



Takaka Freshwater Management

Takaka FLAG work to date

26 September 2016

Outline

- FLAG and their role
- National Policy Statement – Freshwater Management
 - National Objectives Framework
- FLAG philosophy and values
- Summary of [interim](#) FLAG outputs
- FLAG/staff questions for iwi

FLAG and staff questions for iwi:

- How can we best include the following in the FLAG process and in the recommendations to Council?
 - **Iwi interests and values** - what are your relationships with water?
 - **Kaitiakitanga** (guardianship)
 - **Matauranga maori** (maori body of knowledge and understanding)
 - **Tikanga maori** (maori customary values and practices)
 - **Mauri & wairua** – how to maintain/improve; assess/monitor?
 - **Mahinga kai** – places, species? how to maintain/improve; assess/monitor?
 - **Wahi tapu & taonga** – places, species, etc?
 - **Te Waikoropupu**
- Two requests received:
 - Request for **Cultural Impact Assessment** – of what? who by? method? scope?
 - **Cultural reservation** has been raised previously – what does this include?
- What else should FLAG/staff be considering?

FLAG and staff questions for iwi:

- What **information** do you need from FLAG/staff?
- **How do you want to be further involved?**
 - Is there someone you would like involved at the policy drafting stage?

We will come back to these questions at the end of this presentation...

Who are FLAG?

- 13 Volunteers
 - 11 selected by Council (1 has recently withdrawn)
 - 1 selected by Manawhenua ki Mohua (Margie Little)
 - 1 member co-opted by FLAG
- Involved as individuals, but often wearing many hats:
 - Bringing the perspectives of water users and enjoyers - including swimmers, farmers, iwi, scientists, dairy, aquaculture, Trustpower, parents, kaitiaki...etc
- People who care about Golden Bay / Mohua
- Group supported by council staff:
 - Administration and independent facilitation
 - Science staff and external experts for science advice
 - Policy staff for plan change drafting and policy advice

FLAGs Role:

- Tasked to provide **recommendations** to Council:
 - **Draft plan change:** allocation and water quality management
 - **Implementation plan:** non-regulatory methods
- Operate under a Terms of Reference:
 - Use a **collaborative** approach and to seek **consensus**
 - Observe **tikanga Māori**
 - **Involve** local community and stakeholders
 - Take account of **interests of all sectors** of the community
 - Promote **integrated** water management

Council's responsibilities:

- Council has responsibilities to:
 - Give effect to **RMA** – including Sec 8: Treaty of Waitangi
 - Implement the **NPS for Freshwater Management**
 - **Engage with all iwi**
 - Invite advice from the **River & Freshwater Advisory Committee**
 - As required in the iwi Settlement Acts (April 2014)
 - Publicly notify the plan change
 - Consider submissions and make decisions
 - Consider funding of other methods through the LTP process

Drivers for Takaka FLAG work:

- National Policy Statement for Freshwater Management (NPS-FM)
- Lack of allocation regimes to manage water demand
- Concern over water quality and potential future risks



National Policy Statement: Freshwater Management

- Council must implement NPS-FM by 2025
 - Safeguard: life-supporting capacity, ecosystems, processes, indigenous species
 - Protect: significant values of wetlands and outstanding water bodies
 - Avoid or address: over-allocation of water quantity and quality
 - 'Over-allocated' if not meeting the freshwater objectives
- Integrated and sustainable management
- Involve iwi and hapu
 - Identify and reflect tangata whenua values and interests in freshwater management and decision making for freshwater planning
- “This national policy statement is about recognising the national significance of fresh water for all New Zealanders and **Te Mana o te Wai.**”
 - Water health is integral to the social, cultural, economic and environmental well-being of all communities



NPS-FM National Objectives Framework

- Process to set **freshwater objectives**
- 13 national **values**, 2 compulsory:
 - Ecosystem health
 - Human health for recreation
- Identifies some **key attributes** for values
 - National 'bottom lines'



National Objectives Framework process: (Policies CA1&2)

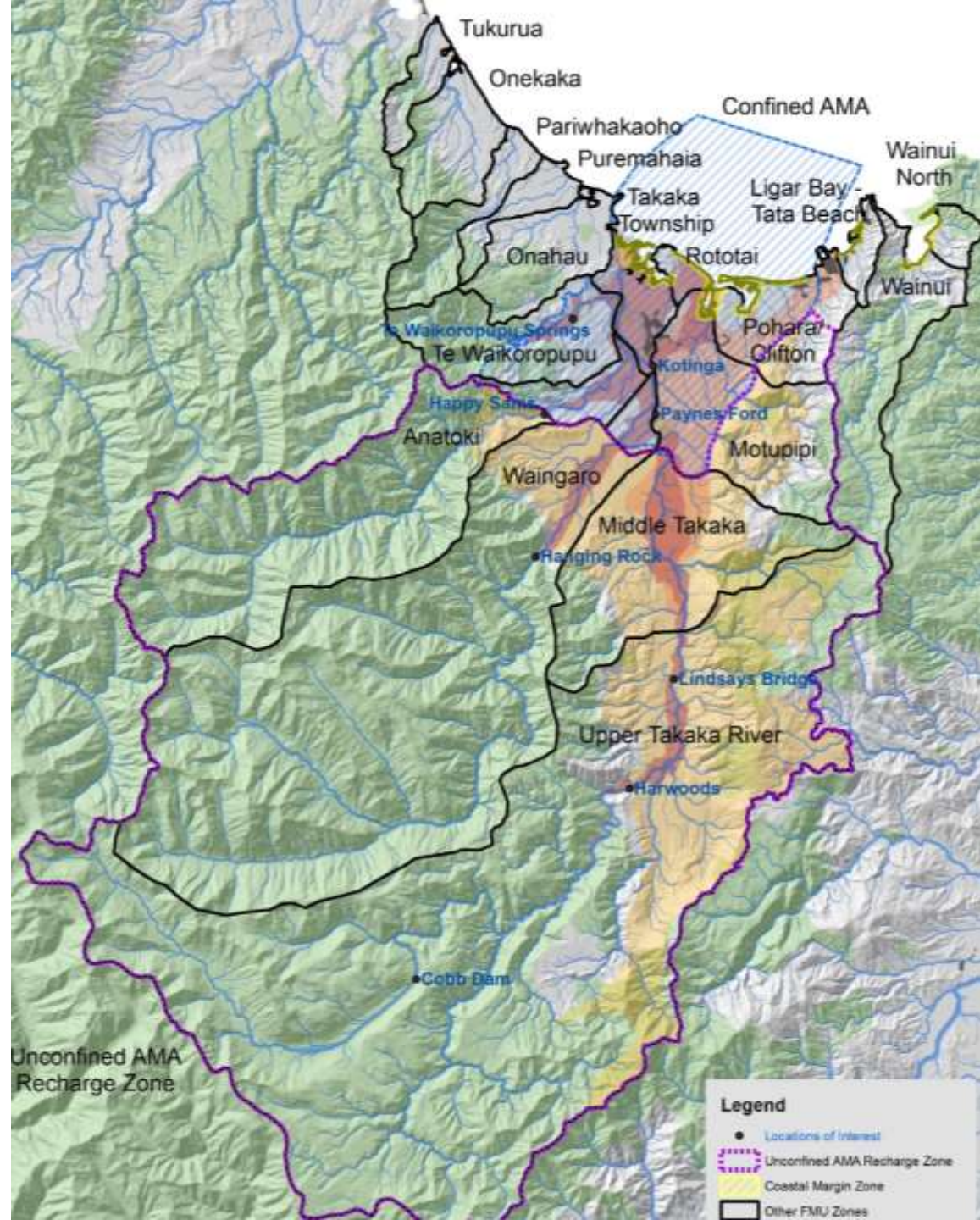
- ① Identify freshwater management units (**FMU**)
- ② Identify **values** for each FMU
 - considering national values, including compulsory ones
 - any other values considering local and regional circumstances
- ③ Identifying relevant **attributes** for each value eg:
 - algae, bacteria and water clarity for **swimming**
 - dissolved oxygen, flow, etc for **ecosystem health**
- ④ Assigning an **attribute state** for the attributes
 - at or above the minimum acceptable state (no decline in quality)
- ⑤ Formulating **freshwater objectives**
 - numeric and narrative
 - adopting the most stringent for each attribute across all the values

