



# Land & Water Regional Plan for Otago

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Community consultation on  
environmental outcomes and  
actions



North Otago FMU  
November 2022





# Meeting outline

- ▶ Presentation: background (15 mins)
- ▶ Group discussion: possible environmental outcomes (20 mins)
- ▶ Group discussion: possible actions (40) minutes

# North Otago FMU





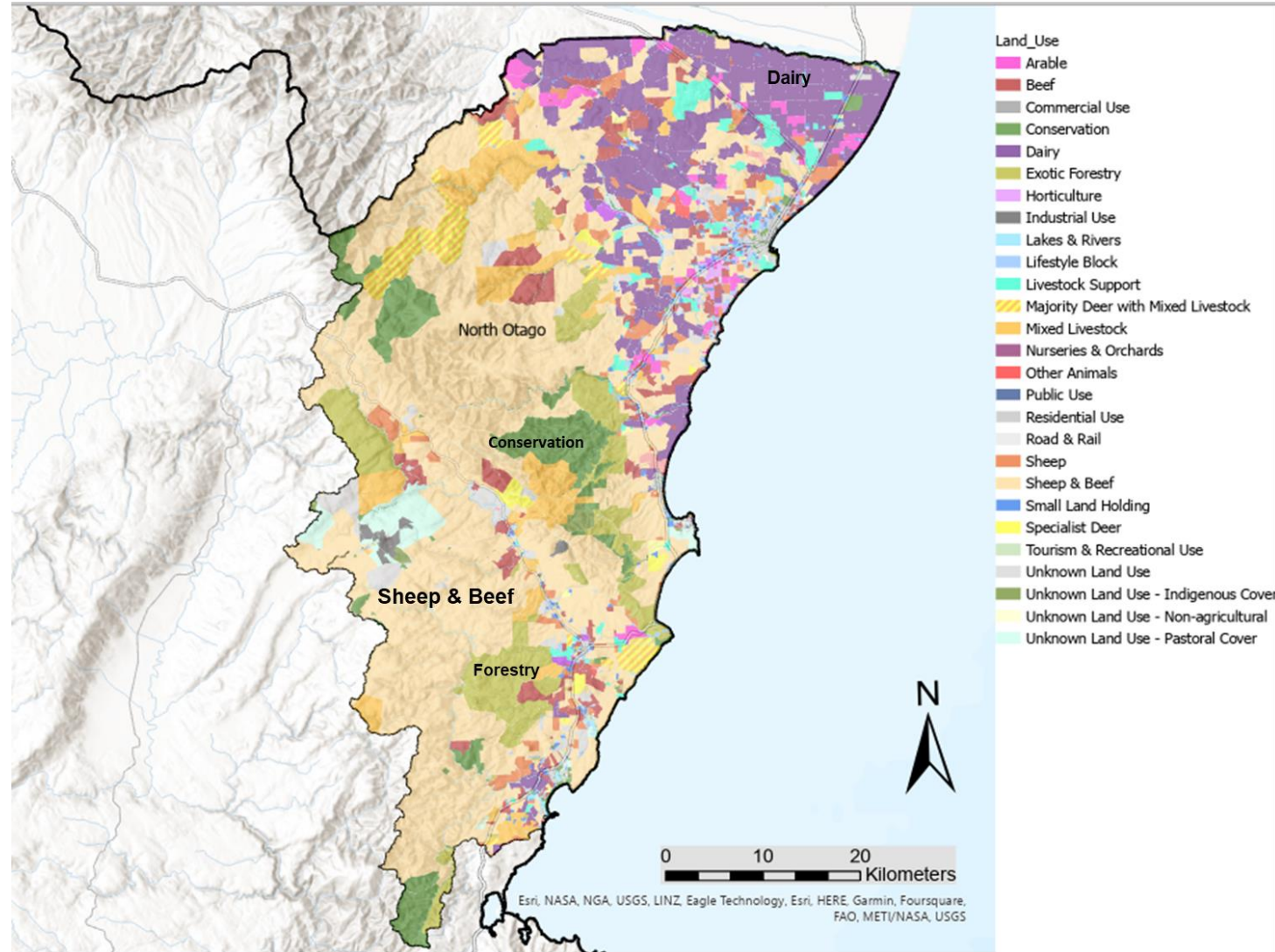
# Land use overview

## Key land uses

- ▶ Dry-stock farming: 58%
- ▶ Dairy: 12%
- ▶ Forestry: 7%
- ▶ Conservation estate: 6%

