Welcome

Regional plans review workshop

Water Quantity

14 October 2014

Welcome, introductions and housekeeping

- Welcome
- NRC introductions
- Toilets and fire
- Attendance register
- Participant introductions

Outline of the day

9:45 - 10:30	Session 1: Issues with water quantity in Northland
10:30 - 11:00	Session 2: Giving effect to the National Policy Statement for Freshwater Management 2014
11:00 - 11:15	**Morning tea**
11:15 - 1:00	Session 2: continued
1:00 - 1:30	**Lunch**
1:30 - 3:00	Session 3: Options for improving water quantity management
3:00 – 3:15	**Afternoon tea**
3:15 – 4:00	Session 3: continued
4:00 – 4:30	Wrap up, next steps & evaluations

Why do a review?

- Plans are old
- Based on old information
- We have to
- Learnt a lot
- New government policy

Review → Draft → Proposed → Operative

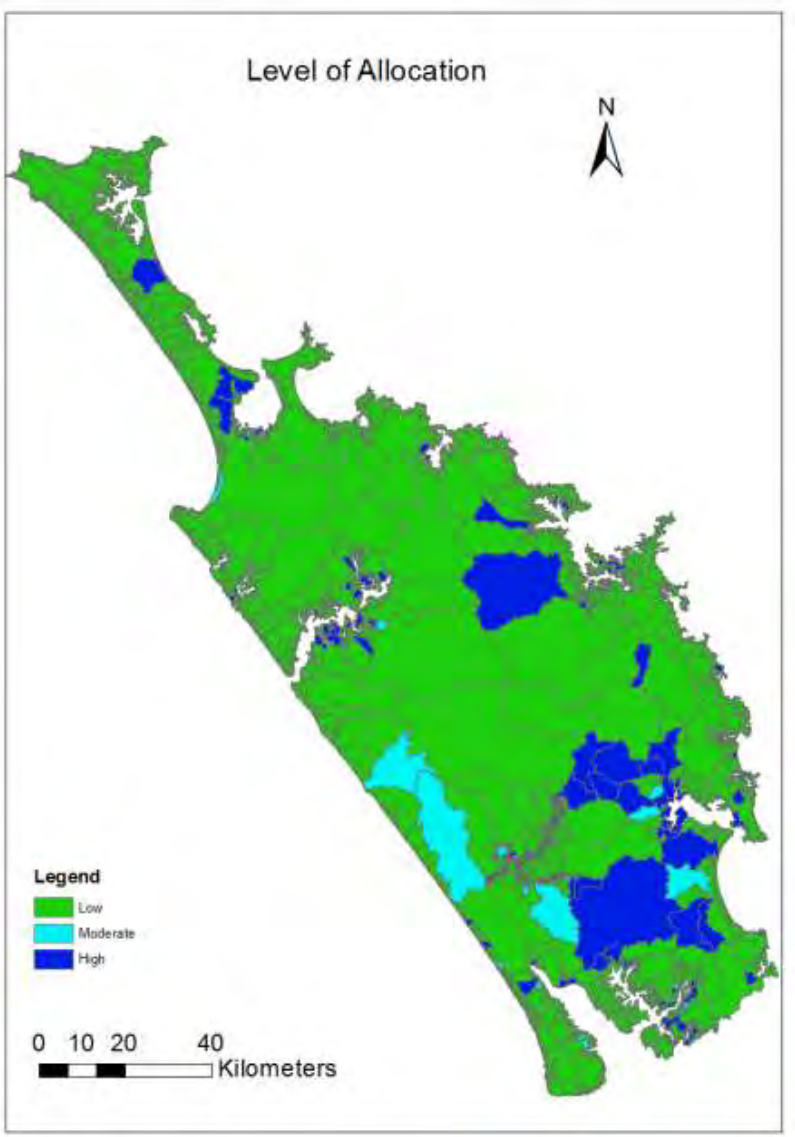
Session One

- Significant issues with water quantity in Northland

3 significant issues for water quantity

- High levels of allocation in some catchments
- Climate change
- Drainage and diversion of wetlands

