

Water Allocation and the Canterbury Land and Water Regional Plan

Aim

The Land and Water Regional Plan sets limits on the quantity of fresh water in each river or stream that can be allocated to consents to take water, the minimum flow at which water take must cease, and restrictions on water take at variable flows.

Are current consent conditions in line with these limits?

Te Mana o te Wai

The health of our people relies on the health of our water



Data

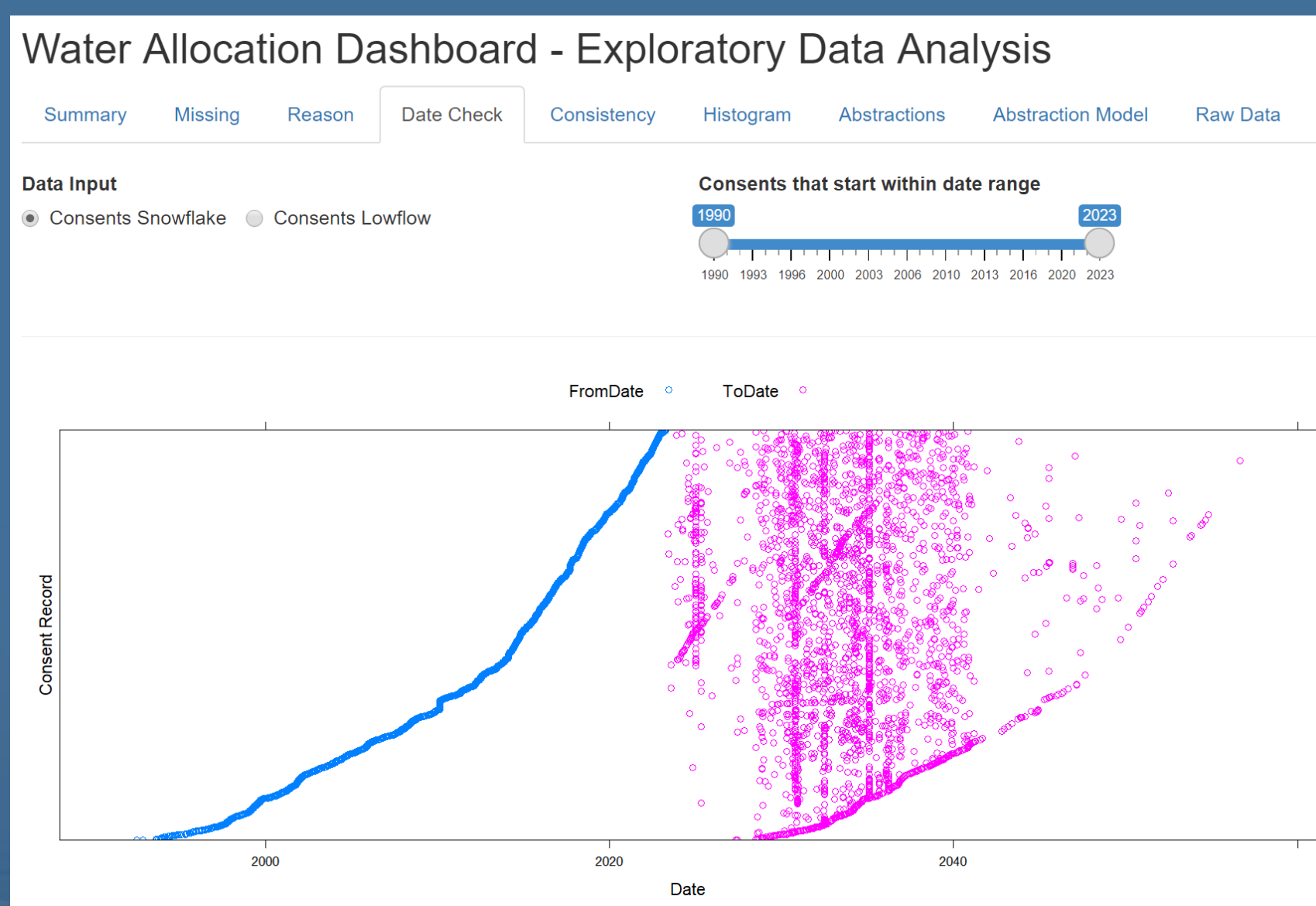
Extracted from Environment Canterbury databases:

