

Minutes for Land Technical Advisory Group, 8 October 2014

Bay of Plenty Regional Council – Te Wai Ariki

1125 Arawa St, Rotorua, 9:00 am

Chair: Dave Clark

Convener: Andy Bruere

Present:

- Gina Mohi – Independent Advisor
- Ag First- Phil Journeaux
- Landcare- Suzie Greenhalgh
- Ag Research: David Houlbrook and Neels Botha
- Greg Lambert- Independent Advisor
- BOPRC: Anna Grayling, Sarah Omundsen, John Paterson, Warwick Murray, and Sandra Barns
- Others: Simon Park; Gloria Zamora,
- Observers: Lachlan McKenzie (Farmer); Stuart Morrison (Farmer); Tanira Kingi (StAG Chairman), Professor David Hamilton (Lakes Chair), Mike Scarsbrook (Dairy NZ); and Ollie Parsons (Dairy NZ)

Action summary

1. Andy Bruere: Note that TOR allows the convener to invite additional people to participate on a short or long term basis.
2. Gloria Zamora: to make a conflict of interest register.

Item 1: Karakia and Welcome

1. Gina Mohi opened with a Karakia.
 2. Andy Bruere welcomed everyone to the inaugural meeting of the BOPRC Land TAG.
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Item 2: Apologies

1. For lateness: Dr Tanira Kingi and Prof David Hamilton
 2. For absence: Tim Payne, Simon Stokes, Rob Donald
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Item 3: Housekeeping matters

1. Andy Bruere updated the group in regards to parking, bathroom locations, building health and safety.
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Item 4: Background: ToR, selection process and transition to Regional Land TAG- Andy Bruere

1. Andy explained that the initial focus of the Land TAG would be the Rotorua Te Arawa Lakes Programme for the first two (2) years after which the Land TAG would focus on the wider region of the Bay of Plenty beginning with the Kaituna.
2. The group was asked if there were any questions in regards to the Terms of Reference. There were none.
3. The panel agreed that non-technical observers attending may potentially affect the focus of the group.
4. The panel agreed that Chatham House rules would apply with all Land TAG meetings.
5. The panel discussed the issue of outside observers attending the LandTAG meetings. It was agreed that the ToR allowed the convener to invite outside contributors and further that the Stakeholder Advisory Group may be a more appropriate group for farmer participation.
 - a. It was noted the difficulty of operating in a technical matter with many observers.
 - b. It was emphasized that the Land TAG was a group of professionals rather than a group “representing” outside industries.
6. Selection Process for Land TAG consisted of a panel of the following individuals: Ants Roberts, Simon Stokes, Andy Bruere, Tanira Kingi and Leilani Ngawhika.
7. The owner of the Rotorua Te Arawa Lakes Programme (RTALP) is a partnership set up under the Te Arawa Settlement between Te Arawa Lakes Trust, RDC, and BOPRC.
8. It was agreed that the panel of LandTAG would need to be transparent as to avoid any potential conflicts of interest and a conflict of interest register will need to be created.
 - a. It was clarified: there is no conflict of interest for panel members submitting tenders to the BOPRC tender request for Farm Plan Advisors.

AGREED:

1. Chatham House rules would apply with the Land TAG where participants are free to use the information received, but neither the identity nor the affiliation of the speaker(s), nor that of any other participant, may be revealed.
2. TOR allow “convener can invite industry professionals to observe Land TAG”.

ACTION:

1. Make a conflict of interest register.

Item 5: Land TAG Chair Discussion

1. Panel selected Dave Clark as the interim chair.
2. It was agreed that Dave Clark would remain chair for the first few meetings after which a decision could be made to appoint long term chair if the group desired.

AGREED:

3. Panel selected Dave Clark as interim chair.

Item 6: Presentations of individual knowledge and experience

1. Each member of the LandTAG presented on their knowledge and expertise on environmental outcome.
2. A short bio of each panel member may be found here:
[http://www.rotorualakes.co.nz/land technical advisory group](http://www.rotorualakes.co.nz/land_technical_advisory_group).

Item 8: Rotorua Lakes Programme Updates

1. An overview of the programme was given by multiple members of the RTALP team.
All presentations may be found here:
[http://www.rotorualakes.co.nz/land tag minutes](http://www.rotorualakes.co.nz/land_tag_minutes)
 - a. Overview including TLI targets- Andy Bruere
 - b. Lake Rotorua policy framework- Sarah Omundsen
 - c. Incentives Scheme and advisory services and current land use options- Anna Grayling.

Item 9: Lake Science- Professor David Hamilton

1. An update was given in regards to the tremendous amount of research needed in a short space of time and how the University master and PhD students under Professor Hamilton's direction contribute to the RTALP. A brief overview was given on current actions on the priority lakes.
2. Items to note of the Professor Hamilton's presentation:
 - a. Monitoring buoys-
 - i. Currently there are 5 monitoring buoys around the lakes which transmit data every 15 minutes.
 - ii. Solar powered panels transmit the lakes' water column vertical data
 - iii. Goal is to get monitoring linked up with a satellite.
 - b. Alum dosing is currently being used to mitigate the phosphorous and has had short-term success; however, the programme is still monitoring for the long-term effects.
 - i. Alum dosing is only a short-term solution.
 - ii. The panel questioned whether were any health concerns in regards to the alum in the water and farmers using the water for their stock. To which Regional Council staff replied that currently there are no stock which have access to Lake Rotorua.

