

20 February 2023

File Ref: 2023-016

Tēnā koe [REDACTED]

### **Request for information 2023-016**

I refer to your request for information dated 26 January 2023, which was received by Greater Wellington Regional Council (Greater Wellington) on 26 January 2023. You have requested the following:

- “1. What is the state of the health of the Inlet/Harbour, is it improving, getting worse, about the same? How is the health measured, over what time period have the measurements been taken?”*
- 2. Will the future budget spends be maintained under the new structure, increased or decreased or will they be redirected?”*
- 3. What work do the staff undertake (of around \$700,000 pa) that contribute to positive outcomes for the Inlet/Harbour*
- 4. The amounts spent on the regional parks will rise from \$30,000 to \$590,000 in 2023/24, where is the increased spend and what is it?*
- 5. When will the proposed new structure be in place and budgets/outcomes finalised?”*

### **Greater Wellington’s response follows:**

#### Part 1:

*What is the state of the health of the Inlet/Harbour, is it improving, getting worse, about the same? How is the health measured, over what time period have the measurements been taken?*

Our Environmental Science Department is currently carrying out a review of the Porirua Harbour monitoring programme, collating all data for the last 18-20 years. This report will be available in July/August 2023. Meanwhile, please find below a short summary taken from the 2021/22 Intertidal

Monitoring Report. More information can be found in the full report at this link [Te Awarua-o-Porirua Harbour fine scale report 2022](#).

Overall, results from monitoring in 2022 indicate that, with the exception of a slight increase in the amount of mud at the outer Pauatahanui Arm site, there has been an improvement in the sediment quality and ecological condition of Porirua Harbour intertidal areas since 2020.

### **Sedimentation and sediment quality indicators**

- Sedimentation has been highly variable year-to-year. Mean annual sedimentation data shows that 5-yr rates have slightly exceeded the national guideline value of 2mm/yr at the outer Onepoto Arm and inner Pauatahanui Arm sites. The 10-yr mean rates have exceeded the guideline at the outer Onepoto Arm site only.
- There has been a small (and variable) overall trend of increasing sediment mud content at the inner sites of both arms with a noticeable spike in 2020. However, in 2022 sediment mud content increased slightly at the outer Pauatahanui Arm site relative to 2020, but decreased elsewhere.
- Measures of Total Organic Carbon, Total Nitrogen and Total Phosphorus indicated organic enrichment was relatively low at the measured sites, and was considered to be of no significant ecological concern.
- Levels of trace metals contaminants were very low and were considered to be of no ecological concern. Levels of other contaminants, including pesticides, were less than laboratory method detection limits.
- Sediment oxygenation was rated 'good' to 'poor' across survey years, with an overall decline evident from the 2008 baseline. In the absence of corresponding changes in other enrichment indicators (i.e. TOC) this result may be associated with increased sediment mud content, as mud-size particles inhibit flushing and oxygen diffusion into the sediment matrix. Results suggest other potential variables such as bioturbation, drift algal decay, and subjectivity in measurements, may contribute to the apparent discrepancies.

### **Epibiota and sediment-dwelling macrofauna**

- Core sampling revealed 100 different sediment-dwelling macrofauna taxa over the six surveys. Relative to the low macrofauna species richness and abundances evident in 2020 (which corresponded with an estuary-wide increase in sediment mud content compared to previous years), the macrofaunal community condition appears to have improved in 2022.
- Changes in macrofauna richness, abundance and composition were not clearly or plausibly related to any of the measured sediment variables. Hence, the reasons for the apparent improvement from 2020 to 2022 are unclear. There appear to be drivers (e.g. hydrodynamic processes, sea surface temperature) of spatial and temporal change in the intertidal habitats of the harbour that are not reflected in any of the sediment constituents that are

routinely measured using national estuarine monitoring methods. As the fine scale sites are intentionally located away from the direct effects of point sources, they provide an excellent basis (using the current indicators) for monitoring long-term changes (i.e. over time scales of decades) in the harbour as a whole. However, the fine scale sites do not necessary provide a strong foundation for capturing changes in the state of the estuary that may arise in the near-future, or which are localised to areas around point sources such as river outflows (e.g. pulse inputs of sediment from catchment sources). As such, the programme, sampling sites and sampling parameters are currently under review.

