Miraka Evidence
PC1 Hearings, Block 1

Murray Hemi	Mihimihi and Karakia
Jennifer Caldwell	Legal Opening
Richard Wyeth	Miraka Overview
Grant Jackson	Key Positions
Dr Mark Paine	Practice Change Principles
Dr Gavin Sheath	Practice Change in PC1
Jude Addenbrooke	FMU and Sub-Catchment Scale
Kim Hardy	Planning

9 April 2019

Miraka Introduction and Principles

Richard Wyeth

Miraka Overview

- Maori-owned dairy processing and exporting company, 2011

- Miraka is different:
  - Strive for global recognition for best practice sustainability and innovation
  - Independent dairy company, with 6 major Maori shareholders
  - Operate on the strong cultural values of its Maori owners
  - Uphold kaitiakitanga and tikanga as central business values

Kaitiakitanga

- Kaitiakitanga is about relationships – our community, our environment and our business
- Miraka responsibility to recognise those relationships, balancing business decisions within context of wider social and environmental considerations
- Te Ara Miraka, our farming excellence programme, has supply farm practices assessed on 5 key pou (principles):
  - Nga tangata (people)
  - Nga kau (cows)
  - Te Taiao (environment)
  - Turikura (prosperity)
  - Miraka (milk)

Tikanga

- Tikanga is about balance – local decisions have consequences for local communities, environment and business
- Tikanga varies according to circumstance → balance of factors
- Tikanga is an active dynamic process
- Miraka is challenged to make decisions that strike the best overall balance
- This requires a high level of organisational development and operational intelligence

Operation of Kaitiakitanga and Tikanga

- Kaitiakitanga and tikanga are extremely soft skills, relying on collective understanding, wide breadth of awareness, and a complex range of intelligence
- Miraka's experience in implementing practice change offers valuable insight into best way to achieve reductions in contaminant discharges
- Effective long-term approach involves:
  - Building a culture of connection and relationship within communities (kaitiakitanga)
  - Supporting a local decision-making process that enables communities to balance out their respective needs, values and aspirations (tikanga)

Miraka Experience

- This approach of kaitiakitanga and tikanga within Te Ara Miraka has underpinned significant changes in farming practice within Miraka's supply community in a short time
  - Sense of pride shared by entire Miraka supply community
  - Farmers feel like they are doing the right thing
- Miraka supports the goals of PC1, and advocates for a more determined focus on processes and provisions that emphasise community engagement and effective practice change
- Practice change is not explicitly covered in any Hearings topics, but is fundamental to many of our individual submission points and topics throughout the Hearings

Overview of Changes Sought and Te Ara Miraka

Grant Jackson

Overview of changes sought

- No pre-emptive decisions made during Stage 1 on the allocation of contaminant loss
- Practice Change emphasised as the primary means of reducing all four contaminants
- Replace current Nitrogen Reference Point/75th percentile approach with practice change focus
- Practice change to be accomplished through Good Farming Practices, Farm Environment Plans, Monitoring and Feedback
- Planning, Implementation, Auditing of GFP's conducted at Enterprise Level
- New FMU/Sub-catchment boundaries established for optimised homogenous geophysical and community attributes

Timeframes and Challenges

- 2 key drivers of contaminant loss:
    - Inherited biophysical attributes (soil type, topography, climate)
    - Farm management practices (Animal Mgmt, Cultivation, Fertiliser)
- Biophysical attributes to be dealt with in a longer-term allocation framework
- Stage 1 focus should be on practice changes on farm
- Still considerable uncertainty regarding contaminant flow & attenuation as well as socio-economic impacts on communities
- Miraka supports Stage 1 “settling in” approach

Nitrogen Reference Point and Allocation

- Miraka opposes proposed NRP for anything other than a baseline for ongoing monitoring of progression towards the Vision & Strategy.
- In Stage 1, the NRP and the 75th percentile as notified would
    - Disadvantage enterprises already implementing GFP's or investing in mitigations early
    - Create inequity for Maori freehold land owners
    - Create significant socio-economic disruption in certain communities
- Miraka strongly believes responsibility for change should be shared equitably across all enterprises by placing emphasis on appropriate Practice Change
- Therefore maintain consistency in approach across all four contaminants

