



Land & Water Regional Plan for Otago

Community consultation on
environmental outcomes
and actions



Dunedin & Coast FMU
December 2022



Meeting outline

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

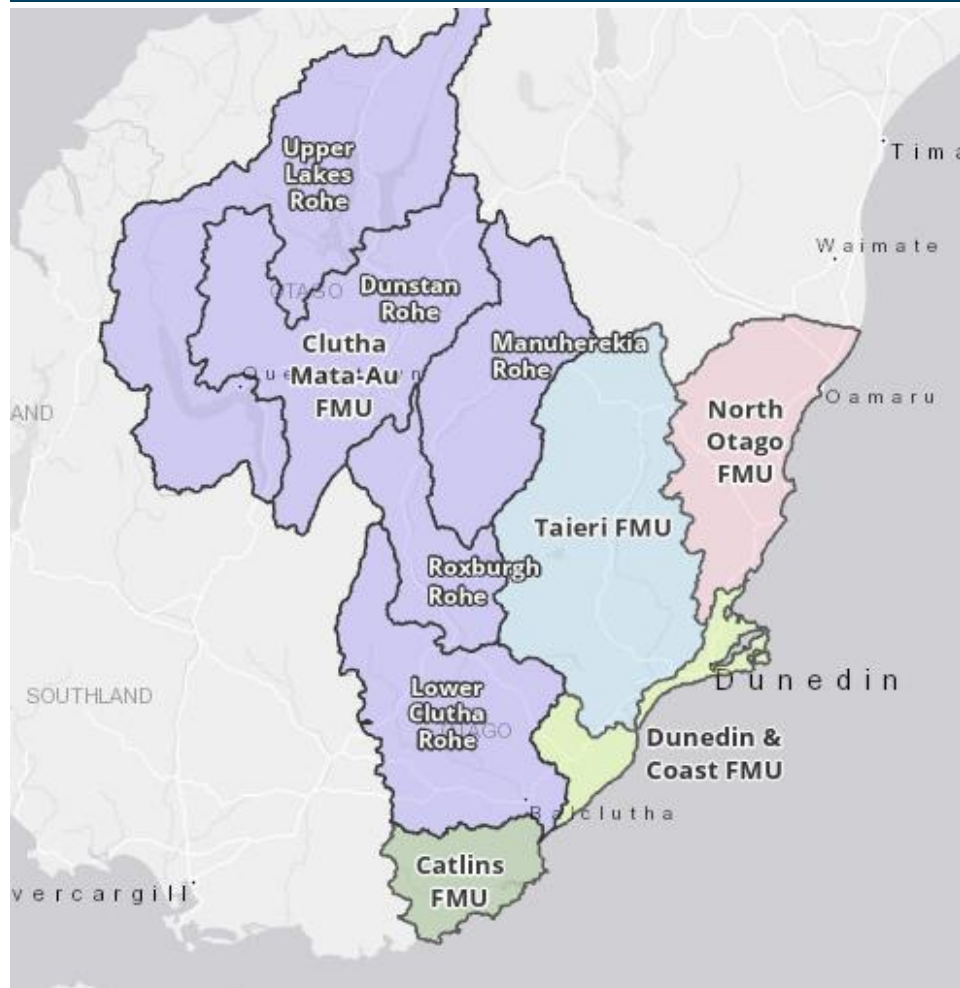


Presentation

- ▶ Freshwater Management Units
- ▶ Land use overview
- ▶ Water quality
- ▶ Water quantity
- ▶ Mana whenua values
- ▶ Environmental outcomes & actions

Freshwater Management Units (FMU)

