

## **Climate Justice Taranaki submission on the Consultation document - Proposed amendments to the Resource Management (National Environmental Standards for Sources of Human Drinking Water) Regulations 2007**

Climate Justice Taranaki Inc. (CJT) is a community group dedicated to environmental sustainability and social justice. This includes issues of inter-generational equity, notably in relation to climate change, which will impact future generations' inalienable rights to safe water, food and shelter, crucial to sustaining livelihoods and quality of life.

As pointed out in the IPCC AR6 report chapter 11<sup>1</sup>, *“Water is highly valued by Māori for its mauri or life force and for its intrinsic values and multiple uses... Increasingly, these diverse values are in conflict... due to increasing pressures from how land is used and managed and the effects on water availability and quality. Such tensions will be further challenged as temperature rise and extreme events intensify beyond what has been experienced, thus stressing current adaptive capacities...”*

*Pressure for long-term access to groundwater or large-scale water storage is increasing to ensure the ongoing viability of the primary sector as the climate changes. While investment in irrigation infrastructure may reduce climate change impacts in the short-term, maladaptive outcomes cannot be ruled out longer-term which means that focusing attention now on adaptive and transformational measures can help increase climate resilience in areas exposed to increasing drought and climate extremes that disrupt production...”*

Our group appreciates the opportunity to comment on the consultation document. Below we have answered some of the set questions and provided a few additional points.

### **Proposal 1: How at-risk source water areas are delineated**

Q2. It may be useful to also consider the types of contaminants and treatment when determining the size of Source Water Risk Management Area (SWRMA).

Q4. The 3 metres setback requirement of the Resource Managed (Stock Exclusion) Regulations 2020 is too small. It should be increased to the same distance as the SWRMA 1 for lakes and rivers, preferably at least 10 metres from the edge of the river or lake, not 5 metres.

Q5. For source water bores, at least a 10 metres radius should be designated as SWRMA 1, in line with evidence.

Q9. Support for Māori organisations, iwi, hapū, marae and environmental/community groups to work with regional councils would help to delineate SWRMAs more effectively.

Q10. It'd be more efficient to map currently unregistered supplies as they register, rather than waiting for at least four years.

Q11. Based on the precautionary approach, existing protection zones or bespoke SWRMAs undertaken or proposed by regional councils are only acceptable if they provide greater protection to the source water. In all other cases, a consultative process and approval from the Ministry for the Environment should be required.

### **Proposal 2: How activities that pose risks to source water are regulated or managed**

Q12. National direction on activities within SWRMA 1 is necessary.

- Strict controls are necessary in SWRMA 1 for resource users, not just water suppliers.
- All contaminant discharge activities should be fully prohibited within SWRMA 1.
- Oil and gas well drilling, fracking (hydraulic fracturing, well stimulation), water flooding, deepwell injection and contaminate discharge should also be fully prohibited.

Q14. Chemical control of pest species should be prohibited within SWRMA 1.

Q15. National direction on activities within SWRMA 2 is necessary.