GMPs, FEPs and Te Ara Miraka

- Miraka supports the approach of using Good Mgmt Practices & Farm Environment Plans to reduce all four contaminants
- Te Ara Miraka is our first hand experience in achieving practice change through this Quality Assurance Programme. Primary drivers:
    - Farm business resilience
    - Production efficiency
    - Commercial branding story
    - Living our values – throughout the Miraka Value Chain

Te Ara Miraka & CIS

- Farms provided support and clarity to achieve GMP's. Failure of mandatory standards results in contract termination. Incentivised standards worth c. $40k/yr
- Significant results achieved in just three years. Our experience is that:
    - Practice Change can be effectively implemented
    - Effective communication, support and advice are critical to success
    - Regulation a necessary tool for laggards
- Miraka supports the use of Certified Industry Schemes for plan implementation and intends Te Ara Miraka to operate as one

Farm Practice Change

Mark Paine

Context

- **My evidence will discuss the practice change process on farm**
  - Principles related to on farm change and community action
  - Links with the evidence provided by Dr Sheath who applies the principles to PC1.
  - A focus on opportunities to make progress on short term targets

Practice Change

- **Practice change: how farm businesses and communities adapt to achieve desired outcomes**
  - **PC1 context**: how farmers contribute to healthy river targets
  - **Co-development**: using knowledge & experience of farmers, advisers & researchers
  - **Policy & market signals**: economic incentives that support good practice

Farm System and Practice Change

- **Farm entities the most effective unit for achieving practice change:**
  - where decisions on management practices are made
  - Ability to change practice varies between individuals and businesses
  - Environmental change: when farm businesses have access GMP guidelines
    - When land managers and policy managers agree on good management practices.

Adaptive Management: Farm and Catchment

- Dairy
  - Group based farmer to farmer learning using targets and benchmarking
- Meat industry
  - Focus farms (3 year tenure) as a hub for approximately 20 farms implementing environmental practices
- Extension 350
  - Northland project combining dairy and meat farming approaches
- Horticulture and pricing signals

Catchment Management

- **A community endeavour.**
  - Communities provide their members with a sense of identity and belonging.
  - Achieving healthy river outcomes requires several communities to combine their skills and strategies for mutual benefit.
  - Each industry is a type of community. When they operate independently, they will achieve partial solutions to the problem of river health.

Incentives, Limits and Penalties

- **Economic incentives (rewarding practices consistent with healthy rivers) will stimulate businesses and communities to change.**
  - Several factors that can disrupt practice change to the detriment of farming businesses, industries and communities.
  - Correct recidivist behaviour that threatens the health of rivers for future generations.
    - Failure to provide adequate policy support will increase the likelihood that inappropriate power relations and distrust issues will undermine practice change.

