

Freshwater Management Units for Te Awarua-o-Porirua Whaitua

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Outline

1. Brief recap on philosophy for FMUs
2. Initial recommended biophysical FMUs for Te Awarua-o-Porirua Whaitua
3. Modifications to the Urban management class.

1. Criteria for defining FMUs

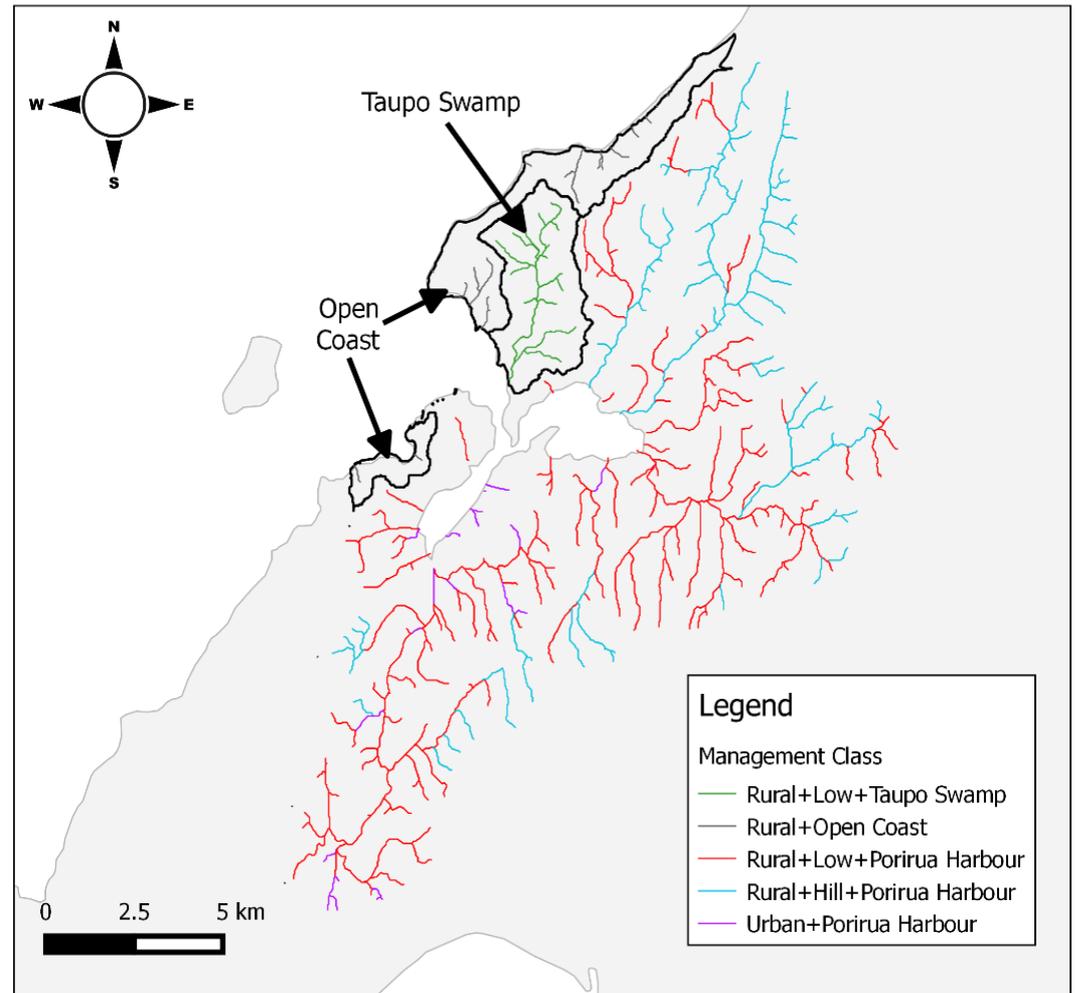
- Incorporate the water body **and** its catchment
- Discriminate differences in values and “capacity for resource use” [**current state** - water quality]
- Basis for defining **justifiable** plan provisions (objectives and policies)
- Practically monitored and administered
- Provide plan clarity and certainty – boundaries
- Easily altered and revised as part of plan development
- Need a “Goldilocks” number, not too many, nor too few