- Plan Allocation Limits
- Plan Minimum Flow Limits
- Plan Partial Restrictions
- Water Resource Consents
- Low Flow Restrictions
- Water Abstraction



Analysis

R shiny app created to identify duplicates, outliers,



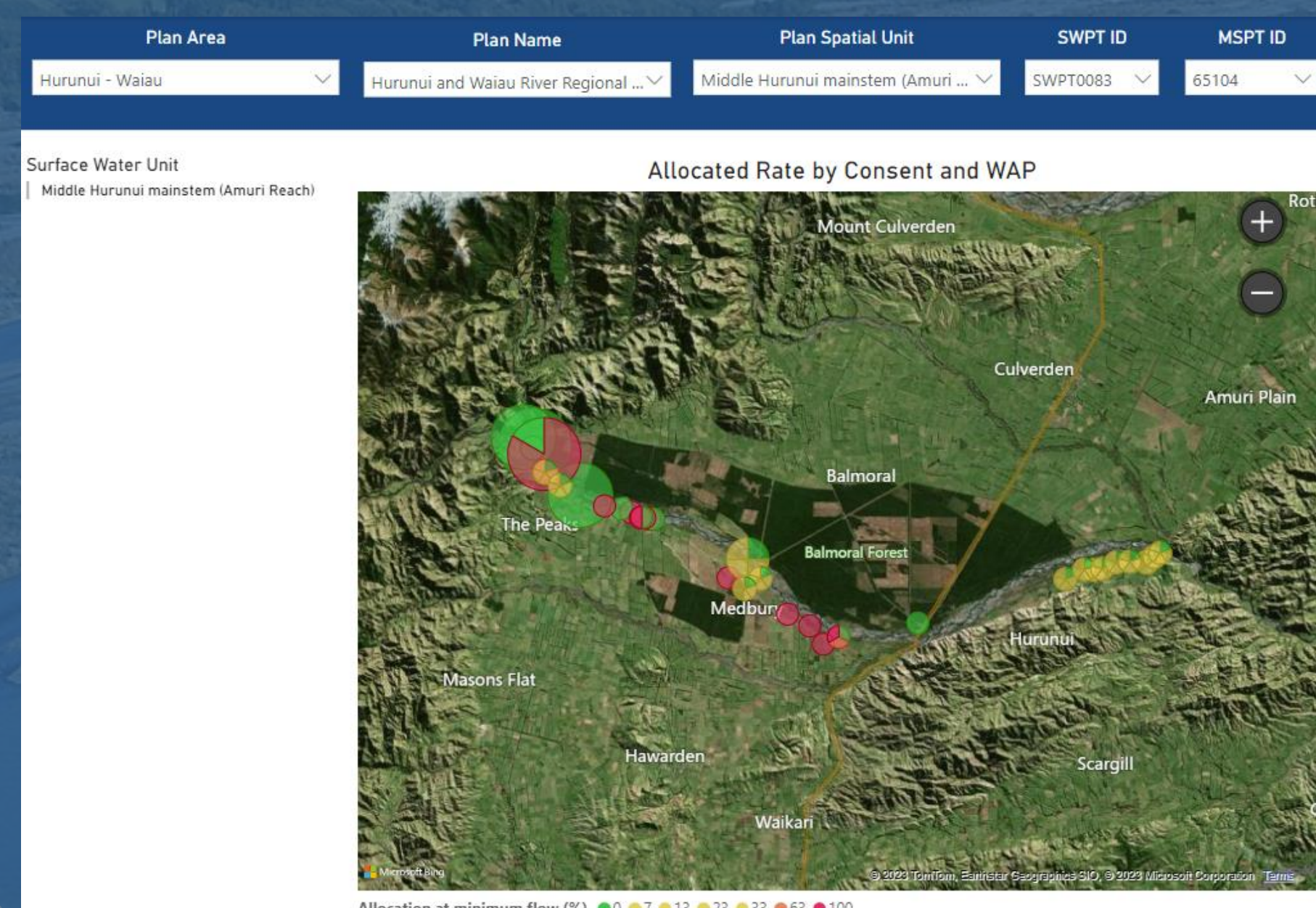
missing values and inconsistencies



Power BI

Interact

PowerBI dashboard developed to analyse water allocation and abstraction for

