

Setting the scene: Regulatory and commercial drivers & NZ context

Samantha Iles – SLR Consulting NZ
Lisa Scott – Environment Canterbury
Stephanie Dijkstra – WSP
James Court – bp

Agenda

- Te Tiriti and settlement legislation
- Regulatory hierarchy
- Technical guidance documents
- Passive vs active discharge consenting
- Permitted activities
- Compliance boundaries and thresholds
- Consenting
- Commercial drivers
- Resource management reform





How settlement legislation affects groundwater and contaminated land practice

Influence on Regional Planning

Settlement legislation shapes regional planning and environmental limits impacting groundwater contamination management indirectly.

Precautionary Approach in Connected Waters

Legislation prompts conservative contaminant levels and adaptive management for groundwater linked to surface freshwater bodies.

Consent and Monitoring Conditions

Practitioners see settlement legislation results in stricter consent conditions and rigorous groundwater monitoring requirements.

Integration with Resource Management Act

Settlement legislation complements, not replaces, Resource Management Act effects assessments in groundwater contamination practice.

Role of Iwi settlement legislation in groundwater regulation

Settlement Legislation Framework

Treaty settlement legislation creates statutory freshwater governance influencing regional planning and water protection decisions.

Recognition of Iwi and Hapū

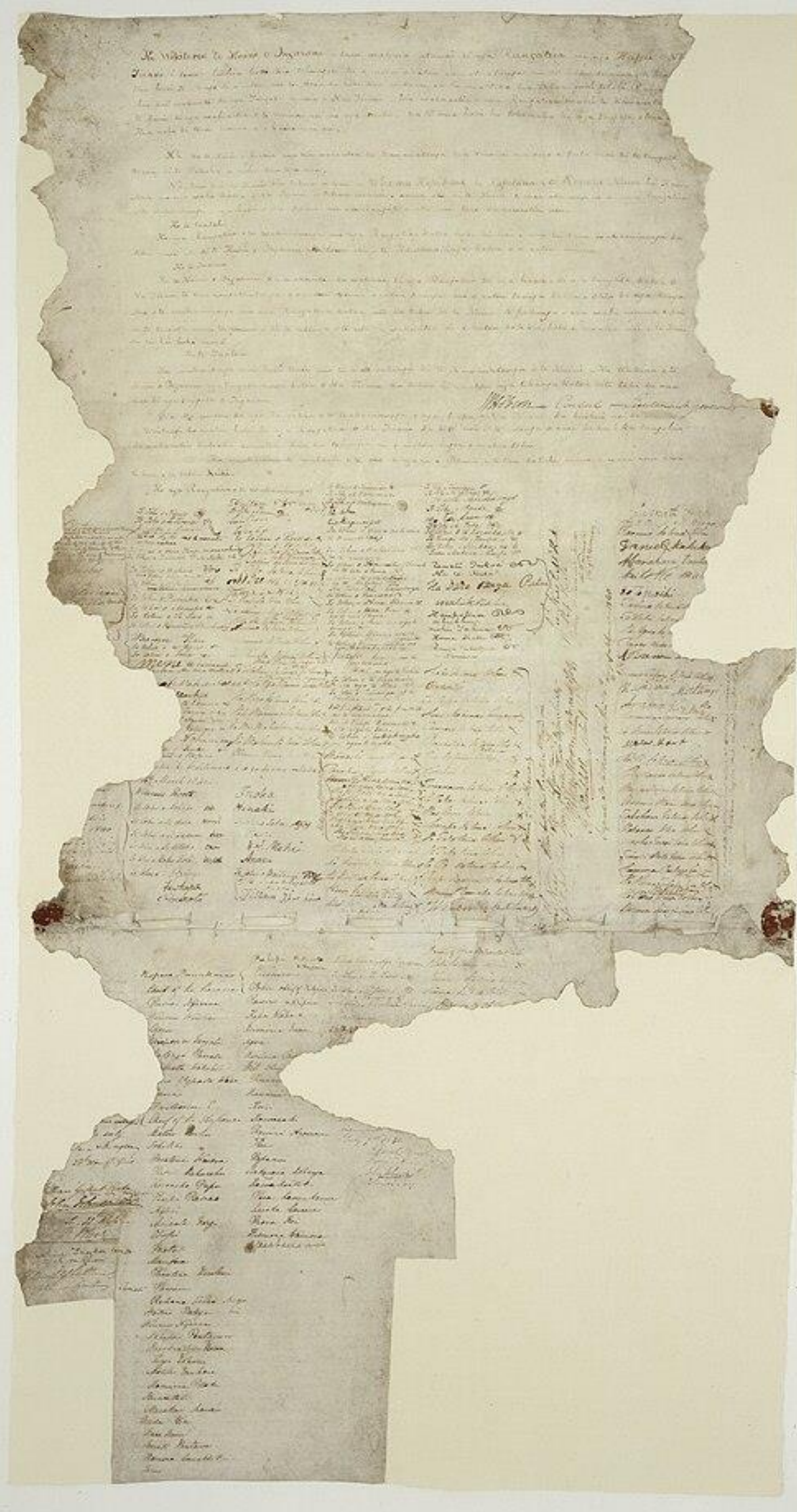
Acts recognize and restore iwi and hapū relationships with rivers, lakes, and catchments through co-governance bodies.