## Key trends (1990-2018):

- ▶ Increase in conservation estate (100%) , forestry (67%), dairy (57%)
- ▶ Decrease in dry-stock farming (12%)



# Water quality

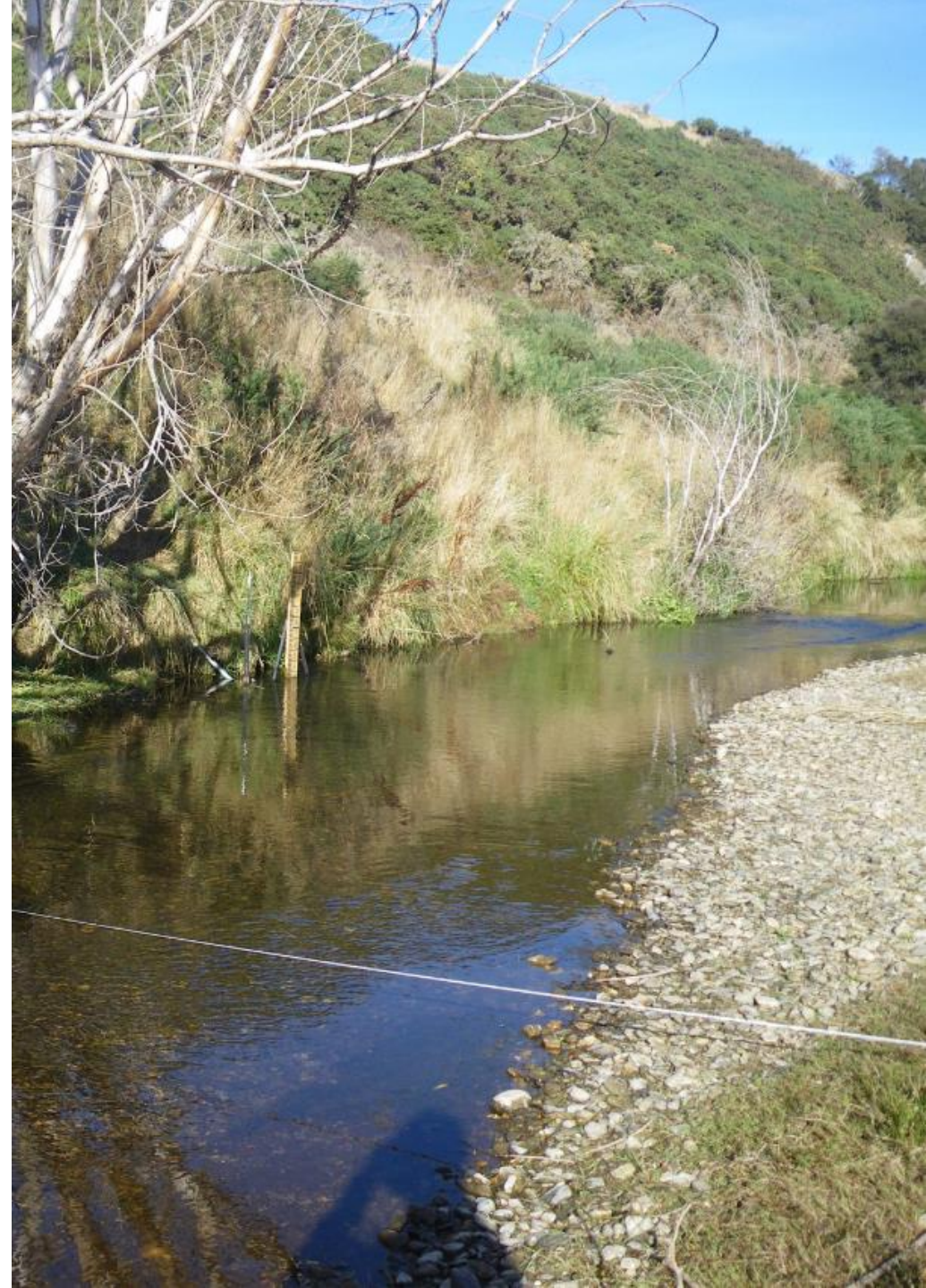
- ▶ Water quality is degraded to varying degrees – all sites have at least one attribute which falls below the ‘national bottom line’
- ▶ Bacterial water quality severely degraded at about half of monitored sites
- ▶ Monitoring results reflect the influence of higher intensity land uses (agricultural and urban)
- ▶ Trends analyses show degrading trends for some parameters (particularly nitrogen) at most sites over both the 20-year and 10-year analysis period





