



# Waitangi Catchment

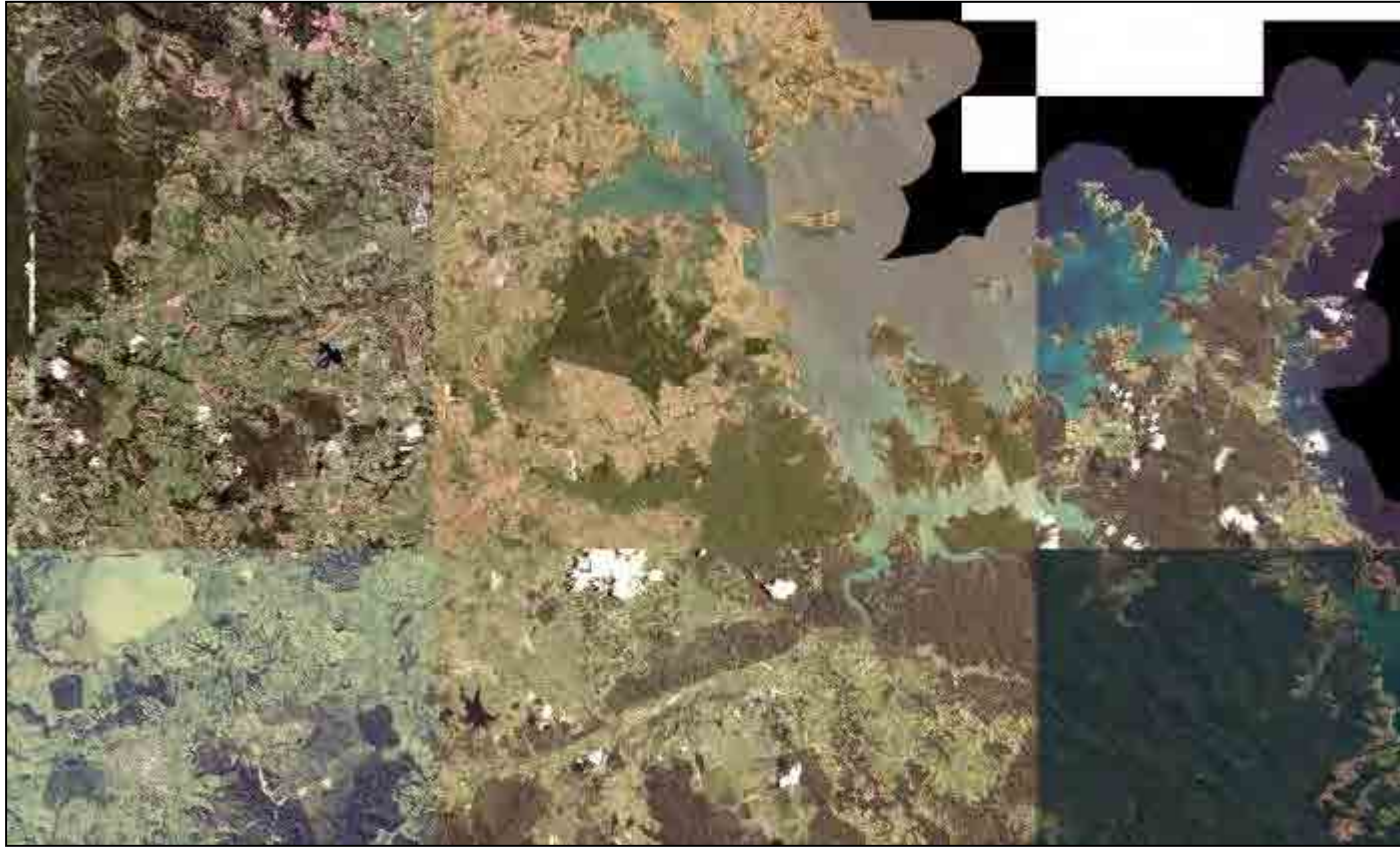
**Duncan Kervell: Land Management Advisor**