Item 11: Presentations

1. Lake Rotorua Catchment Information-

- a. OVERSEER® application to nutrient benchmarking and attenuation- Andy Bruere
 - i. There are significant issues around the use of OVERSEER® in regulation, due to calibration and how nitrogen loss varies from version to version. There was particular concern around what the Taupō catchment faced in how OVERSEER®'s outputs differed greatly from those done from what was actually measured. It was further clarified to the panel that Council looks at what they think is coming from the land to the lake and lake budgets to aid decisions are made from that.
 - ii. The panel questioned if the farmer's reductions were solely based on changes to OVERSEER®.
 - iii. Council is hoping that the farm plans will capture that. The programme assumes best management practices are being applied.
 - iv. It was suggested that there is a gap between the assumed practices and what is actually happening.
- b. Other land use mitigations in action- John Paterson
 - i. A presentation was given which began with a summary of land uses and sources of N & P. It identified the two fundamental approaches: land use change and land management change (anything you can manipulate on farm). An overview of detainment bunds was given.
 - ii. The panel noted that flood peaks have been reduced in many areas as a result of the detainment bunds.
- c. Farm and catchment scale economic impacts- Ollie Parsons DNZ
 - i. The presentation began by identifying the current gaps in realizing the economic impacts the rules will have on farms. The current project aims to optimize land use between the different management scenarios and is not modelled to the capital value of a property.
- d. Landowner perspectives on science, economics, and change.
 - i. Large proportion of land in the catchment is Māori owned. Conversations with the BOPRC began in 2011 around future land use. This led to the reinstatement of Land TAG. There is a lot of expectation from farmers on the role that this Land TAG will play in advising solutions to both farmers and to StAG for the initial 2 years.
 - ii. Farmers have always wanted a clean lake. Initially farmers helped council to get the \$45 million; however he suggested that research shows it will take closer to \$120 million.
 - iii. Farmers need good advice to get through the disruption in change and a framework. Council have committed to 130t N reduction with the incentives fund and gorse control. Looking at achievability of targets whilst maintaining economic viability. Farmers also concerned about the land value. A best way forward needs to be identified.

- iv. Iwi perspective varies; however, most interested in the long-term outcomes.
- v. Some issues that will need to be resolved:
 - 1. Nutrient allocation,
 - 2. Rule and policy framework,
 - 3. P mitigation and role of in-lake interventions,
 - 4. Credibility of advice,
 - 5. Support for stressed people,
- e. Made the comment that excellence may not be enough.

Item 12: Group Discussions

1. Identify priorities for Bay of Plenty land science and economics work

- a. ROTAN model has had difficulties around the programs that support it. It needs to be rewritten and UoW has been contracted to do this work. Once completed it should give a better understanding of attenuation along with the farm information for Rotorua farming catchment.
- b. Priorities are as follows:
 - i. Clarify Gorse N parameters
 - 1. Satellite imagery will be assessing the extent of mature gorse. Target of Land Management team is going out there and forging deals with those that own the gorse. Originally gorse had been assessed by a summer student a few years ago.
 - 2. Current costs are \$2k-3K per hectare to remove. During the transition of the removal there will be a spike of N to the lake. A short-term hit for a long-term gain.
 - 3. Conversion should take 20-40 years.
 - 4. Issue has been getting dairy farm data. Most farmers do not hold their individual files only a the nutrient benchmark report.
 - 5. First action in the SMP is to make sure that each farmer has an up-to-date OVERSEER® file.
- c. Attenuation- need for all updated farm data to complete this and feed into ROTAN.
- d. Robust consistent data management, including:
 - i. Dairy N loss changes/progress over time
 - ii. Overseer version transition
 - iii. Address trust and confidentiality issues
 - iv. Multiple Overseer files: SMP roll-out; Fonterra N loss; Fertiliser companies
- e. N trading
 - i. Learnings from Taupo
 - ii. Interaction with Overseer and specific NDA values (not %)

- f. Practicalities of compliance
- g. Dashboard reporting for N- allowing a user to quickly make sense of the raw numbers by presenting them in visually rich charts and tables.
 - i. Where does it fit; consider ARGOS version
 - ii. Community input and role as a boundary object¹
 - iii. Tracking wider objectives and progress beyond Overseer files
- h. Phosphorus loss
 - i. Consider Overseer P sub-model limitations and current review (Colin Gray)
 - ii. AgResearch trials on coarse pumice soils (P leaching risk)
 - 1. Council in process of procuring contract for this.
 - 2. Will be completed 28 February 2014.
 - iii. Detention bund efficacy
 - iv. Progress with MitAgator and “Clean Water Productive Land” MBIE work
- i. N allocation
- j. Land value impacts
- k. Impact of pending water allocation limits
- l. Aluminium in lake risks
 - i. Short Vs Long term perspectives
 - ii. Different risks and effects e.g. bioaccumulation
 - iii. Link to social impact assessment and the need to bring people with you i.e. broader than the farming community
- m. Mechanisms to address landowner distress (a social responsibility)
- n. Farmer behaviour and impact on extension work, “social obedience” and resourcing
- o. Extending farm-scale economic analyses to the catchment level
 - i. District Input-Output analysis (Sandra Barns scoping consultant brief now)
 - ii. Critical mass for new land uses, in terms of supplier numbers and area
- p. Alternative land uses
 - i. Challenge to Land TAG scope
 - ii. Cropping options attractive for local food but value chain challenges
- q. Objective forestry analysis for dry stock farms
- r. Overseer calibration site for high rainfall podzol soil
- s. Alternative pasture species e.g. plantain, red clover and Italian ryegrass (note Horizons work)

Meeting End 5:45 pm.

¹ In sociology, “a boundary object is information, such as specimens, field notes, and maps, used in different ways by different communities...but with enough immutable content to maintain integrity”...[Wikipedia](http://en.wikipedia.org/wiki/Boundary_object)