1. High levels of allocation



NORTHLAND REGIONAL COUNCIL

High levels of allocation

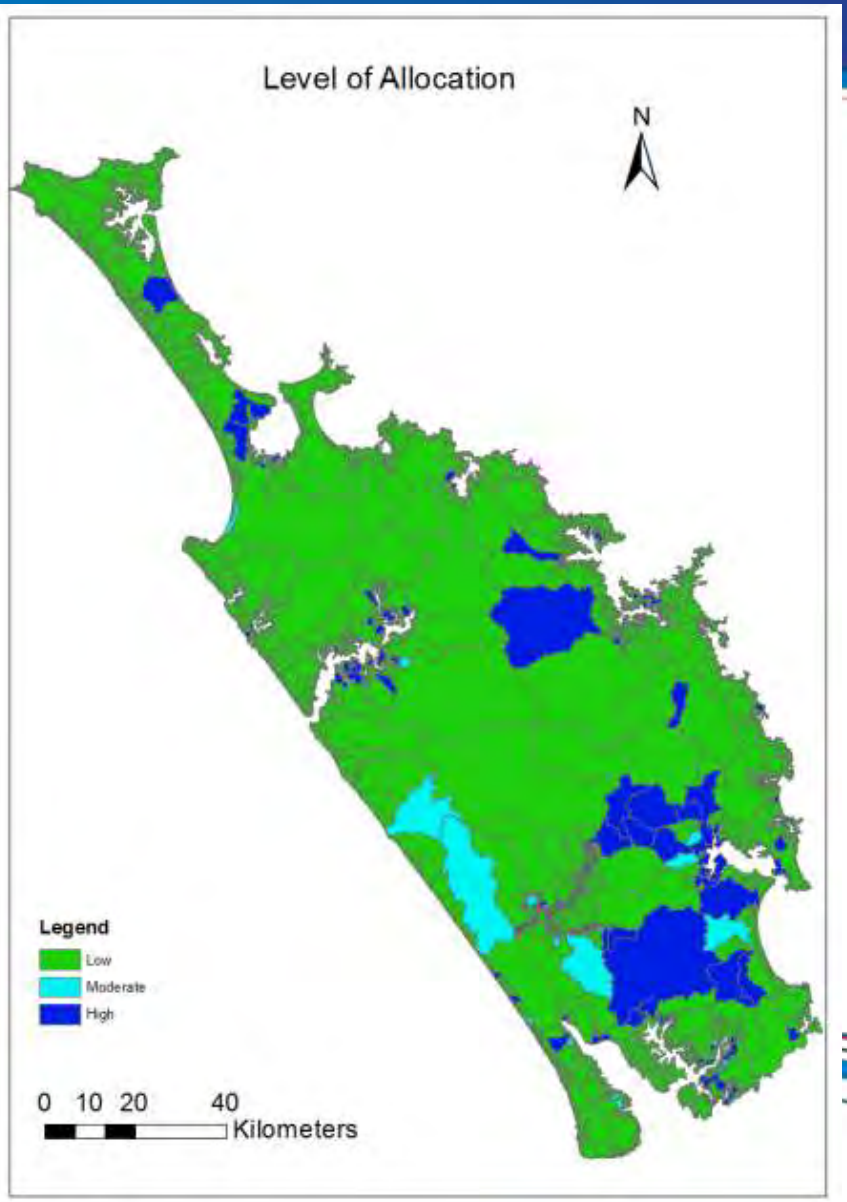
Water allocation calculator:

- Breaks Northland into surface water catchments
- Levels based on defaults in the Proposed National Environmental Standard for Ecological Flows and Water Levels

High levels of allocation

Allocation level calculations based on:

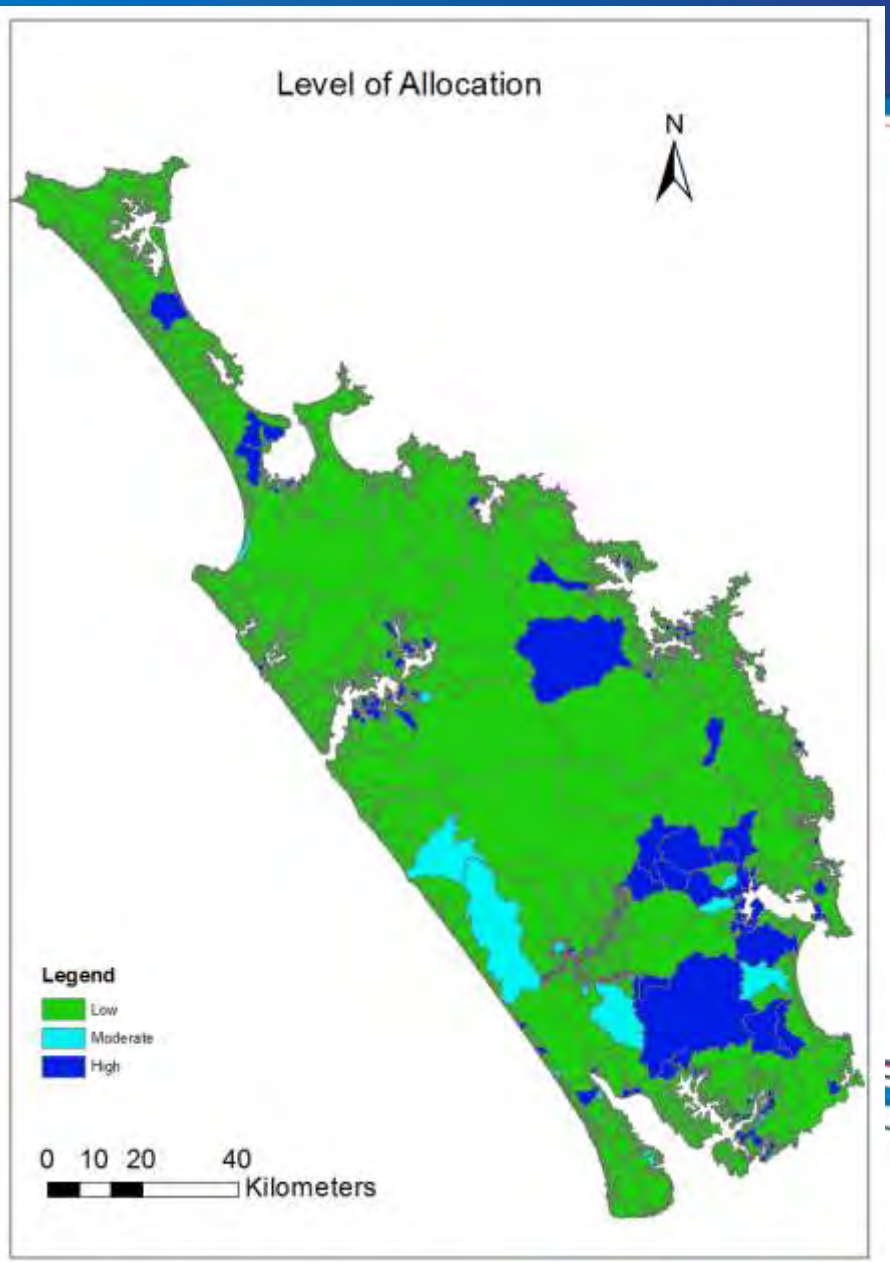
- Flows
- Water use



Example:

Allocation calculator

- Most accurate info at the time
- Surface water only
- Changes with time



2. Climate change

Climate change

Existing climate is highly variable

Climate change

Into the future…

- Temperatures are expected rise this century
  - 0.8°C in limited greenhouse gas scenario
  - 3.5°C in a high emissions world
- Reduced annual rainfall but rise in extreme rainfall evens
- More drought

Climate change

What this means for water quantity:

Groundwater:

- Reduced annual recharge
- Decline in groundwater levels
- Decrease in base flows to rivers
- Increased water demand
- Less water available for use
- Increased risk of saline intrusion

Rivers and stream:

- Reduced mean and low flows
- Increased flood flows and frequencies
- Increase water demand
- Less water available for use
- Increased water quality issues

3. Drainage and diversion of wetlands

Drainage and diversion of wetlands

- Only 5% remain
- Native species becoming rare, threatened and endangered
- Loss of buffer storage for flood waters
- Loss of sediment trap

Discussion

- Do you agree with the significant issues we have identified? Why or why not?