Integrated Freshwater Management

Settlement legislation links groundwater and surface water management under unified planning frameworks.

Regulatory Impact on Contamination Management

Settlement Acts indirectly influence groundwater contamination assessments and management through planning frameworks.



Key Settlement Legislation

Waikato River Settlement

The 2010 Act sets a vision and strategy legally driving freshwater goals across the Waikato catchment, including groundwater.

Whanganui River Legal Recognition

The 2017 Act grants the Whanganui River legal personhood, influencing planning and groundwater management decisions.

Co-management Frameworks

Settlement Acts for Waipā River and Te Arawa Lakes establish co-management, integrating local governance with waterway protection.

Other National Settlements

Acts like Tūhoe and Ngāti Rangi create governance for unique waterways, shaping regional freshwater management.



The Resource Management Act (1991)

Under the RMA, groundwater is “water” and any activity that may result in contaminants entering groundwater must have effects assessed.

- Section 15(1) of the RMA:
- “No person may discharge any—
 - contaminant or water into water; or
 - contaminant onto or into land in circumstances which may result in that contaminant (or any other contaminant emanating as a result of natural processes from that contaminant) **entering water; . . .**
- . . . unless the discharge is expressly **allowed by a . . . rule in a regional plan** as well as a rule in a proposed regional plan for the same region (if there is one), or **a resource consent.**”

What is a contaminant?

- **RMA Definitions:**
- **contaminated land** means land that has a **hazardous substance** in or on it that—
 - (a) has significant adverse effects on the environment; or
 - (b) is reasonably likely to have significant adverse effects on the environment
- **contaminant** includes **any substance** (including gases, odorous compounds, liquids, solids, and micro-organisms) or energy (excluding noise) or heat, that either by itself or in combination with the same, similar, or other substances, energy, or heat—
 - (a) when discharged into **water**, changes or is likely to change the physical, chemical, or biological condition of water; or
 - (b) when discharged onto or into land or into air, changes or is likely to change the physical, chemical, or biological condition of the land or air onto or into which it is discharged

- Applies to all freshwater (including groundwater) and receiving environments (e.g., estuaries and coastal).
- Directs councils to set environmental limits that:
 - Improve degraded water bodies, and maintain or improve all others
 - Avoid any further loss or degradation of wetlands and streams
- Sets national bottom lines for lakes and rivers (but not for groundwater)

National Policy Statement – Freshwater Management (NPS-FM 2020)



NPSFM NOF freshwater limits (rivers and lakes)

Appendix 2A – Attributes requiring limits on resource use



Guide water quality limits
in regional plans

[npsfm-2020-amended-december-2025](https://environment.govt.nz/assets/publications/npsfm-2020-amended-december-2025.pdf)
<https://environment.govt.nz/assets/publications/npsfm-2020-amended-december-2025.pdf>

Table 5 – Ammonia (toxicity)

Value (and component)	Ecosystem health (Water quality)	
Freshwater body type	Rivers and lakes	
Attribute unit	mg NH ₄ -N/L (milligrams ammoniacal-nitrogen per litre)	
Attribute band and description	Numeric attribute state	
	Annual median	Annual 95th percentile
A 99% species protection level: No observed effect on any species tested.	≤0.03	≤0.05
B 95% species protection level: Starts impacting occasionally on the 5% most sensitive species.	>0.03 and ≤0.24	>0.05 and ≤0.40
National bottom line	0.24	0.40
C 80% species protection level: Starts impacting regularly on the 20% most sensitive species (reduced survival of most sensitive species).	>0.24 and ≤1.30	>0.40 and ≤2.20
D Starts approaching acute impact level (that is, risk of death) for sensitive species.	>1.30	>2.20

Numeric attribute state is based on pH 8 and temperature of 20°C. Compliance with the numeric attribute states should be undertaken after pH adjustment.