Set limits/flow/levels to achieve these objectives (Policies A1 and B1)

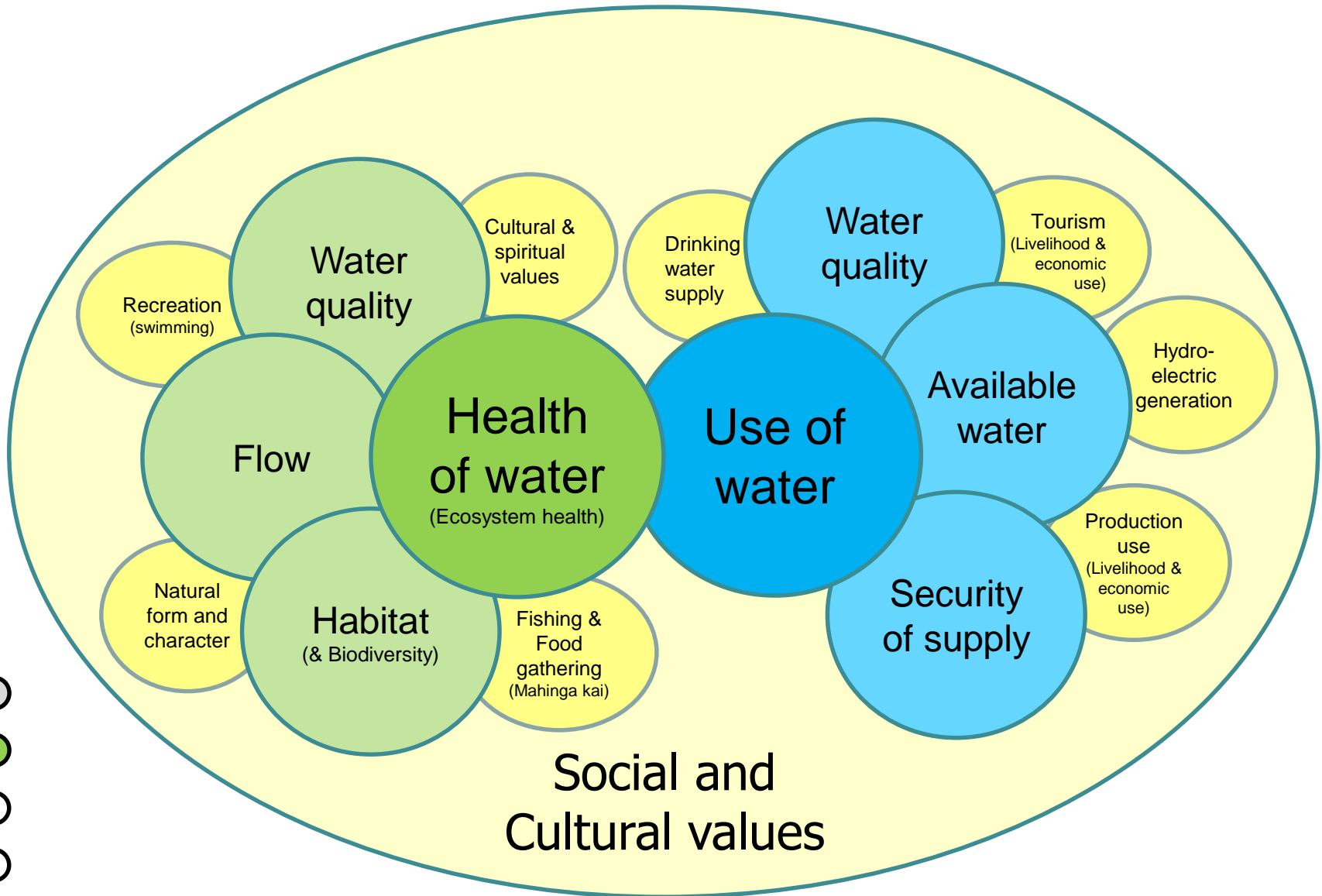
1. Takaka Freshwater Management Unit (FMU) – extent

Extent considered:

- Surface catchments
- Groundwater-surface water linkages
- Community of interest



