

Te Awarua-o-Porirua Whaitua Committee - April 27, 2017
Collaborative Modelling Project –Update & Tech Team Plan

Having achieved a significant milestone of completing the narrative scenarios for rural, stormwater, wastewater and urban development activities, the Whaitua Committee handed the material to the Collaborative Modelling Project team (CMP) on March 23 2017. This memo provides a brief update on the progress of the CMP and suggests ways the technically-inclined Committee members can continue to be involved in the modelling refinements.

CMP Update

The CMP is now well into generating background information, building the models and setting them up to reflect the current conditions of the Whaitua. Achievements to date include:

- Setting up and running the CLUES model to estimate yields of contaminants from rural environments;
- Local customisation of the model estimating urban contaminants run-off (CLM) to modify or create new estimate yields specifically for Te Awarua-o-Porirua whaitua;
- Setting up and testing the model looking at changes in hydrology from different urban development approaches for in two case-study catchments;
- Estimating and documenting capital and maintenance costs for a range of wastewater and stormwater management devices, and,
- Scoping of social indicators and assessment methodology.

The current priorities are:

- Further technical work to translate the Committee’s narrative scenario material into model inputs and identify appropriate technical assumptions. A number of modellers are working on this to ensure consistent assumptions are made across model components for the different scenario runs;
- Setup of the freshwater and coastal models;
- Scope and prioritise attributes for Bayesian Belief Network (BBN);
- Establish a group of rural land owners to help gather local data and validate model setup for the rural interventions and rural enterprise models;
- Scope the methodology and availability of data for modelling the private and public economic costs, benefits and ‘flow-on’ impacts of the scenarios, and,
- Review the Ngāti Toa values and attributes document with the capabilities of the modelling architecture and the Kaitiakitanga assessment framework.

Tech Team Plan

At the March 23 meeting four members of the Whaitua Committee were confirmed to form a ‘Tech Team’ – Diane, John G, John M and Stu. The purposes of the Tech Team are to:

- Provide the Committee with assurance that that model inputs and technical assumptions reflect the intentions of the Committee’s narrative scenarios
- Provide the Committee with assurance that that models are focused on producing information matching the Committee’s decision making needs

- Test and provide feedback to modellers on the model inputs and technical assumptions that modelling makes and check how well the resultant information matches the Committee's decision making needs
- Contribute members' knowledge in their fields of expertise and interest

Potential mechanisms through which the Tech Team may be kept engaged are:

- Contribution to issue specific meetings with relevant modellers and PT team members, for example, the wastewater network overflow modelling with Wellington Water or determining urban development parameters.
- Receipt of the monthly CMP progress report.

In addition to bringing together CMP members and the Committee Tech Team in mid-May, members of the CMP and/or PT will contact the Tech Team members in the next couple of weeks.