- All contaminant discharge activities should be fully prohibited within SWRMA 2.
- The drilling of oil and gas wells through groundwater into underground formations is a Permitted activity under the Regional Freshwater Plan for Taranaki<sup>2</sup>.
- For seismic surveys in search of oil and gas, the Taranaki Regional Council grants non-notified consents *“To discharge contaminants to land where they may enter groundwater, including residues from detonation of explosive charges and degradation of unexploded charges, associated with undertaking a seismic survey”* (TRC, July 2021)<sup>3</sup>.
- The council also issues non-notified consents for oil and gas well hydraulic fracturing (fracking / well stimulation), water flooding and deepwell injection of contaminants into underground formations below aquifers, as well as abstraction from surface and groundwater (TRC, Nov 2021<sup>4</sup>, Sep 2020<sup>5</sup>, Feb 2022<sup>6</sup>, Nov 2021<sup>7,8</sup>).
- Consents are also granted *“To discharge treated stormwater and production water from hydrocarbon exploration and production operations”* into streams or unknown tributaries of streams (TRC, Aug 2021<sup>9</sup>, Nov 2020<sup>10</sup>) and to discharge surplus drilling water *“onto and into land where it may enter an unnamed tributary”* of streams (TRC, Feb 2022)<sup>11</sup>. On some farms, operators are issued consents *“To discharge drilling waste cuttings... from hydrocarbon exploration activities with water based muds and synthetic based muds onto and into the land via landfarming, landspreading, injection spreading and irrigation* (TRC, Mar 2021)<sup>12</sup>. Consent conditions at the CD Boyd Landfarm allow for waste discharge beyond 12 metres of streams and 6 metres of any other surface water course including farm drains.
- At the Remediation NZ Uruti composting facility, the company held consents for the stockpiling and discharge of hydrocarbon and other wastes onto land for composting and to discharge treated stormwater and leachate onto and into land *“where contaminants may enter water in the Haehanga Stream catchment and directly into an unnamed tributary of the Haehanga Stream”* (TRC, Mar 2022)<sup>13</sup>. Irrigation of wastewater is allowed 25 metres beyond any surface water body. This operation has been denied extension of discharge consents in 2021 due to the unacceptable environmental and cultural impacts on the Haehanga Stream and Mimitangiatua River<sup>14</sup>.

Q17, Q27. We submit that all activities associated with hydrocarbon exploration, production and waste management operations should be fully prohibited in SWRMA 2. The NES-DW should be applied to these activities retrospectively to ensure no expansion of existing activities and no extension of expiring consents for these activities.

Q18. In addition to microbial contamination, industrial contaminants such as various hydrocarbons, heavy metals and endocrine disrupting chemicals, as well as agricultural contaminants, notably nitrates, pesticides and fungicides, should also be regulated stringently.

Notably, Schullehner (et al. 2018)<sup>15</sup> has linked increased bowel cancer with nitrate levels above 3.87 mg/L (0.87 mg/L of nitrate-nitrogen) in drinking water<sup>16, 17</sup>. A substantial minority of New Zealanders are therefore exposed to high or unknown levels of nitrates in their drinking water (Richards, et. al. 2021)<sup>18</sup>. The NZ maximum allowable value of nitrate-nitrogen of 11.3ppm (equivalent to 50ppm nitrate) fails to protect human health<sup>19</sup>, especially that of rural communities. This needs to be lowered to <1 ppm, in line with new research and as a precautionary principle.

As an example, the New Plymouth District Council reported nitrate as N level in Ōkato water supply at or above 3 g/m<sup>3</sup> for three months in 2021 (NPDC, 2022)<sup>20</sup>. In search of a new water supply to supplement the scarce supply for Ōkato during summer droughts, a test bore was drilled. The aquifer was, however, found to be contaminated with the fungicide difenoconazole at 50 times above what is allowed in Europe and cannot be used as drinking water<sup>21</sup>.

Q22. Unused bores should be decommissioned. Sub-standard bores should be upgraded or decommissioned.

Q34. Council should offer support to small water suppliers where needed. As an example, support for the installation of rainwater tanks, pumps and ecological wastewater treatment systems would be very helpful to small, rural communities in building their climate resilience.

Q35. Safe drinking water is a basic human right. The benefits from a much strengthened and properly implemented NES-DW at regional and local levels for source water protection will outweigh the costs and work burden on councils.

Q36. The development of farm plans needs to support a much-strengthened NES-DW, through reduced stocking rate, retiring high risk areas, substantially reduce the application of synthetic nitrate fertilisers, adequate riparian planting and regenerative management that builds soil carbon and incorporates tree crops and rewilding for biodiversity.

Q39. The protections of the NES-DW should apply to all registered water supplies because the water quality standard and protection should be equally strong for small (1-500 people over 60 days a year) as for large (over 500 people) communities.

### **Additional points**

Water abstraction needs to be much more strictly managed, to protect water supply and ecological needs, especially with escalating impacts of climate change. A case in point, there is no clear data on the water take for oil/gas fracking operations. The production of so-called green hydrogen that is being promoted at national and regional levels, will require huge amounts of water for electrolysis. Independent, comprehensive assessment and strict rules need to be put in place if this technology is to proceed.