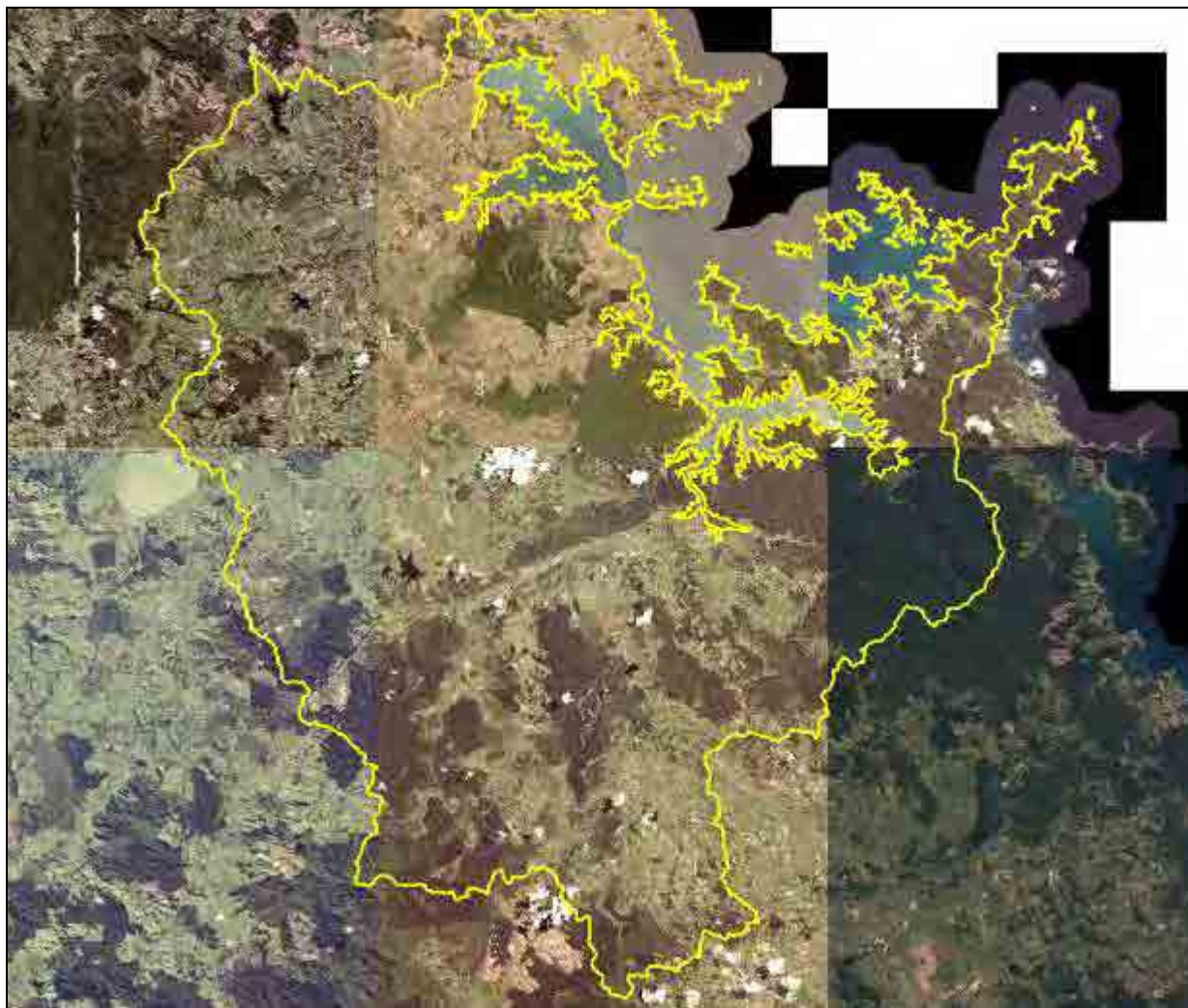
**18 June 2014**

# Introduction to the Waitangi

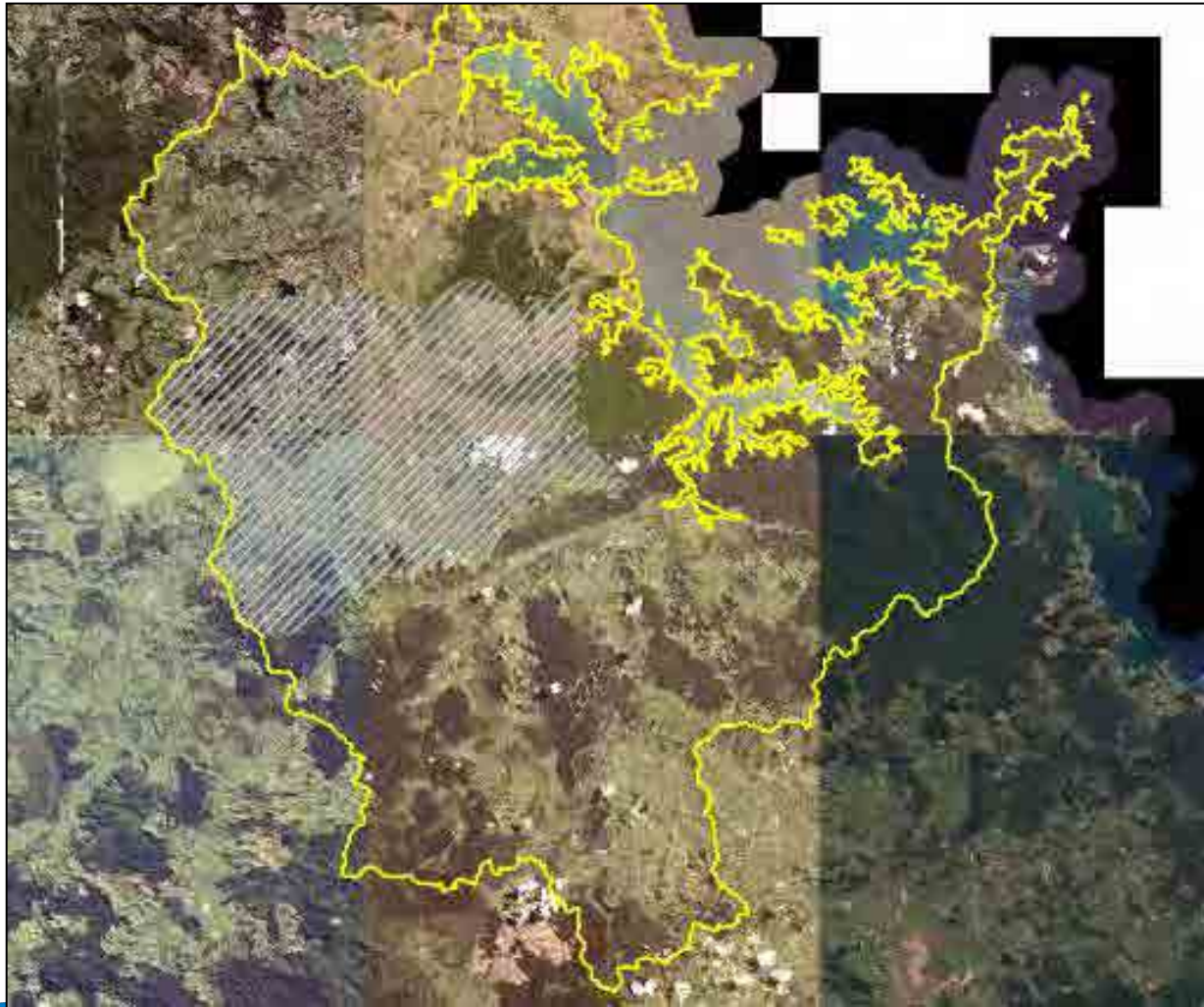
- The Waitangi river catchment is 302 km<sup>2</sup> or 30,200 ha
- Land uses include grassland, forest, exotic forest, manuka/kanuka and exotic shrublands.
- 2 main rivers: Upper Waitangi and Waiaruhe rivers that form the main Waitangi river.
- 5 Subcatchments:  
  
1) Manaia Stream; 2) Puketotara; 3) Waiaruhe; and the 4-5) Upper and Lower Waitangi River sub-catchments