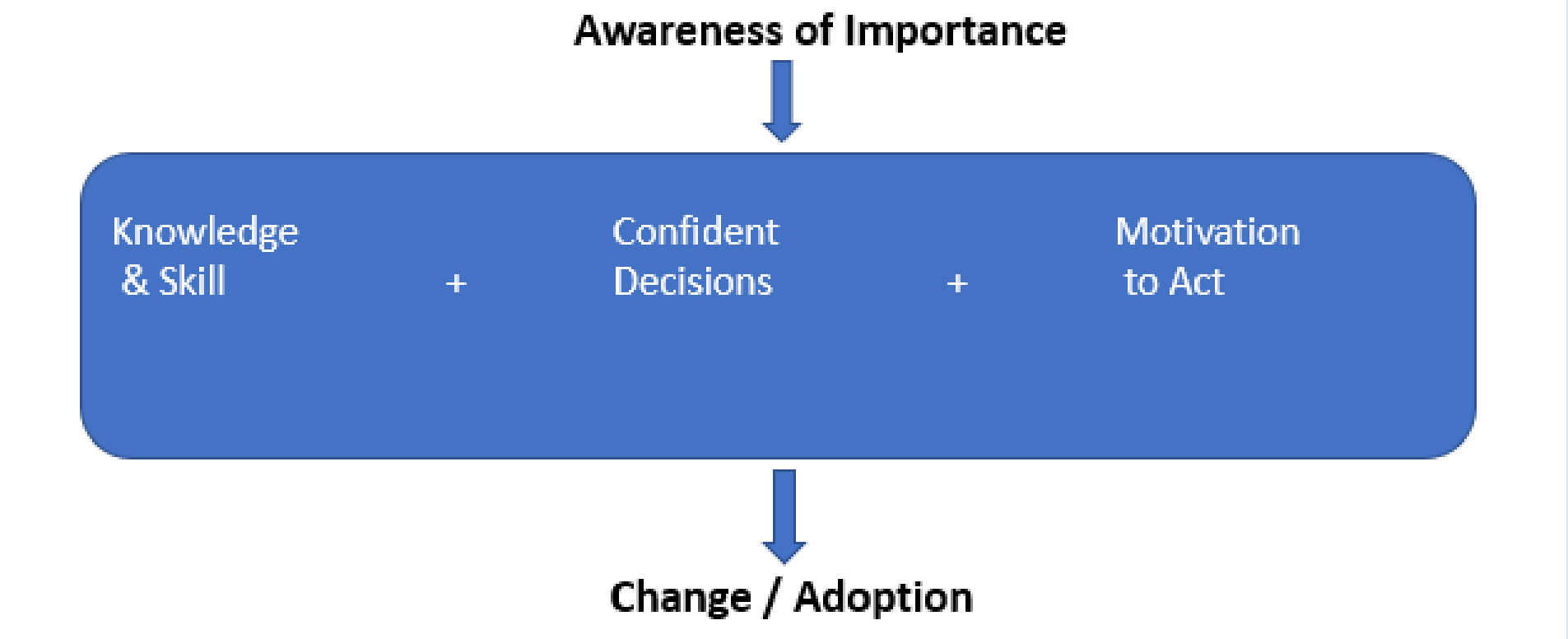
Practice Change in the Context of PC1

Gavin Sheath

Context of My Evidence

- I build on the principles of Dr Paine's statement and my own experience in working with farmers
- Two key drivers of contaminants to freshwater:
    a) "Inherited" biophysical attributes
    b) Practices on farm
- Practice change should be emphasised during Stage 1
    a) It is more equitable and feasible
    b) It provides a settling in period for land managers and communities
- Plan Change 1 should look through the lens of Practice Change

My Experience



- Plan Change 1 contains some of the necessary elements of effective change [eg: FEP, CIS], but other elements need strengthening

Communities of Interest

- Communities of interest that are cohesive and collaborative need to be established
- This has implications on setting the boundaries and scale of FMU – Sub catchments
- Correct boundaries will provide:
  - a) more focussed targets
  - b) greater ownership
  - c) stronger peer support
  - d) more meaningful monitoring and feedback to land managers
  - e) more responsive adaptive behaviour
- Lake Rerewhakaaitu is a good working example

Farm Environment Plans and Good Management Practices

- FEPs that embody GMPs are strongly supported and should be required by all land use enterprises
- GMPs that reduce all four contaminants should be agreed and described in Plan Change 1
- Plan Change 1 is silent on GMPs that will reduce nitrogen loss – this must be addressed
- Section 42A report (para 134) is contradictory on the effectiveness of GMPs and practice change – this should be rationalised

Confidence and Motivation to Change

- “Implementation methods” of Plan Change 1 (3.11.4) is weak on confidence and motivation to change
- Knowing and understanding that change has been worthwhile is essential to build confidence
- Plan Change 1 must specify how practice change and its impact on water quality will be monitored and communicated to land managers
- Motivation to change is determined by the balance between incentives and disincentives:
    a) Certified Industry Schemes have the potential to provide market incentives
    b) Robust auditing and assessment of compliance is required to underpin a Practice Change strategy. Plan Change 1 should specify how this will occur