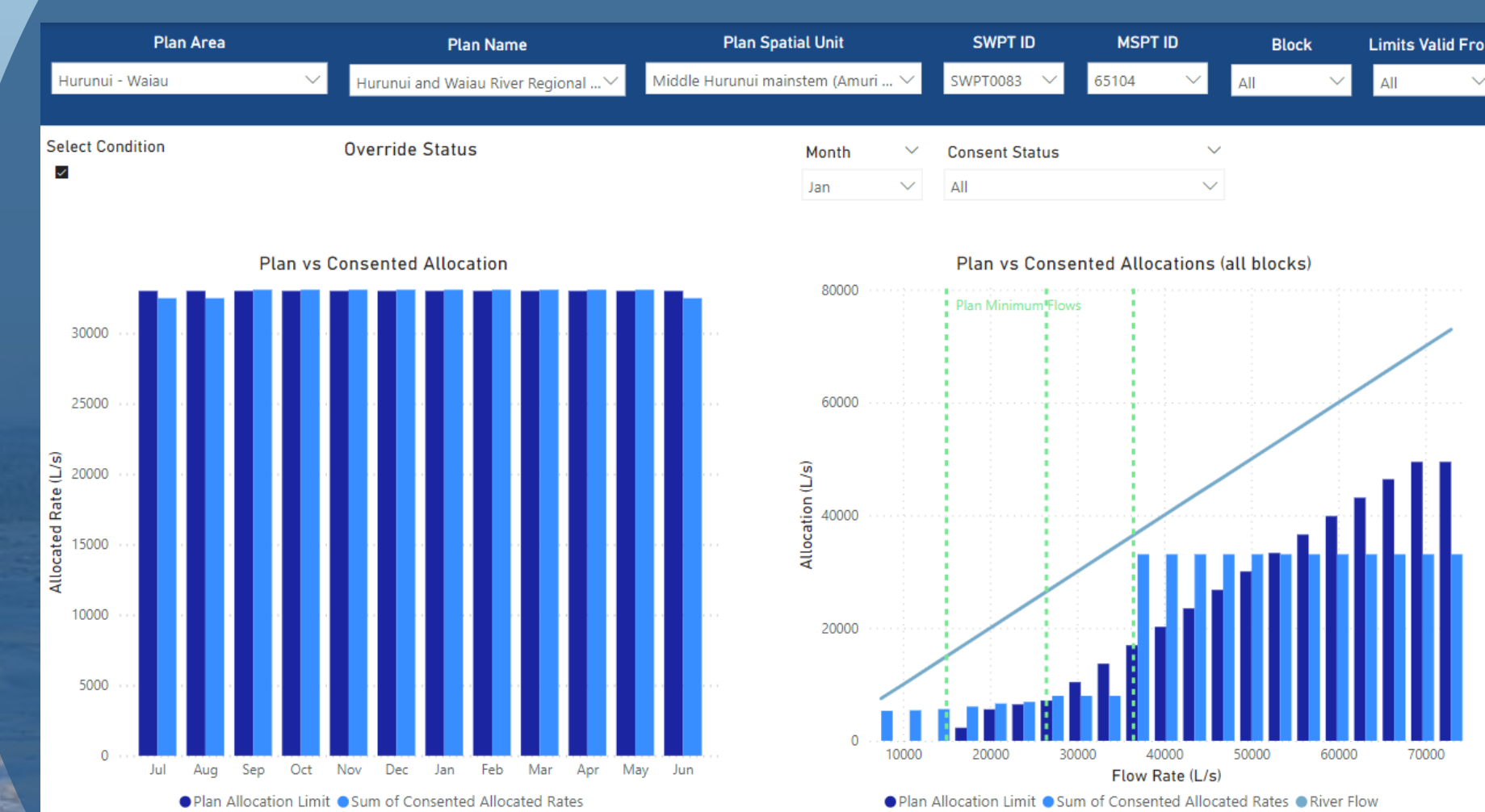


Canterbury rivers and streams



Transform

Python workflow created to calculate plan allocation



and consented allocation at minimum flow limits and variable flows

Outcome

A tool for Environment Canterbury staff to analyse and present data on plan limits, total consented allocation, allocation at variable flows and actual abstraction