Submission on Plan Change 1 to the Natural Resources Plan Greater Wellington Region

Te Awarua-o-Porirua Harbour and Catchments Community Trust

The Te Awarua-o-Porirua Harbour and Catchments Community Trust (Porirua Harbour Trust) makes this submission on Plan Change 1 of Greater Wellington Regional Council's Natural Resources Plan (the 'NRP') or 'Regional Plan') for the Greater Wellington region.

We wish to be heard in any formal hearings relating to the submission process.

1. BACKGROUND

A. Te Awarua-o-Porirua Harbour and Catchments Community Trust (Porirua Harbour Trust)

The Te Awarua-o-Porirua Harbour and Catchments Community Trust is an independent entity with a role of monitoring and advocating for the sustainable management and environmental health of the Porirua Harbour and catchments.

The Objectives of the Porirua Harbour Trust (PHACCT) are to promote the sustainable management of the Porirua Harbour and its catchment by:

a. Advocating for the sustainable management of the harbour's ecosystem and its catchments; Fostering the understanding of ecological and environmental issues associated with the harbour and its catchments through education and community awareness;
b. Co-ordinating input from community groups on issues relating to the harbour and its catchments;
c. Supporting, promoting and contributing to programmes and projects aimed at improvements to the Porirua Harbour ecosystem and its catchments;
d. Fostering an understanding that the rural and urban areas around the harbour have specific needs; and
e. Engaging in any other activities and processes that are complementary to any of the foregoing objectives including to promote or undertake research.

B. Porirua Harbour and Catchments – The Area of Interest

The Te Awarua-o-Porirua Harbour, comprising the Onepoto Arm and the Pauatahanui Inlet and the outer harbour, and its contributing catchments (~19,000 ha.) provides a range of significant values to the wider Wellington region. The harbour contains the largest estuary system (11% intertidal with narrow opening) in the lower North Island, and has high importance for wildlife habitat, cultural, recreational, and economic values. The whole harbour forms one inter-related, interdependent ecosystem.

C. Porirua Harbour and Catchments – Resource Management Responsibilities

Ngāti Toa Rangatira are recognised as mana whenua of the area and have traditional and ongoing interests as kaitiaki of the Porirua Harbour.

The Porirua Harbour catchment area is administered by three local authorities: Greater Wellington Regional Council, Porirua City Council and Wellington City Council.

D. Current State of Te Awarua-o-Porirua Harbour

The Porirua Harbour has been recognised as a degrading and 'Most at Risk' ecosystem[1,2,3] (Estuarine Trophic Index[4,5] = **D** - Most at Risk) reflected in eutrophication status, and susceptibility and resilience of estuarine habitats to sediment pulses. This is manifested by extent of sea grass (*Zostera Spp*.) beds[6], fish nursery values, and extent of shellfish habitat.

The pressures that cause degradation of habitat and ecological health include[1]: massive pulses of sedimentation (6-9mm per year), roading, reclamation, and urban development, and highly elevated Total Nitrogen loads from pastoral land use.

E. Expected Outcomes of the GWRC Natural Resource Plan to Enhance Degraded Environments

The PHACCT recognises the vital importance of ecologically healthy water for maintaining the health of our waterbodies, freshwater ecosystems and the communities that rely upon them for their sustenance and wellbeing. By protecting the health and wellbeing of our streams and estuaries, we in turn protect the health and wellbeing of our people and surrounding environments.

The current principles underpinning current legislation provide consideration of outcomes that reflect the concepts of Te Mana o Te Wai in prioritising the health and wellbeing of waterbodies and freshwater ecosystems, including estuaries, first. If a waterbody is degraded, then it should be enhanced – and status quo and acceptance of a degraded state is not acceptable.

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[1] Parliamentary Commissioner for the Environment. 2020. ***Managing Our Estuaries.*** 220pp

[2] Hume, T., Gerbeaux, P., Hart, D., Kettles, H. and Neale, D., 2016. *A classification of New Zealand's coastal hydrosystems.* ***NIWA Client Report No. HAM2016-***062 prepared for the Ministry for the Environment. Hamilton: National Institute of Water and Atmospheric Research.