2. FLAG philosophy and values

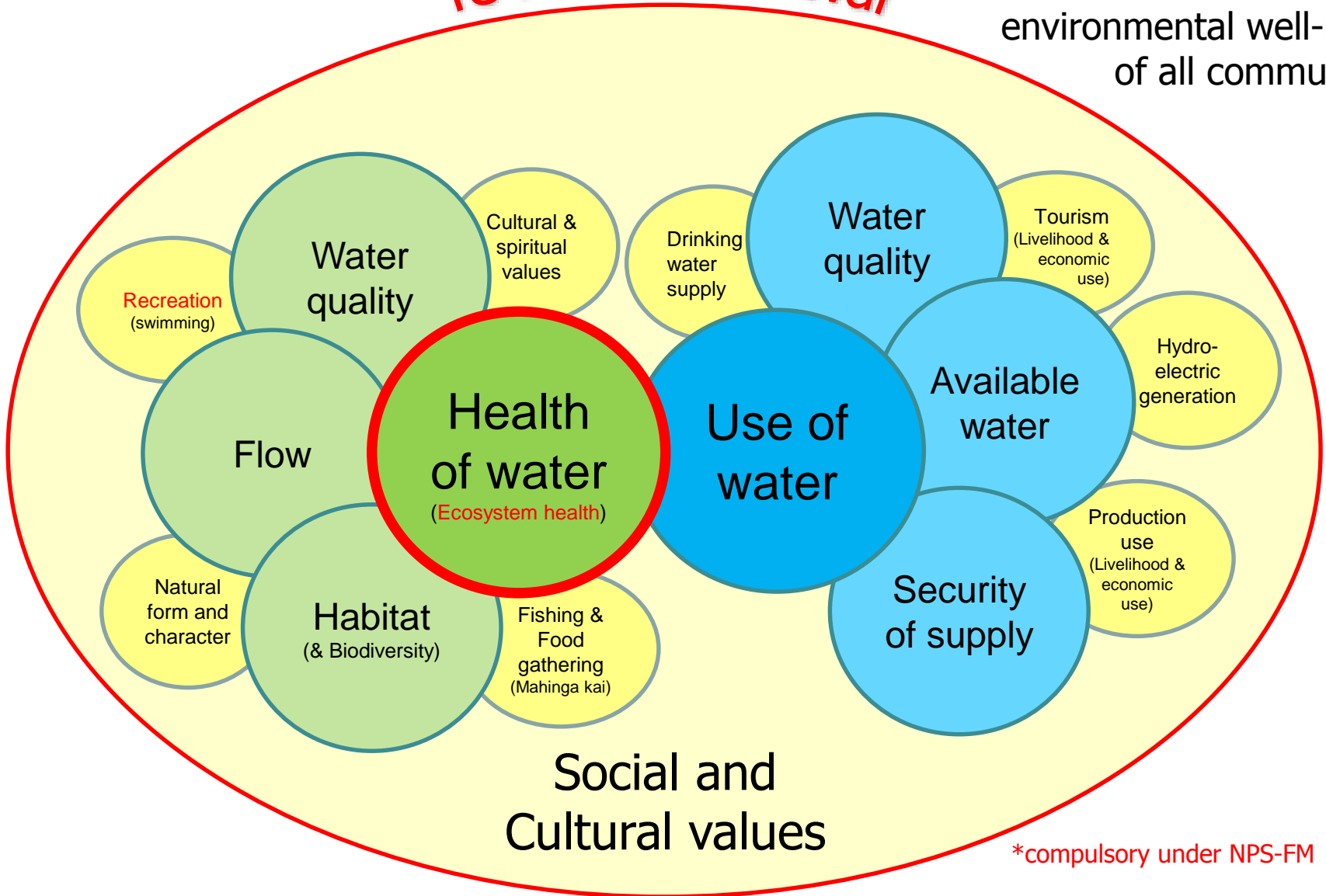


- 1
- 2
- 3
- 4
- 5

2. FLAG philosophy and values

Water health is integral to the social, cultural, economic and environmental well-being of all communities