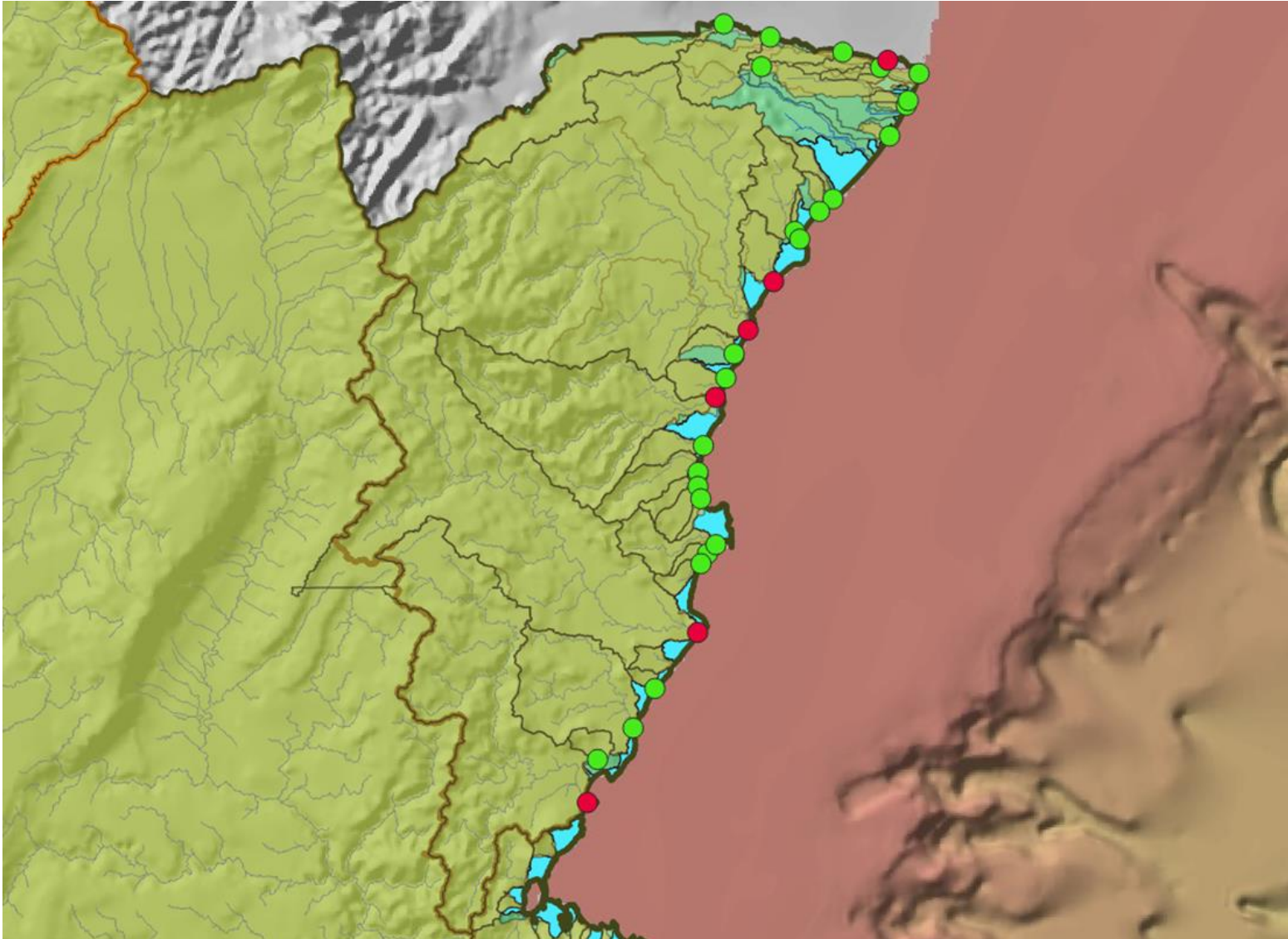
# Water quantity

- ▶ Application of technical guidelines for ecological flow setting to modelled flows:
- ▶ Majority of catchments no environmental concerns
- ▶ Smaller number have potential for environmental concern
- ▶ Some catchments need further investigations





# Water quantity



## Management Scheme

No environmental  
concern



Needs investigation



# Mana whenua core values associated with freshwater

- ▶ Core values of whakapapa, mauri, tapu and mana descend from time immemorial
- ▶ They recognise that every water body has a unique personality and life force
- ▶ The life-supporting functions of wai are characterised by natural flow, healthy ecosystems and water quality
- ▶ Kāi Tahu are integrally connected to wai and have a duty to protect it for future generations



