Taranaki Monthly Meeting (Quakers)

Submission to the Climate Change Commission Draft Report to Parliament

28 March 2021

Our group submission focuses on what action can bring about a significant change in the shortest possible time within current resources.

We submit that restoring wetlands, especially peat wetlands, is one such action with low infrastructure constraints, on-going benefit and with potential for new agricultural products. Swamps have the added benefit that they will not catch fire and accidentally add to carbon emissions as a forest might.

Evidence shows that nearly 207,861 hectares of historic peat wetlands in New Zealand have been drained and degraded; and that the majority of missing peat wetlands (158,149 ha. or 73%) are currently classified as High Producing Exotic Grassland, which is used for intensive agriculture directly contributing to the nation's high carbon footprint[(1)].

Over 90% of New Zealand's wetlands are gone [(2)] and with that habitat loss, many waterfowl are under threat especially the native whio (blue duck) and pāteke (brown teal) as well as migratory birds who rely on the wetlands as a food resource. Biodiversity is essential for a healthy biosphere.

We believe that there is evidence that protecting and reinstating wetlands, especially peat wetlands, is the shortest route to sequestering carbon both in the short term and on a long term basis[(1)(3)]. This is in addition to other means already recommended by the Commission. We ask that protecting and restoring wetlands be promoted to be a major part of the commission's recommendations to the Government.

We note that there are sections in your report where reference to the value of increasing wetlands is absent, or demoted to the point of invisibility:

- Table 4c.1: Opportunities and challenges of on-farm management changes for reducing agricultural emissions: Creating a diversified landscape add "conserve, restore or create wetlands". Restoring old wetlands is being trialled successfully [(2)] and is a relatively low cost contributor to carbon sequestering. The great advantage is that it can be implemented immediately with no infrastructural requirements.
- 5.1.1 Increasing biological uptake: this section makes no mention of the potential benefits of restoring wetlands for increasing New Zealand's carbon capture actions. Even if little in the way of systemic records exist for the level of carbon sequestering in peat wetlands, we know

that draining wetlands adds to carbon release and this practice should be banned. A measure to use could be the hectares devoted to swampland.

- 5.1.1 Increasing soil carbon stock: The paragraph supporting peatland restoration can be easily missed especially coming after an introduction which says carbon levels in the soil are already relatively high so the gains will be less than overseas models show. In the final report please give Peatland restoration its own heading to enable it to be seen.

We would like the final report to give more prominence to the value of wetlands as a carbon sink, a means to support biodiversity and a potential new resource for agricultural products.

We ask the commission to recommend to Government that immediate action is taken to provide incentives to agricultural interests, land developers, and councils to preserve, reserve, conserve and recreate wetlands as an immediate priority and to issue an immediate moratorium on the draining of more wetlands.

A. Major Recommendation:

We recommend that financial incentives, such as grants, carbon credits or other means, be introduced to bolster the voluntary retention of current wetlands measured by hectare of wetlands in ownership and to encourage the increase of the national hectares devoted to wetlands on the same par as converting land to forestry or regenerating native bush.

B. Other Recommendations:

We also recommend the provision of incentives to business interests to develop wetlands for productive purposes such as:

1. Supporting the re-development of the flax industry to create biodegradable fibre, rope, linens, sacking and other sustainable products which with the phasing out of plastics will become valuable alternatives. Such products will assist New Zealand to become plastic free and also be a potential export. Taranaki and Horewhenua were once a principle flax growing areas which has been converted to intensive dairying with the costs to New Zealand of degraded water quality, long term nitrogen pollution in the aquifers and costs of importing feed and fertilisers.
2. Support the growing of raupo and research in to new ways the fibre can be used and exported.
3. Support research into and the establishment of growing of edible crops in wetlands.

4. Use wetlands to improve water quality as a filtration process which protect downstream waterways and the ocean. Urban wetlands can be created to filter storm water and will attract birds and wild life into the urban environment (refer to the lagoons at Unitec, Auckland).

C. Other supporting actions:

1. Support treaty obligations: iwi need to be consulted and actively involved on measures to protect, develop and manage the wetlands. Local and regional councils to be actively encouraged to initiate such discussions.
2. A public re-education programme to increase awareness of the value of wetlands as a carbon sink, as a resource for sustainable products and as a means of supporting greater biodiversity.
3. Find the means to resource (by grants or other means) and facilitate (by appointment of people responsible to ensure action) a collaborative, community-led development process which brings together different parties of interest (including citizen volunteers to provide labour, agriculture, iwi, schools, local and regional councils, land developers, and environmental action groups) to maximise the establishment and effectiveness of local wetlands schemes.

D. Immediate action, by Government decree if necessary:

1. Apply a national moratorium on draining more peat wetlands as drained peatland gives off 20 tonnes of carbon dioxide per hectare per year (Forest & Bird, No 379, Autumn 2021, p.42) or up to 6% of New Zealand's Agricultural emissions [(1)]
2. Stop the expansion of the urban settlement of ex-wetlands around Levin and other drained swamp land. All such new housing developments need to be banned. Building on ex-wetlands is ill advised given the increase in flooding events likely with climate change and the likely liquefaction damage from earthquakes.
3. Stop destruction of mangrove areas and associated wetlands around Auckland Bays and Northland justified as a means to enhance the scenic attractiveness for residents. Instead, encourage boardwalks and scenic cycle/pathways which will allow locals to observe the biodiversity gains and take pride in their local wetland areas.

Resources

(1) Evidence cited by Forest & Bird Media release 2 February 2021: https://www.forestandbird.org.nz/resources/restoring-peat-wetlands-our-climate-change-secret-weapon

(2) Ducks Unlimited New Zealand: https://ducks.org.nz/wetlands

(3) Manaaki Whenua, Landcare Research https://ourenvironment.scinfo.org.nz/maps-and-tools/app/Wetlands/wetlands_current,wetlands_historic