The bio-physical classification approach

- Assume water bodies with similar catchment characteristics:
 - have similar states (e.g. water quality)
 - have similar values (e.g. fishing, swimming, irrigation) and associated objectives
 - respond in similar ways to pressures/change/management
- Provides a transparent and justifiable **starting point** for defining FMUs
 - Later on, can incorporate sites of special interest, social, cultural &/or economic considerations

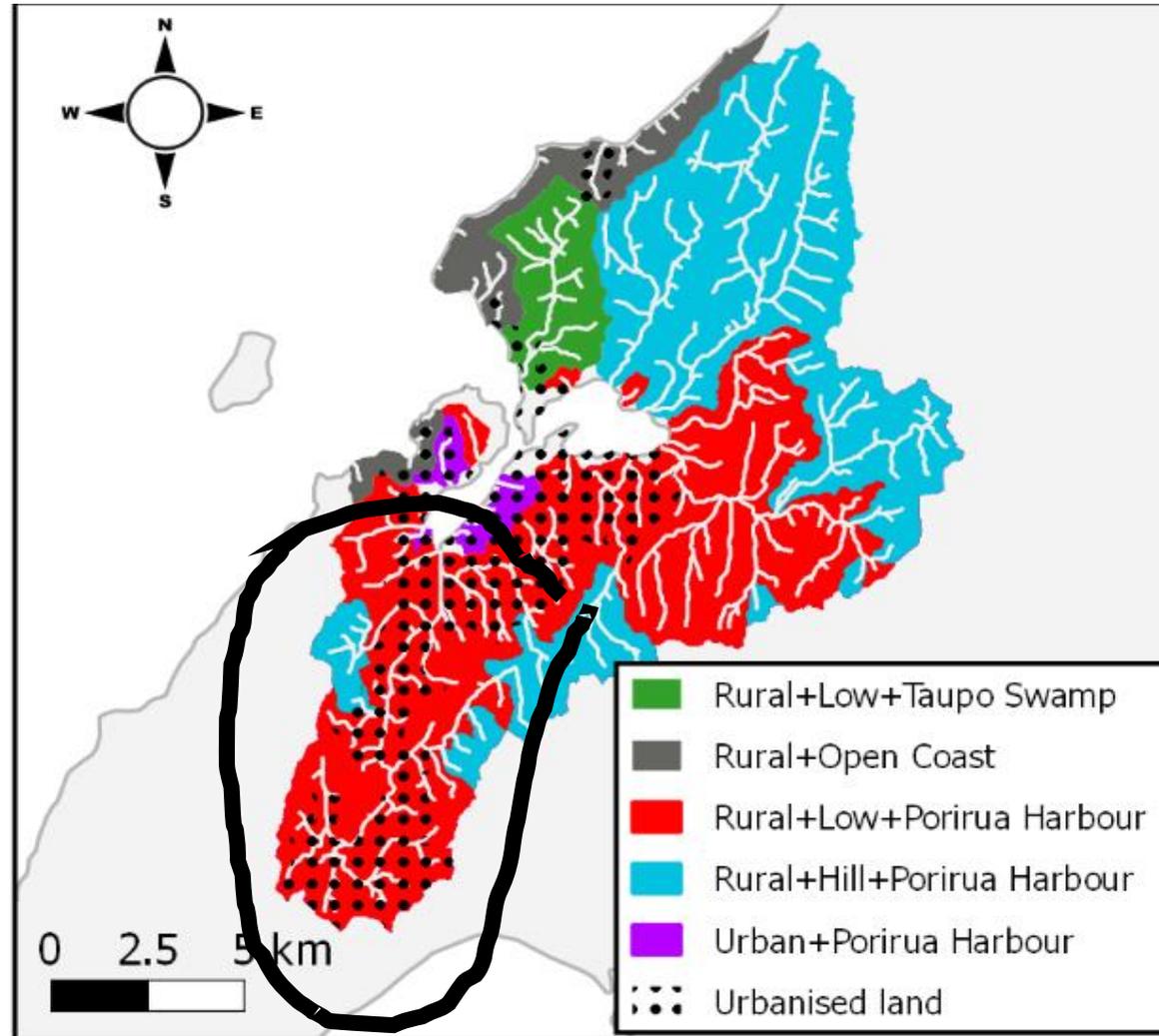
Original management classes

- **Dominant** land cover + catchment slope
- 3 classes
 - Rural + Hill
 - Rural + Lowland
 - Urban
- Plus coastal classes
 - Harbour
 - Taupo swamp
 - Open coast
- Resulted in 5 classes