FMUs and Sub-Catchments (Scale)

Jude Addenbrooke

Sub-Catchments & FMUs in PC1

- PC1 is built around the framework of sub-catchments:
  - 74 identified; scenario modelling; Table 3.11-1; policy focus

- FMUs barely feature in PC1
- FMUs are required under the NPS-FM, at an "appropriate scale for setting freshwater objectives and limits and for freshwater accounting and management purposes"
  - 4 river catchment FMUs identified
  - Used only for calculating NRP 75th percentile
  - Not used for setting freshwater objectives and limits; freshwater accounting; management
- FMUs not incorporated into PC1 in a meaningful way and not used in accordance with the NPS-FM because not set at a **scale** that facilitates usefulness

FMUs and Sub-Catchments

- Inconsistent and ineffective for PC1 to have two separate scales
  - FMU for N
  - sub-catchments for all other contaminants and actions - freshwater limits, management, planning, coordination, funding, analysis, modelling, etc
- Solution: merge the two into a single conceptual unit: “Freshwater Management / Sub-Catchment Units”
  - Units that are smaller than the current FMUs
  - Larger than the current sub-catchments

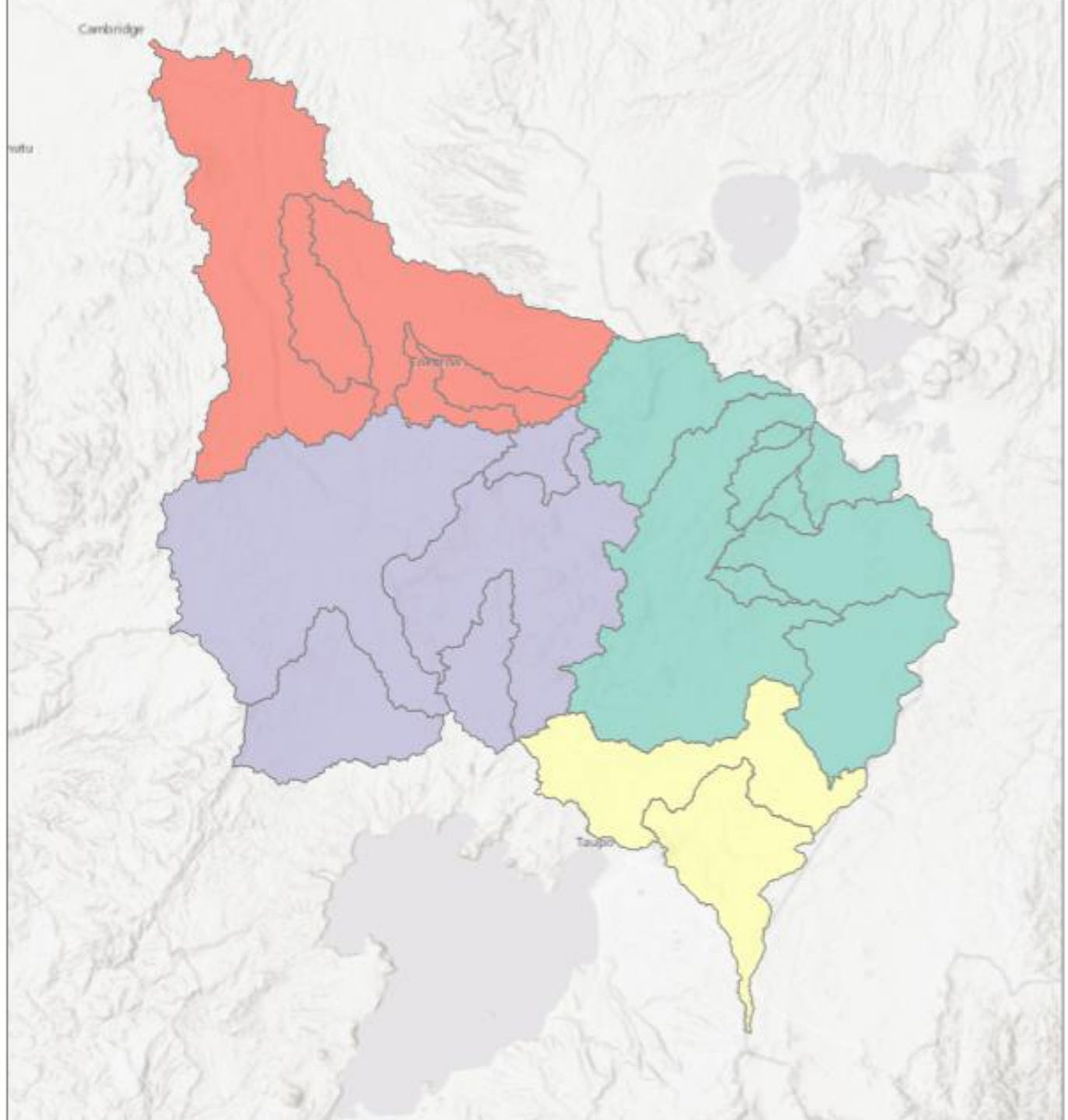
Freshwater Management / Sub-Catchment Units