- Do you think we have overlooked any significant issues and if so what and what?

Session Two

- Giving effect to the National Policy Statement for Freshwater Management 2014

National Policy Statement

- **National Policy Statement for Freshwater Management** directs regional councils to manage freshwater quantity in a nationally consistent way and has specific requirements for regional councils and their plans.
- **Key steps:**

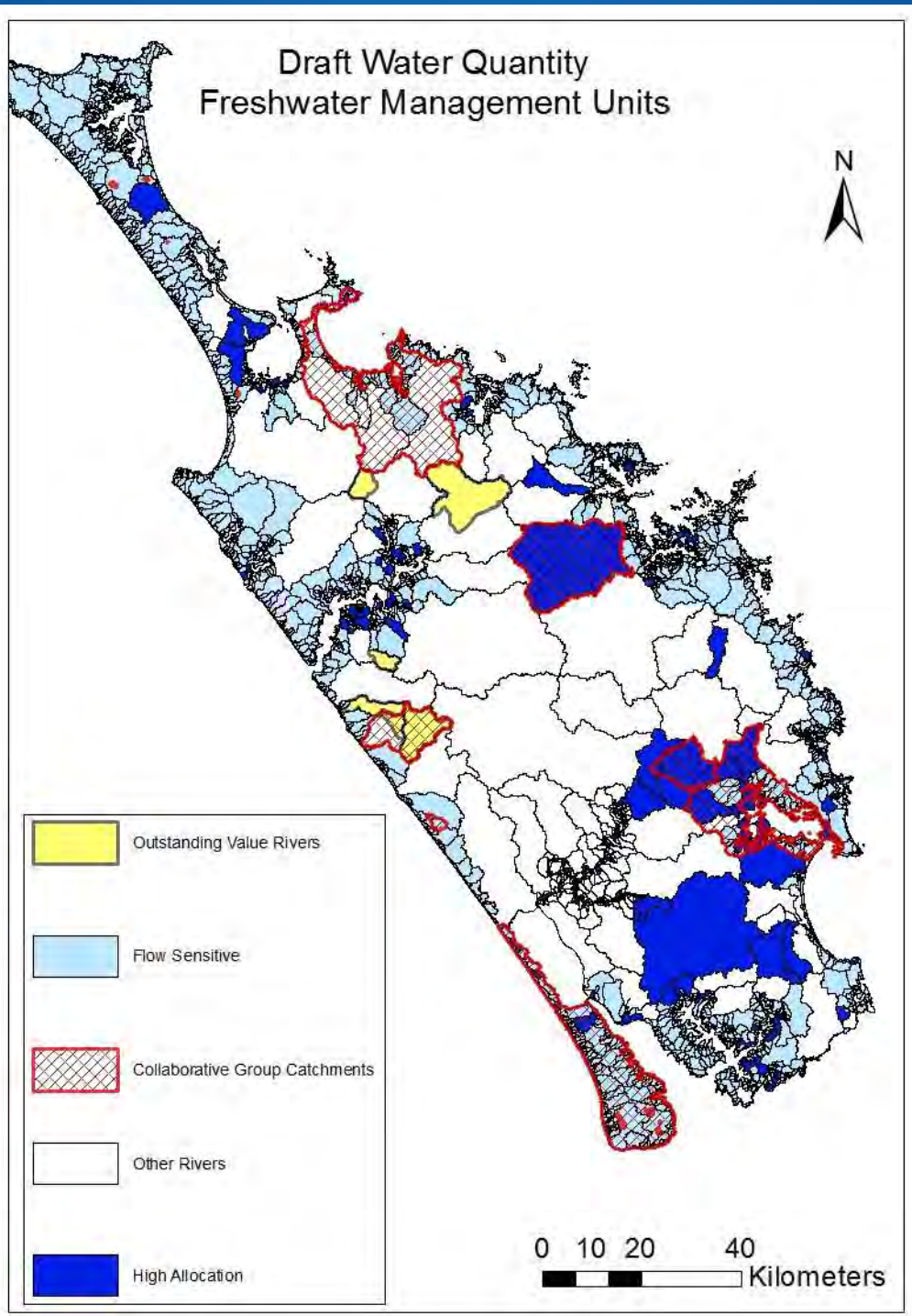
- Establish freshwater areas "Freshwater Management Units"
- Establish water quantity objectives
- Set water quantity flows/levels and limits