[3] Plew, D., Dudley, B., Shankar, U. and Zeldis, J., 2018. Assessment of the eutrophication susceptibility of New Zealand Estuaries. ***NIWA Client Report No. 2018206CH*** prepared for Ministry for the Environment. Wellington: National Institute of Water and Atmospheric Research.Table A-1.

[4] Robertson, B., Stevens, L., Robertson, B., Zeldis, J., Green, M., Madarasz-Smith, A., Plew, D., Storey, R., Hume, T., Oliver, M. 2016. *NZ Estuary Trophic Index Screening Tool 1. Determining eutrophication susceptibility using physical and nutrient load data.* Prepared for Envirolink Tools Project: ***Estuarine Trophic Index, MBIE/NIWA Contract No: C01X1420:*** 47.

[5] Robertson, B.M, Stevens, L., Robertson, B., Zeldis, J., Green, M., Madarasz-Smith, A., Plew, D., Storey, R., Oliver, M. 2016. NZ Estuary Trophic Index Screening Tool 2. Determining Monitoring Indicators and Assessing Estuary Trophic State. Prepared for Envirolink Tools Project: ***Estuarine Trophic Index, MBIE/NIWA Contract No: C01X1420.*** 68p.

[6] Zeldis J. and Plew, D.R., 2022. Predicting and Scoring Estuary Ecological Health Using a Bayesian Belief Network. ***Frontiers in Marine Science Volume 9***:89899

It is from this advocacy perspective that we recognise that Porirua Harbour is in a degraded state that the Porirua Harbour Trust provides its commentary on the Plan Changes to the GWRC Natural Resources Plan (NRP).

The Porirua Harbour Trust strongly supports outcomes from the NRP that environments with current degraded ecological states are reversed, can recover and are enhanced (where practicable).

Recent Experiences and Observations

A. Porirua Harbour is in a degraded state and is continuing to decline under current conditions.

   Reports on research findings and monitoring reports consistently report on the degraded state and the environmental stressors that need to be addressed.

   Acknowledgement that there needs to be significant improvement JUST to maintain and reverse the continuing degradation. To achieve meaningful outcomes, sediment entering the estuaries needs to be significantly reduced, the ecosystem is under stress and can't self-restore.

B. Transmission Gully Construction – hundreds of non-compliance incidents with pulses of sediment and contaminants entering the harbour.

C. Continued sediment and pollutant input from urban areas – especially through stormwater discharges.

D. Housing construction proposals – Kāinga Ora – promising flexible construction options – but little substance of how to achieve better environmental outcomes.

2. Submission On Plan Change 1 To The GWRC Natural Resources Plan

1. Plan Change 1 NRP should address issues to restore degraded and degrading ecosystems – i.e. the Te Awarua-o-Porirua Harbour and its associated catchments. We note that these issues were identified through a robust and lengthy process – the Whaitua Committee process – and we are pleased that their recommendations are to be reflected in detail in the Natural Resources Plan and we strongly support this initiative.

Greater Wellington Regional Council undertook an intensive programme of review water and land management issues and approaches to catchment management using a Whaitua Committee (independent appointees) process to provide guidance – with a list of recommendations[7] for Te Awarua o Porirua Harbour and its catchments released in 2019. In addition, Ngāti Toa (as kaitiaki for the rohe) outlined their views and expectations[8] for addressing the issues facing the harbour and surrounding environment.

[7] Te Awarua-o-Porirua Whaitua Committee. 2019. Te Awarua-o-Porirua Whaitua Implementation Programme, April 2019

[8] Te Awarua-o-Porirua Whaitua Implementation Programme: Ngāti Toa Rangatira Statement 2019

Porirua Harbour Trust notes that the Plan Changes align well with our Trust's vision:

- *to maintain and enhance the health of Te Awarua o Porirua*
- *enhance the quality of the environment by protecting the integrity of existing ecosystems and by restoring degraded ecosystems wherever possible*
- *enable people to enjoy recreational activities*
- *enable people to undertake economic activities without compromising the reasonably foreseeable needs of present and future generations*
- *to be able to eat kai moana from the harbour*

The PHACCT therefore supports the intent and substance of Plan Change 1 which reflects the recommendations that resulted from the work done from the Whaitua process for Porirua catchment zones.

