

File No: WGN140054 [32483], [32484], [32485], [32486], [32487] and [32488]
22 May 2015

Greater Wellington Regional Council Flood Protection Department
Internal Mail

For: Tracy Berghan

Dear Tracy

Further information request under section 92(1) of the Resource Management Act 1991

<i>Applicant:</i>	<i>Greater Wellington Regional Council Flood Protection Department</i>
<i>Proposal:</i>	<i>Operations and maintenance activities for flood protection purposes in the Otaki River</i>
<i>Location:</i>	<i>Otaki River and specified tributaries</i>
<i>Resource consents required:</i>	<i>Water permits, land use consents and discharge permit.</i>

Thank you for your application, which we received on 22 August 2013 and the amended application which we received on 3 November 2014.

I have reviewed your application, the supporting information, and the information provided by Alex James of EOS Ecology following his peer review of the application dated August 2013, the amended application dated October 2014 including the ecological AEE report, the draft Code of Practice including a draft Environmental Management Plan and a finalised version of Alton Perrie's memorandum.

I need further information on your application so that I can better understand the effects of your proposed operations and maintenance activities for flood protection purposes, its effects on the environment and how any adverse effects on the environment might be mitigated.

Overall, the description of the existing environment is missing some key information that is required to adequately assess the effects on the Otaki River, and the affected tributaries. This information is especially important given the adaptive management approach proposed by the "Code of Practice" document as the means of avoiding, remedying the mitigating the effects of the proposed flood protection activities over the next 35 years.

Information provided below on the existing environment needs to compare the ecology of the area affected by the consent application (the impact section) with the upstream catchment that is outside the influence of flood protection activities (the reference section).

Information requested¹

1. **Maps** - Please provide an overview map or maps at a suitable scale, showing the areas covered by the application, the affected tributaries, the main existing flood protection features (eg. willow plantings, rip-rap rock linings, groynes), and any ecological site survey locations referred to in the application (please refer to Fish at point 5 below).
2. **Estuary** – Please provide full details and a description of the Otaki River estuary and the potential effects of flood protection activities may have on it. Given the proposed works include activities in the estuary and coastal marine area, a more thorough description of the receiving environment is required. This must be based on actual data or recently cited information of the Otaki River estuary.

Please include a full description and data in relation to the composition of fish, resident and migratory shorebirds, invertebrate (marine and freshwater) communities, plant species, and any associated biodiversity values of the estuary. Please also state when resident and migratory shorebird species make use of the estuary.

Please confirm if salt marsh habitat remains, and if so, the location in relation to flood protection activities. Please note whether it may be adversely affected by these activities. If flood protection activities are proposed within salt marsh habitat please provide a detailed description of the potential adverse effects and how it will be avoided, remedied and mitigated.

With regard to section 3.1.7 of the AEE report, please provide the reference for the recreational fisheries details provided which refer to kahawai, snapper, dogfish, red cod, gurnard and yellow eyed mullet.

With regard to section 3.1.1 of the AEE report, please clarify what is meant by low productivity and biodiversity values. Please provide references and data to support this statement, and provide comment with regard to the rearing and habitat spawning for a range fish noted in section 3.1.7.

3. **Aquatic Plants/Macrophytes** – Please provide full details and a description of the macrophyte communities that are present where mechanical instream vegetation removal is proposed, or where macrophyte communities will be affected by other flood protection activities.

Please provide full details if there are native species or noxious exotic species present, and the location of any significant patches (in terms of areal extent) of these species.

¹ Any person who has been asked to provide further information under section 92(1) of the Resource Management Act 1991 (the Act), has the right to object to the consent authority in respect of that request for information under section 357A(1)(b) of the Act.
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4. **Macroinvertebrates** – Please provide full details and a description of the invertebrate communities, including habitats affected by new structures, gravel extraction and bed/beach recontouring, the hyporheic zone and deeper, non-wadeable habitats.

Please provide information on macroinvertebrates within the tributary waterways. If MCI surveys of the affected tributaries are not possible, please provide prediction data from the Freshwater Ecosystems of New Zealand (Leathwick et al, 2010)² Please provide details of whether any crayfish/koura are present in the tributary waterways.

What are the most common species/taxa in the sections to undergo gravel extraction/bed contouring? How does the community composition compare to that found outside of the area? Are there threatened or at risk invertebrates present according to the listing of Grainger et al (2014)³? Which EPT taxa are present in the river?

In the AEE report, it is stated in the text that the lower river site is rated ‘good’ however, Table 3-3 indicates all sites are rate ‘excellent’ according to the QMCI. Table 11 (application) and Table 3-3 (AEE report) present means. Please provide some measure of variability eg. ranges, standard errors.

SOE invertebrate monitoring data has been presented only for the period 2009-2011. Please provide data for the full period for which data is available and an analysis of the trends.

5. **Fish** – Please provide further information on fish species that are of most concern, such as those that are most abundant and spawn in the area covered by the application, and especially in habitats that are affected by gravel extraction and beach contouring. Please compare data for impacted and reference reaches of the Otaki River.

Please provide full details and a description of the fish fauna of tributary waterways in the area covered by the application and compare this information with tributaries outside of the subject area.