- Dissolved Oxygen
- Total Nitrogen
- Total Phosphorus
- Ammonia (toxicity)
- Nitrate (toxicity)
- Suspended fine sediment
- *E. coli*
- Phytoplankton
- Periphyton
- Cyanobacteria



Regulatory Hierarchy



Technical Guidance Documents

- User's Guide NES-CS (2012)
- HAIL Guidelines
- CLMG No. 3 – 4
- Guidelines for Assessing and Managing Contaminated Gasworks Sites in New Zealand (1997)
- Health and Environmental Guidelines for Selected Timber Treatment Chemicals (1997)
- Technical Guidelines for Disposal to Land
- PFAS NEMP 3.0

Sampling/data collection and management:

- National Environmental Monitoring Standards (NEMS)
- Draft PFAS sampling protocols (MfE 2025)

Effects thresholds:

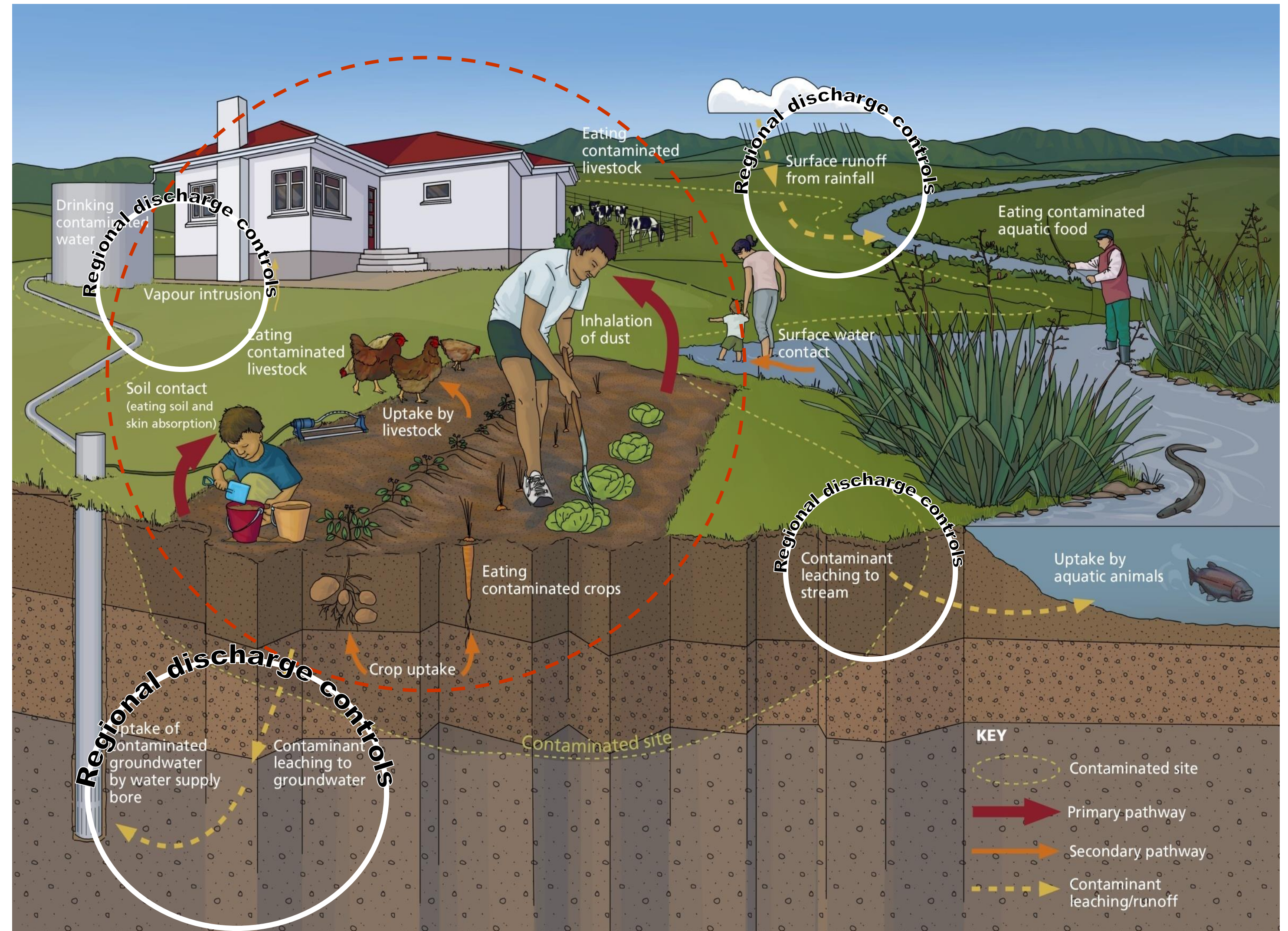
- DWSNZ (2022)
- Taumata Arowai Aesthetic Values for Drinking Water Notice (2022)
- ANZG (online) Guidelines for Fresh and Marine Water Quality

... AND MORE?

What about the NES-CS?