Otago divided into FMU



Dunedin & Coast FMU



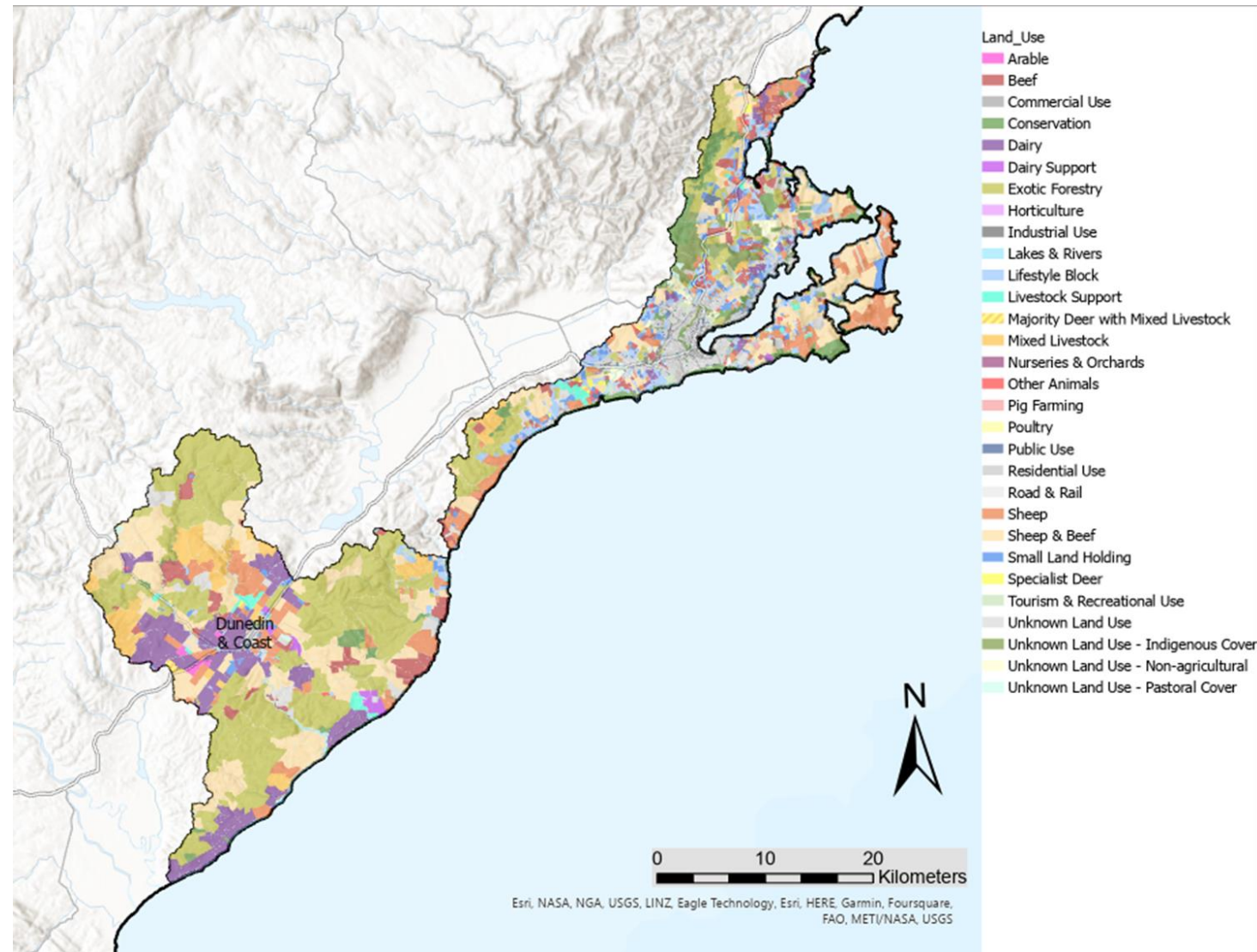
Land use overview

Key land uses

- Dry-stock farming: 36%
- Plantation Forestry: 28%
- Dairy: 8%
