

21 March 2024

File Ref: OIAPR1274023063-25734

J Thurston

By email: fyi-request-25891-782a140f@requests.fyi.org.nz

Tēnā koe

Request for information 2024-027

I refer to your request for information dated 26 February 2024, which was received by Greater Wellington Regional Council (Greater Wellington) on 26 February 2024. You have requested the following:

"Information Requested:

I would like to request information on stopbanks in the Lower Hutt area, along the Hutt River. The Riverlink project is apparently going to provide protection between Kennedy Good and Ewen bridges for a one in 440 year flood, compared to the current state (as best as I can tell the current state is one in 100 year flood protection: https://www.qw.govt.nz/your-region/emergency-and-hazard-management/flood-protection/our-work/rivers-and-schemes/hutt-river/flood-protection-hutt-central-from-just-north-of-ewen-bridge-to-kennedy-good-bridge/">https://www.qw.govt.nz/your-region/emergency-and-hazard-management/flood-protection/our-work/rivers-and-schemes/hutt-river/flood-protection-hutt-central-from-just-north-of-ewen-bridge-to-kennedy-good-bridge/ but please correct me if I am wrong about the status quo or the plan.

I would like to request:

- 1) the current stopbank height and flood protection measure (i.e protection from X in X years flooding) for the stopbanks south of Ewen bridge on both the western (Ava/Petone) and eastern (Moera) sides of the river from Ewen bridge through to Waione St overbridge. Please indicate whether these are at different levels of protection at different points i.e. if the western side from Ewen to Ava bridges is different from that of the western side from Ava to Waione overbridge. I am asking here about sections of stopbank that I understand are not within scope of the Riverlink project; please correct me if I am wrong.
- 2) information on when the Council last considered the suitability and efficacy of the stopbanks south of the Ewen bridge as described above, and the results of any such consideration
- 3) any plans the Council (or any related party that the council knows about) to re-assess or otherwise consider improvements to the stopbanks described above

- 4) whether the Council has any information on potential costs and benefits of improvements to the stopbanks outlined above
- 5) I note that the stopbanks in question protect the Gear Island Water Treatment plant. Has the council or wellington water considered the efficacy of the protection of the Gear Island water treatment plant, or put any plans in place to improve protection from flood surges? I also note that Gear Island is between Te Mome Stream and the Hutt River, so flooding could come from either direction."

Greater Wellington's response follows:

On 14 March 2024 **Part 5** of your request was transferred to Hutt City Council. Further correspondence on this request will come directly from Hutt City Council.

Clarifications:

I would like to request information on stopbanks in the Lower Hutt area, along the Hutt River. The Riverlink project is apparently going to provide protection between Kennedy Good and Ewen bridges for a one in 440 year flood, compared to the current state (as best as I can tell the current state is one in 100 year flood protection: https://www.gw.govt.nz/your-region/emergency-and-hazard-management/flood-protection/our-work/rivers-and-schemes/hutt-river/flood-protection-hutt-central-from-just-north-of-ewen-bridge-to-kennedy-good-bridge/">https://www.gw.govt.nz/your-region/emergency-and-hazard-management/flood-protection/our-work/rivers-and-schemes/hutt-river/flood-protection-hutt-central-from-just-north-of-ewen-bridge-to-kennedy-good-bridge/ but please correct me if I am wrong about the status quo or the plan.

The existing stopbank between the Melling Link Bridge and Mills Street currently has the lowest level of flood protection in the area, for a 1 in 65-year flood event protection (in any year there's a 1.5% chance of a flood that size happening).

When all of the works under Te Awa Kairangi programme are completed, the Hutt Valley will be protected from a 2,800m³/s (cumecs) flood or a 1 in 440-year flood event including for future climate change (with a 0.2% chance of a flood that size in any year).

Request:

1) the current stopbank height and flood protection measure (i.e protection from X in X years flooding) for the stopbanks south of Ewen bridge on both the western (Ava/Petone) and eastern (Moera) sides of the river from Ewen bridge through to Waione St overbridge. Please indicate whether these are at different levels of protection at different points i.e. if the western side from Ewen to Ava bridges is different from that of the western side from Ava to Waione overbridge. I am

asking here about sections of stopbank that I understand are not within scope of the Riverlink project; please correct me if I am wrong.