National Environmental Standards for Assessing and Managing Contaminants in Soil to Protect Human Health

- implemented by Unitary and District Councils
- focused on soil but explicitly expects groundwater to be considered where relevant



Resource Consenting (by Regional Councils)

PASSIVE

- Legacy contamination -> Passive discharge

- Require good understanding of the history and current state
- Investigation report (DSI, plume delineation, CSM, risk analysis)
- Assessment of environmental effects (AEE)
- Consent with conditions

ACTIVE

- New activities -> Discharges/ land use on HAIL site

- Stormwater discharges, earthworks, dewatering, etc. have different activity status on contaminated land.
- Otherwise permitted activities might need resource consent
- Talk to council staff – take advantage of pre-app advice

Regional plans



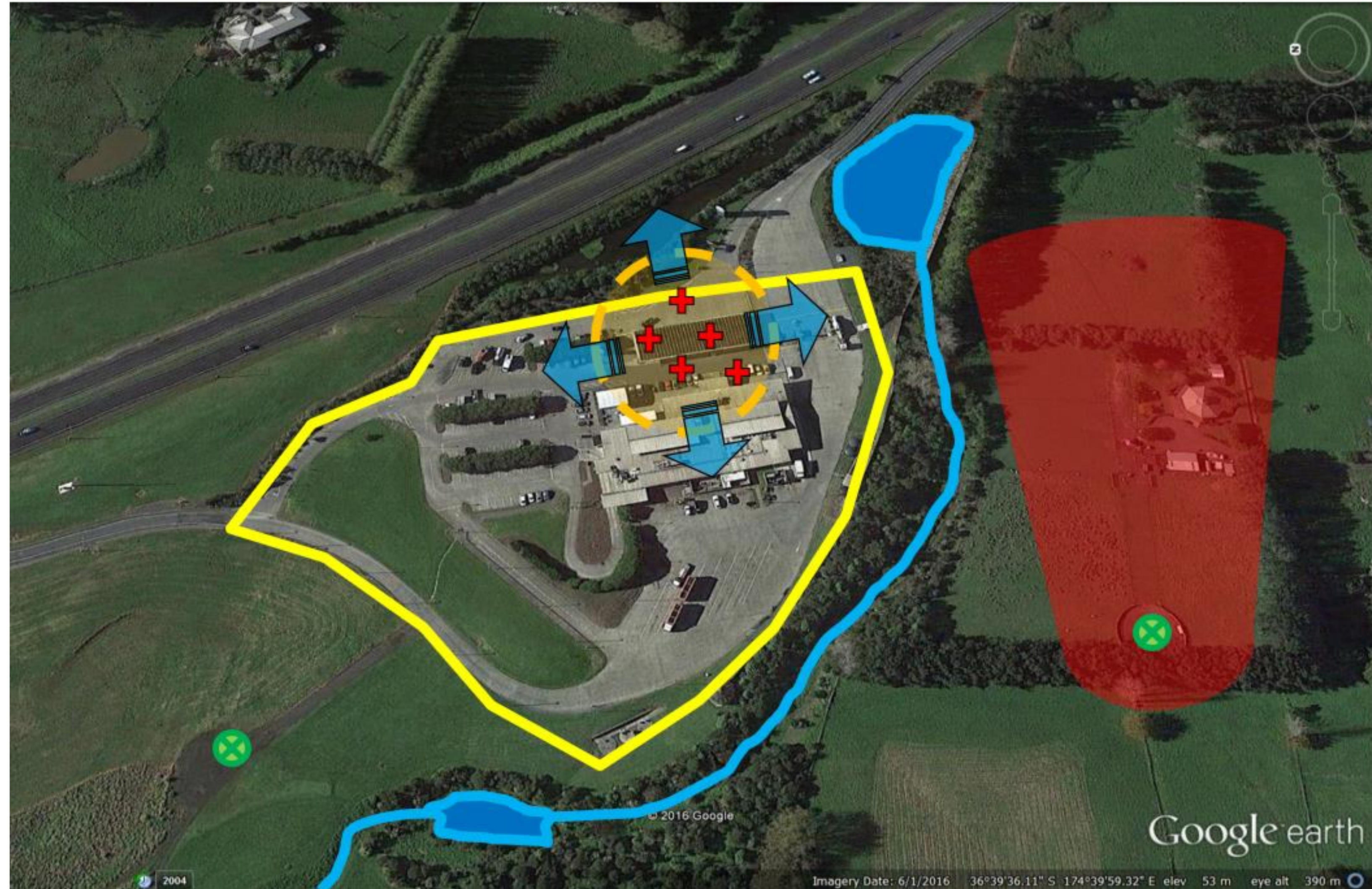
Regional plans

Permitted Activities

- Compliance boundaries
- Contaminant thresholds



Compliance Boundaries

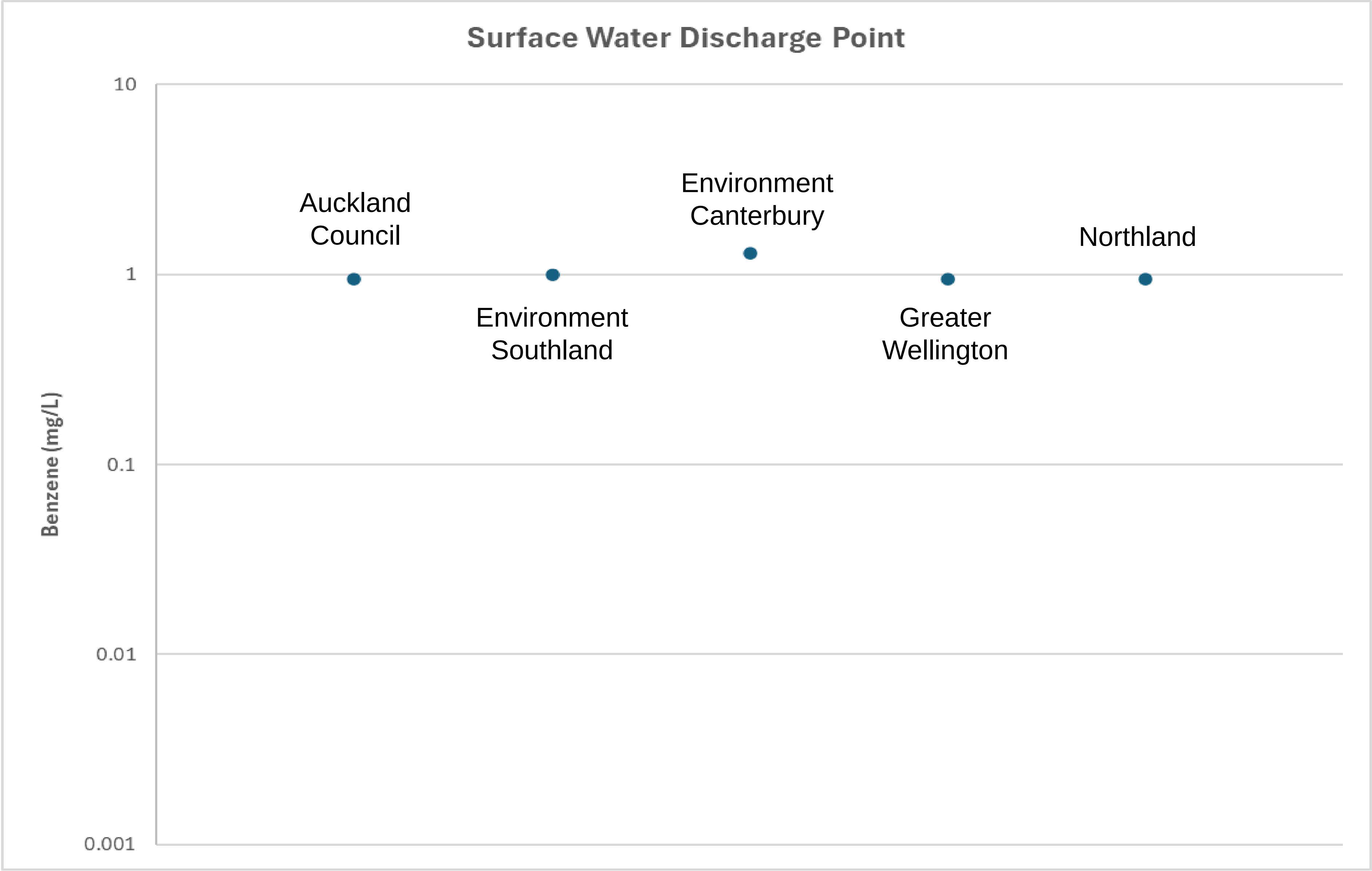


Boundaries & Thresholds

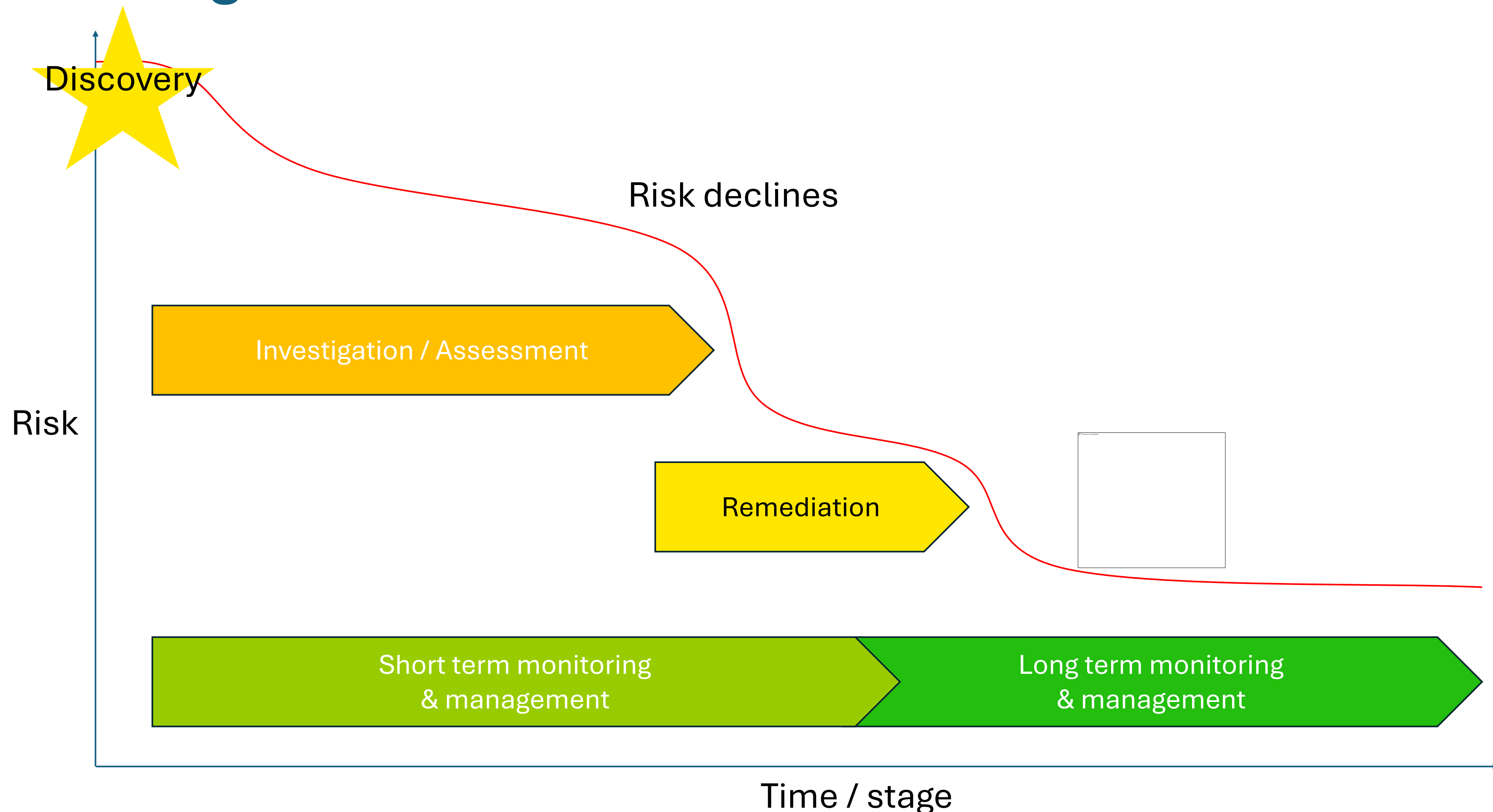
Media	Compliance Point	Auckland Council	Environment Southland	Environment Canterbury	Greater Wellington	Northland Regional Council
Soil		Various				
Ground-water	At boundary	ANZEEC 80-95% No separate phase	ANZEEC 80-90%	DWSNZ 50%	DWSNZ	DWSNZ
	Bore		DWSNZ	DWSNZ 50%	DWSNZ	
	50 metres		ANZEEC 80 – 90%		DWSNZ	DWSNZ
	Groundwater protection zone			DWSNZ 50%	DWSNZ 50%	DWSNZ ANZEEC 80-95%
	No point specified					
Surface water	Discharge point	ANZEEC 80-95% No separate phase	ANZEEC 80-90%	ANZEEC 90% RMA s.107 (Visible effects)	ANZEEC 95%	ANZEEC 95 – 99% RMA s.107
	Stormwater					

At the Property Boundary





When to get a consent?



What can go in a passive discharge consent?

- Timeline for cease of activities (if ongoing)
 - Remediation (capping, removal, *in situ* treatment, etc).
 - Confirmation sampling
 - Management plan(s)
 - Monitoring Natural Attenuation checklist
- Pre-application phase
- Ongoing monitoring requirements (groundwater, surface water)
 - Reporting to council/stakeholders
 - Triggers for further investigation (events, activities or monitoring results)
 - Redress for affected resource users
 - Triggers for close out (cease monitoring when ...)
- Consent conditions

Commercial Drivers

Must consider both regulatory and commercial responsibilities (e.g. lease agreements)

- Sometimes blended but sometimes different or ambiguous (e.g. 'leave the site clean and tidy')
- Change of ownership