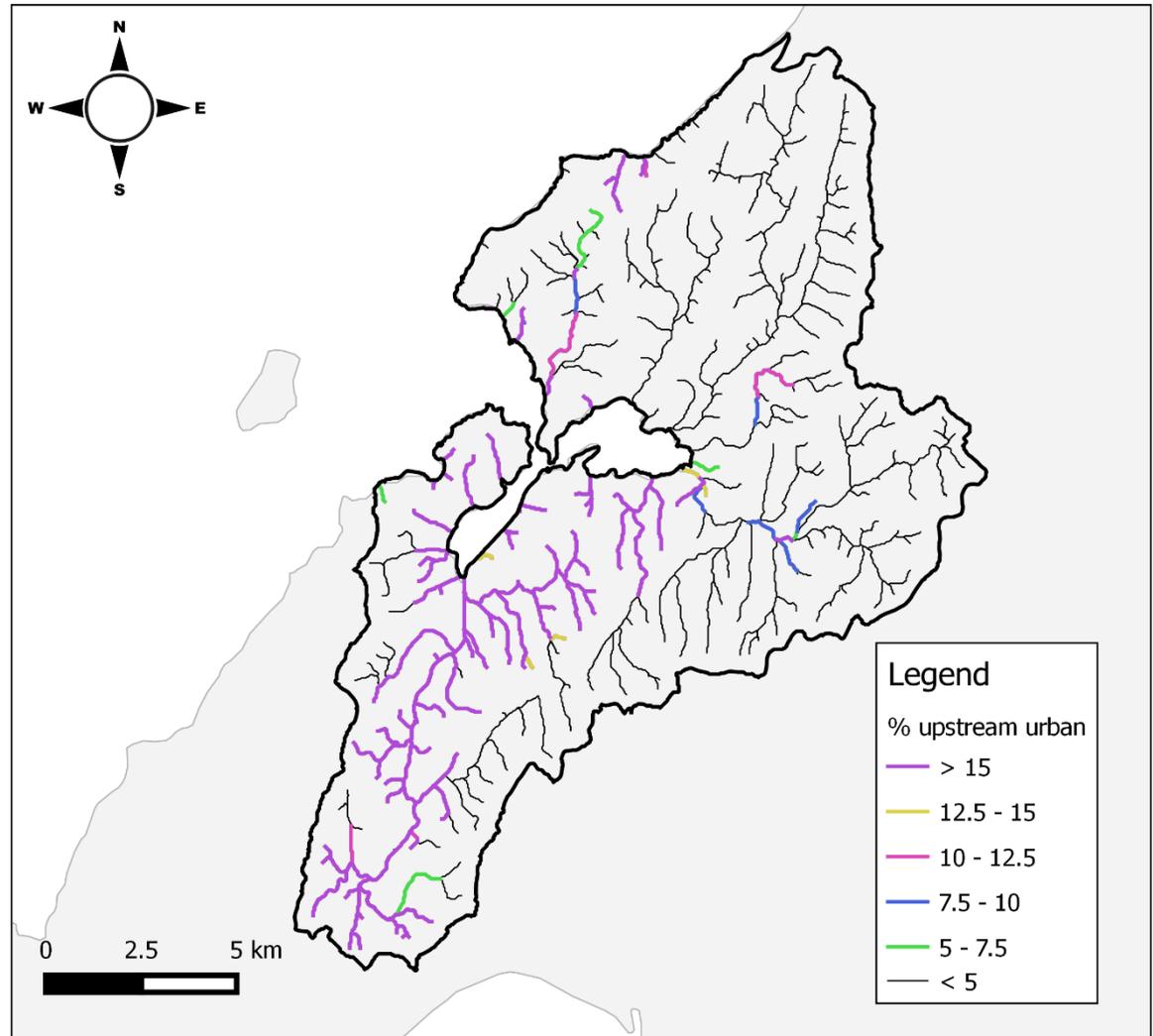
Recommended water quality FMUs

- Assume management regimes are most restrictive;
 - Blue > Green > Red > Purple
- Issue with designation of urban class