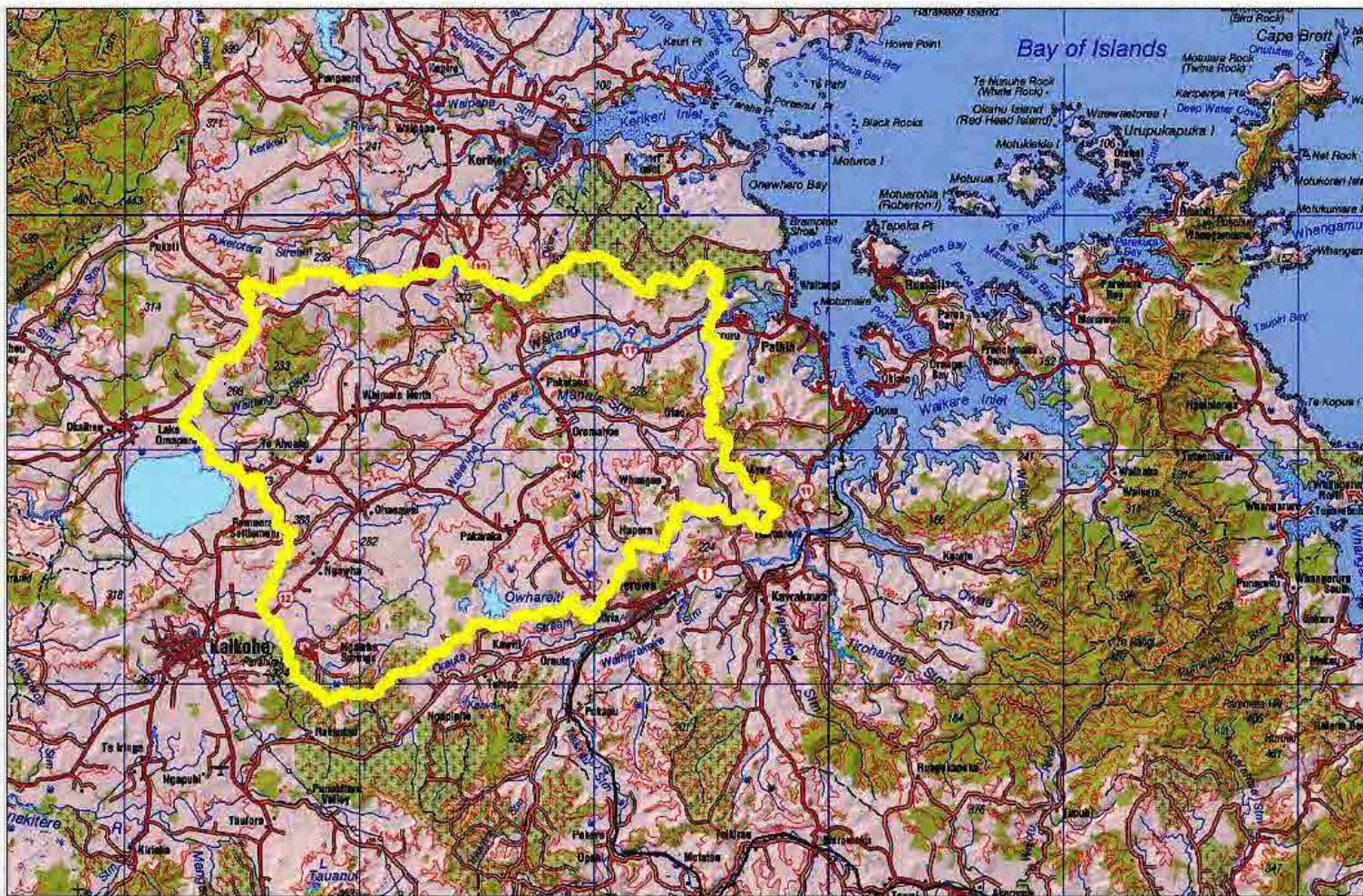










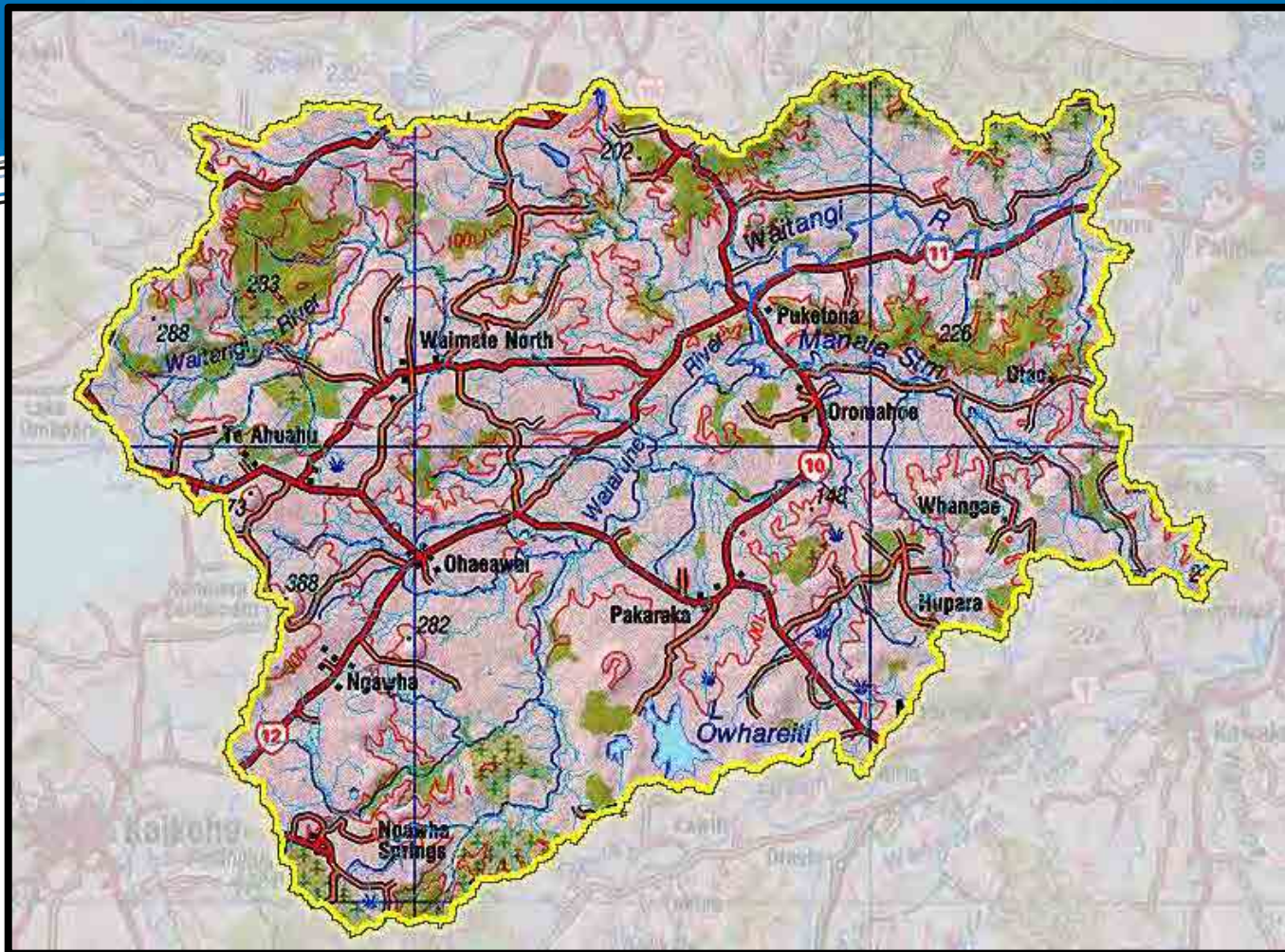


Title

Scale 1:50,000  
 Date 1/1/2011  
 Author [illegible]  
 Checked [illegible]  
 Approved [illegible]  
 Project [illegible]









