



Scenario 1 (business as usual) – Management option examples

What is Scenario 1?

- Business as usual = existing policy, practice and investment
 - e.g. Proposed Natural Resources Plan, existing WWTP investment, hill country sediment management practice
- PT will put together for Committee review
- Use as an example for management options

Building scenarios

- Describe something of what you want
(high level outcomes/vision/aspirations)
- **Identify and package management options to try and get there**
(management options)
- Understand what you'll measure it by
(attributes)



Management options – details!

- What management action/activity?
- Why? What are you looking to achieve?
 - Where? To what extent?
 - Who needs to do it?
 - Timeframes for it to be done?
 - Any other key details?

Scenario 1 management options

- PNRP minimum flows/water allocations
- Stock exclusion rules
- Existing and projected wastewater discharges
- 'Bundle 1' farm mitigations (GMPs)
- Hill country farm plans
- Cultivation/break feeding rules

Reminder of on-farm mitigation bundles (GMPs)

- Bundle 1 = part of Scenario 1:
 - Stock exclusion (dairy, s+b, dairy support)
 - Deferred effluent irrigation (dairy)
- Not part of Scenario 1:
 - Bundle 2 (easy and medium GMP)
 - Bundle 3 (hard GMP)

Examples from Scenario 1

- **Excluding stock from water ways**

By 2018, all stock will be excluded from highly valued waterways (Category 1 water bodies), except that sheep may enter significant wetlands. By 2022, all cattle, farmed deer and farmed pigs will be excluded from lowland streams >1m, large drains, water races, estuaries, lakes and trout spawning areas (Category 2 water bodies), and dairy cattle may not enter any stream (lowland or hill country) of >1m width. Category 1 and 2 waterbodies are defined in PNRP.

- **WWTP discharges to land**

Discharges from wastewater treatment plants are progressively moved to being discharged to land. There are existing investments and resource consent conditions that require the Masterton and Carterton WWTPs to currently discharge partially to land; Martinborough and Greytown WWTPs will discharge to land fully by 2035 and 2039 respectively; Featherston discharges entirely to water. Details on progressive discharge to land identified in resource consents.

Assumptions for Scenario 1

Excluding stock from water ways				
What?	Why?	Where?	When by?	Other details
Remove livestock from highly valued water bodies	<ul style="list-style-type: none"> - Reduce sediment, nitrogen, pathogens, improve habitat - Begin with most sensitive and/or highest valued sites first 	Category 1 water bodies: <ul style="list-style-type: none"> - Mana whenua - Inanga spawning - Important bird habitat - Estuaries - Significant wetlands - Outstanding waters - Around drinking water supplies taking from surface water 	2018	<ul style="list-style-type: none"> - All livestock (except sheep from wetlands)
Remove livestock from moderately sensitive water bodies	<ul style="list-style-type: none"> - Target livestock that tend to wallow/damage waterways the most 	Category 2 water bodies: <ul style="list-style-type: none"> - Rivers, drains and water races on valley floor - Trout spawning - Lakes and estuaries not in Category 1 	2022	<ul style="list-style-type: none"> - Rivers and drains to be fenced are >1m - Cattle and farmed deer and pigs only - Dairy cattle must also be excluded from streams outside valley floor

Assumptions for Scenario 1

WWTP discharges to land				
What?	Why?	Where?	Timeframe	Other details
Progressively discharge treated wastewater to land rather than to water: <ul style="list-style-type: none"> - Proposed Natural Resources Plan - Investment in LTPs - Resource consent conditions 	Restore mauri, improve swimmability, reduce effects on ecosystem health through reducing N, P, sediment and pathogen loads directly to water	Masterton	Now	Partial discharge to land (24% to land 2015/16)
		Carterton	Now	Partial discharge to land (<20% to land 2015/16)
		Greytown	By 2022	Dis to land only when river in low flow (20% to land)
			By 2030	Partial dis to land, no deferred storage (62% to land)
			By 2039	All discharge to land, deferred storage (100% to land)
		Martinborough	By 2017	Dis to land only when river in low flow (24% to land)
			By 2030	Partial dis to land, no deferred storage (42% to land)
			By 2035	All discharge to land, deferred storage (100% to land)
		Featherston	Now	Full discharge to water New consent application soon

What happens from today

- Refining management option bundles
 - ⇒ PT and CMP work through details
 - ⇒ Revisit and refine at next workshop
- PT brings Scenario 1 and Aspirational Scenario(s) assumptions to next workshop