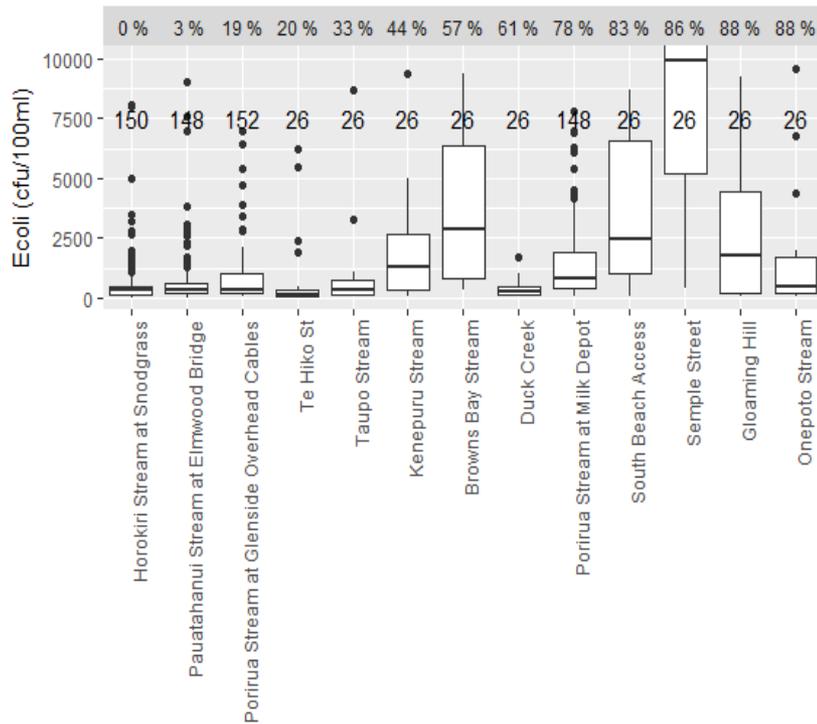


Reassessment of the urban land cover threshold

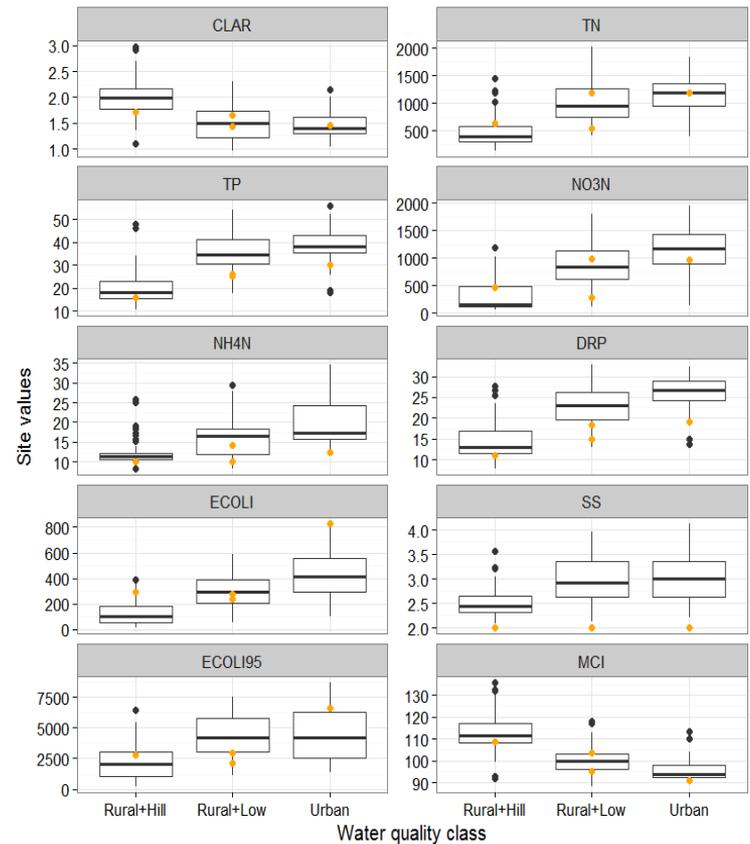
- Many stream segments have > 15% urban
 - Originally classified rural
- Committee uncomfortable with their assessment as rural
- Choice of threshold
 - Attempted to use water quality data in justification



Can we justify an urban threshold?