Cross-boundary Issues

- Access requirements for off-site monitoring
- Risk of damaged off-site wells affecting compliance

Regulatory confidence

Risk Based Decision Making - Uncertainty vs Cost

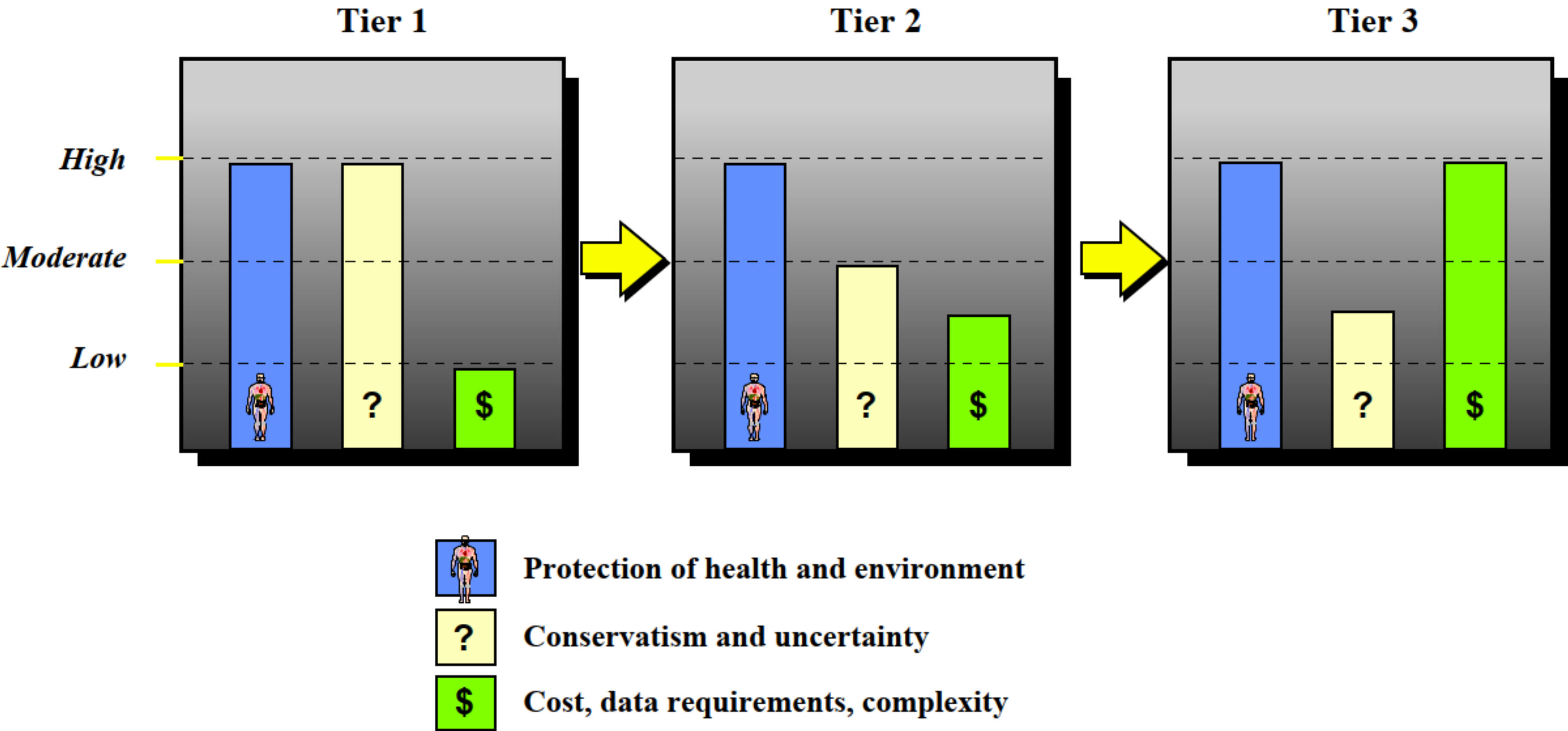


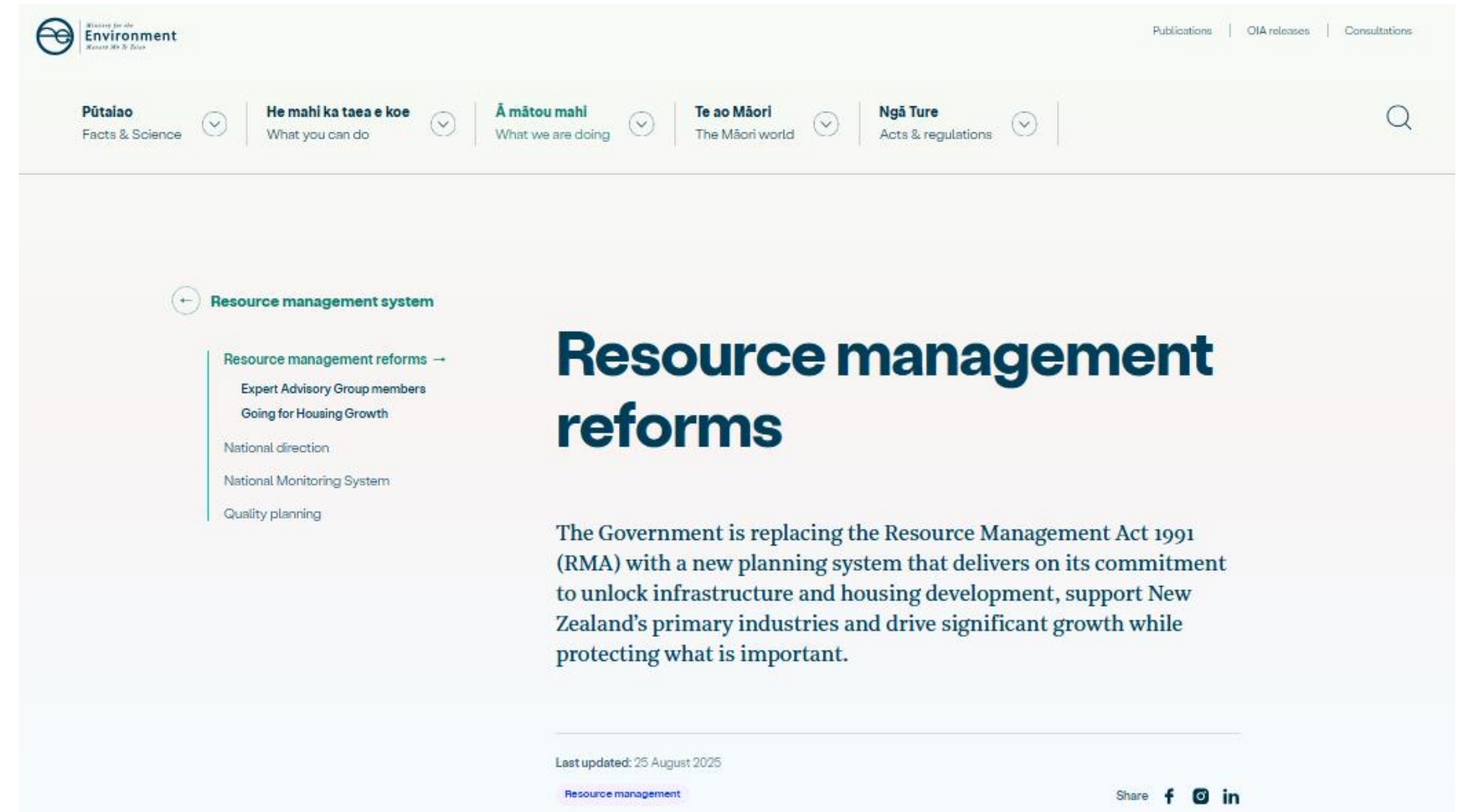
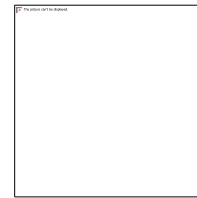
Figure 1.2 Comparison of cost, uncertainty and conservatism for tiered approach

Source: 'Guidance Manual for Risk-Based Corrective Action Tier 2 RBCA' June, 1995

Source: MfE (1999), Guidelines for Assessing and Managing Petroleum Hydrocarbon Contaminated Sites in New Zealand

RM Reform

- MCERT (Ministry for Cities, Environment, Regions & Transport) replaces MfE on 1 July 2026
- Spatial Planning Bill and Natural Environment Bill expected to replace the RMA in 2026 (pre-election).
- RMA processes continue to apply, with some modifications (under transition plan), until new combined Natural Environment Plans are notified and the Minister formally switches over to the new RM system (in 2029?)



What's coming?

- National direction and consistency (e.g., national standards/limits)
- Fewer councils (unitaries)
- Fewer plans (?) (1 plan per "region")
- Fewer consents (more permitted activities)
- Enhanced property rights

and what's proposed to stay?

- Councils regulate discharges to land, air, or water and soil conservation (erosion & contamination)
- Environmental limits to protect human and ecosystem health



Summary

- Settlement legislation informs the regulatory framework
- Contaminated land can result in controls on active and passive discharges
- Discharges are regulated under the RMA
- There are passive discharge rules in 5 regions
 - Similar rule structure, different thresholds and boundaries, esp. groundwater
- Consent timing is driven by the understanding of risk
- Commercial considerations also influence consenting and assessment
- What next? RM reform, National standards?