Many of the Regional Plan changes need to be integrated with the related functions and initiatives from the respective statutory agencies, including the GW Regional Council, Porirua and Wellington City Councils and Wellington Water as current water managers. How this is undertaken (and subsequently funded) is for those agencies to determine – even if substantial funding and structural reform is required.

It is clear that there is an expectation from the community that implementation of recommendations and actions identified by the Whaitua committee should be carried out in a timely manner – given that there is awareness of the issues and that clear actions and timelines have been defined.

To this end the Porirua Harbour Trust strongly supports incorporating the appropriate Whaitua Committee's recommendations into Plan Change 1 to the NRP as proposed.

2. Timeframes must contain interim and measurable milestones (including five yearly reporting)

Long-term target attribute timeframes require interim target attribute state timeframes set for intervals of not more than 10 years with baselines which need to be achieved by the interim target date set. It is acknowledged that outcomes sought from actions to improve ecosystem health will be a long-term prospect. However, timeframes should not be arbitrarily set several decades in the future. They must include interim and measurable milestones (such as five yearly intervals) in achieving the ultimate goal by 2040 (for example). There must be a regular critique of the actions being implemented to ensure they are effective.

Even with development of previous harbour strategies[9] (for example, *Te Awarua-o-Porirua Harbour and Catchment Strategy and Action Plan Annual Report 2017/18*), this gives the impression to the public that agencies are working together to improve the health of the harbour. Regrettably, while efforts are being made since the tabling of the Whaitua recommendations in 2019 have been minimal and they are overshadowed by continuing and dominating key stressors that continue to degrade the harbour ecosystem.

The PHACCT supports retention of the dates recommended by the Whaitua Committee rather than pushing out the dates of achieving an improved attribute state by decades.

[9] Te Awarua-o-Porirua Harbour and Catchment Strategy and Action Plan Annual Report 2017/18

The PHACCT and the catchment community has an expectation to meet the target attribute states of water quality by 2040 and any delay will mean that the community will have to (and continued risk of having to) continue living with an increasingly degraded environment. Further, the longer this degraded environment continues, the more costly its rehabilitation will be.

3. Ensure that the environmental limits that are set to achieve "ecological health" and other associated values such as recreation, amenity, and custodianship.

There is a need to establish meaningful and robust environmental limits. The inclusion of the limits recommended by the Whaitua Committee in 2019 and listed in Plan Change 1 are supported by PHACCT.

4. PHACCT supports long term goal of improvement to target attribute state.

Target Attribute States need to be set to allow for the maintenance and/or restoration of this level of ecosystem health, which in cases will likely involve setting limits and bottom lines well above the national bottom lines.

All waterbodies, not just rivers and streams, should have set Target Attribute States. This includes **estuaries**, **wetlands**, and groundwater.

A functional NRP requires Objectives, Policies, Methods, Rules, timelines and dates that are robust and scientifically based to succeed in restoring health to degraded waterbodies. The NRP needs to provide clear guidance as to how these will be incorporated into existing and future resource consents. This also applicable to developing resource consent conditions that allow for unambiguous enforcement options while undertaking the compliance function of the Regional Council.

5. Requirement to develop Freshwater Action Plans - Supported

The requirement for Freshwater Action Plans specified in section 6.16 is supported by PHACCT. We support the approach of developing Freshwater Action Plans which protect, maintain, or enhance macroinvertebrate, periphyton, and fish abundance and community attributes as necessary and where applicable, where these communities also include life stage habitat protection actions for all species.

There is a particularly urgent need to develop Freshwater Action Plans for urban catchments. There is a physical and psychological disconnect from the Harbour for many residents of Tawa and Johnsonville in the Wellington City area – yet their contribution of total associated contaminants and flows into the Porirua Stream (and ultimately the Onepoto Arm of the harbour) is significant.

6. Focus required on key contributors to contaminant loading[10] in the harbour

There is a need for urgent actions to address these environmental stressors that are driving degradation of waterbodies and harbour.

