

## Science and Technical Advisory Group Meeting

### Minutes

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**Dates and Location:** Thursday 29 November 10am-4.30pm, Room 1A (Matairangi), Ministry for the Environment, 23 Kate Sheppard Place, Thorndon.

**STAG Members present:** Bryce Cooper, Chris Daughney, Clive Howard-Williams, Bev Clarkson, Graham Sevicke-Jones, Ian Hawes, Jon Roygard, Ken Taylor (chair), Marc Schallenberg, Mike Joy, Russell Death, Joanne Clapcott, Ra Smith, Tanira Kingi, Mahina-a-rangi Baker, Jenny Webster-Brown (in the afternoon, by phone), Adam Canning (by Skype). **MfE staff:** Jen Price, Oscar Montes de Oca Munguia, Isaac Bain, Vicki Addison, Dan Elder, Helli Ward, Nik Andic, Jo Burton, Lucy Bolton, Carl Howarth. **Apologies:** Dan Hikuroa, Jamie Ataria

#### Items:

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**1. Previous meeting minutes and actions arising, Terms of Reference, apologies, conflict of interest**

The chair outlined the agenda in relation to timing and prioritisations of the work programme. The group was briefed on the proceedings of the Freshwater Leaders Group and Kahui Wai Māori meetings.

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**1. A) Indicative work programme, milestones, timing of meetings, topics for discussion**

MfE staff presented the indicative timetable for the advisory group network with timing of decisions by ministers, and outlined the plan for the joint Advisory Group meeting on 7 December. These were discussed and it was noted that the Group needs to have enough time to consider proposals and provide feedback.

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**2. State and trends**

MfE staff gave a presentation on state and trends in NZ freshwaters, based on Land Air Water Aotearoa (LAWA) data. Discussion points included survey site considerations, analysis of water quality parameters compared to a more holistic approach, and matters to consider relating to interpreting trends.

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**3. Maintaining or improving water quality**

MfE staff presented a paper on how the issue of maintaining or improving water quality is dealt with in the National Policy Statement for Freshwater Management (NPS-FM), and outlined options to better manage the “bands test” for Appendix 2 attributes. The group agreed that a decline within a band “might constitute a material (i.e. more than minor or significant) decline in ecosystem health, for at least some existing attributes”. The group identified attributes where this might apply, including the “A” band for lakes, nitrate toxicity bands, and *E. coli* bands. The group felt that bands are a useful tool for setting community objectives and communicating to the public and councils; however they can cause some detail to be lost. Further clarity is needed on how to define “maintain” statistically. MfE staff were asked to provide worked examples to help further this discussion.

#### 4. Sediment

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The group discussed sediment attribute components – metrics and exceedance criteria for potential attributes. The group discussed the decision to base attributes on rolling medium-term (~2 years) measures of central tendency, and asked for MfE to provide a worked example illustrating the implications of this. It was agreed that suspended and deposited sediment were appropriate indicators. The group then discussed policy principles to guide bottom-line attribute development. It was discussed that it is key to have provision for, and meaningful recognition of, Te Mana o te Wai in the Principles, and that bottom lines need to be measurable and related to the purpose or outcomes being sought.

#### 5. Wetlands

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There was discussion on wetland identification and delineation, water level changes, setbacks, wetland size, national targets and the wetland condition index. The Biodiversity Collaborative Group (BCG) has also provided wetland policies in the draft NPS Indigenous Biodiversity (NPS-IB) and officials are working together.

#### 6. Updates/shorter sessions: indicators of health from a Māori perspective, nitrate, copper and zinc, dissolved oxygen

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*Note:* flows and dissolved oxygen were scheduled but were postponed until the next meeting due to time constraints.

Indicators of health from a Māori perspective – MfE staff and Kahui Wai Māori representatives gave an outline of work planned and under way on this topic, and this was discussed. Work is in the early stages and MfE staff will report back to the group again at a later stage.

Nitrate - The processes set out in the 2018 MfE report “*A draft technical guide to the Periphyton Attribute Note*” were outlined. Some members of the group would like to see attribute tables in the National Objectives Framework for the trophic state effects of nitrogen and phosphorus in rivers. Monitoring considerations and the influence of groundwater were discussed.

Copper and zinc – MfE staff outlined work to date. There was discussion on the importance of other contaminants of concern.

**4pm** End of meeting