Te Mana o Te Wai

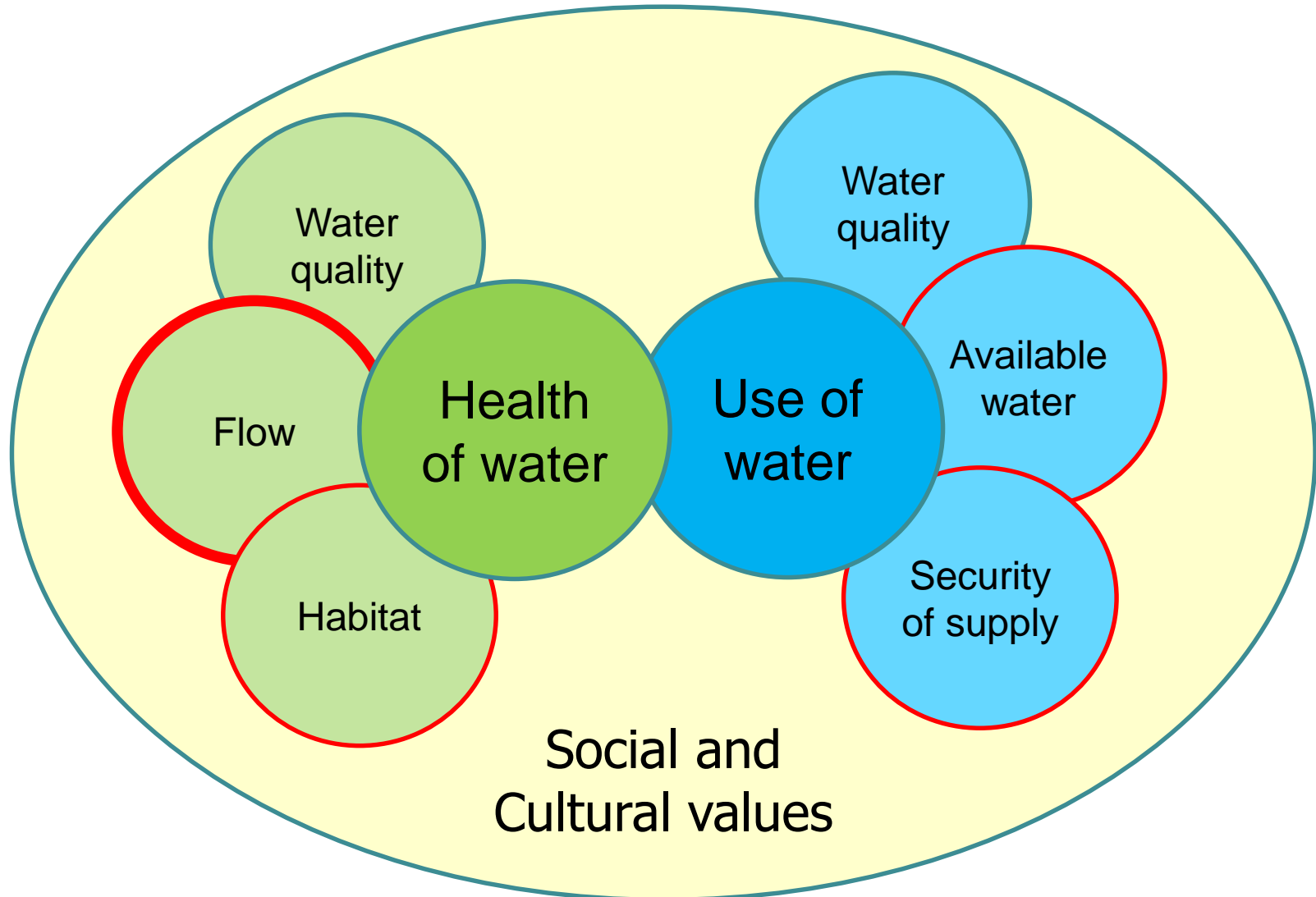


*compulsory under NPS-FM

National value of Transport/Tauranga waka not represented

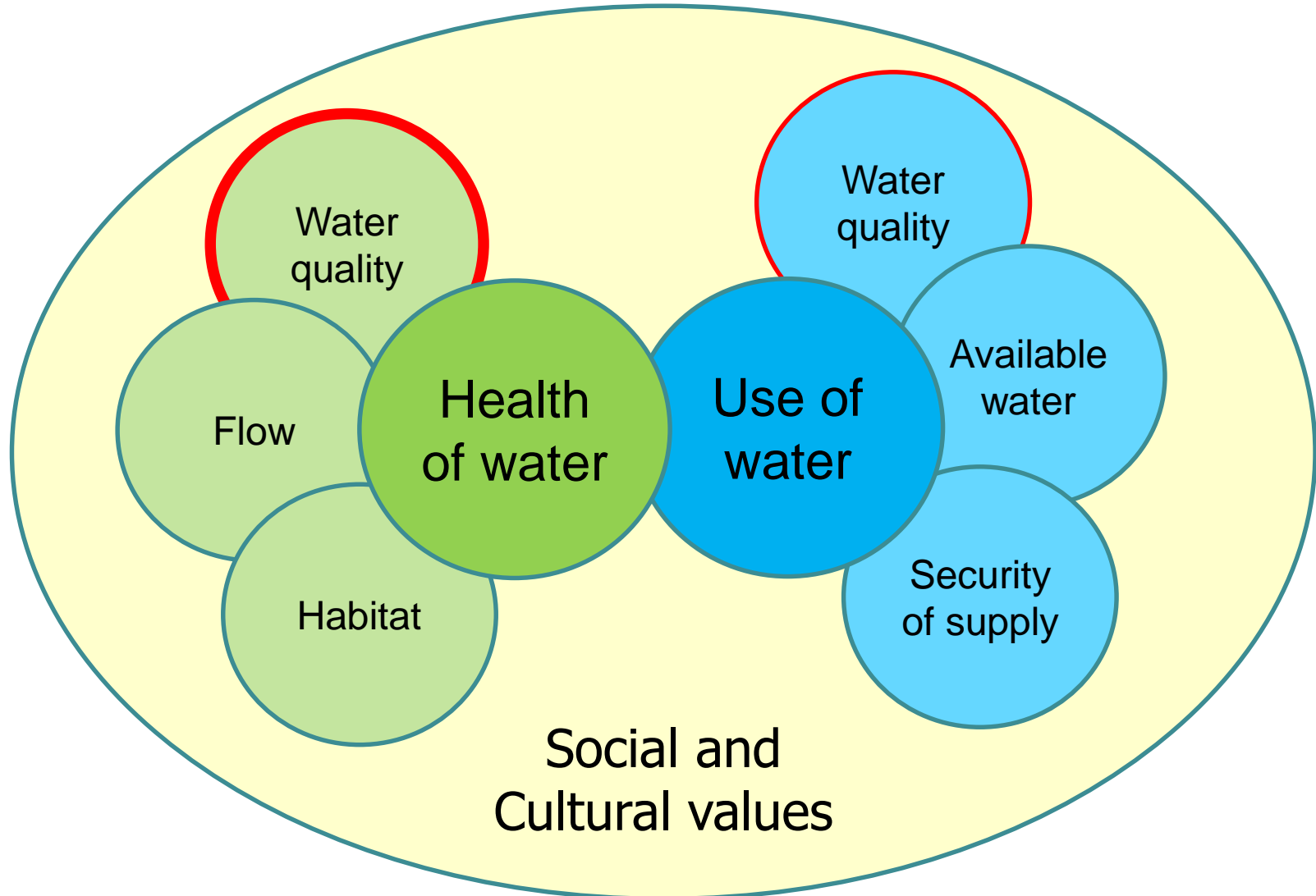
FLAG process – water quantity management

- Allocation of water: firstly protecting aquatic ecology during dry periods, then available water & security



