Kāpiti-Mana Forest and Bird Newsletter February 2025

Editorial: Will we avoid flooding?

I attended a visioning exercise for the Wharemauku Stream, organized by KCDC Councillor Bede Laracy. It was a good process. One aspect highlighted was the flooding in the stream's lower reaches. Large storms with low atmospheric pressure elevate sea levels; if such events coincide with high or king tides, the resulting flooding can be severe. Near the sea, mitigating such floods is very challenging and expensive.

Natural moderators of storm damage include wetlands, peatlands, and the vegetation types within the watershed. These moderators must be situated upstream of flood-prone areas to be effective. Factors that exacerbate flooding include the extent of impervious surfaces and the rate at which water is directed into streams.

Historically, less intensive development meant fewer exacerbating factors. However, modern urbanization has increased hard surfaces considerably, and improved stormwater systems, and these contribute to much faster runoff rates. Contemporary developments attempt to mitigate this through stormwater tanks and soak pits, which help - provided they are maintained. Farmlands and pine plantations also contribute to rapid water runoff, particularly following plantation harvests.

In the past, natural moderators were more abundant. Native forests in upper regions absorbed significant rainfall through their rich mulch layers. Streams and rivers had wider channels and pools that delayed water flow, and wetlands connected to these waterways absorbed excess water. Peatlands, acting like sponges, were extensive and stored large volumes of water. Although riverbeds still built up with gravel, this occurred more gradually due to the complex catchment topography. Major floods naturally create new, lower channels for streams, but today's confinement by stop banks prevents this.

Given these changes, how do we prevent flooding?

For every hectare of wetland lost to the expressway, five hectares was created, acknowledging that new wetlands do not match the value of existing ones. However, I have since learned that these wetlands primarily receive water from the expressway, contaminated with heavy metals and hydrocarbons from vehicle emissions. Consequently, expressway wetlands are designed to hold and treat this water then discharge it to a stream. Stream water cannot enter them and this limits their utility for flood control. The only flood mitigation benefit from the expressway wetlands is slowing rainwater runoff from the expressway itself.

Portions of the lower Wharemauku Stream function as drains, rigidly confining the stream and disconnecting it from nearby wetlands, reducing the area that floods can expand into and the volume of sponge that would absorb them. Council could decide that wetlands and peatlands must be protected in future developments to mitigate this. Part of The Wellington Company land near Paraparaumu's CBD is such a wetland.



Blue = Natural wetlands now isolated from Wharemauku stream

In the past, the wetland was naturally integrated with the stream and capable of reducing the stream's flow by 190,000m³. But the Wharemauku has since been turned into a drain isolating it from the wetland. The wetland area probably absorbed that amount

of water during the moderate weather event in August 2024 when the Wharemauku Stream overflowed into it.



Wharemauku overflowing onto Wellington Company land August 2024

Historical wetlands south of the Wharemauku (now expressway wetlands) might have further reduced flood levels but now, no longer.

The Wellington Company development will remove some of the peat wetlands, replacing it with sand to build on, thereby halving the peatland capacity and increasing flood risks.



The Wellington Company Development plan

An estimated 178,000 cubic meters of peat will be excavated from the Wellington Company site, releasing approximately 36,000 tonnes of carbon into the atmosphere, overshadowing KCDC's smaller-scale environmental measures like LED streetlights, council hybrid vehicles and some solar powered facilities. Council has acted on cost saving climate initiatives while ignoring larger non cost saving climate mitigation.

Every time wetland and peatlands are isolated and replaced with built areas, we

reduce streams' and rivers' ability to manage water flow, increasing downstream flood risks. This has continued to happen throughout our district. When peat is removed from peatland and used in an unwetted form, as intended in the development, we increase the destructive effects of climate change and lock them in for longer. Climate change will exacerbate flood risks with more intense weather events, higher sea levels, and increased storm surges, and will force residents nearer the sea to abandon their homes. The process will be called managed retreat.

The Wellington Company's proposal is under the fast-track process, detailed on the Ministry for the Environment's website under "New Central Park." New Central Park Ministry for the Environment. Information regarding peat extraction and flood plain volume used in this article is available there, along with a letter of support from KCDC. The council knows that the removal of natural stream moderating features in favour of development, combined with climate change, increases future flood risks for those near the sea, and digging up peat continues climate change. Those consequences are obvious. Supporting the proposal, yet knowing the future consequences constitutes a premeditated action. This is an injustice both to people in the flood hazard area and to younger generations. We are seeing natural areas and systems being squeezed to the point that they cannot protect us, far less nurture us. Because of the removal of peat wetlands and the treatment of peat once removed, this development is damaging and not sustainable.

Recently, a visit to the Vivienne Westwood exhibit at Te Papa emphasized her stance on climate change. Her view was that *Politicians* are criminals. I am moving in that direction.

Russell

*While flooding may not directly fall within Forest and Bird's remit, preserving wetlands, allowing rivers and streams room to move, and the mitigation of climate change is within its remit.

A different aspect on this topic will be continued next month.

Results of our AGM (draft)

Our AGM was held on Wednesday 20 February, and your elected committee is:

Pene Burton Bell (Chair), Peter Kentish (Treasurer), Tom Pesendorfer (Secretary), Russell Bell (Conservation subcommittee) and new committee members: Karen Wood, Wendy Young and Stacey Perkinson.