# National Policy Statement for Freshwater Management 2011

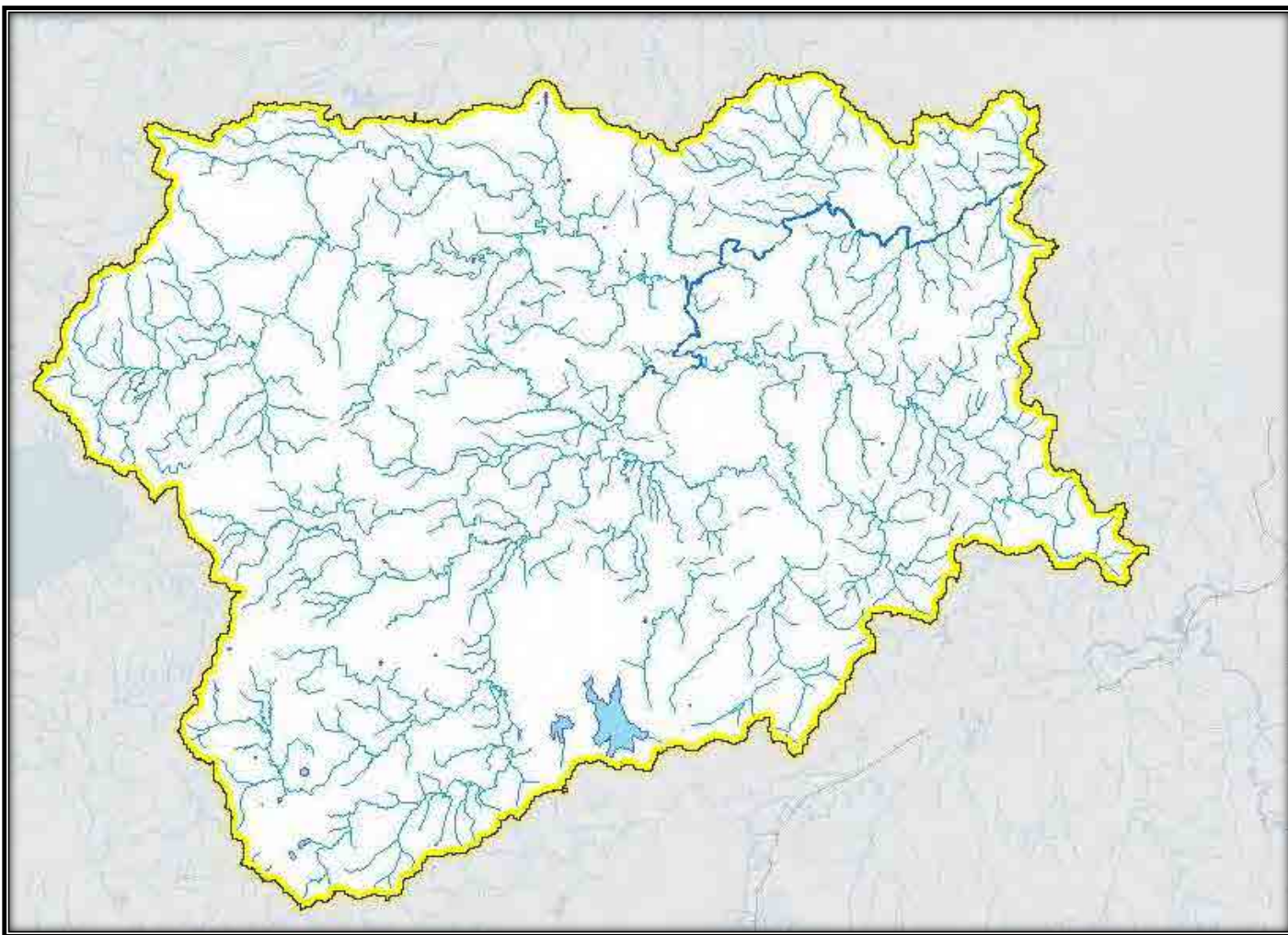
“For communities to make the recommendations for catchment management. We need to gain an understanding of the catchment”.

# National Policy Statement for Freshwater Management 2011

## NPS states:

- Improve overall water quality in a region.
- Manage land use, water discharges and water allocation within environmental limits.
- Find ways to improve water quality standards at a catchment and regional scale .