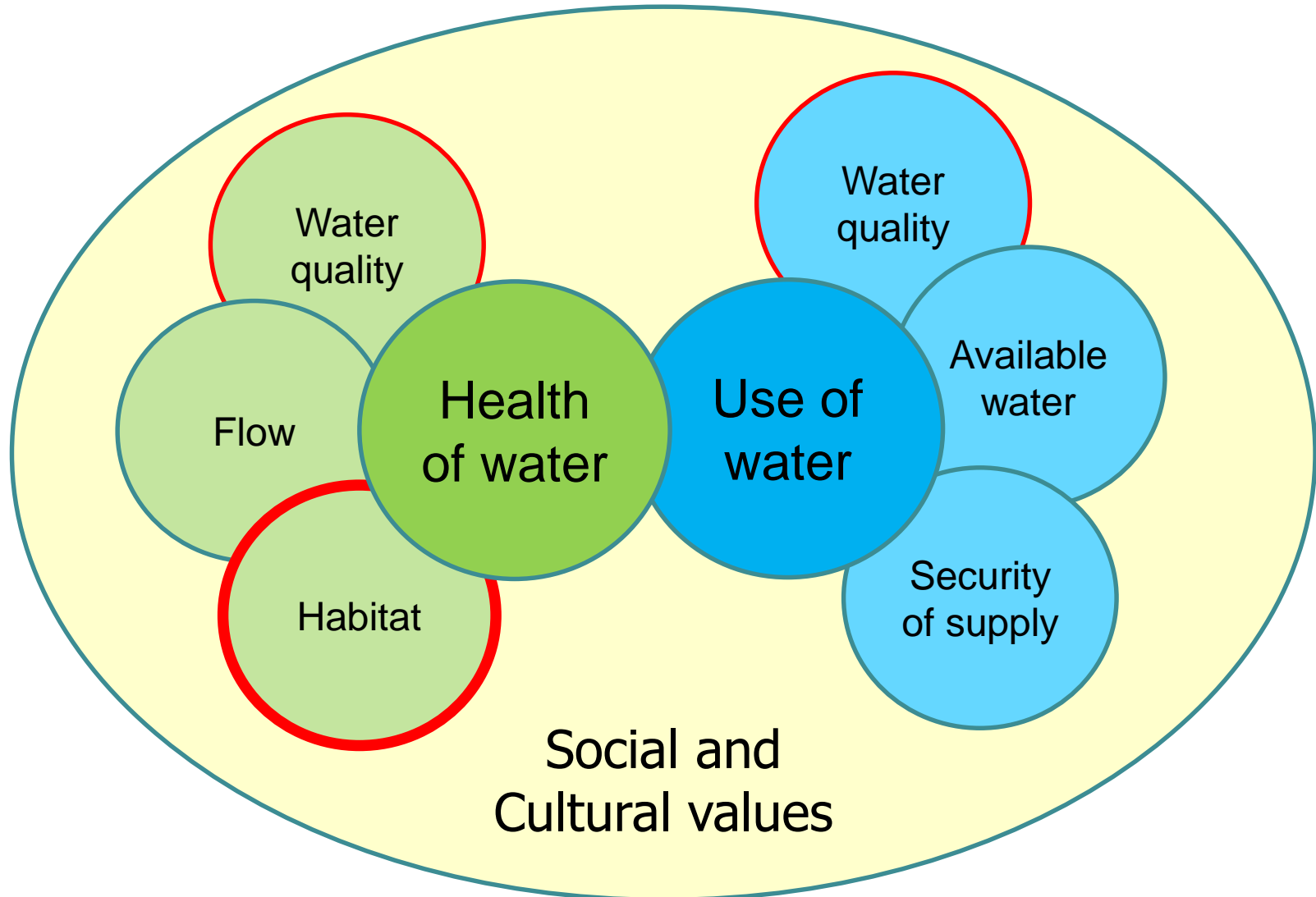
FLAG process – water quality management

- Focus on quality for the health of water – for all values
- Also provides for quality for use of water



FLAG process – habitat management

- Focus on riparian restoration and stock exclusion for both water quality and habitat improvement



Key attributes across all values

- Mauri
- Water clarity
- Fine sediment
- Riparian and aquatic habitat (incl. shading and habitat)
- Dissolved oxygen and dissolved organic carbon
- Nutrients- nitrates and phosphorus
- Nuisance aquatic plants (eg overgrowth of weeds, algal blooms, etc)
- *E.coli* (as an indicator of disease causing organisms)
- River and spring flow
- Groundwater level
- Security of supply
- Other economic indicator – yet to be defined

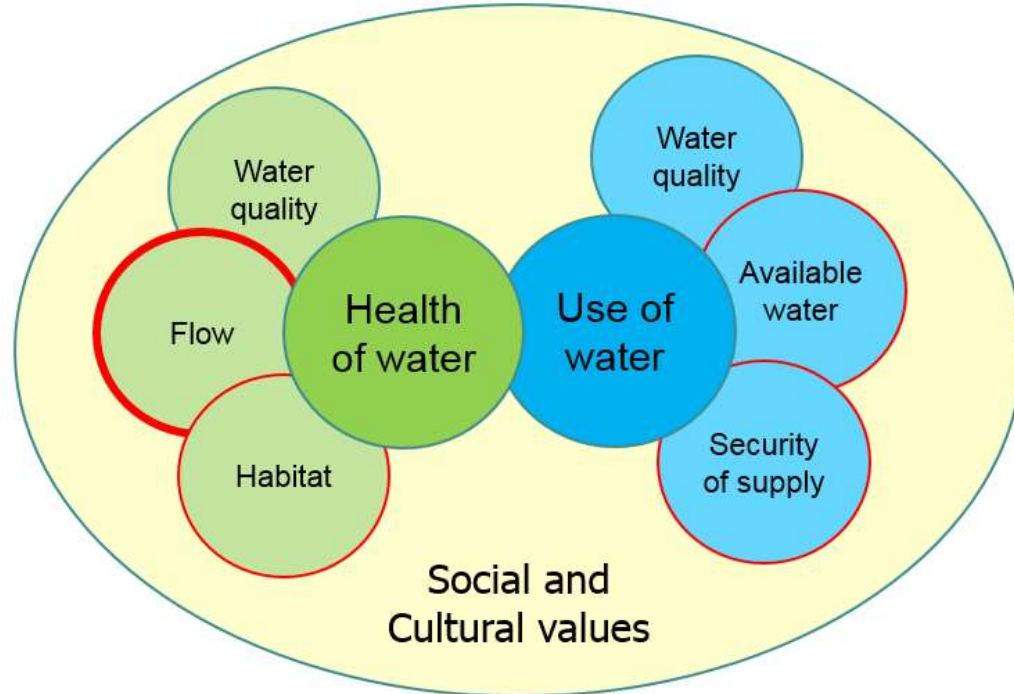




Summary of FLAG Interim decisions to date:

- Allocation of water (water quantity)
- Water quality and habitat (water health)

Work done to date: Water Quantity (Allocating water)