## Monitoring

Greater Wellington and Salt Ecology have been carrying out annual monitoring of Porirua Harbour since 2006. This monitoring varies each year but broadly includes:

- Annual monitoring of sediment deposition over 18 buried sediment plates
- Five yearly monitoring at nine sites of intertidal and subtidal sediment quality (metals and mud) and benthic community health (number and type of invertebrates living in the sediment)
- Five yearly mapping of intertidal substrates (sand, cobble, mud) and key habitats (seagrass and saltmarsh) to measure extent and density
- Five yearly harbour-wide bathymetric surveys to compliment sediment plate measures to evaluate sedimentation rates
- Continuous monitoring of turbidity in the three largest sub catchments for the purposes of calculating annual and event-based sediment loads to the harbour (Porirua, Pauatahanui and Horokiri).
- Monthly water quality monitoring in three catchment streams (Porirua, Pauatahanui and Horokiri)
- Annual sampling of freshwater invertebrate communities in three catchment streams, as above

## ONLINE REPORTS AND MORE INFORMATION

A summary of Greater Wellington Te Awarua-o-Porirua Harbour monitoring and interactive data maps can be found on our [annual Te Awarua-o-Porirua Harbour web report](#).

Access to interactive reports from our turbidity programme in the Porirua whaitua can be found at [Te Awarua-o-Porirua Harbour catchment sediment monitoring | Greater Wellington \(gw.govt.nz\)](#)

References include the [Te Awarua-o-Porirua Harbour fine scale report 2022](#) and the [Te Awarua-o-Porirua Harbour sediment plate 2022 survey](#).

### Part 2:

*Will the future budget spends be maintained under the new structure, increased or decreased or will they be redirected?*

Future budget for the Environment Group will be developed and consulted on as part of the 2024-2034 Long Term Plan. Community input and our partnerships with Mana Whenua will be key drivers of our work programmes.

### Part 3:

*What work do the staff undertake (of around \$700,000 pa) that contribute to positive outcomes for the Inlet/Harbour*

Activities undertaken by staff to improve the health of the Te Awarua o Porirua Harbour primarily involve implementing what is described in the budgets provided in our previous information request response, and these are described below. However, some activities are undertaken at a regional scale, and may not be accurately captured in the previously released spreadsheets e.g. planning regulation and guidance.

- Coordinating and/or supporting events such as the public snorkel days at Whitireia Park and the GOPI cockle count. These help to grow community awareness and appreciation of harbour biodiversity, and the cockle count is also used to track harbour health via an indicator species
- Community-led restoration support including:
  - Co-managing the Community Environment Fund with Te Rūnanga o Toa Rangatira. This is a contestable fund for community groups doing environmental restoration
  - Events to upskill and connect those working to improve harbour health and biodiversity, such as the Freshwater Hui and Restoration Day
- Supporting rural landowners to reduce the amount of sediment and other pollution entering streams and the harbour from their land, including:
  - Erosion control on steep land
  - Fencing streams and restoring riparian areas to reduce stream erosion and faecal contamination
  - Advising on good farm management planning
- Education:
  - Funding Mountains to Sea Wellington to deliver programmes that take students snorkelling and/or testing stream health
  - Funding EnviroSchools to support schools on a whole school sustainability journey
  - Funding school transport on fieldtrips to learn about the harbour and streams

