Takaka FLAG – Update to EPC
2: NPSFM Framework and FLAG decision philosophy

23 March 2016

tasman district council

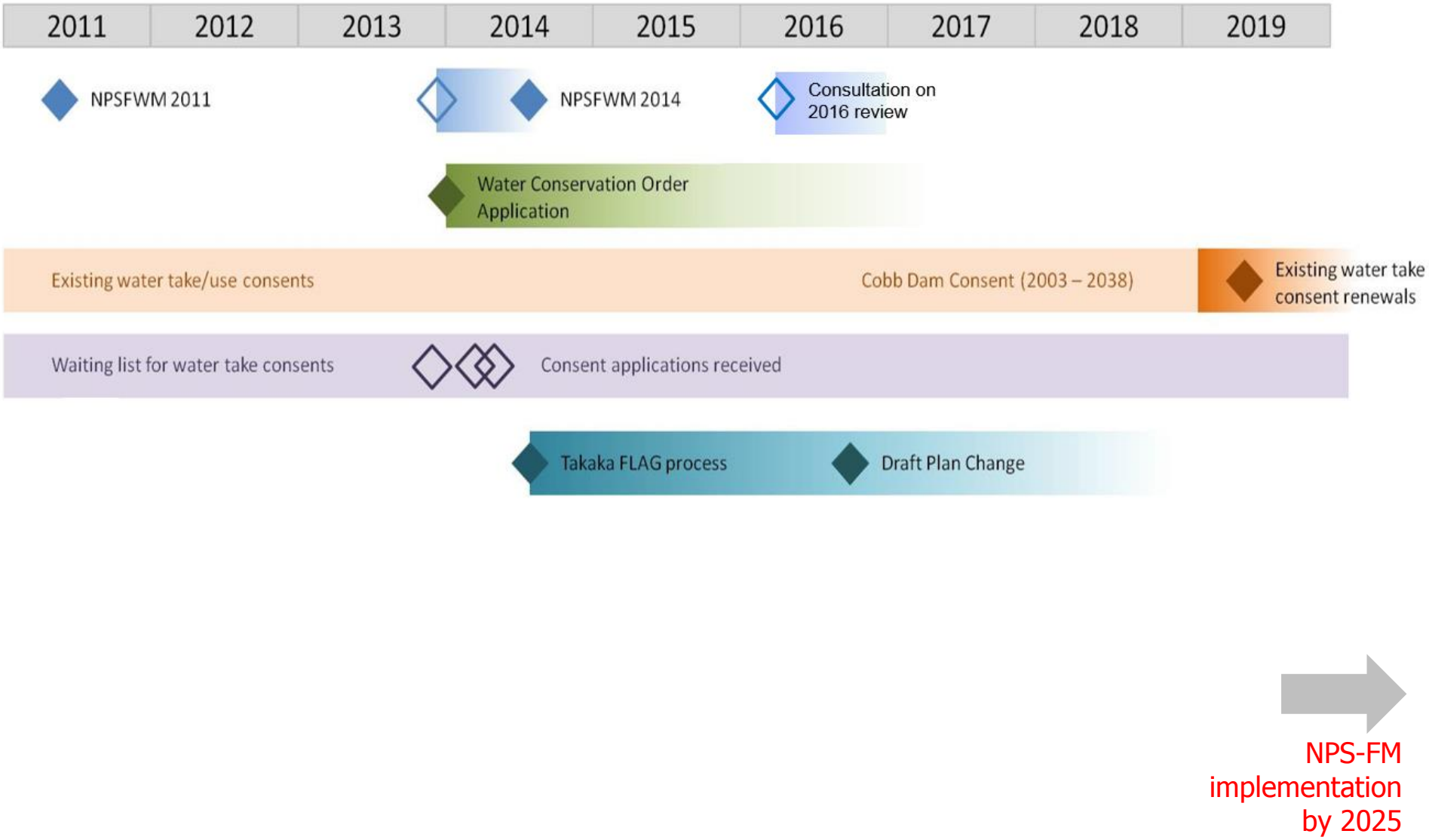
Outline

- Current planning context
- NPSFM framework
  - NPSFM overview
  - Proposed changes to the NPSFM
  - NPSFM process and outputs
- FLAG progress and milestones reached
- FLAG decision philosophy

