

15 August 2022

File Ref: 2022-115

Robyn Smith  
Friends of Taupō Swamp and Catchment  
By email: [REDACTED]

Tēnā koe Robyn

### **Request for information 2022-115**

I refer to your request for information dated 25 July 2022 received by Greater Wellington Regional Council (Greater Wellington) via email. On 8 August 2022 you agreed to clarify your request as stated below:

1. *“Does GW have any baseline hydrological (water levels) and/or water quality monitoring related to the Taupō Swamp and stream? If so, where can we access this information? If not then, how will GWRC be able to measure the impacts of the change of land use when the development of Plimmerton Farm begins, on Taupō swamp and Taupō stream?”*
2. *Has the weir in Taupō Swamp undergone a fish passage assessment? If so, please provide information on the findings of this assessment?*
3. *Does GW have plans to remedy fish passage at this weir if it has been identified as a barrier to fish passage?”*

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

##### **1. Hydrological and Water Quality in Taupō Swamp and Taupō Stream**

Greater Wellington has a water level monitoring station (known as ‘Taupō Stream at Flax Swamp’) in Taupō Stream that has data going back to 1979. This is a State of the Environment monitoring site monitoring stream water level, with associated flow derived from a stage discharge relationship for the weir. The data is freely available to view and download from our website:

[Environmental Monitoring and Research » Environmental Monitoring and Research \(gw.govt.nz\).](https://www.gw.govt.nz/environmental-monitoring-and-research/)

Taupō Swamp is monitored by Greater Wellington on a five yearly basis as part of its State of the Environment Wetland Programme. It was first surveyed in May 2019 and is due to be re-surveyed in 2023-24. Four permanently marked vegetation plots are surveyed as part of this work and one-off

measures of water pH/Conductivity. As this monitoring is undertaken on land owned by Porirua City Council and QEII National Trust, approval would need to be obtained from these parties for Greater Wellington to be able to share this information.

Greater Wellington also undertakes monthly water quality monitoring at a site in the Taupō stream (Taupō stream at Plimmerton Domain) for a Wellington Water Limited global stormwater consent (List of variables given in Appendix 1). Water quality sampling began in July 2021 and one macroinvertebrate and sediment chemistry sample has been collected to date. Wellington Water Limited would need to be approached to seek this water quality data. You can view the water quality data and download it for this site for 20/7/2020 to 21/6/2021 (GWRC staff are currently checking data to be put on this site from July 2021 to June 2022 and it should be available within the next month): [Environmental Monitoring and Research » Environmental Monitoring and Research \(gw.govt.nz\)](#).

The data for macroinvertebrates and sediment chemistry is attached to this email. Wellington Water Limited should be contacted for further information relating to the interpretation of the data and monitoring design in relation to their global stormwater consent.

In terms of the Plimmerton Farms development, Greater Wellington has received one resource consent to date for a small part of the development off Mo Street. When a resource consent is received for large parts of the development, Greater Wellington are likely to seek external expert advice on the scale of the effects on the receiving environment. Greater Wellington has the ability through the consenting process to require the applicant to undertake monitoring of the effects on the wetland during the development.

## **2. Fish Passage Assessment of Taupō Swamp weir**

In the summer of 2018/2019 Greater Wellington and Porirua City Council employed two university students to undertake fish passage assessments in waterways around Porirua using the NIWA developed New Zealand Fish Passage Assessment Tool (NZFPAT). The Taupō Swamp weir was assessed by the students on 13 February 2019. You can access the fish passage assessment record for this site by following the link to the NIWA NZFPAT web viewer and entering this Response ID (217) into the search bar:

[Fish Passage Assessment Tool \(niwa.co.nz\)](#)

Each structure assessed in the NZFPAT is assigned a fish passage risk class and an ecological prioritisation score. According to the NZFPAT record for the structure, the weir is in the 'very high' risk class of presenting a barrier to fish passage.

**3. Does GW have plans to remedy fish passage at this weir if it has been identified as a barrier to fish passage?**

Taupō Swamp complex is part of the Greater Wellington Key Native Ecosystem (KNE) Programme, a voluntary programme that seeks to protect some of the best examples of original (prehuman) ecosystem types in the Wellington region. In 2020, a five-year KNE operational Plan for Taupō Swamp complex was released and is available from our website:

[Key-Native-Ecosystem-Operational-Plan-for-Taupo-Swamp-Complex-2020-2025.pdf](https://www.gw.govt.nz/assets/Key-Native-Ecosystem-Operational-Plan-for-Taupo-Swamp-Complex-2020-2025.pdf) (gw.govt.nz)

Section 9.6 (page 21) in the KNE plan for the Taupō Swamp complex notes that the weir poses a risk to fish passage and that a fish passage remediation plan would be developed during the course the term of the KNE plan. Greater Wellington has yet to develop such a plan or investigate remediation options.

Greater Wellington has recently established a new 'Improving fish passage in the Greater Wellington region' project which is part funded through the Council's 2021-2031 Long Term Community Plan and through the Ministry for the Environment's Freshwater Improvement Fund. This is a 4.5 year project that began on 1st January 2022 and is due to be completed by 30 June 2026. There may be some opportunities to support investigations into the feasibility of fish passage remediation of this structure during the project. A regional fish passage prioritisation tool has been developed by Greater Wellington using information gathered by the NZFPAT and ecological information to inform decision making around where to target remediation funding.

Please note that it is our policy to proactively release our responses to official information requests, where practicable. Our response to your request will be published shortly on Greater Wellington's website. Whilst it is Greater Wellington's standard practice to remove the name and contact details of a requestor in a response released proactively, as you are a candidate for Greater Wellington's 2022 elections, we will publish this response to the Greater Wellington website without your name redacted.

Nāku iti noa, nā



Al Cross  
Kaiwhakahaere Matua Taiao] | General Manager, Environment Management

Encl: *Appendix 1 – list of water quality monitoring variables measured at Tāupo Stream at Plimmer*

## Appendix 1

List of water quality monitoring variables measured at Taupō Stream at Plimmerton Domain

Monthly	Water Temperature (Field)
	Black Disc (Field)
	Conductivity (Field)
	Dissolved Oxygen % Sat (Field)
	Dissolved Oxygen (Field)
	Fine Sediment (% Cover) (Field)
	E-Coli (Lab)
	pH (Lab)
	Suspended Sediment Concentration (Lab)
	Total Suspended Solids (Lab)
	Turbidity (Lab)
	Ammoniacal Nitrogen (Lab)
	Calcium (Dissolved) (Lab)
	Copper (Total) (Lab)
	Copper Dissolved (Lab)
	Dissolved Inorganic Nitrogen (Lab)
	Dissolved Organic Carbon (Lab)
	Dissolved Reactive Phosphorus (Lab)
	Magnesium (Dissolved) (Lab)
	Nitrate Nitrogen (Lab)
	Nitrite Nitrogen (Lab)
	Nitrite-Nitrate Nitrogen (Lab)
	Total Kjeldahl Nitrogen (Lab)
	Total Nitrogen (Lab)
	Total Phosphorus (Lab)
	Zinc (Dissolved) (Lab)
	Zinc (Total) (Lab)
Hardness Total (Lab)	
Annually	Sediment Chemistry
	Annual Macroinvertebrates (sb)