- Urban use: 7%

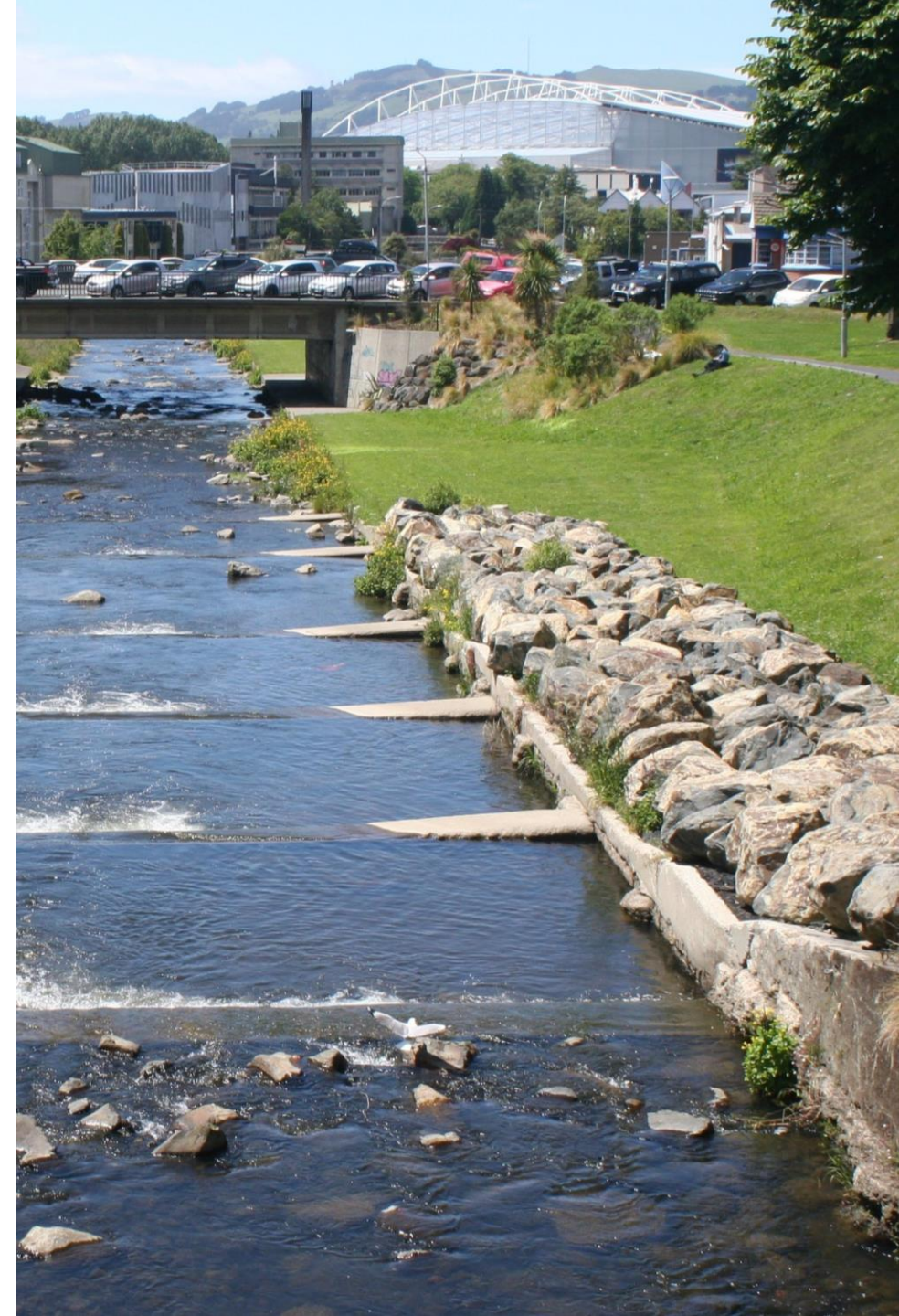
Key trends (1990-2018):

- Increase in dairy (38%), forestry (19%), Urban use (4%)
- Decrease in dry-stock farming (14%)