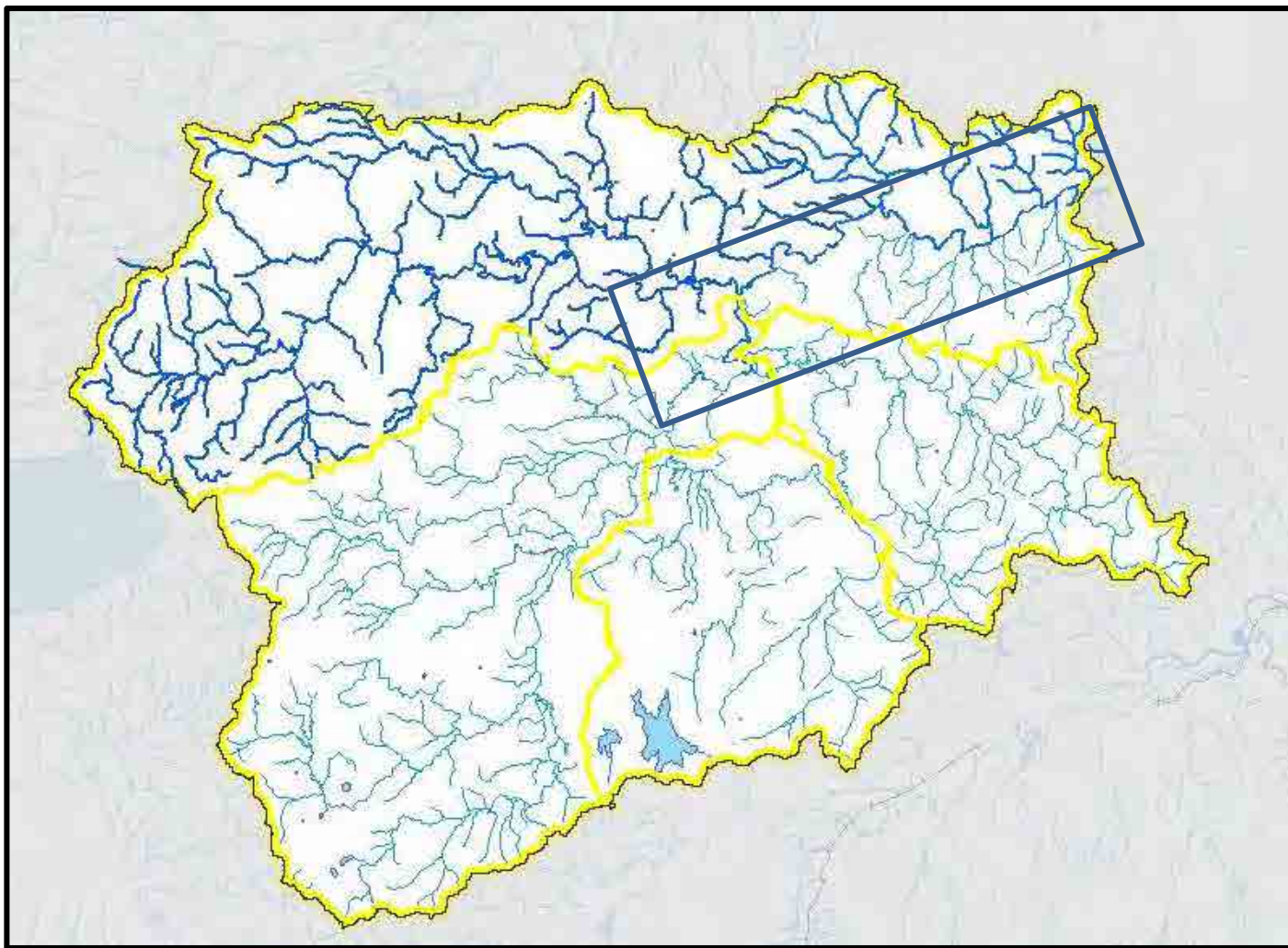
## Waterways



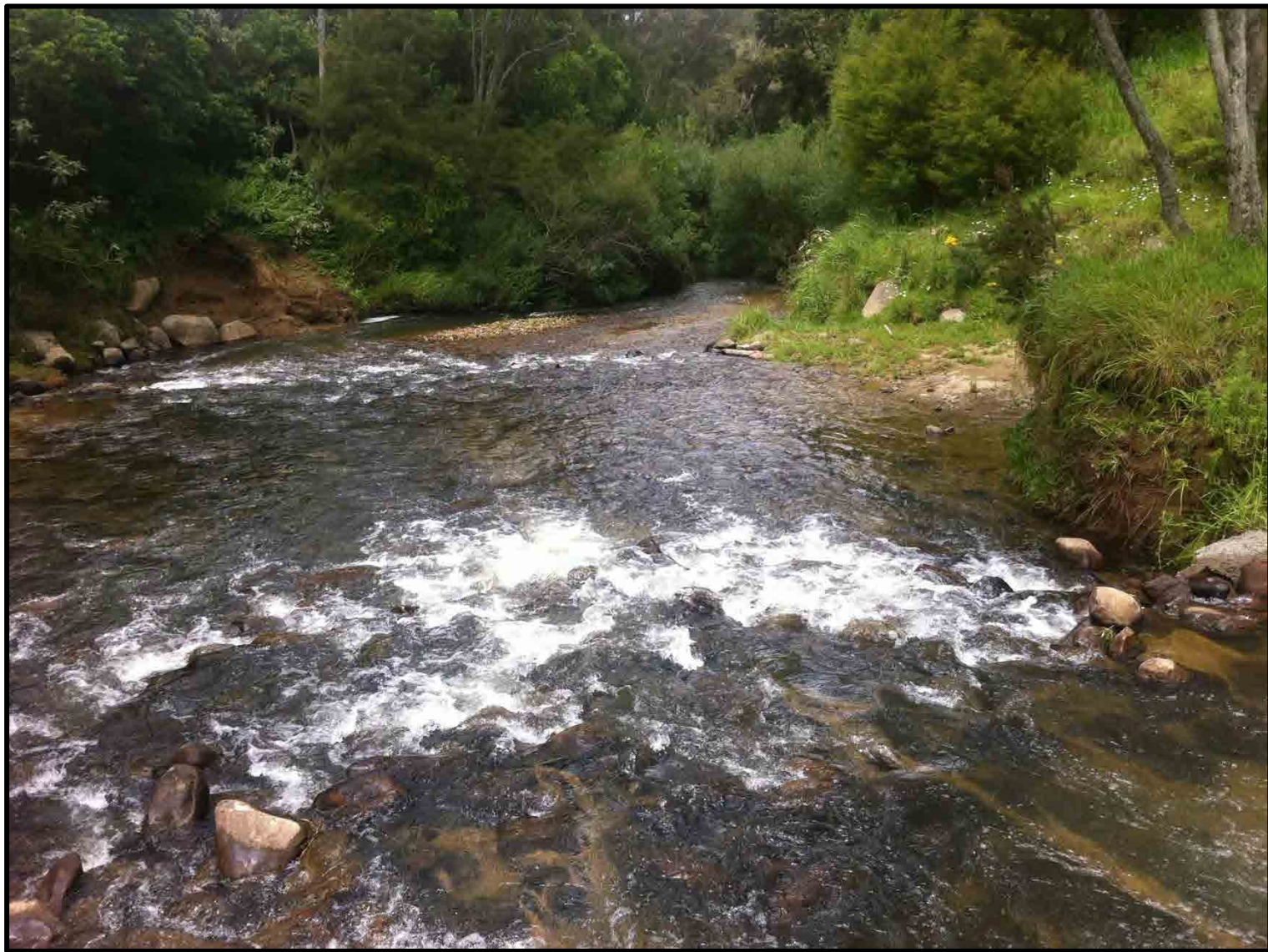
## Puketona Junction



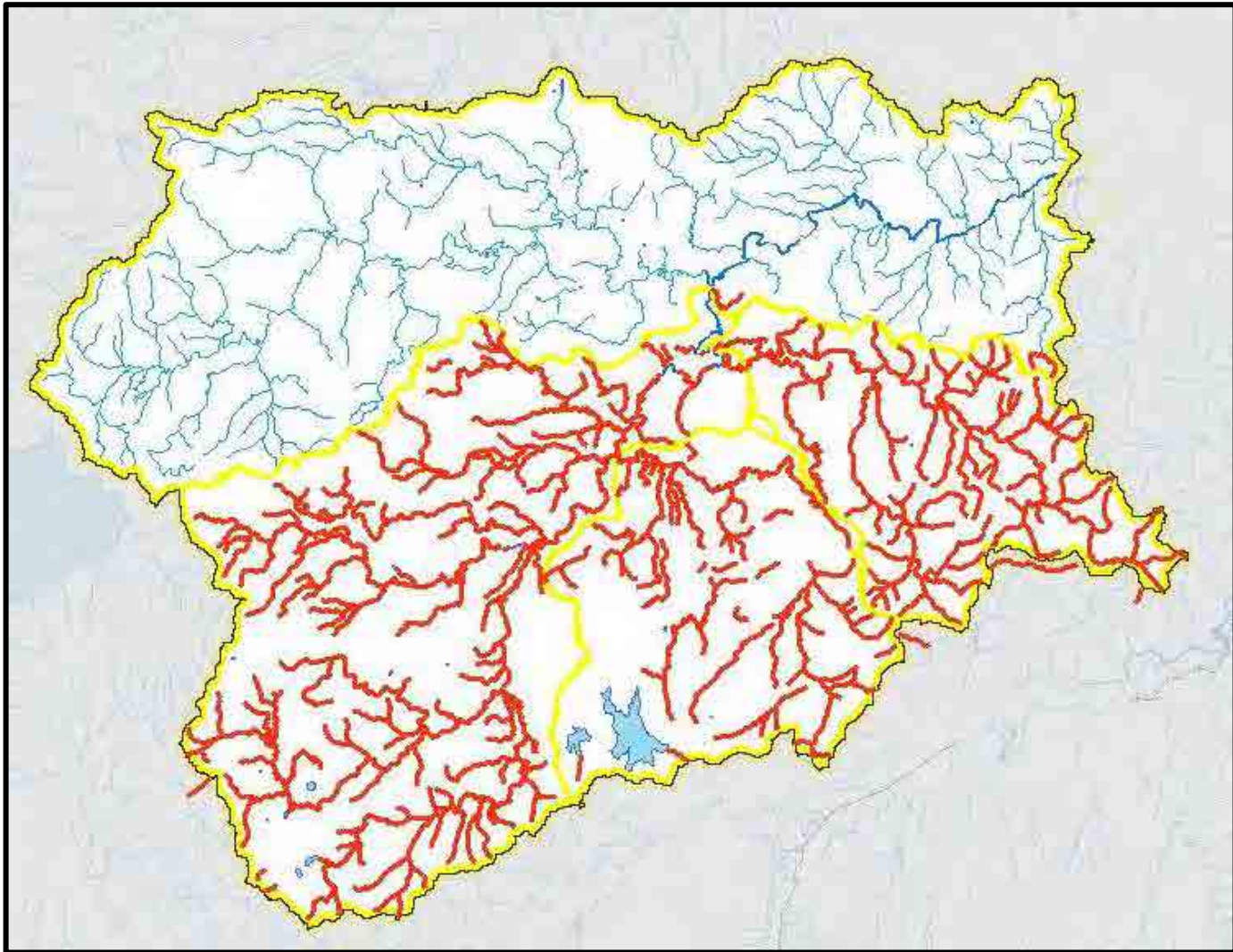






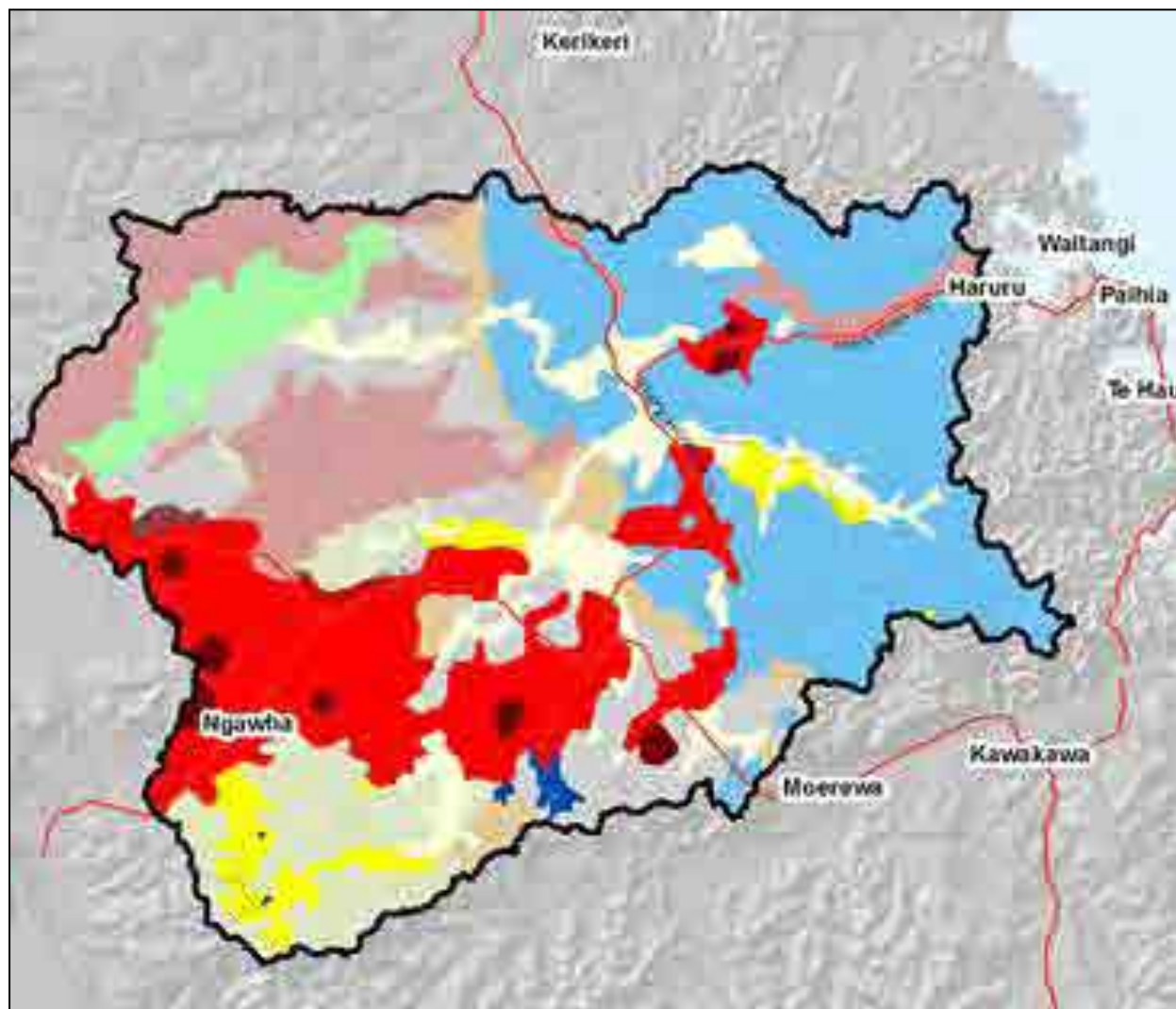






**Soil,  
Water,  
Wetlands  
Lakes,  
Geology,  
Landscape,  
Land Use,  
Land Management,  
Natural Ecosystems,  
Native Species,  
Fish & Eels  
Kiwi,  
Natural disturbance verse Human Influence,  
Hydrothermal  
Community values and needs  
and More!**