Current Water Management Context

- Consents effective: 83 water take, 105 discharge (45 to water, 60 to land)
- 12 registrations on waiting list for further water in the Arthur Marble Aquifer (AMA) Recharge area
- New applications to take water - latest in AMA Recharge area was appealed
- Water Conservation Order application
  - Not yet accepted for processing by MfE
  - One of applicants has been co-opted onto the FLAG
- Not enough water to meet potential demand in places
- Water quality concerns in some areas
  - Non-point source (diffuse) pollution not well managed
  - Potential land use change or intensification risks
- Requirement to implement the NPSFM by 2025

Current Water Management Context



National Policy Statement for Freshwater Management

- First released in 2011
- Amended in 2014 - added National Objectives Framework (NOF)
- Next revision currently in the submission phase (22 April)
- Council obligated to fully implement NPSFM by 2025
- Includes:
  - Objectives and policies for management of freshwater:
    - Water quality and quantity
    - Maintain or improve water quality
    - Avoid and address over-allocation
    - Integrated management: land<>fresh water<>coastal
    - Iwi and community involvement
  - 13 national values of water (2 compulsory)
  - Some attributes for compulsory values listed in NOF

National Policy Statement for Freshwater Management

- Somewhat of a moving goal post, eg:
  - Reviews are refining and clarifying key principles
  - Adding new attributes in the National Objective Framework
  - Guidance material being released sporadically
  - It is not yet a complete package

National Objective Framework (NOF)

- Identifies attributes for the compulsory national values:
- Eg Ecosystem Health for rivers - attribute: Nitrate (toxicity) (mg NO3-N per litre)

Grade	Annual Median	Annual 95th Percentile	Narrative Attribute State
A	≤ 1.0	≤ 1.5	High conservation value system. Unlikely to be effects even on sensitive species.
B	>1.0 and ≤ 2.4	>1.5 and ≤ 3.5	Some growth effect on up to 5% of species.
C	>2.4 and ≤ 6.9	>3.5 and ≤ 9.8	Growth Effects on up to 20% of species (mainly sensitivity species such as fish). No acute effects.
National bottom line D	>6.9	>9.8	Impacts on growth of multiple species and starts approaching acute impact level (ie risk of death) for sensitive species at higher concentrations (>20mg/L)

- Any attribute below the national bottom line must be improved
- For any attributes NOT in the NOF yet – FLAG needs to determine the numbers for the relevant value and objectives

NPS process in a nutshell

1. What are we managing our water bodies for? (our values and our objectives)

2. What attributes are important for our values/objectives?

3. What state do the attributes need to be?

4. What is the current state of these attributes?

5. How do our desired and current states compare?

6. What are the threats and risks to attributes/objectives?

7. How can we manage the attributes and threats/risks?

8. Can we afford it, will this be effective?

NPS in a nutshell - eg

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No getting sick

E.coli

Good Water clarity

Water clarity

Bed sediment

No excessive algae, slime or sediments

Periphyton

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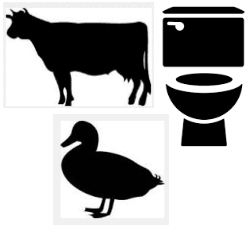
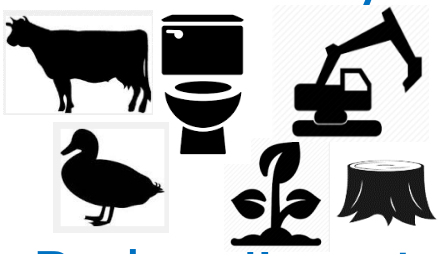


Water clarity



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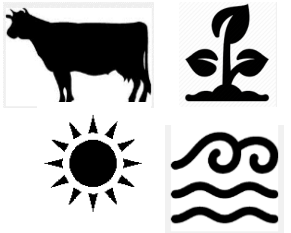
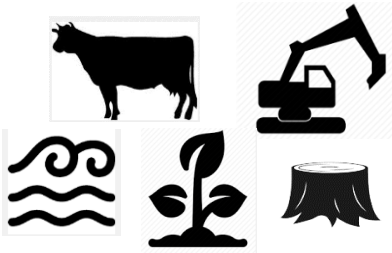


Bed sediment



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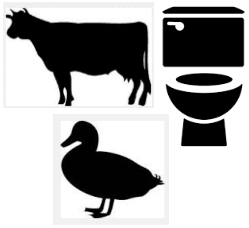

