



Water Allocation Update

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**WAIORA
NORTHLAND
WATER**

**NORTHLAND
REGIONAL
COUNCIL** 

Aim:

Objective:

Waiora Northland Water – Improving Water Management

Aim: Provide stakeholders / decision makers

- Accurate base information; and
- Decision support tools

..... to enable sustainable limits / levels to be set at specific catchment and regional level.

Background

Sustainable Water Allocation Project started in 2009

National Policy Statement Freshwater Management 2011

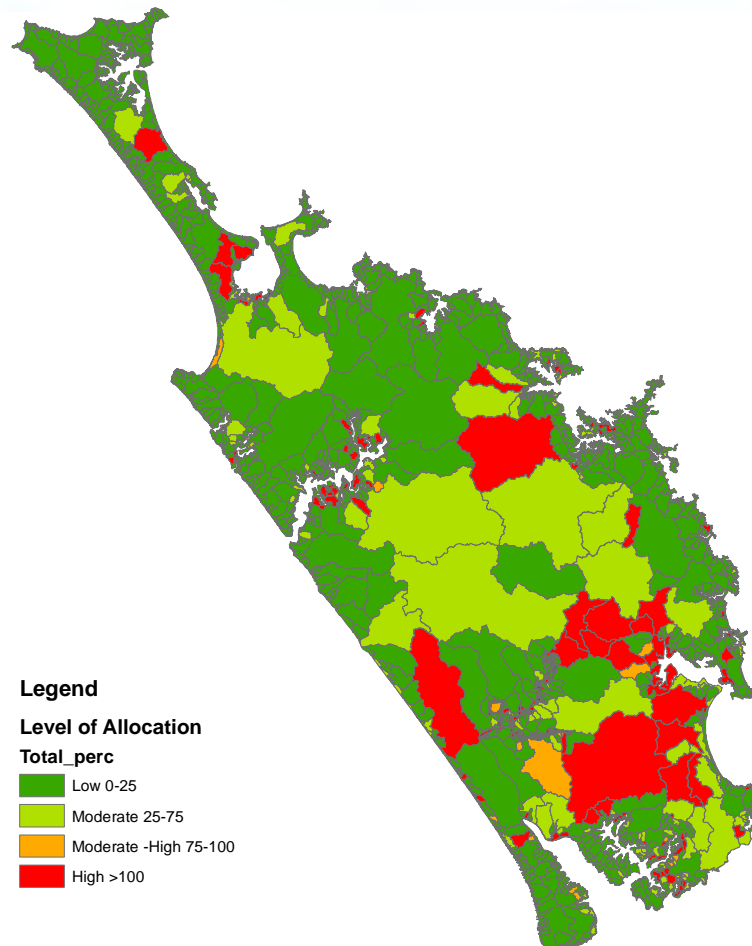
Set environmental flows for **all** water bodies – **must** include:

- minimum flows and/or levels; and
- allocation limits.

Waiora Northland Water 2012

Surface Water Allocation

Total Allocation in Catchments



Level of allocation is shown as percentage of default allocation level proposed in the Proposed National Environmental Standard for Ecological Flows

Specific Limits for Priority Rivers

Specific Limits required where:

- high competing demand for water and/or
- specific environmental issues.

Tools to assist setting specific limits:

- In-stream Habitat Assessment
- Trial Cumulative Take Assessments (CHES)

Specific Limits for Priority Rivers

Instream Habitat Assessment

– Mangere, Waitangi, Hatea, Otaika Catchments

Aim:

- Understand flows required to maintain in-stream habitat
- Help inform decisions on base line ecological flows



Specific Limits for Priority Rivers

Trial - Cumulative Take Assessments

Waitangi, Mangere

Aim:

Understand flows and takes throughout each catchment

Determine how different minimum flows /allocation limits will affect :

- out-of-stream values (e.g. security of takes) and
- in-stream values (e.g. physical habitat of banded kokopu)

Specific Limits for Priority Rivers



Figure ?: Example of physical habitat change for Banded Kokopu for proposed NES allocation scenario. Green = no to little change, blue = increase in physical habitat, yellow to orange = decrease in physical habitat.