- 1
- 2
- 3
- 4
- 5

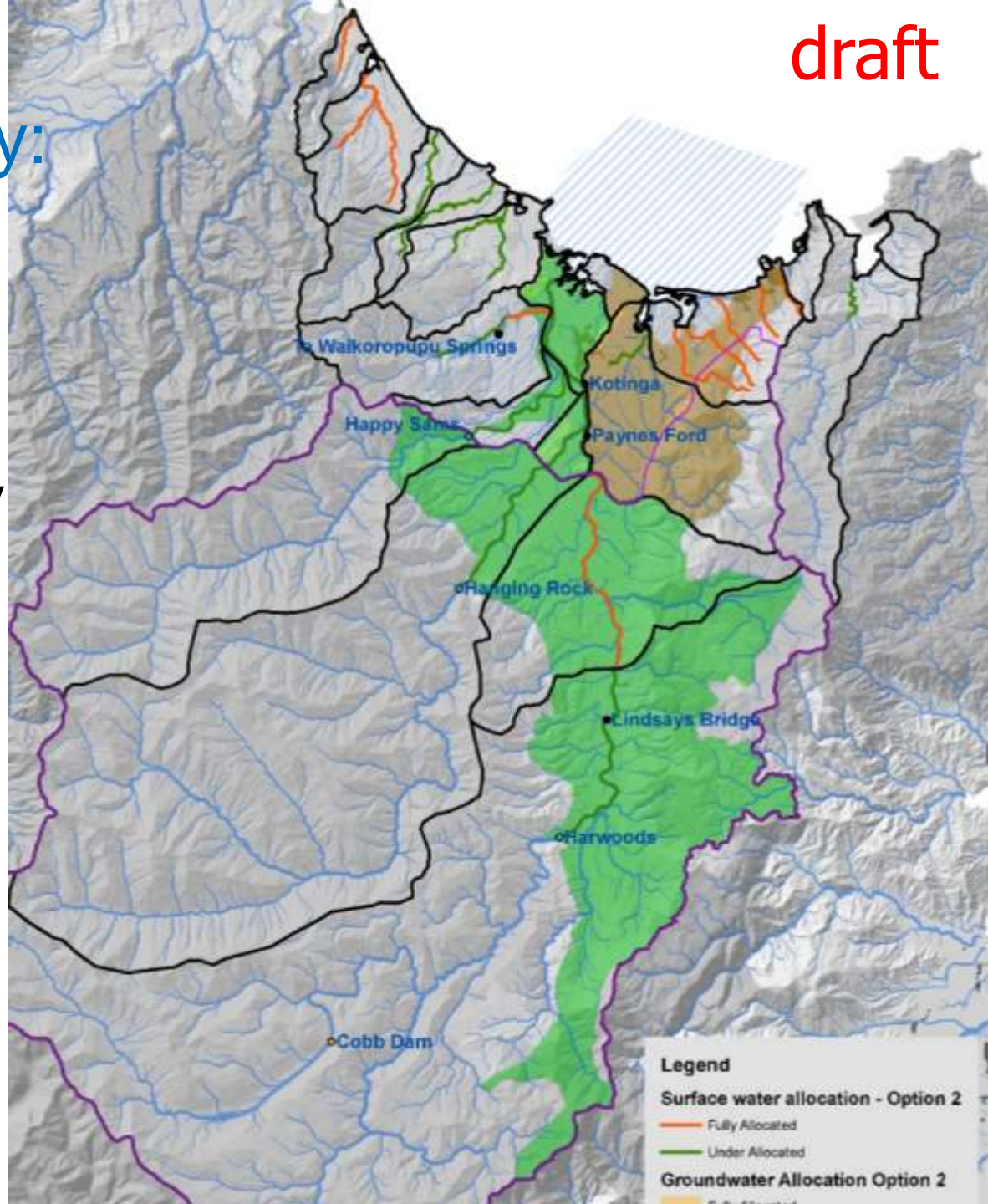
Work done to date – water quantity

- **Interim regimes** for water bodies that could have water allocation:
 - Goal to **protect in-stream ecological values** during dry periods
 - Enable **water use** where it is sustainable
 - Advice from Dr Roger Young – freshwater ecology expert (Cawthron)
- Setting **minimum flows** - low flow to be protected
- Setting **allocation limits** - amount of flow that can be taken
- Setting **cease take triggers** – so takes won't affect low flows
 - rivers may still drop lower naturally
- Review **security of supply** – options to improve:
 - Reduce allocation limits - ie users get less water, but don't get cut off as often
 - Promote use of storage
- **Questions to be resolved** regarding some zone allocation amounts
- **FLAG to review interim decisions** once draft plan change available

Interim allocation decisions summary:

draft

- Groundwater (aquifers) shown as polygons
- Rivers reaches shown as lines
- Additional water potentially available in **green** areas
 - subject to physical access
 - irrigable area not shown
- No further water in **orange** areas
- Tukurua:
 - Potential 'over-allocation'
 - Community water supply



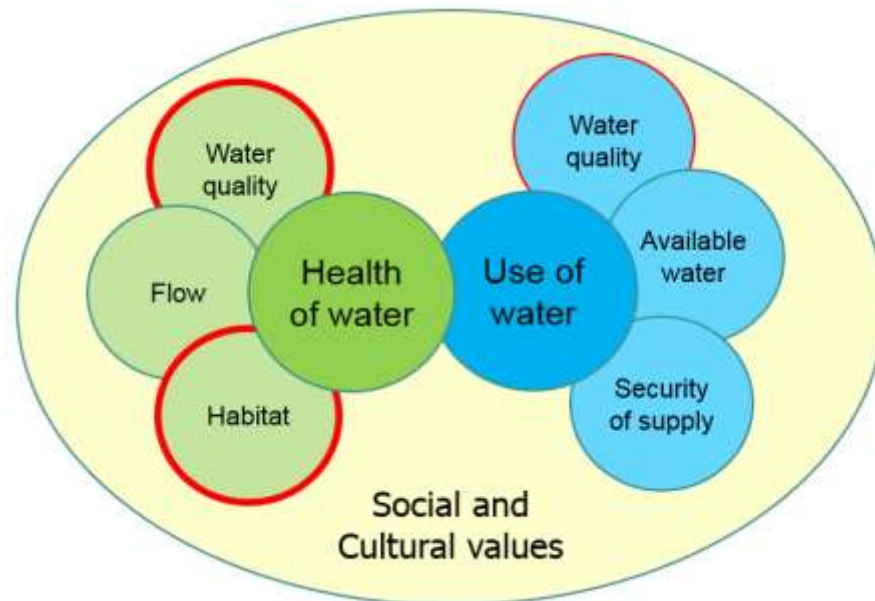
Anticipated Water Allocation Benefits

- **Low flows and ecological values** for rivers and springs are protected from the effects of consented, consumptive water takes
- Greater **certainty for water users** on water availability & security of supply
- **More water is available** for use in many zones:
 - 100% of waiting lists for water can be met by proposed regimes