### Waitangi Geology

- Recent Alluvium
- Terraces and Basins
- Scoria Cones
- Young lava Flows
- Old Volcanic Cones
- Old Lava Flows
- Mudstone/Shales
- Mudstone
- Sandstone
- Acid Shale
- Greywacke

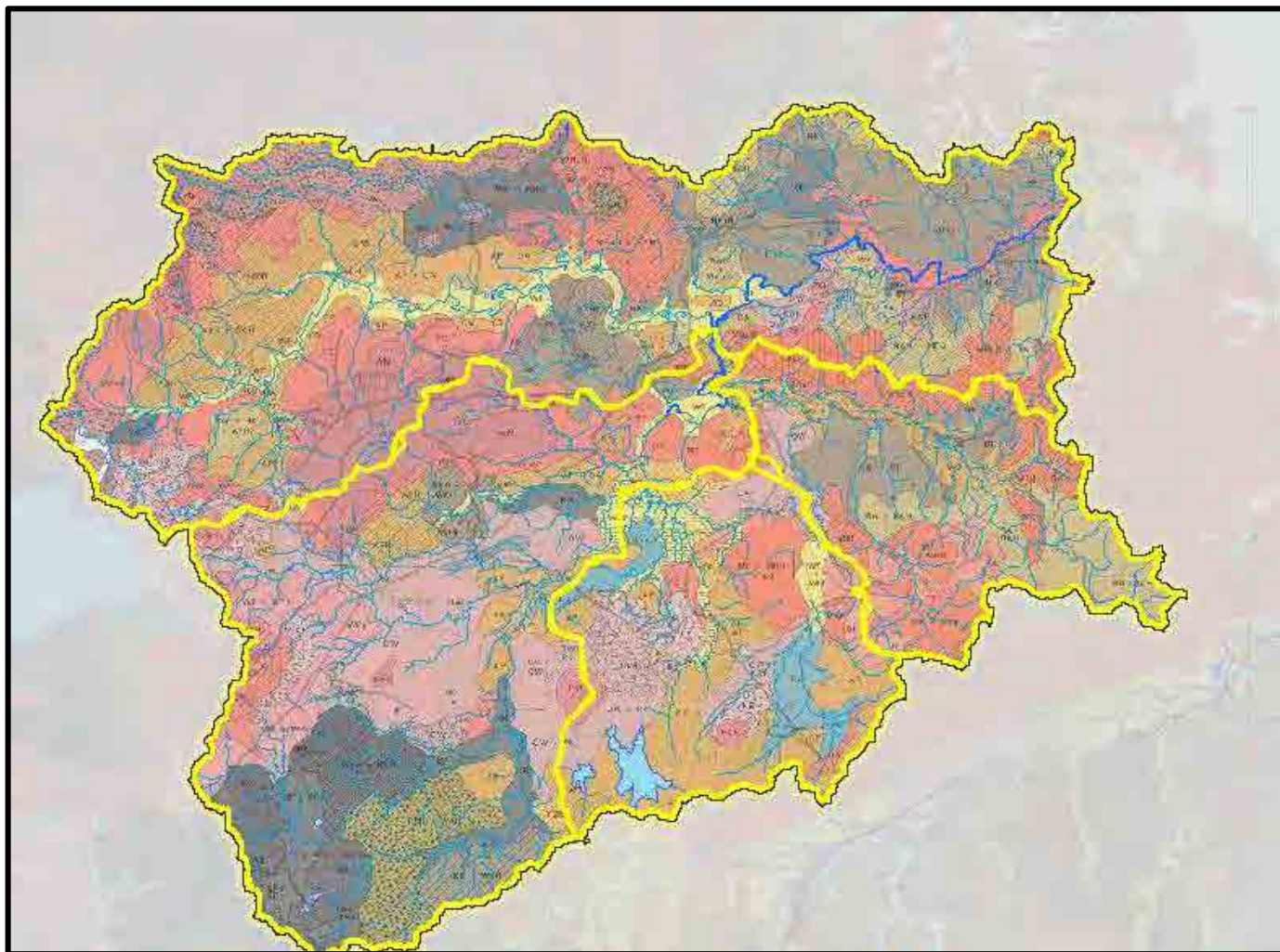
## Geology and Waitangi Catchment



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Soils and Waitangi catchment