Tables of NZFFD records provided in the application and the AEE report give no indication of where each species has been found in relation to the area covered by the consent application. Please split the records into those from within the application area and those outside. Please provide a map of site locations.

While distribution maps of five fish species are provided in the AEE report (figs 3.1 - 3.5) the consent application area has not been included on the maps. This information would be useful to determine those species most likely to be affected by the works.

² Leathwick, J.R., West, D., Gerbeaux, P., Kelly, D., Robertson, H., Brown, D., Chadderton, W.L., and Ausseil, A.-G. 2010. Freshwater Ecosystems of New Zealand (FENZ) Geodatabase Version One – August 2010 – User Guide. Department of Conservation. 57 p.

³ Grainger, N., Collier, K., Hitchmough, R., Harding, J., Smith, B., Sutherland, D. 2014. Conservation status of New Zealand freshwater invertebrates, 2013. New Zealand Threat Classification Series 8. Department of Conservation, Wellington. 28pp.

Please provide abundance data (relative abundance, rank abundance) rather than just presence/absence, so that which species are more abundant and the general community composition can be determined.

There is very limited information on fish fauna of the lower Otaki River and the 2001 Boffa Miskell study is based on limited fish trapping which is unlikely to adequately sample the fish community, and would not capture small cryptic species such as bluegill bully. Please provide additional information on fish fauna including that from FENZ (Leathwick et al 2010).

Please provide the source of the data in Table 3-6 of the AEE report.

Please provide a map of the inanga spawning locations, and information on any other species that may spawn in the reaches affected by gravel extraction and bed recontouring (eg. torrentfish or bully species).

At Section 8, Monitoring, of the AEE report, it is implied that annual drift dive monitoring of trout abundance is undertaken at two sites in the Otaki River. Please confirm if this is the case and provide the data from this monitoring.

Please provide details of the level of customary, recreational and commercial fishing for eels in the Otaki River and affected tributaries.

6. **Water quality** – *Please provide the water quality data that exists from 2004 and an analysis of the trends.*
7. **Gravel bar and beach flora and fauna** - *Please provide additional information on the flora and fauna of gravel bars and beaches that might be affected by gravel extraction and beach recontouring.*
8. **Riparian vegetation** – *Please provide additional information on riparian vegetation in the application area, including the tributary waterways. Please describe in detail and shown on maps any remnant native vegetation in the area or significant areas of native vegetation.*
9. **Birds** – *Please provide more detailed information on the bird species of most concern, such as those native or endemic species that roost, feed, nest or rest in the area covered by the application. Please provide details of which species feed and rest on gravel bars and which species may be nesting and roosting among the riparian vegetation (including willows) and when. Please include information for the tributary waterways also.*

From the 2012 survey it appears that there is higher resolution bird distribution data available than what has been presented in the AEE report. Please provide this data.

10. **Herpetofauna** – *Please provide full details in relation to herpetofauna that could be present in the areas potentially affected by flood protection works.*

Code of Practice

11. *Please provide comment on whether a free-draining bucket is the most appropriate method for removing silt from the Otaki River.*

Environmental Monitoring Plan

12. *Please provide further details in relation to the proposed bird monitoring and its workability including details of the justification for the proposed percentage triggers.*
13. *Please provide further details on the proposed pool and riffle counts using aerial photography. Please discuss how features obscured by vegetation are accounted for, and discuss whether the variability of habitats (depth, area, ecological value) would be noted or whether the proposed methodology simply counts features.*
14. *Please provide further justification on how the Natural Character Index (NCI) will be useful in the context of ecological monitoring.*
15. *Please provide any information available on the optimal width of willow plantings to achieve the objective of vegetative bank protection. Please identify any areas where willow planting can be retired over time and natives planted instead.*

Date information required

Please provide the above information to me by **Monday 15 June 2015**. If you are not able to supply the information requested⁴ by this date, you must let us know in writing within this timeframe, either that you require additional time (at which time we will set a reasonable timeframe for you to provide the information) or that you refuse to provide the requested information. I appreciate it may take longer to address my requests depending on the complexity or amount of work required for each. It may be worth discussing timeframes or having a staged response to my request to ensure an understanding of how long it will take to respond.

We may decline your application if we consider we have insufficient information to enable us to determine your application, or if you do not respond to our request by **Monday 15 June 2015** or if you refuse to supply the information. If you consider you have a valid reason for refusing to provide the requested information, please contact me on the number below to discuss this further.

Processing of your application

Your application has been placed on hold, and the statutory ‘clock’ stopped⁵, until such a time that either I am satisfied that I have received the above information, receive written notice that you refuse to provide it, or the time period for providing the requested information has expired. As soon

⁴ Under section 92A of the Resource Management Act 1991.

⁵ Under section 88C of the Resource Management Act 1991

as one of these occurs, the statutory 'clock' will restart and I can continue processing your application.

Please feel free to contact me on 830 4255 if you have any questions or concerns.

Yours sincerely

A handwritten signature in blue ink, appearing to read 'Michelle Conland', written in a cursive style.

Michelle Conland

Resource Management Consultant, for Environmental Regulation