

JOBS FOR NATURE

Horowhenua Freshwater Management Unit Water Quality Interventions

Community Stakeholder Group meeting

Thursday 22th September 2022, Rimu Room, Te Takeretanga o Kura-hau-pō, Levin (and via Zoom)

NOTES

In Attendance

Community Stakeholder Group members:

Sam Ferguson (Co-Chair), Charles Rudd, Vivienne Bold, Phil Teal, Mike Campbell, Trevor Hinder, Dan Touhy, Michael Kay, David Blackiston.

Support:

Logan Brown and Charlotte Minnis.

Apologies:

Dean Wilson (Co-Chair), Jay Clarke, Michelle Sands, Adam Duker, Christine Moriarty, Geoff Kane.

1 Welcome

Sam Ferguson opened the meeting with a karakia and Sam welcomed everyone to the meeting.

2 Science update

- **Waiopahu water quality model**

The Waiopahu FMU science report video from Horizons Regional Council and presented by Ton Snelder was played.

Questions/comments:

Shared sentiment amongst the present members of the group was that they would like a links for all the science reports to be sent out so that they can review the findings.

- **Tim Cox presentation on the development of the water quality model**

Questions/comments:

Trevor asked how long will it take for the results of the model in regards to the Waipahu FMU to be available.

Logan explained that is a live tool currently but that we are waiting for the wetland design to be confirmed before using it. Logan also stated that the model can be altered as further data becomes available.

Mike was concerned that the model was young being based on the recent (2020) publication that was the used for the wetland modelling.

Logan explained that it was a publication used in the development of the model.

There was some technical questions around how the model was developed from members of the group. Logan stated that given he did not write the report it would be best of the group members to read it. Group members agreed and the report will be circulated once finalized.

Charles and Mike both raised their concerns around sediment. Charles referenced the Hōkio stream and Mike the Manakau Stream as well as raising the issue of the Arawhata wetland having the potential to be filled up with sediment.

Logan responded that the issue of smothering the wetland in sediment has been raised with the wetland design team and is a concern that will influence the proposed wetland designs.

Charles referred to dying eels and birds at Lake Horowhenua. Sam and Logan agreed that that topic of conversation did not fit within the scope of this meeting.

Logan's disclaimer/summary for the models

We should not focus on the specific values given in the models output. We instead need to be using the model to identify the direction of travel and the magnitude of change.

- **Neil Thomas presentation of the groundwater model for the Lakes inputs**

Questions/comments

Trevor asked why groundwater inputs are concerning.

Logan and Sam responded that nitrate leaching into groundwater is a large concern in the Horowhenua region.

Mike followed Trevor's line of enquiry around the level of contamination of groundwater suggesting that the ground water is of high water quality in comparison to the surface water quality.

Logan clarified that the ground water is highly contaminated with nitrates.

Feedback from the group was that they would like to know the level of nitrate loads in the Lake's groundwater springs in comparison to the surface water nitrate inputs.

- **Marc Schallenberg presentation on the Lake's phosphorus and nitrogen budgets**

Mike discussed whether floating nurseries would be considered to harvest some of the nutrients.

The group was concerned that the groundwater data used in the budget came from the northern side of the lake and would like to see groundwater data from the Southern/Eastern side of the lake. The group also acknowledged though that the budget had been done with the data

available and was the best prediction that could currently be made due to data gaps.

- **Logan Brown presentation on Ōhau and Waikawa estuary**

Logan reminded the group that the specific numbers are not the focus but instead we should use the data to help us identify the direction of travel and the magnitude of change needed to make improvements.

Logan highlighted that estuaries are one of our most sensitive receiving environments and need to be considered when looking at the land use intensification in the area.

Sam outlined the background to this work being whether or not some of the landuse activities in Levin could be moved south into the Waikawa and Ōhau catchments. The testing done in the estuaries was to see if the catchments had the capacity to receive higher nutrient loading. The conclusions drawn from the science is that the estuaries are already exceeding nutrient limits for a large percentage of the year and do not have extra capacity.

Charles has indicated that he would like more fish data collected in the estuary. Logan responded that there will always be more data that could be collected but it comes at a price and we need to consider what benefit that data collection has. Trevor added that we only want to be collecting data that we will actually use.

Sam closes with a karakia.

Actions from the meeting

- **Charlotte** – Follow up how the final reports are tracking and share the links to the reports when they become available online.
- **Logan** – Check with the experts that they are happy for their presentation to be circulated with the Community Stakeholder Group and if they are send the members the videos.