Freshwater Management Units

- Enables a diverse region to be divided up
- Apply common objectives and limits
- **Current approach:**

- Outstanding water bodies
- Flow sensitive rivers of high ecological value
- Other rivers
- Wetlands and lakes
- Aquifers

Water quantity management unit	**Uses/values**	**Attributes (basis of water quantity objectives)**	**Limits**
Outstanding rivers	Aquatic Ecosystem health Natural character Cultural values Recreation	Fish habitat Other?	Conservative proposed NES approach High minimum flow (e.g. 100% mean annual low flow) Small allocation limit (e.g.10% of mean annual low flow)
High value rivers and rivers sensitive to changes in flows (generally small rivers close to the coast).	Ecosystem health Security of supply	Fish habitat for sensitive species % time that water is available for use	Proposed NES approach High minimum flow (e.g. 90% mean annual low flow) Moderate allocation limit (e.g. 30% mean annual low flow)
Highly allocated catchments (individual catchments)	Aquatic ecosystem health Security of supply	Fish habitat for sensitive species % time that water is available for use	Cap allocation at current level until the catchment is reviewed and specific limits set (policy sets out approach).
Priority catchments for collaborative planning.	Aquatic ecosystem health Security of supply Other?	Fish habitat for sensitive species % time that water is available for use Other?	To be determined with the collaborative stakeholder groups
Other rivers	Aquatic ecosystem health Security of supply	Fish habitat for sensitive species % time that water is available for use	Proposed NES approach



NORTHLAND REGIONAL COUNCIL

Water Quantity Objectives

- Desired environmental outcome
- **Objectives can be:**

- Broad narrative
- Tight narrative
- Numeric

Water Quantity Objectives

- **NSP-FM requires within each management unit:**

- Identify the values
- Identify the attributes
- Select desired state for each attribute
- Set objectives

Water Quantity Objectives

- Existing objectives broad narrative
- Difficult to measure their success
- NPS require numeric where practicable
- Ecosystem health = provide for other values?

Water Quantity Flows and Limits

- **Environmental flows and limits:**

- A limit that describes the amount of water in a water body that is required to meet an objective
- Must include a minimum flow/level and an allocation limit

Minimum flows and water levels

- Less water = less habitat & higher stress on ecosystem
- Only maintains a minimum quantity

