*.

MfE will develop the governance and stewardship structures required to assess and evaluate **nutrient management tools** prior to regulatory implementation. These structures will be socialised with the regional sector and MPI prior to approval.

MfE will develop an **assessment checklist** for the RIT, new and existing nutrient management tools. The checklist will be socialised with the regional sector and MPI prior to approval.

Communications



Communications overview

- All RIT communication materials are published on the MfE website.
- Our communication materials are primarily be intended for councils.
- Anyone with an interest in freshwater policy is able to read the materials on the MfE website.
- We email news and updates to our stakeholders from our RIT mailbox.
- If you have any queries, please email: riskindextool@mfe.govt.nz

Next steps



Next steps

The government made commitments in response to the Overseer whole-model review

- RIT will be released in phases for use.
- MPI will provide updates on Overseer redevelopment.
- MfE will develop an assessment checklist for new and existing nutrient management tools, including the RIT.
- MfE is scoping guidance on how to create a mātauranga Māori framework that works alongside tools at local scale.
- All RIT communication materials will be published on the MfE website.

***No one approach is the solution to managing diffuse nutrients.
A systems approach, at place, is required.***

Contact

If you have any queries, please email:
riskindextool@mfe.govt.nz