When looking at improving the ecosystem health of a degraded aquatic or estuarine system, it makes logical sense to deal with the main contributors to contaminant loadings – sedimentation, nitrogen, phosphorus, and bacterial (*E. coli*). Excessive nutrient and sediment inputs threaten ecological condition in many estuaries. Developing an approach to prioritise actions to improve ecosystem health can be modelled[11] to ensure the key actions are prioritised. Evaluation can be made for potential improvements in estuary health arising from diversion of wastewater from an estuary, and estimating catchment diffuse nutrient load reductions required to meet estuary health objectives. For example, prioritising actions to avoid sediment input from urban development and from stormwater pulses is better than a relying solely on a riparian planting programme. Both should be done but focus should be on the contributors to the key contaminants in the NRP.

This might provide potential leverage to increase the prioritisation of central government funding for cleaning up water bodies by highlighting the urgency of action – as well as noting the financial constraints and dilemma to fund the actions.

A do-nothing approach is not an option.

As an example, the extent and health of eel grass (*Zostera muelleri*) beds has been reduced over many decades in Porirua Harbour. There is substantial evidence to infer that there are multiple stressors[12] existing in the harbour that impede ecosystem resilience and that it will not simply promote regeneration[13] and recovery by natural processes[14]. There is clear evidence that the multi-stressor effects of fine sediment on seagrasses, with substrate suitability for seagrass being detrimentally affected even where light exposure seems sufficient[15].

Sediment inputs into waterways from earthworks from new urban development (subdivision), land use, and forestry must be avoided or tightly controlled to allow freshwater and coastal receiving environments to be restored to a state of health and wellbeing. Rules and methods should focus on **avoiding** activities which contribute the most sediment from construction, subdivision development and forestry. The effects of

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[10] Zeldis J. and Plew, D.R., 2022. Predicting and Scoring Estuary Ecological Health Using a Bayesian Belief Network. ***Frontiers in Marine Science Volume 9:***898992

[11] Zeldis J. and Plew, D.R., 2022. Predicting and Scoring Estuary Ecological Health Using a Bayesian Belief Network. ***Frontiers in Marine Science Volume 9:***898992

[12] Zabarte-Maeztu, I., Matheson, F.E., Manley-Harris, M., Davies-Colley, R., Oliver, M., and Hawes, I., 2020 . Effects of Fine Sediment on Seagrass Meadows: A Case Study of *Zostera muelleri* in Pāuatahanui Inlet, New Zealand. ***Journal of Marine Science and Engineering*** volume 8(9):645-665

[13] Matheson, F.E., Reed, J., Dos Santos, V.M., Cummings, V., Mackay, G. (2017). Seagrass rehabilitation: successful transplants and evaluation of methods at different spatial scales. ***New Zealand Journal of Marine and Freshwater Research 51***: 96-109.

[14] Lundquist, C.J., Jones, T.C., Parkes, S.M., and R.H. Bulmer. (2018). Changes in benthic community structure and sediment characteristics after natural recolonisation of the seagrass Zostera muelleri. ***Scientific Reports Volume 8***, Article 13250.

[15] Zabarte-Maeztu, I., Matheson, F.E., Manley-Harris, M., and Hawes, I. (2019) . Sediment-effect thresholds for the New Zealand seagrass Zostera muelleri: a case study in Porirua Harbour, NZ. ***New Zealand Marine Sciences Society Conference, Dunedin, New Zealand***

these activities are seldom mitigated and never remedied – once the silt has entered the harbour there is little interest in active management of the effects.

Aquatic ecosystem health and wellbeing depends on managing diffuse discharges of nutrients and E. coli from farming activities – albeit most farming activities in the catchments are relatively low intensity farming activities.
The policies governing adverse effects of stormwater discharges (e.g., Policy P.P10, Policy WH. P10) contain many clauses giving reasons to not put good management practices into effect. This is not supported in current form.

When discussing adverse environmental impacts of stormwater or wastewater discharges, it is also required to actively consider ecosystem health – this requires a demonstration of a functional need for that activity, and if there is a functional need, then the effects management hierarchy must be applied. This should be referred to in the PC1 GWRC NRP.

PHACCT supports Methods M43 and M45 to support the health of, and funding for, urban waterbodies, particularly in relation to stormwater discharges – and this needs to be considered by the City Councils when assessing improving existing urban sites or urban development projects.