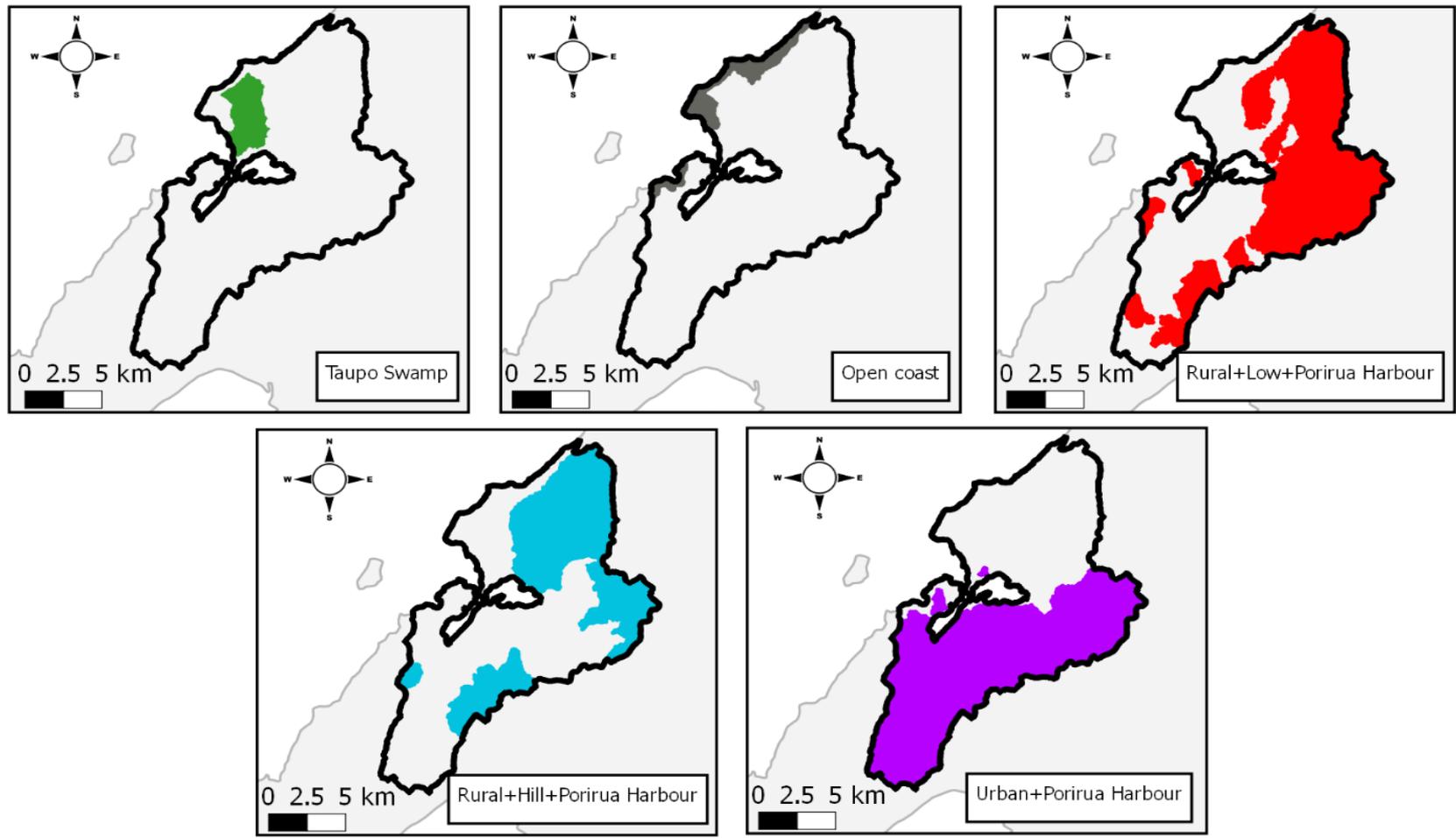


New E.coli data

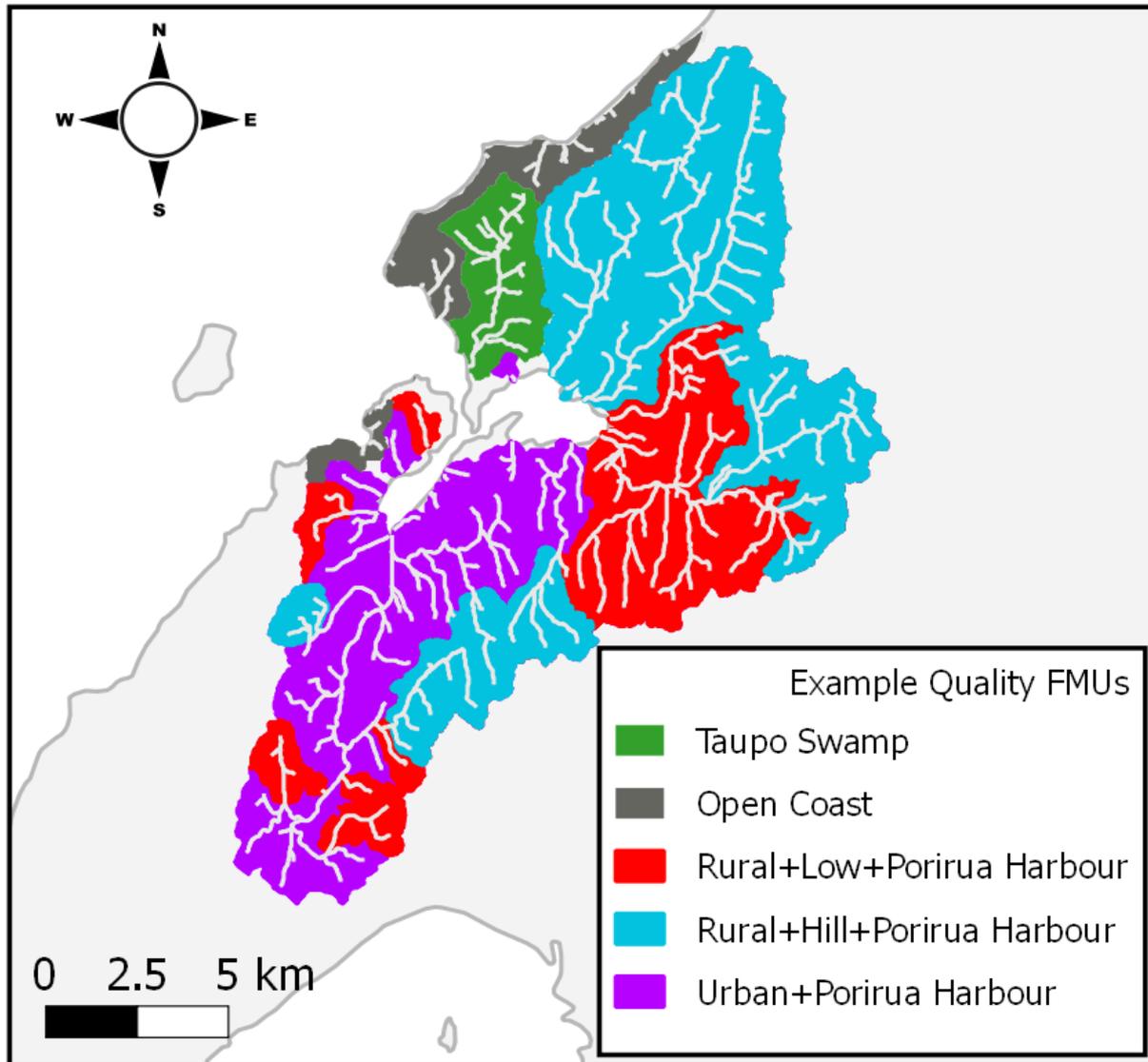


Previously used WQ data reapplied to test of discrimination

Management zones - 15% urban land cover threshold



FMUs based on 15% urban threshold



Conclusion

- That an “objective” basis for choosing a criteria to define the Urban class did not emerge from our analysis
- The choice will need to be based on informed judgement about stream character and values the Whaitua
- There is a precedent in the use of 15% as a threshold in the widely used REC
- The Whaitua Committee need to consider and ratify the classification, zone and FMU maps
 - In your experience, do they look right?

THANK YOU