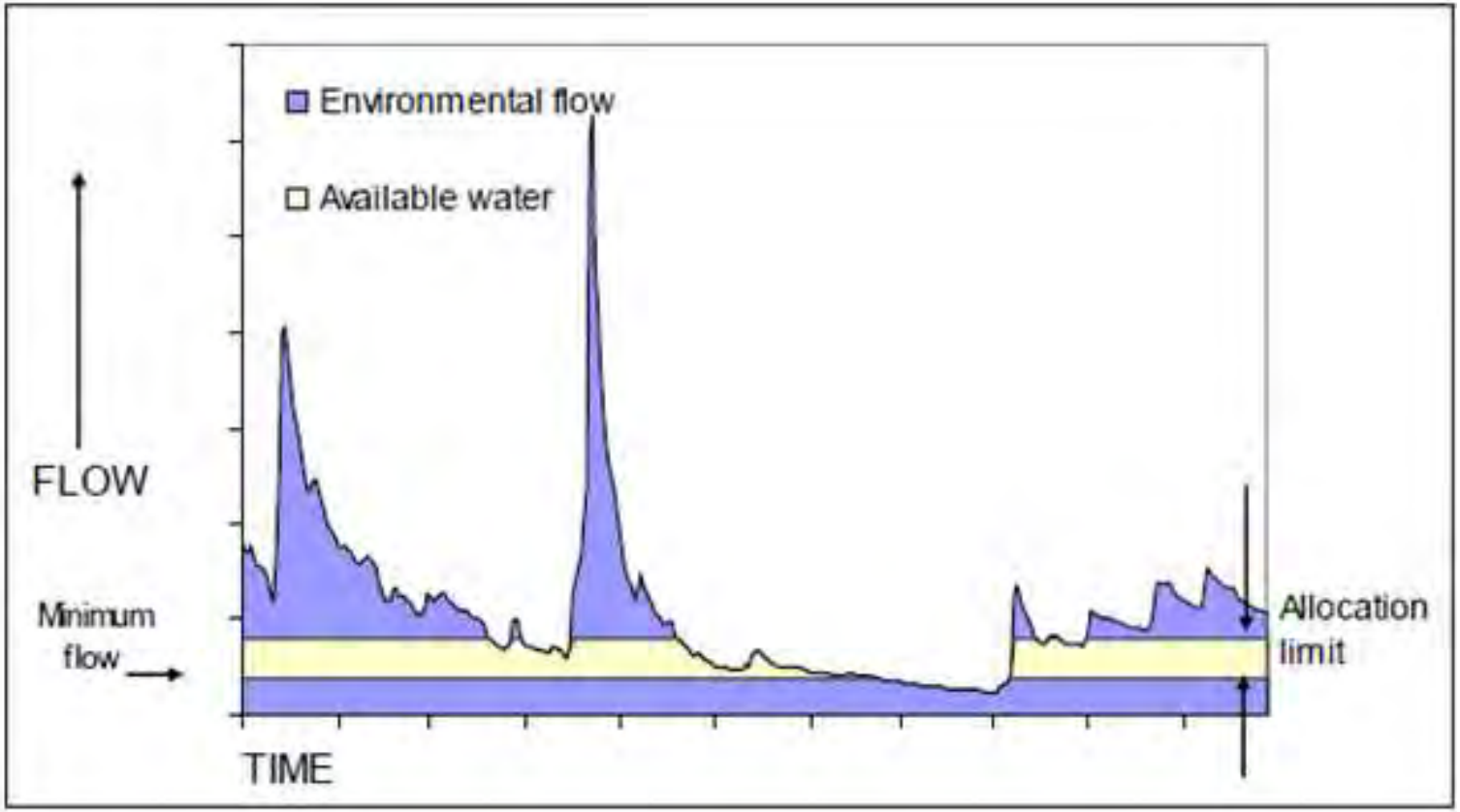
NORTHLAND REGIONAL COUNCIL

Allocation limits

- Provide maximum amount of water that can be allocated above minimum flows/levels
- **Role:**

- Ensure natural fluctuations
- Provide security of supply

Water Quantity Flows and Limits



RWSP now

- RWSP has minimum flows for rivers but these are not absolute
- Does not have specific minimum levels for lakes, wetlands and some aquifers
- Does not have allocation limits

= conflict with requirements of NPS-FM

Options for Setting Flows and Limits

- **Options for setting flows and limits:**
- NES defaults
- Catchment specific limits / Collaborative planning

NES Defaults

- **Defaults for limit setting for rivers:**

Those with 5m^3/sec or less:

- Minimum flow: 90% mean annual low flow
- Allocation limit: 30% mean annual low flow

Those with greater than 5m^3/sec:

- Minimum flow: 80% mean annual low flow
- Allocation limit: 50% mean annual low flow

NES Defaults

- **Defaults for limit setting for lakes and wetlands:**

- Narrative terms, e.g. “No change in water levels, beyond the water level variation that has already been provided for by existing resource consents on the date that the [limit] comes into force.