Currently, the stopbanks and flood protection measures along the Hutt River, downriver of Ewen Bridge and outside the scope of the RiverLink project are as shown in *Table 1*, with the stopbank reaches given in *Figure 1* (from Living with the River¹; note that the capacity has been updated to reflect work carried out):

Table 1: Hutt River Flood Mitigation Scheme - Security of Flood Defences

Stopbank Name	Capacity (m³/s)
WEST BANK	
Estuary Bridge to Ava Railway Bridge	
Shandon (875m)	2100
Sladden Park (400m)	2100
Ava Railway Bridge to Ewen Bridge	
Alicetown (950m)	2300
EAST BANK	
Seaview Marina to Estuary Bridge	
Port Road (450m)	<u>1600</u>
Estuary Bridge to Ava Railway Bridge	
Moera (1250m)	2100
Ava Railway Bridge to Ewen Bridge	
Strand Park (1070m)	2300

The Hutt River Floodplain Management Plan (HRFMP) specifies that the agreed design standard for the Hutt River is a risk-based 2300 m³/s standard (1 in 440-year return period flood). The risk-based approach also applies varying protection standards to different areas in the floodplain, depending on how flood-prone they are. This includes, among other things:

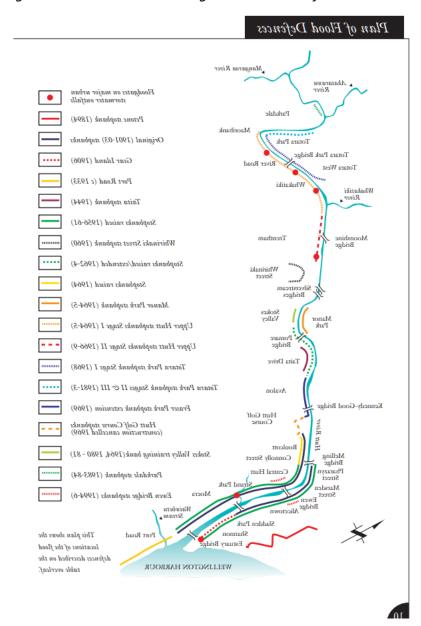
• a requirement to upgrade all major stopbanks (i.e. those protecting the main urban areas of Lower & Upper Hutt cities) to a 2800 m³/s capacity with all remaining stopbanks to a 2300 m³/s capacity;

https://www.gw.govt.nz/assets/Documents/2022/08/1440 HuttLivingwithth s2818.pdf

- a requirement for bank-edge and berm protection to a 2300 m³/s capacity in main urban areas, with a 1900 m³/s (1 in 100-year return period flood) capacity for isolated and small urban areas;
- a requirement for all new bridges and their floodways to pass a 2800 m³/s flood.

This is the standard to which all new works are constructed and maintained. It is reflected in Greater Wellington's capital works programmes and asset management plan.

Figure 1. Hutt River Flood Mitigation Scheme defences and reaches.



2) information on when the Council last considered the suitability and efficacy of the stopbanks south of the Ewen bridge as described above, and the results of any such consideration.

Refer to the link for latest annual report to Council covering the stopbanks requested: https://www.gw.govt.nz/assets/Documents/2023/11/Environment-Committee-23-November-2023-order-paper-v4.pdf.

For annual asset management condition report, refer page 9.

For annual Floodplain Management Plan implementation report, refer page 358.

3) any plans the Council (or any related party that the council knows about) to re-assess or otherwise consider improvements to the stopbanks described above.

The Hutt River Floodplain Management Plan (HRFMP) is still the guiding document for flood risk management projects on the Hutt River. Stopbank upgrades on both sides of the Hutt River and the River Channel improvements between Ava Rail bridge and Ewen bridge were completed in 2009, as per the implementation plan for the HRFMP.

Refer to Section 8.4, page 161 for information on reviewing the HRFMP.

Hydraulic modelling of the Hutt River flood risk is underway; when completed Greater Wellington will be reviewing the priority of initiatives identified in the HRFMP in 2001.

4) whether the Council has any information on potential costs and benefits of improvements to the stopbanks outlined above.

Greater Wellington has no specific information on potential costs and benefits of improvements for stopbanks downstream of Ava Rail bridge, other than that contained within the Hutt River Floodplain Management Plan and associated reports.

5) I note that the stopbanks in question protect the Gear Island Water Treatment plant. Has the council or wellington water considered the efficacy of the protection of the Gear Island water treatment plant, or put any plans in place to improve protection from flood surges? I also note that Gear Island is between Te Mome Stream and the Hutt River, so flooding could come from either direction."

The efficacy of the protection to the Gear Island Water Treatment Plant was considered, along with other key infrastructure and private property, as part of the Hutt River Floodplain Management Plan completed in 2001. Gear Island Water Treatment Plant is within the area protected by the stopbanks on the true right bank of the Hutt River with the design standard of 2300 m³/s level of protection being selected for that area.

This part of your request has been transferred to Hutt City Council, as the Water Treatment Plan is their asset. They will be responding directly within statutory timeframes.

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

Lian Butcher

Kaiwhakahaere Matua Taiao | Group Manager Environment