Anticipated Water Allocation Costs

- Most existing consents will have **new cease take triggers**
 - Results in a **lower security of supply** (ie no cease take currently)
 - Security can be increased through storage or lower allocation
- Some zones are at **full allocation** - no further water available
 - Tukurua may be **over-allocated**, potential to resolve at consent renewal
- **Risks to water quality:** increased water use enabling land use intensification or change
 - To be addressed through water quality management methods, including land use and discharge controls
 - Reason: water use is only one cause of water quality risks- eg high rainfall, imported feed, stocking rates, land use practices etc

Work done to date: Water Health (quality and habitat)



- 1
- 2
- 3
- 4
- 5

Work done to date – water quality

FLAG discussions on:

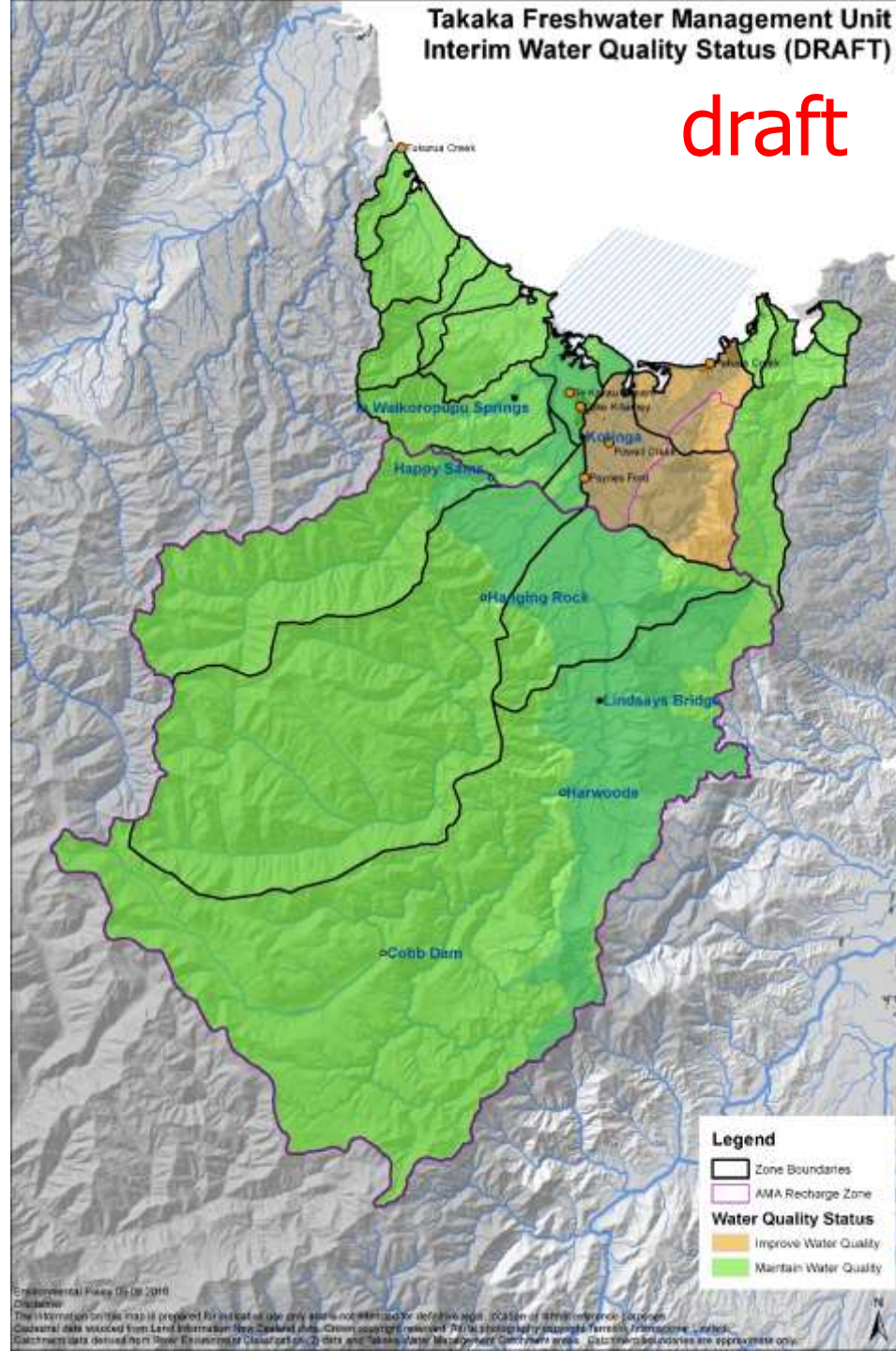
- Zones with water quality **issues to address**:
- Zones with **good or excellent quality** needing to be protected
- **Future potential risks** to be managed