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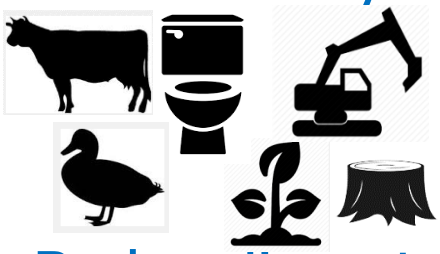

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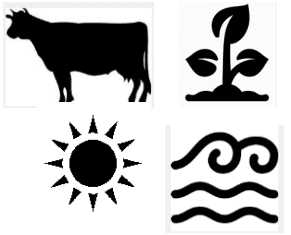

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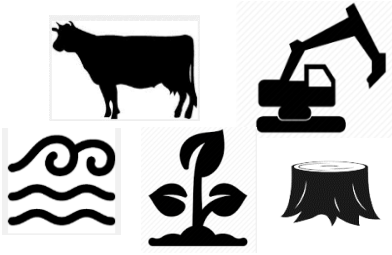

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8. Can we afford it, will this be effective?

Education, rules on good practice + audit and compliance

Education, monitoring, compliance

Replanting, education, advice, funding support

Sounds simple enough!

But…

NOF in a nutshell - considerations

1. What are we managing our water bodies for?
(our values and our objectives)

Have we got everyone's uses and values
How do we address conflicting uses and values, or not enough water for all demands?

2. What attributes are important for our values/objectives?

What are the key attributes and which metric and statistic should be used?

3. What state do the attributes need to be?

Most are not in the NOF! – so what state is required to meet our objectives? By when?

4. What is the current state of these attributes?

Do we have any data? - or the right data? in the right location?

5. How do our desired and current states compare?

Do we agree on whether there is a problem and how big it is?

6. What are the threats and risks to attributes/objectives?

How well do we understand the threats and risks – the sources, the pathways?

7. How can we manage the attributes and threats/risks?

What are our options? How well do these work? What timeframe? To regulate or not?

8. Can we afford it, will this be effective?

What do the options cost? **Who pays?**

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How do we address conflicting uses and values, or not enough water for all demands?

What are the key attributes and which metric and statistic should be used?

Most are not in the NOF! – so what state is required to meet our objectives? By when?

Do we have any data? – in the right data in the right location?

Do we agree on whether there is a problem and how big is it?

How well do we understand the threats and risks – the sources, the pathways?

What are our options? How well do these work? What timeframe? To regulate or not?

What do the options cost? What are the opportunity costs/trade-offs? **Who pays?**

Lack of information and UNCERTAINTY

FLAG progress in NOF framework

FLAG Progress - Key Milestones

1. What are we managing our water bodies for? (our values and our objectives)	Draft values and management objectives complete ✓
2. What attributes are important for our values/objectives?	Key attributes for most values ✓
3. What state do the attributes need to be?	Key states for most attributes ✓
4. What is the current state of these attributes?	Current states for key sites, lacking data for others ✓
5. How do our desired and current states compare?	Generally understood, but yet to confirm specific desired states ✗
6. What are the threats and risks to attributes/objectives?	In the midst of discussing threats, risks and options to address these ✓
7. How can we manage the attributes and threats/risks?	
8. Can we afford it, will this be effective?	Yet to discuss costs ✗

FLAG Progress – Quantity vs Quality

- Further along for water quantity (allocation) interim decisions
- Water quality more complex:
  - Non-point source management is new to the TRMP
  - Regulation of land use to control water pollution is relatively new
  - Various projects progressing around the country to better understand this
  - Some specific projects being initiated in Tasman using Envirolink funding
- Iterative process to ensure interim decisions address all issues and the objectives will be met

FLAG Decision Philosophy

- Currently refining decision philosophy
  - Clarify reasoning and ensure consistency
  - Understand any non-consensus and differing perceptions of risk
  - Will be used when reviewing interim decisions
  - Contribute to Sec 32 evaluation

- Key philosophy points include:
  - Using a precautionary approach
  - Seeking expert advice where info is uncertain
  - Use adaptive management as appropriate
  - Seek consensus - if consensus is not reached, the preferred options will be put to EPC for decision making

Questions?