*Hukerenui silt loam  
with yellow subsoil*

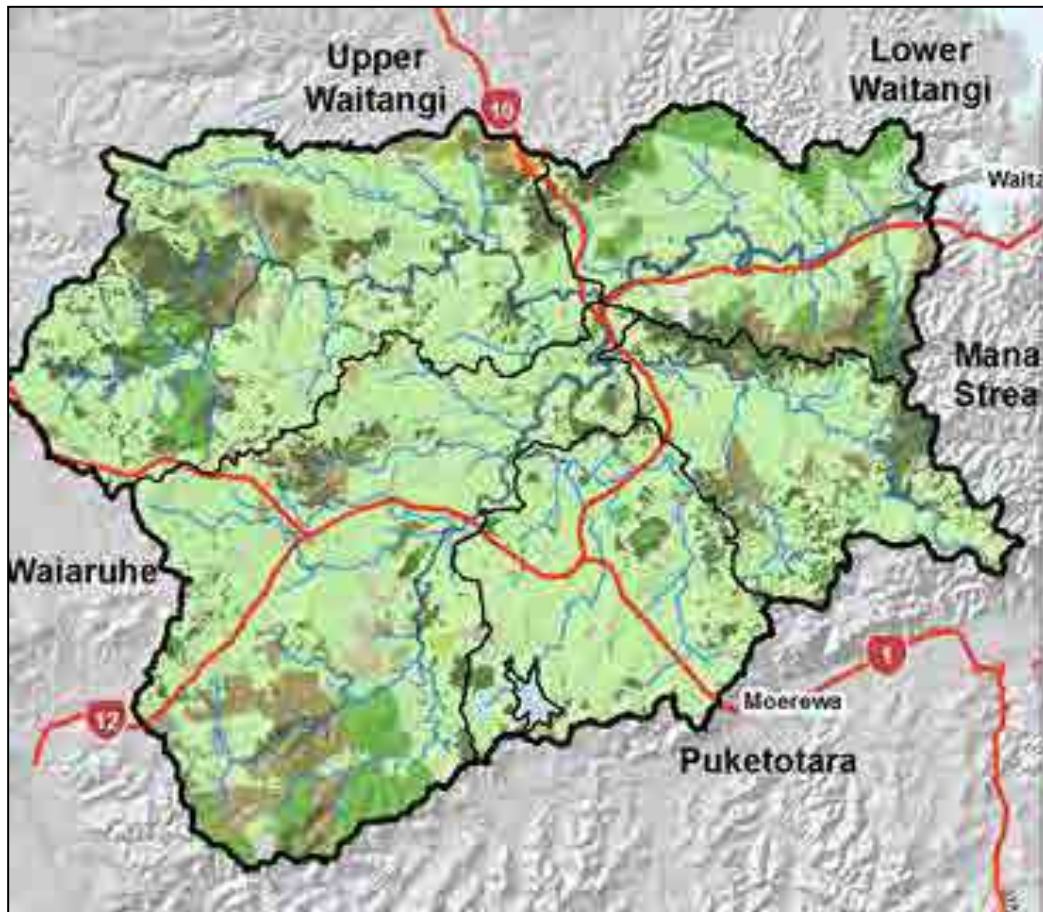


*Kiripaka silt loam*



*Okaihau gravelly friable  
clay*





- Native Forest : 14 %
- Manuka Kanuka / Native Shrub : 6%
- Pastoral Farming : 68 %
- Exotic Plantations: 8%
- Exotic Shrublands: 1%

Land Use in the Waitangi catchment



# The Rivers





# The Rivers



*Pekepeke Stream : Ohaewai*



*Stream: Pakaraka*

# Floods and High Water



*SH10: Puketona Junction 26/07/2008*



*Upper Waitangi: 26/07/2008*



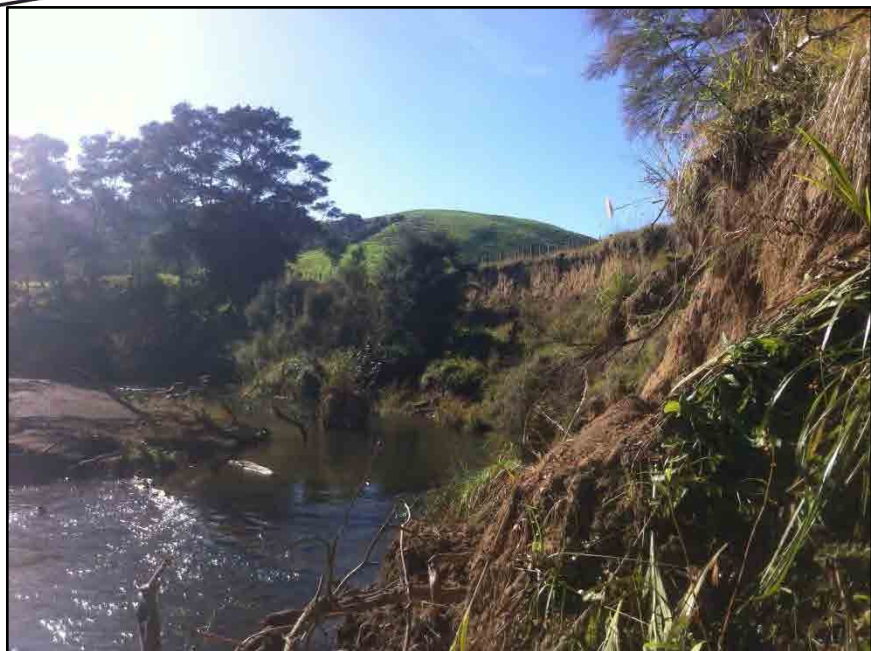
# Stream bank Erosion



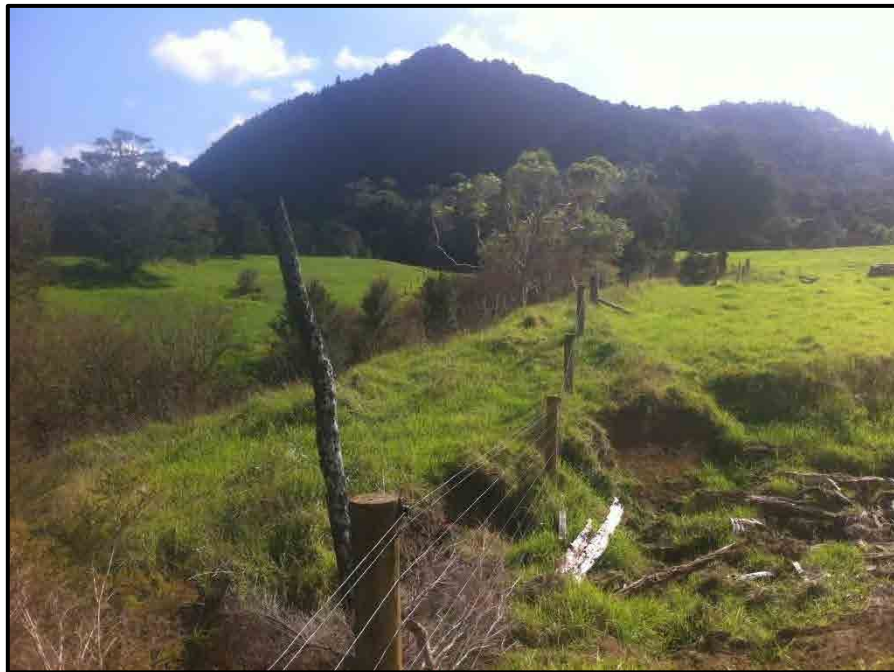
*Waiarui :*



*Upper Waitangi : Bulls Gorge Farm*







# Where now?

- The Waitangi is a priority catchment
- Studies and focus and water quality monitoring.
- NRC filling gaps in knowledge.
- Scientific and accurate basis for discussion, consensus forming and recommendation making.
- Working towards an improved Waitangi River and Bay of Islands.
- First year is learning...



- Thank You
- Any Questions?