Water Quality Status

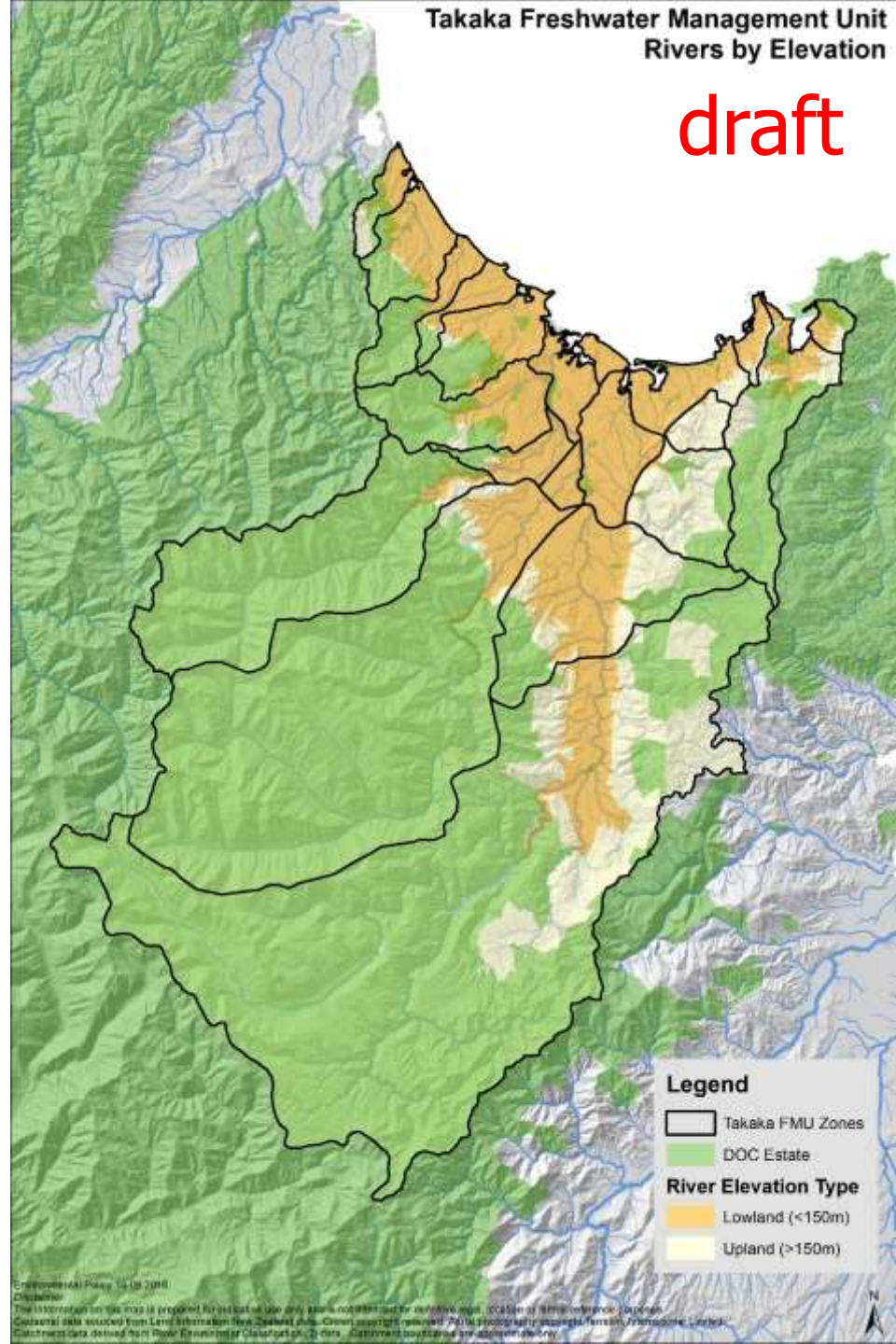
- Green areas in a maintain state, orange in an improve state
- Generally water quality is good and FLAG want to keep it that way
 - Especially at Te Waikoropupu
- **Motupipi and Pohara-Clifton Zones:**
 - Takaka Limestone Aquifer - potentially elevated nitrate
- **Sites/reaches with concerns:**
 - Te Kakau Stream
 - Lake Killarney
 - Motupipi river and tributaries
 - Swimming holes (eg Payne's Ford)
 - Pohara and Tukurua Creek/Beach
- **General FMU wide concerns:**
 - Risks from sediment, *E.coli*, nutrients
 - Loss of riparian cover/habitat – esp. lowland streams, close to coast

draft



Water habitats

- Loss of riparian cover and aquatic habitat:
 - Focus on **lowland streams**:
 - under 150m elevation (orange on map)
 - close to coast - have high fish diversity
 - Smaller streams benefit most from riparian shading
- **Stream restoration and replanting is occurring**
 - Staff to look at options to support this as part of implementation plan



Water quality management options discussed:

- Explore options during draft plan change and implementation plan development – focus on:
 - Requirement of **good land use practices** throughout all zones
 - Management of sediment, nutrients, effluent/bacteria, riparian areas, water use
 - Stock exclusion (dairy and beef cattle, deer, pigs)
 - **Investigations** into potential sources of contaminants at problem sites
 - eg. Bacteria *E.coli* levels – land practice or naturalized populations
 - Ongoing **monitoring** & additional monitoring to identify future issues
 - Adaptive management (set triggers > monitor > if breached > action)
 - **Education and promotion** of projects that improve water quality/health
 - eg. stream replanting and restoration
 - Work also still to be done on **scoping and costing** these aspects

Anticipated Water Quality Benefits

- Improved water quality through targeted projects in areas with issues
- Adaptive management approach to managing future risks
 - Avoids over-regulation & allows for changes to management if monitoring identifies undesirable trends or issues
- Improved aquatic and riparian ecology through support of enhancement projects and networks
- Greater protection and respect given to water bodies

Anticipated Water Quality Costs

- Changes will be needed for higher-risk land use practices:
 - Some may have little direct cost, requiring only behavior changes
 - Some may impact on-farm operating costs or require new investment
 - Compliance monitoring costs for council and industry
- Enhancement efforts such as riparian restoration require funding, and also ongoing commitment from owners
- Some additional monitoring and one-off investigation projects will add costs to Council monitoring budgets

Remaining work for FLAG / staff

- Include iwi input in FLAG recommendations
- Set **Freshwater Objectives** (step 4 and 5 in NOF)
- Developing **drafting plan change** and **implementation plan**
 - Merging **good land use practice** with a regulatory framework - new approach to water quality management, being grappled with nationally
- **Sec 32** analysis of methods: costs and benefit, implications
 - **Impact of draft plan change** compared to current situation
 - **Scoping and costing** of non-regulatory methods
- Gain **input from stakeholders and public**
- FLAG **review of interim decisions** in context of draft plan change and feedback – seek consensus if possible





FLAG and staff questions for iwi:

- How can we best include the following in the FLAG process and in the recommendations to Council?
 - Iwi interests and values - what are your relationships with water?
 - Kaitiakitanga (guardianship)
 - Mataranga maori (maori body of knowledge and understanding)
 - Tikanga maori (maori customary values and practices)
 - Mauri & wairua – how to maintain/improve; assess/monitor?
 - Mahinga kai – places, species? how to maintain/improve; assess/monitor?
 - Wahi tapu & taonga – places, species, etc?
 - Te Waikoropupu
- Two requests received:
 - Request for Cultural Impact Assessment – of what? who by? method? scope?
 - Cultural reservation has been raised previously – what does this include?
- What else should FLAG/staff be considering?

FLAG and staff questions for iwi:

- What **information** do you need from FLAG/staff?
- **How do you want to be further involved?**
 - Is there someone you would like involved at the policy drafting stage?