NES Defaults

- **Options for limit setting for aquifers:**

- Default limits in NES:

  15% average annual recharge (for shallow coastal aquifers)

  35% average annual recharge (others)

Catchment Specific Limits

- **Highly allocated catchments:**

- Determine values
- Set limits based on this
- Cap in the interim:

  existing consents

  permitted

  existing unauthorised

Collaborative Planning

- Trail catchments:
- Whangarei Harbour
- Mangere
- Waitangi
- Doubtless Bay
- Pouto

Discussion

- Do you agree with our approach to establishing water quantity management units? (pgs 12 – 16 of summary doc)
- Do you think if we manage for ecosystem health as a minimum we will provide for other values or should we identify additional values?
- Do you agree with our proposed approach to setting limits?

Session Three:

- Options for improving water quantity management

Water Takes - RMA

- **Section 14(3) of the RMA:**

…an individual's reasonable domestic needs; or the reasonable needs of an individual's animals for drinking water and the taking or use does not, or is not likely to, have an adverse effect on the environment…

- Currently no rules regulating this therefore permitted
- Limited data on location, volume or impact
- Prevent and phase out over-allocation

Options:

- Set maximum takes for reasonable use
- Inform council of location, volume, purposes

Water Takes – Other & Metering

- **Other permitted takes**
  - Permitted rules could be too permissive in some areas (i.e. small coastal streams) and not permissive enough in others (where water is abundant)
  - Limited information on permitted takes, particularly dairy

  Option: revise permitted volumes in some catchments
- **Metering**
  - We need to improve our information

  Option: consider compulsory metering in some/all areas

Water Takes – Allocation & duration

- **Efficient allocation and use of water**
  - Rate/quantity justified – no change
  - Transfer of water permits
  - Promoting water sharing groups
- **Consent duration**
  - No change?
- **Reviewing conditions of permits**
  Option: Common review dates?

Dams

- **Dams**
  - Increase in demand for storage
  - Limited information on existing dams as no requirement to notify when constructing permitted dams

  Options:
  - Permitted takes to fill during medium/high flows
  - Notify when constructing permitted dams
  - Encourage damming of intermittent watercourses
  - Greater control on takes from dams

Diversions/drainage & Structures

- **Diversions and drainage**
  - Illegal activities in wetlands

  Option: Increasing monitoring and enforcement

- **Structures in the beds of lakes and rivers**
  - Existing rules relatively permissive
  - No requirement to notify council of permitted construction

Continued…

- **Structures in the beds of lakes and rivers**

  Options:

  - Notify council
  - Design and threshold based on catchment size
  - Guidance on fish passage
  - Stock crossing guidance

Land Use Changes

- **Land use changes**
  - Can effect aquifer recharge and stream base flows
- **Wetlands**
  - Current rules can be counterproductive

  Options:
  - Improve stock exclusion
  - Better definitions & schedule mapped wetlands?
  - Wetland guidance
  - Provisions for beneficial activities

Discussion

- Have we identified all of the issues with managing activities that affect water quantity? Have we missed any?
- Do you agree with our proposed options or do you have any alternative options?
- Do you think the significant issues discussed in Session 1 have been addressed adequately?
- Based on your experiences with the RWSP, what are the main administrative issues with the current policies and rules (if not already addressed above) you have?

Wrap up

Next steps

- Workshops – *Oct 2014*
- Review complete – *Dec 2014*
- Draft regional plan released – *mid 2016*
- Proposed regional plan notified – *mid 2017*

Workshop evaluations

Thank you

Robyn Broadhurst (topic lead)

Policy Analyst

09 470 1192

robynb@nrc.govt.nz

www.nrc.govt.nz

Stay connected

0800 002 004

www.nrc.govt.nz

24/7 Environmental Hotline
0800 504 639

Putting Northland first

NORTHLAND REGIONAL COUNCIL