# National Policy Statement for Freshwater Management

## Te Mana o te Wai

- ▶ Te Mana o te Wai approach recognises the values of mauri and mana and the connection of mana whenua to the wai
- ▶ It recognises that protecting the health of freshwater protects the health and well-being of the wider environment and of people
- ▶ It seeks to protect the mauri of the wai

# What does this mean?

## We must respect the mauri of each water body

- ▶ Mauri is distinctive for each water body - each has its own personality, energy and life-supporting characteristics
- ▶ Flow regimes would reflect natural form and function, letting the river be itself
- ▶ Changes in water quality along the river would only be due to natural causes e.g. the river should not be used to dilute contaminants
- ▶ Provide for healthy resilience rather than managing to bottom lines
- ▶ Cross-mixing of the mauri of different waterbodies is not appropriate



# What does this mean?

## Integrated management/ ki uta ki ta

- ▶ Sustain and restore connections throughout catchment
- ▶ Recognise connections between surface water and groundwater
- ▶ Sustain and restore habitats of mahika kai and indigenous species
- ▶ Recognise and manage relationships between land use, water use, and water quality
- ▶ Have regard to cumulative effects and climate change risks

# Mana whenua values in North Otago awa

- ▶ The Waitaki River is of paramount importance for mana whenua
- ▶ The Kakaunui is a taoka stream to the Moeraki hapū – it is seen as the jewel in the crown
- ▶ Strong cultural connection to the Waimataitai estuary – referred to in Moeraki pepeha and traditional stories
- ▶ The Waihemo has a history of being a rich food basket and was a site of early settlement
- ▶ Wetlands and estuaries are rich in life and important for mahika kai – including riparian wetlands associated with Waitaki tributaries



# What do mana whenua want to see?

Outcome	Concerns about current state
Enable reconnection with traditional practices <ul style="list-style-type: none"><li>• Restoration of mauri to sustain mahika kai practices and relationship to the awa</li><li>• Restoration of riparian wetlands</li></ul>	Degradation of mauri through: <ul style="list-style-type: none"><li>• Damming</li><li>• Heavy abstraction of water and loss of springs</li><li>• Contamination by nutrients and effluent</li></ul>
Let the rivers flow as naturally as possible <ul style="list-style-type: none"><li>• Allowed to run in their natural course</li><li>• Healthy flow in tributaries to support a strong and healthy main stem and estuary</li></ul>	Flow is constrained for flood control or land drainage purposes Heavy abstraction from tributaries
Protect rock art from effects of water use	Change in composition of limestone through irrigation
Healthy populations of indigenous species <ul style="list-style-type: none"><li>• Healthy estuaries</li></ul>	Effect of nutrients and other contaminants Low flows
Appropriate allocation of water to mana whenua for community and cultural needs, once the rivers are healthy	Over-allocation has affected reliability and security of supply

# Land & Water Regional Plan

- ▶ Notified by December 2023
- ▶ Key concepts
  - ▶ Te Mana o te Wai (health of the water)
  - ▶ Integrated management
  - ▶ Holistic (ki uta ki tai/ Mountains to sea)
  - ▶ Future proof (climate change)



# Values for the North Otago FMU

**FIRST PRIORITY** – health and well being of water bodies and freshwater ecosystems

Ecosystem  
health

Threatened  
and taoka  
species

Natural  
form and  
character

**SECOND PRIORITY** – health needs of people

Drinking  
water  
supply

**THIRD PRIORITY** – social, economic, and cultural well being

Animal  
drinking  
water

Food  
production

Commercial  
& industrial  
use

Recreation  
(human  
contact)