Interim Default Limits for Rivers

Interim defaults limits where:

- Low demand for water
- Little information on resource



Interim Default Limits for Rivers

Commissioned NIWA

Apply limits / flows at a regional level to assess effects on:

- out-of-stream values (e.g. security of takes) and
- in-stream values (e.g. physical habitat of native fish)

Results indicate one default rule results in same outcome for most of Northland

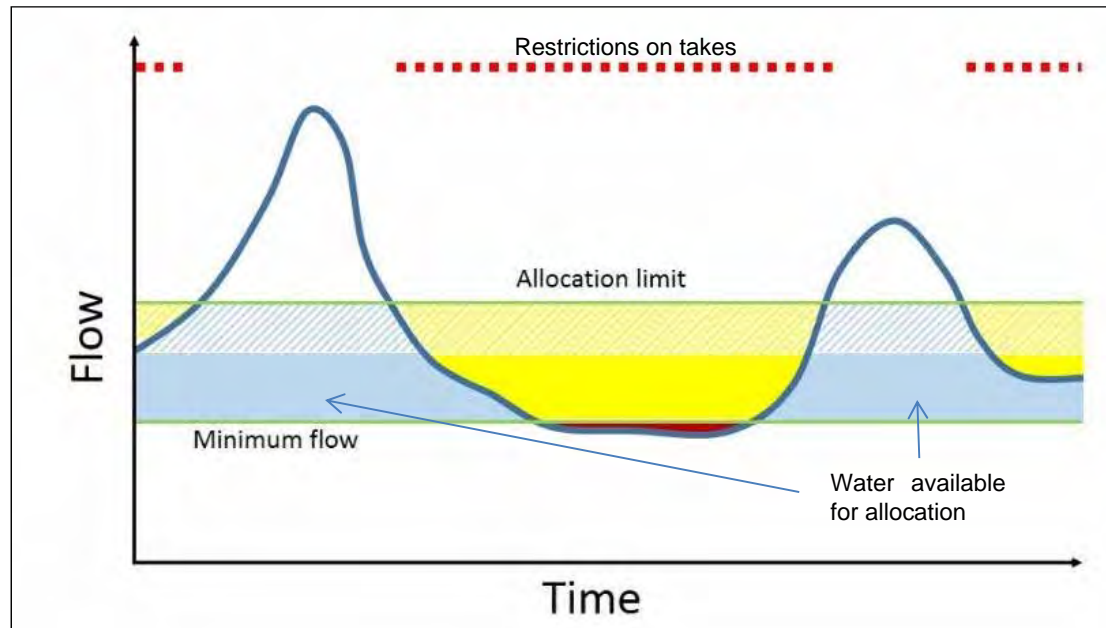


Interim Default Limits for Rivers

Report also helps understand trade offs between:

- in-stream values and
- the quantity (amount allocated) and
- security of supply.

Trade Offs



Decision Support for Rivers

Report provides decision support diagrams for range of limits:

- Help select limits / minimum flows that best satisfy objectives and values for a catchment
- Transparent decision making

Groundwater



Groundwater

Key work undertaken to date:

- Mapped aquifers - Investigating sustainable limits and levels
- Regional Groundwater – Investigating default limit approach relating to base flows of streams
- Tool to estimate surface water and groundwater interaction

What's next?

Next key steps include:

- introducing the base information and decision support tools to stake holder groups
- further work on region wide defaults to assist planning with Regional Plan review
- Integrating with water quality limits

Conclusion

Significant progress to date

Compliments RiVas – ranking catchments for different values and Economic assessment

Integrated and transparent decisions on sustainable allocation limits, flows and levels for Northland's water bodies



Thank you

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