

Reclaiming Resources: Optimising Soil Reuse

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Background

- Between 4.5 7.5 millions tonnes of soil goes to landfills every year*
- Up to 54%+ of this material is not contaminated soil**
- WasteMINZ been advocating for the development of a framework to optimise soil reuse in infrastructure and development sectors



About the project

- Core project team, supported by many others to provide crosssectional representation within the sector
- First phase of the work includes:
 - · Development of a Vision for surplus soil management
 - Analysing the gaps and barriers of the current system
 - Provide recommendations on 3 to 5 priority actions to progress a nationwide soil management framework
- Next phase TBA pending identification of priority actions

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Purpose of this session

- Engagement with the sector, to share our Vision and purpose
- Consultation within the sector: targeted and general
- We will share the gaps/barriers identified, highlighting those we think relevant to your sector area
- We are seeking feedback on these gaps/barriers i.e. accuracy, priority, etc.
- Our current objective is identification of the gaps/barriers and their significance, not necessarily their solutions
- Several ways in which feedback can be provided
- Feedback to be provided on/before 27 October 2025



The Vision

Our Vision

That soil is managed as a finite resource: its economic, physical, environmental, wellbeing, and cultural attributes are understood and valued by all, and supported and preserved as far as practical.

That Aotearoa New Zealand's operating, regulatory and planning structure includes a viable, collaborative, and robust system to enable the economic and environmental opportunities for soil to be realised. In this system:

- · soil maintains its highest value use,
- infrastructure and development projects are designed to minimise soil disturbance, and
- if soil needs to be disturbed, it is managed in accordance with a soil management hierarchy (*yet to be developed).

Essentially, creating a system where it is better and smarter to reuse soil than to landfill it.

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Key issues

- Lack of Relevant Guidance
 - There is a lack of clear and unified regulations and standards for soil reuse available in Aotearoa NZ
 - There are a lack of incentives (and conversely enforcement) around sustainable soil management and reuse



- Soil Definitions and Standards
 - Multiple and varied definitions of soil within NZ regulatory context lead to confusion and inconsistency
 - Many standards focus on "good ground" which excludes many soil types (e.g., topsoil) essential for ecosystem function, leading to over-stripping and soil disposal.

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Key issues

- Perception and Liability concerns
 - Sites with soil issues are considered less valuable
 - Confusing or conflicting definitions of 'background', 'cleanfill', and contamination impede clear risk assessments.
 - Reputational, compliance, contractual or long-term risk



- Regulatory-related issues
 - Existing regulatory frameworks (like the NES-CS) create hurdles related to the interpretations of 'cleanfill' and 'background' requiring consent to move soil(s)
 - Consent conditions and regulatory uncertainty discourage reuse
 - There is a disconnect between various government authorities which results in fragmented management and oversight

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Key issues

- Economic barriers
 - The direct cost of disposal, and lack of financial incentives or streamlined processes for reuse, means potential savings from retaining and reusing surplus soils are not realised.
 - The physical cost of soil disposal (developer), and the loss of revenue from soil disposal (contractor/operator)



- Site and Material Suitability
 - Inadequate or inconsistent site investigations and characterisation of soils inhibit appropriate assessment of soil suitability for reuse.
 - Lack of standardised testing protocols and soil specifications*
 - Some sites/soils are simply not suitable for reuse in certain engineering applications**
 - Geotechnical requirements often necessitate strict soil quality controls, which may contradict reuse objectives***

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Key issues

- Logistical barriers:
 - Lack of/mismatch of supply and demand for surplus soils, with a lack of infrastructure options to manage soils.
 - Convenience and familiarity makes disposal easier and more attractive than reuse.
 - Lack of coordination and early planning and engagement regarding soil reuse in project contracts and development phases.
 - Projects often operate under tight timelines. Soil reuse planning or extra testing / consents can introduce delays, which contractors see as risky.



- Cultural and Engagement
 - Lack of engagement and consideration of Te Ao Māori perspectives and cultural connections to soil and mana whenua.
 - Absence of cultural considerations in current regulatory and risk assessment frameworks.

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Consultation questions

Questions we would like you to consider are:

- Do you agree with the key issues identified / for your sector?
- How would you prioritise them to support moving toward the Vision?
- Are there any issues/gaps/barriers missing from the list that should be added?
- From your perspective, what is the biggest reason for soils not being reused/being disposed of?
- Why or how is this a problem?
- If there was one thing that could be done to improve it, what would it be?

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Consultation and Feeback

Next steps

Report due to be submitted to MfE by end of October.

Ways to provide further feedback:

- Via a short survey
- Via email: madelon@wasteminz.org.nz

Feedback due 27 October

For more information or to subscribe to project updates:

https://www.wasteminz.org.nz/soil-surplus-project