- Funding student action projects to improve the health of the harbour and/or catchment
- Lending schools resource kits for monitoring stream health and shoreline coastal biodiversity
- Supporting a network of agencies working to support schools with environmental education in the Te Awarua o Porirua whitua and similar regional network to promote collaboration and reduce duplication
- Supporting some community groups to engage with schools including the Kids Enhancing Tawa Ecosystems project which works with all Tawa schools and provides planting activities at Takapu Road to reduce erosion and improve biodiversity, as well as associated learning within the school environment
- Implementation of Greater Wellington led deliverables within the Te Awarua-o-Porirua Whitua Implementation Programme. Details can be found under the 'Updates' section on this page of our website: [Greater Wellington Regional Council — Te Awarua-o-Porirua Whitua \(gw.govt.nz\)](http://www.gw.govt.nz)
- Managing sites significant for indigenous biodiversity including:
  - The Key Native Ecosystem programme which helps ensure we maintain a full range of naturally occurring ecosystems for the Region. These are managed so they are healthy and functioning, and supporting diverse native plants and animals
  - The Wetlands programme which works with private landowners to protect and manage wetlands through financial assistance for management actions such as fencing, control of weeds and pest animals and planting
  - The Improving Fish Passage project which identifies, prioritises and remediates barriers to fish passage around the region
- Undertaking work in our regional parks to reduce erosion and pollution entering streams, improve biodiversity values and provide best practice examples of land and environmental management (see response to Question 4 below for more detail)
- Managing and funding all public transport and supporting safe, sustainable transport to work and school for everyone including disabled and elderly people. This reduces the amount of pollution from private vehicles entering the harbour
- Maintaining and improving Park'n'rides for better environmental outcomes. This has included supporting the Friends of Tawa to restore native plants at Kenepuru, as well as ongoing maintenance of the raingardens and filter systems
- Monitoring and researching harbour health to inform the Greater Wellington activities in the whitua (see response to Part 1 above for more detail)

- Planning regulation and guidance including:
  - The Proposed Natural Resources Plan which provides rules, policies and methods to ensure that natural resources are sustainably managed around the Region. We expect the plan to be made operative in the first half of 2023 and the first plan-change later in the year which will include the Te Awarua-o-Porirua whitua plan change
  - The Regional Policy Statement which sets out the framework and priorities for resource management in the Wellington Region. Proposed Change 1 includes direction on implementing the National Policy Statements for Freshwater Management and Urban Development, indigenous biodiversity and climate change.
  - The Toitū Te Whenua Parks Network Plan which is a combined plan for eight regional parks including Battle Hill Forest Farm Park and Belmont Regional Park and the Whitireia Park Management Plan. All of these parks contain land in the Harbour catchment.
  - The Regional Pest Management Plan outlines how we manage or eradicate certain animal and plant pest species, and guide us through the next twenty years of biosecurity in the region
- Building and maintaining relationships with PCC and Ngati Toa Rangatira regarding current and future management of the catchment, including implementation of the RPS, implementation of the Te Awarua-o-Porirua whitua recommendations, and involvement in the District Plan process.

**Part 4:**

*The amounts spent on the regional parks will rise from \$30,000 to \$590,000 in 2023/24, where is the increased spend and what is it?*

The attachment provided to you on 22 September 2022 outlines where increased funding will be spent in our Regional Parks in 2023/24:

**Belmont Regional Park - reforestation of areas previously leased for grazing:**

Belmont	Restoration Plan Development (Porirua Catchment)	\$25,000
Belmont	Waitangirua plant supply	\$67,500
Belmont	Waitangirua planting preparation	\$75,000
Belmont	Waitangirua plant supply	\$202,500
Belmont	Pest control	\$30,000
Belmont	Community restoration coordinator	\$50,000

**Whitireia Park – increase in maintenance and activity costs:**

Whitireia		\$10,000
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**Battle Hill Farm Forest Park – reforestation of areas previously leased for grazing:**

Battle Hill	Plant supply	\$67,500
Battle Hill	Planting preparation	\$17,500
Battle Hill	Planting and aftercare	\$25,000
Battle Hill	Pest control	\$20,000

**Part 5:**

*When will the proposed new structure be in place and budgets/outcomes finalised?"*

We are working toward standing up the new Environment Group on 22 May 2023. The budget for the new Group will be finalised in time for the 2023/24 financial year. Outcomes for the Environment Group will be developed and consulted on as part of the 2024-2034 Long Term Plan.

If you have any concerns with the decision(s) referred to in this letter, you have the right to request an investigation and review by the Ombudsman under section 27(3) of the Local Government Official Information and Meetings Act 1987.

Please note that it is our policy to proactively release our responses to official information requests where possible. Our response to your request will be published shortly on Greater Wellington's website with your personal information removed.

Nāku iti noa, nā



Al Cross

Kaiwhakahaere Matua mo te Taiao | General Manager Environment Management