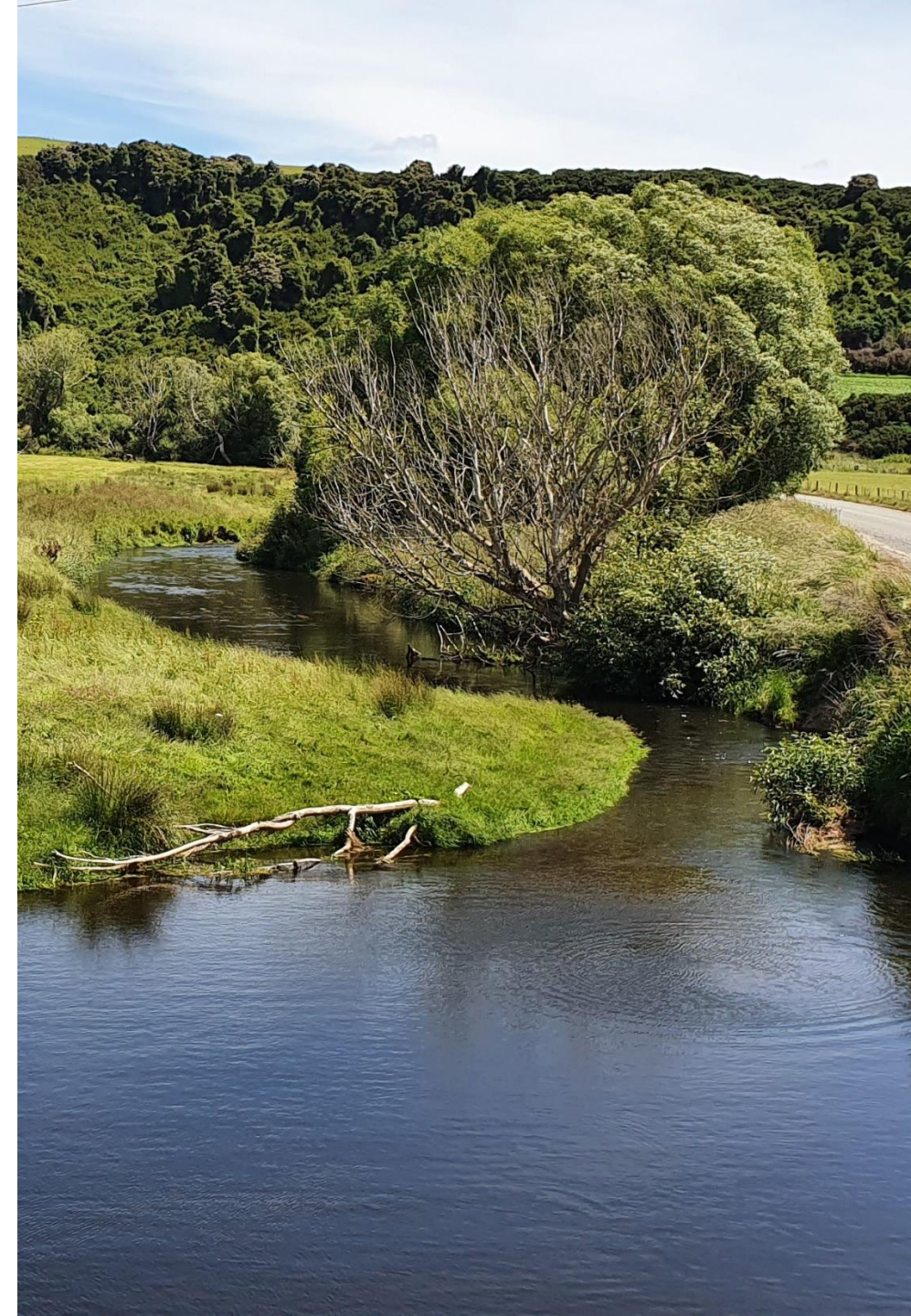
Water quality

- ▶ Nutrient concentrations generally high (half of sites achieve a 'D' band, other sites return a 'C' band)
- ▶ Bacterial water quality severely degraded at all sites except Waitati River
- ▶ Dunedin city sites have a high degree of urbanization (stormwater network with point source discharges)
- ▶ Trend analysis show there were more improving than degrading trends in the last 10 years



Water quantity

- ▶ Application of technical guidelines for ecological flow setting to modelled flows:
- ▶ Majority of catchments no environmental concerns
- ▶ One catchment has potential for environmental concern



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 mauri of wai is characterised by natural flow, healthy ecosystems and natural water quality – the river is thriving, not just surviving
- ▶ 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
- ▶ It recognises interconnections – land/ freshwater/ coast; quality/ quantity; groundwater/ surface water; physical/ ecological

Mana whenua values in Dunedin & Coast

- ▶ The rivers, estuaries and wetlands in coastal Otago are an important part of an extensive mahika kai network
- ▶ Protection of kai moana in the coastal waters also relies on good management of the interconnection between land, freshwater and coastal waters
- ▶ Dunedin streams feed Otago Harbour, which has high importance –its abundant food supply once fed up to 12 settlements along its edge
- ▶ The name of the Kaikarae (Kaikorai) is connected to the stories about the travels of important tupuna, and its estuary was traditionally a rich mahika kai resource