Fishing

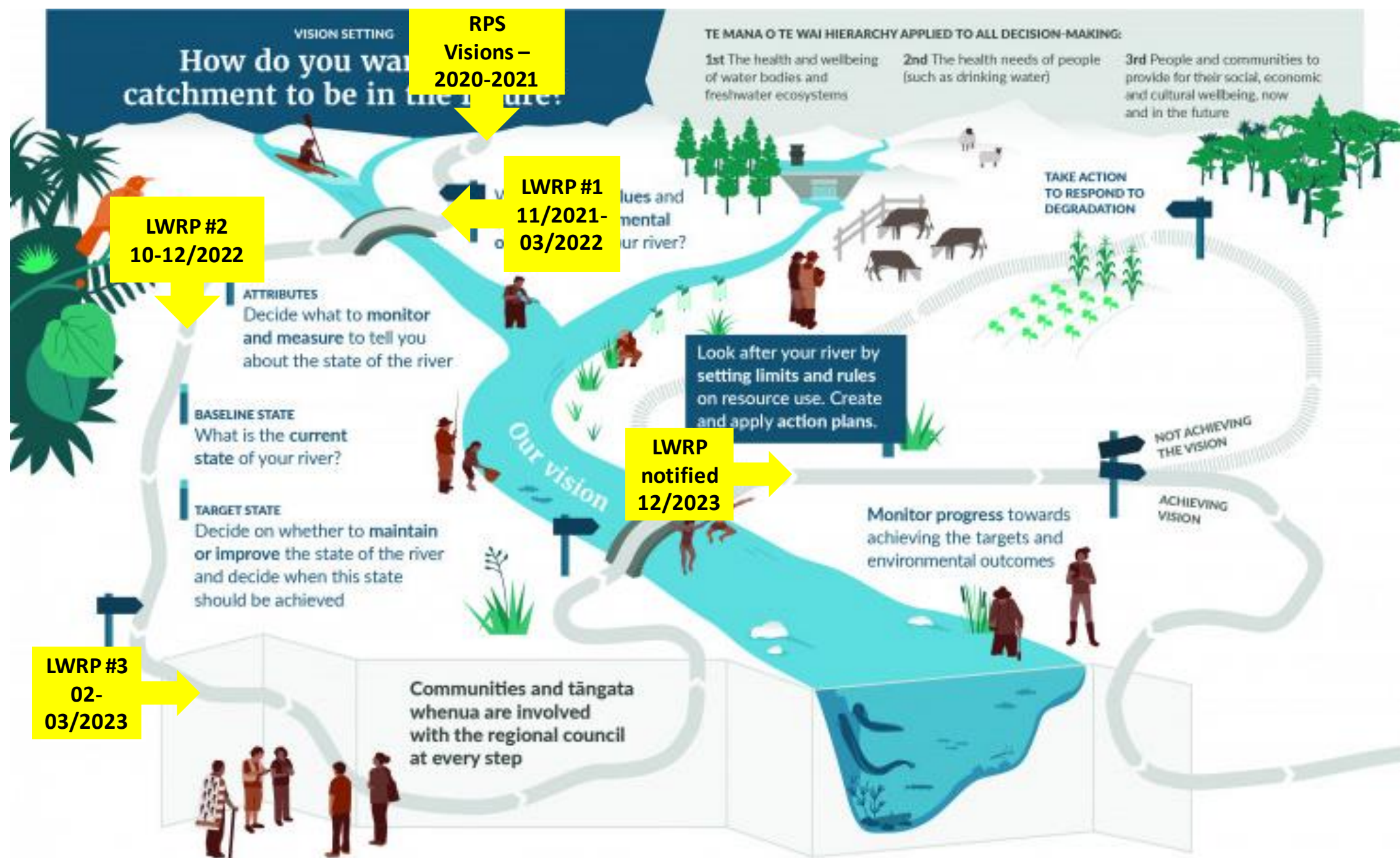
Hydro

Wāhi tūpuna

Mahika kai



The process we're following







# Environmental Outcomes



# Environmental Outcomes

- ▶ Must be set in the Plan for all values identified
- ▶ Describe what a value should look like
- ▶ Guides decision-making on:
  - ▶ Limits, rules and policies in the Plan
  - ▶ Resource consent applications
- ▶ ORC must set target states for attributes (indicators)

# Environmental outcomes - group discussion



Do you agree or disagree with them?



Why?



What other environmental outcomes (for other values) we should include?



# Types of actions



# Actions

- ▶ Things we can do to achieve environmental outcomes
- ▶ Can be developed into rules and controls in the plan or initiatives like education campaigns
- ▶ Everyone has to play their part. Actions for everyone

E.g.:



# Actions - group discussion



Are the possible actions we've identified practicable in your area?



What other actions should we consider?



What issues or unintended consequences do you see in any of these actions?





# Closing

- ▶ Thanks for all your input today!
- ▶ Give us more feedback online: [www.orc.govt.nz/plans-policies-reports/land-and-water-regional-plan](https://www.orc.govt.nz/plans-policies-reports/land-and-water-regional-plan)
- ▶ We'll be back in early 2023 to update you on this work