- Merged units will facilitate:
  - NPSFM freshwater objective and limit setting (as per Table 3.11-1)
  - relatively homogenous biophysical features (equity and relativity assessments)
  - clear identification of issues and priorities
  - community identification and engagement
  - effective practice change and management
  - meaningful monitoring and opportunities for feedback
  - reinforcement of change and improvements in water quality

Criteria and Process for Merged Units

- Reconfiguration, based on
  - hydrologic connectivity
  - biophysical homogeneity
  - socio-cultural identification

- Example of Upper Waikato
  - example of process and criteria (not outcome)
  - expert conferencing?


Cambridge

Planning Evidence

Kim Hardy

Primary Evidence

- Focused on consistency of the Miraka submissions on Block 1 matters within the statutory planning context which includes:
    - National Policy Statement on Freshwater Management (NPSFM);
    - Vision and Strategy for the Waikato River
- The specific provisions of the PC1 and V1 Planning Framework that I comment on in this Block include the FMU and Sub Catchment boundaries

Consistency with NPSFM

- The NPSFM gives no specific guidance as to the size of FMUs
- Having relied on the evidence of Ms Addenbrooke and Mr Jackson I've reached a view that the Miraka Hybrid FMU are more effective than the current FMU
- The Miraka Hybrid FMUs would be set according to local conditions and represent a more appropriate local scale consistent with the purpose of FMUs as defined in the NPSFM:

> *'Freshwater management unit is the water body, multiple water bodies or any part of a water body determined by the Regional Council as the appropriate spatial scale for setting freshwater objectives and limits and for freshwater accounting and management purposes.'*

Vision and Strategy for the Waikato River

- The Vision and Strategy has no specific guidance on FMUs
- There are parts of the Vision and Strategy (in particular Objective d) that the Miraka Hybrid FMU approach will better implement:

  > ‘Objective d: The restoration and protection of the relationship of the Waikato region’s communities with the Waikato river including their economic, social, cultural and spiritual relationships’

- This is because the Miraka Hybrid FMU approach will better implement practice change through smaller, community based boundaries

PC1 Policy Framework

- No fundamental changes are required to the intent of the PC1 FMU policy and rule framework as a result of the amendments sought by Miraka as the overarching purpose and principles of the FMUs would still apply

Rebuttal Evidence

- A whole of catchment approach with smaller FMUs than those proposed in PC1 and Variation 1 is not a mutually exclusive proposition
- Limiting the FMUs to the areas proposed in PC1 and V1 in order to keep an ‘eye on the prize’ misses the opportunity to define the FMUs in a way that supports practice change and encourages community participation and ownership of that change
- Understanding the whole of river outcomes should not be a constraining factor to establishing meaningful FMU boundaries that comprise comparable physical and community characteristics