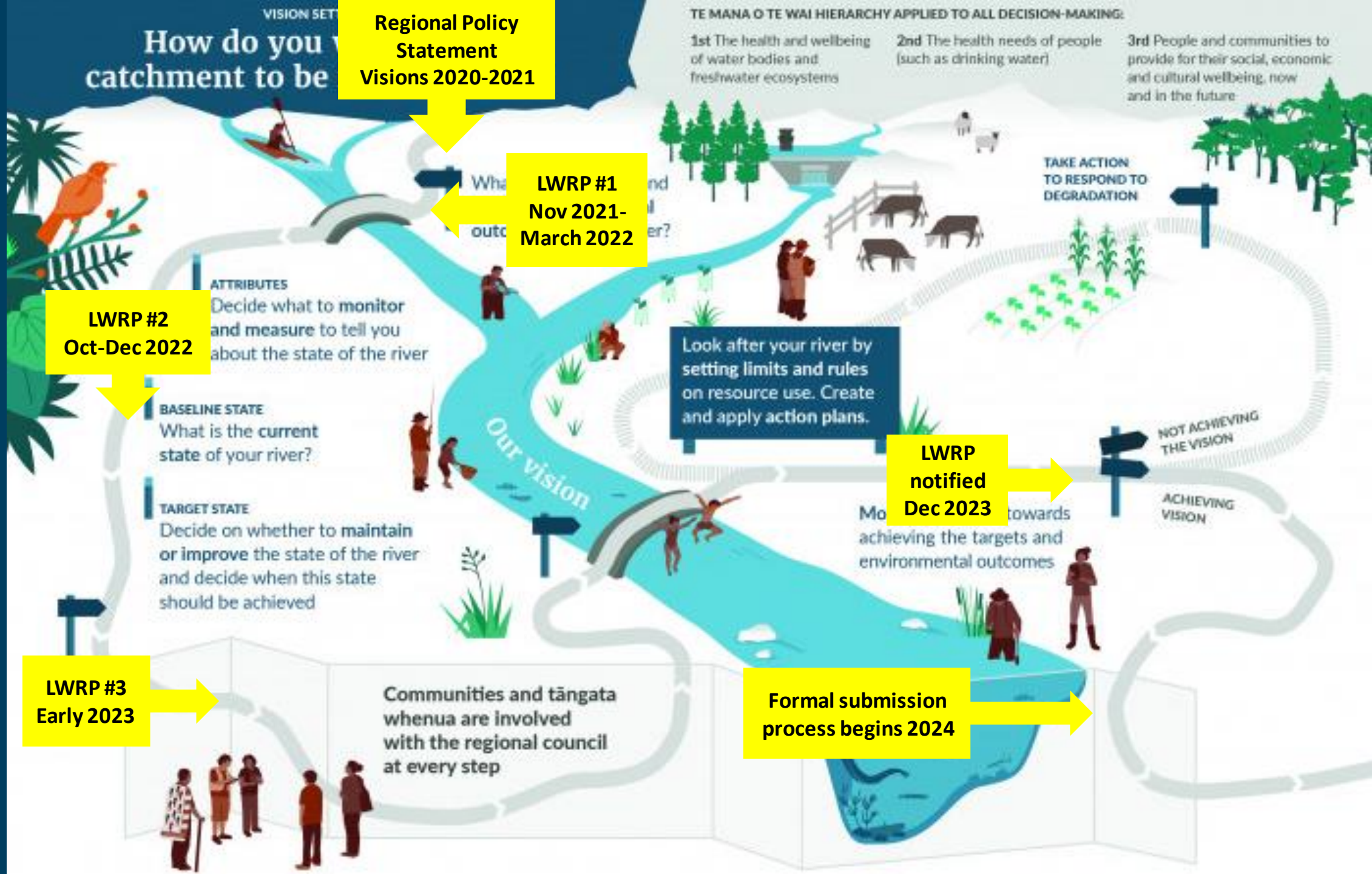
What do mana whenua want to see?

- ▶ Flourishing mahika kai in rivers, estuaries and harbour: Good quality water, healthy ecosystems, ability for fish to migrate
- ▶ Restore the mauri of Kaikarae estuary – a long term vision
- ▶ Let the rivers flow as naturally as possible: Restore naturalness where feasible in modified streams such as the Ōwheo (Leith)
- ▶ Recognise interconnectedness of whenua, wai māori (freshwater) and wai tai (coastal waters)
- ▶ Concerns: Wastewater and stormwater discharges, landfill leachate, contamination from runoff, poor riparian management, effects of upper catchment forestry on flows

Hierarchy of plans



The process we're following



Te Mana o Te Wai



1st

is to the **water**,
to protect its health
and its mauri



2nd

provides for **essential human health**
such as drinking water



3rd

is for **other consumption** provided that such use
does not adversely impact the mauri of freshwater

Values for the Dunedin & Coast 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



Environmental Outcomes

- ▶ A goal or aspiration to work towards
- ▶ Example: *Wetlands within the Dunedin & Coast FMU are resilient and support a diversity of habitats.*
- ▶ Target states for attributes will be set to measure progress
- ▶ We need your feedback

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

- ▶ Things we can do to achieve environmental outcomes
- ▶ Example: *Require greater setbacks between waterbodies and earthworks activities and retain intact riparian management zones.*
- ▶ Can be developed into rules or initiatives like education campaigns

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
- ▶ We'll be back in early 2023 to update you on this work