After many years of amazing service, Tony Ward has stepped down from the committee. Tony didn't want a fuss, but he knows we greatly appreciate all he has done for our branch. At the AGM many signed a card thanking Tony for his contribution.

Robin Chesterfield has agreed to be a 'local branch representative' for members at the

Next Public meeting: 2.15pm on Sunday 9 March 2025 – in Plimmerton – Cat Management

Henk Louw, who helped form Wellington City Council's excellent cat management regime, came to talk to our meeting in Waikanae last year. It was very informative and helpful. With Porirua undergoing a review of their Animal Control Bylaw, we thought it was timely to let our members from Porirua hear this talk. This will be the first of regular bimonthly talks on a Sunday afternoon in Porirua. Members and friends are welcome. We'll be meeting at St Andrew's Church Hall - 22 Steyne Street, Plimmerton. As with our Waikanae meeting, we start at 2.15pm so people can grab a cuppa, and business is underway by 2:30pm. We expect to be finished by 4pm. Do come along, and bring a friend.

Walk & Talk Nature – Greendale Reserve on Sunday 23 February at 2pm

We're trialling an 'easy Sunday walks' option for members to enjoy and learn more about Mana end of our branch. This means if members have conservation issues they think need to be raised which are local, he can come and discuss and/or check them out more easily than the Kapiti-based team. Robin has a lot of experience having been part of the Porirua F&B committee before it folded, and running the Pāuatahanui F&B Wildlife Reserve for many years.

At our AGM Pene Burton Bell was also elected our Councillor for the branch. There is a councillor appointed for every 500 members and their role is to represent the branch at the (usually annual) council meeting where the structure and issues of Forest and Bird as an organisation are raised. If you want to know more about this process, just ask.

nature and make connections with each other. Join Doug Miller at the Greendale Reserve in Otaihanga (https://maps.app.goo.gl/b2bWTxfmqQzHuQCE8) to explore. For each of the walks a handout will be available that gives a brief history, and a plant list. All the walks are on flattish ground and any paths are in good condition.

For more information and to RSVP please contact Doug on 0204-645537.

End of season Joint F&B BBQ - Pāuatahanui Wildlife Reserve on 30 March 2025 at 4pm

Meet other Forest and Birders from our wider area for a <u>BYO picnic and/or BBQ</u>. This is an opportunity for members, including those from Forest & Bird's Wellington Regional Tramping Group (WRTG) to make connections and possibly find a way to contribute to conservation in our region. For details contact Philippa Doig on 021 189 8787. We hope you can join us.

Mataī (Prumnopitys taxifolia) Black Pine

The beautiful mataī trees in our area are fruiting. The fruit of this dioecious conifer are rounded, up to the size of a pea and black when ripe – hence their being called Black Pine by early settlers. Fruiting is always a special event as it doesn't happen every year – berries can take up to 18 months to ripen, and then up to two years to germinate. They can grow up to 1.5m in diameter and 30m in height. They can survive over 1000 years and have a rounded rather than spreading crown. They like damp but well drained soil and are often found on river terraces, with rimu, tōtara and miro nearby.

Mataī is a fine podocarp that can grow in our area from sea level to 760m (a little higher than Mount Wainui - 722m, which is about halfway between Pāuatahanui and Paraparaumu and forms the backdrop to Paekākāriki). That said, it is not all that common, and much of it was milled in the settler days for flooring and furniture. It is a fine quality timber when not in the ground. The wood has a beautiful deep honey hue, but the bark is known for its hammered look - with greyish bark which flakes off to reveal ruby red blotchy scars. A beer made from matai was considered an excellent antiseptic and used to treat consumption. The foliage is wispy and more brown than green, especially when young - making it very hard to photograph -the short needles disappear into any background. Adult leaves are dark green sets of needles. Unlike miro, when you lay a mataī leaf on your hand, the needles continue to go off at all angles rather than lie flat (and miro have red drupes).

Sadly, their useful qualities have meant that not that many mature mataī are found, and predominantly mataī forest is rare. You can see mature mataī in Whitby in the Silverbrooke development, and in Waikanae Park near the Anderson Park development.

All photos by P Burton Bell









Breaking News

You may remember that F&B supported the "Inspired by Sanderson project" (really, about 12 projects). One of those was re-wetting peat wetlands in Queen Elizabeth Park. After 3 years of negotiating with GW, we returned the funds to the funder because Greater Wellington had not yet approved resource consent for the project. Last week, we were informed by GW that Ngāti Toa and Te Āti Awa supported the project and the project's resource consent application had been approved. This is a huge step forward in this project. Four years ago, it was an audacious idea of two people, now it has all the permissions it needs to proceed. It will still take some time, but wetlands will be restored in QEP, and carbon emissions will decrease.

Have Your Say

Kāpiti Flood Hazard Mapping: GW is updating maps for the catchment of these rivers and streams: Ōtaki, Waitohu, Mangapouri, Waikanae River, Mangaone Stream in Te Horo. They are requesting information on previous floods, and would especially like details and photos from these flood events: October 1998, January 2005, February 2017. Find out more here: https://haveyoursay.gw.govt.nz/kapiti-flood-hazard-mapping

The future of public conservation land: Submissions close 28 February 2025
The government is consulting on two aspects which deserve our attention – one is around charging for access to land, and the other to allow the selling of 'surplus' land (modernising land management). You should have received an email of the above title from F&B on this on 18/02/2025. It provides links to useful documents including this brief submission form



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Your feedback on this newsletter would be most welcome as would contributions to future newsletter