We raise our concern over the passing of the Health (Fluoridation of Drinking Water) Bill<sup>22</sup> in November 2021, taking away the authority of district councils, representing their constituents, to decide whether to fluoridate their water. There is an increasing number of studies raising concern over the potential adverse health effects from fluoridation<sup>23</sup>, as there is over chlorination<sup>24</sup>. We would like to see independent inquiries into the health effects of water fluoridation and alternatives to chlorination<sup>25</sup>.

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<sup>1</sup> [https://report.ipcc.ch/ar6wg2/pdf/IPCC\\_AR6\\_WGII\\_FinalDraft\\_Chapter11.pdf](https://report.ipcc.ch/ar6wg2/pdf/IPCC_AR6_WGII_FinalDraft_Chapter11.pdf)

<sup>2</sup> <https://trc.govt.nz/council/plans-and-reports/strategy-policy-and-plans/regional-fresh-water-plan/>

<sup>3</sup> <https://trc.govt.nz/assets/Documents/Meetings/ConsentsRegulatory/2021/CR2007.pdf>

<sup>4</sup> <https://trc.govt.nz/assets/Documents/Meetings/ConsentsRegulatory/2021/cr2311.pdf>

<sup>5</sup> <https://trc.govt.nz/assets/Documents/Environment/Monitoring-OGhf/MR20-ToddMangahewaCHF.pdf>

<sup>6</sup> <https://trc.govt.nz/assets/Documents/Environment/Monitoring-OGwaste/2022/MR21-GreymouthDWI.pdf>

<sup>7</sup> <https://trc.govt.nz/assets/Documents/Environment/Monitoring-OGproduction/2021/MR21-KupePS.pdf>

<sup>8</sup> <https://trc.govt.nz/assets/Documents/Environment/Monitoring-OGproduction/2021/MR21-MauiPS.pdf>

<sup>9</sup> <https://trc.govt.nz/assets/Documents/Environment/Monitoring-OGproduction/2021/MR21-ChealPS.pdf>

<sup>10</sup> <https://trc.govt.nz/assets/Documents/Environment/Monitoring-OGproduction/2019onwards/MR20-TamarindSidewinderPS.pdf>

<sup>11</sup> <https://trc.govt.nz/assets/Documents/Environment/Monitoring-OGdrilling/2019onwards/MR21-GreymouthNorthernSites.pdf>

<sup>12</sup> <https://trc.govt.nz/assets/Documents/Environment/Monitoring-OGwaste/2021/MR20-BoydDrillingWaste.pdf>

<sup>13</sup> <https://trc.govt.nz/assets/Documents/Environment/Monitoring-Industry/2022/Remediation-New-Zealand-Ltd-Uruti-Composting-Facility-Monitoring-Programme-Annual-Report-2020-2021.PDF>

<sup>14</sup> <https://www.rnz.co.nz/news/national/443469/taranaki-composting-business-eyes-appeal-of-consents-decision>

<sup>15</sup> <https://pubmed.ncbi.nlm.nih.gov/29435982/>

<sup>16</sup> <https://www.rnz.co.nz/news/national/455238/contaminated-water-may-lead-to-40-deaths-a-year-in-nz-study>

<sup>17</sup> <https://www.rnz.co.nz/national/programmes/ninetoon/audio/2018804695/natural-state-water-purity-measure-corrected>

<sup>18</sup> <https://www.sciencedirect.com/science/article/abs/pii/S0013935121016236?dgcid=author>

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- 19 <https://theconversation.com/drinking-water-study-raises-health-concerns-for-new-zealanders-108510>
- 20 <https://www.npdc.govt.nz/media/pgsfkhgb/tap-water-report-2022-01.pdf?la=en&hash=FF6DA632F77FE857F126BB2D0FC44DC01541359D>
- 21 <https://www.rnz.co.nz/news/national/441093/taranaki-aquifer-contaminated-50-times-more-than-acceptable>
- 22 [https://www.parliament.nz/en/pb/hansard-debates/rhr/combined/HansDeb\\_20211109\\_20211109\\_32](https://www.parliament.nz/en/pb/hansard-debates/rhr/combined/HansDeb_20211109_20211109_32)
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