PHACCT also supports Method M44 to support the health of rural water bodies.

We wish to stress that in order for rural landowners to retire pasture and undertake protective fencing of vegetation, especially on high erosion prone slopes, that there must be a sufficient quid-pro quo for landowners by way of incentives and financial relief. We disagree, for instance, with local authority suggestions that lower valuations of land and therefore lower rates are already baked in to rating formulas and sufficient to compensate landowners for "doing the right thing" for the environment.

7. Stakeholder Engagement – Providing Transparency of Implementation and Progress.

There is a need to include a method for providing for a structured process of community engagement to ensure updates on progress of implementation are carried out – and the actions are not deferred due to arguments of economic affordability or feasibility.

This method should include support for catchment communities and other groups who work for the environment by providing far greater financial assistance and administrative support at both the catchment and regional level.

The recently released Whanganui River Strategy[16] *Te Heke Ngahuru ki Te Awa Tupua* is an example of an iwi lead collaboration of local authorities and interest groups in the river catchment. This involves all interest groups – not just mana whenua and crown partnerships, in order to develop an enduring legacy. Te Kōpuka chairperson Gerrard Albert stated that reform was needed to improve outcomes for the awa - "*to improve the way we practice resource management …. after 30-plus years of regional-based governance, and of the Resource Management Act …… and it starts with reforming the way we interact with one another*."

[16] Te Kōpuka nā Te Awa Tupua. 2023 . Te Heke Ngahuru ki Te Awa Tupua – Whanganui River Strategy

PHACCT would support the inclusion of a method that provides for meaningful community engagement. This would define requirements for structures and processes that enable communities to participate in all issues in advocating for environmental guardianship.

8. Fish Passage – Need to address existing fish passage barriers as discretionary activities.

Rule 5.4.8 should be a discretionary activity to provide fish passage over artificial barriers such as dams even for those that have existed for 10 years or more – rather than reverting to permitted activity status. If these are consented using permitted activity status, then this will authorise a past decision which leaves a negative legacy and does not address the issues around fish passage that remain.

9. Clarify and strengthen rules and methods to support actions to increase wetland habitat.

PHACCT supports rules and methods that provide for, or encourage, increasing the extent of wetland habitat in the rural landscape and in the river/stream corridors.

10. Assistance to the rural community for farm plans and hill country management.

We note that Change 1 to the NRP includes strong provisions (such as Policy P.P22) to reduce sediment discharges from farming activities on land with a high risk of erosion.

We support the measures proposed in P.P22 which will deliver farm management plans and risk erosion plans. However, implementing these can be costly to landowners and we consider that, as mentioned in that policy in Item (d), support is needed for both risk erosion and farm management plans.

We also note and strongly support implementing the proposals set out in M44:

(a) investigate financial support and rates relief options for accelerating retirement/revegetation of pastoral and plantation forestry land uses, and
(b) support the effective uptake and implementation of Farm Environment Plans, and
(c) promote uptake of good management practice in rural land uses, including for pastoral farming and plantation forestry, and
(d) develop and deliver a specific programme of engagement and education with small (<20ha) landowners.

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CONCLUSION:

Porirua Harbour Trust - Expectations:

1. The degraded ecosystems of the Te Awarua Porirua Harbour and the catchments that flow into the harbour are improved.

2. **The actions to improve the ecosystem health are undertaken with haste – with long-term achievement of attribute targets by 2040.** There needs to defined milestones and reporting dates (five-yearly) to report on the progress being made.

3. **That the community is engaged and kept informed of the progress made with regular transparent reporting.** It is assumed that mana whenua will be consulted and/or be involved with implementation of a long overdue harbour improvement strategy – and that the wider community stakeholders will also be involved in such collaborations.

4. To keep credibility and confidence of the community (including mana whenua) in the Whaitua Committee process sponsored by GWRC, then Regional Council MUST implement those recommendations in the Natural Resource Plan by this Plan Change.

5. There is also an expectation that the implementation of actions that result from these plan changes will be appropriately resourced and funded.

6. The provisions of the Plan Change to the GWRC NRP are generally supported – and reflect the recommendations of the Whaitua Committee process – with some subtle clarifications and emphasis suggested.