

## By email

21 August 2018

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[Internal]

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Dear Kirsty

## Response to further information request under section 92(1) of the RMA 91 - WGN130264, WGN130303, WGN140054, WGN150094

Thank you for your letter dated 1 August 2018 regarding the above.

Please find the information requested for questions 1, and 4-7 outlined below. As already discussed, with you at our meeting on the 15 August 2018, we will need additional time to provide answers to question 2 and 3. Due to the further detail required the information will be provided to you by the 30 September 2018.

### Information requested

#### *Question 1*

*Please outline the overall philosophy and objectives/outcomes/success measures the applicant is trying to achieve the proposed flood protection works. Please also explain where in the documentation this information will sit. It is our expectation that this will provide a framework that can be used to assess monitoring results against and inform the adaptive management process.*

The applications for flood protection consents throughout the Western Rivers propose a 'step change' in the way river management activities are currently planned, undertaken, recorded and monitored by GWRC. The new framework is shown in diagrammatic form in the attached image.

Currently, only the steps shaded in light blue are used by GWRC when undertaking river management activities (i.e. just the FMP and activities themselves). The Western Rivers consent conditions and the updated Code of Practice for the Wellington region (v 19) put in place a structured framework to enable the following objectives/outcomes/success measures to be achieved:



### **Increased river management planning:**

This includes: river-wide and reach specific plans identifying key values (FMP, OMPs); annual works planning (AWP), based on the activity constraint calendars at Appendix 6 of the Code; and in the case of any high potential impact activities, site-specific effects management planning and monitoring to remedy or mitigate adverse effects.

### **Consistent implementation of river management activities:**

All river management activities must be undertaken in accordance with the general and individual good practice methods included in the Code. Section 9 of the Code sets out these good practice methodologies which river managers must adopt when implementing river management activities in accordance with the above planning mechanisms (AWPs, OMPs etc.). These methodologies have been refined throughout the consenting process following engagement with DOC, Wellington Fish and Game Council and Mana Whenua.

The methodologies in the Code seek to ensure that those working on-site avoid, remedy or mitigate the adverse effects of river management activities.

### **Enhanced monitoring of the effects of river management activities:**

The Environmental Monitoring Plan (EMP) sets out the environmental monitoring programme for river management activities. The consent holder must undertake monitoring in accordance with the EMP. Further work is currently being undertaken to incorporate HQI based monitoring into this plan. The consent conditions also provide for kaitiaki monitoring to be undertaken by Mana Whenua.

### **Explicit reporting and review requirements**

The consent conditions require the consent holder to develop an Annual Report for each river, to be reviewed annually by the Manager, Environment Regulation. All reports prepared under this process will be externally reviewed every 3 years by an Independent Review Panel. Both the Manager and the IRP can recommend changes to the existing process as a result of these reviews.

This framework will enable GWRC to achieve greater transparency in its river management decision making, implementation and outcomes and achieve the objectives/outcomes/success measures included in bold above.

### *Question 4*

*Please provide details on the process for developing and reviewing Floodplain Management Plans (FMP).*

Floodplain Management Plans (FMPs) are key strategic documents, which largely determine the Council's approach to river management within those rivers and streams administered by GWRC. Currently there are four completed FMPs

- Hutt River Floodplain Management Plan
- Waikanae River Floodplain Management Plan
- Otaki River Floodplain Management Plan
- Pinehaven Stream Floodplain Management Plan

Two further schemes that meet some but not all the criteria for a FMP are:

- Waitohu Stream Study
- Porirua Flood Mitigation Scheme

A further three FMP's are currently under development for the floodplains of the:

- Waiohine River
- Te Kauru/Upper Ruamahanga Rivers
- Waiwhetu Stream

Priorities for developing FMPs are set by the LTP planning process and each FMP has a review period of 10-15 years (up to three reviews may occur over the 40 year planning timeframe of a FMP) with more substantive reviews envisaged after a major flood event.

#### *Question 5*

*Given the FMPs underpin the works done under this consent application and their apparent rigidity, please comment on whether there is scope to consider RMA/environmental outcomes through the process for developing and reviewing FMPs e.g. a consent condition requiring consideration of environmental outcomes through the FMP review process.*

FMPs are created through the application of Floodplain Management Planning principles to a river and its floodplain. This is an internationally recognised process that provides a comprehensive long-term strategy for managing areas at risk from flooding and river erosion. It relies on the Council's expertise in understanding both the nature and behaviour of the river and on the Council's ability to engage effectively with affected communities and work with

them to develop enduring and affordable solutions. The FMP process is set out in GWRCs FMP Guidelines [2001].

FMPs set the management objectives for a particular river, including a long term strategy for managing flood risk. A FMP is developed through a consultation process which includes the local community. Although FMPs can have a long lifespan, the documents themselves contain review procedures that provide for adaptation.

FMPs define the flood and erosion hazard management activities that will be undertaken and levels of service that will be provided within a specified floodplain area within a river catchment. These responses are not limited to the creation of infrastructure assets for flood protection; the use of other non-structural solutions such as the promotion of hazard avoidance and the use of planning restrictions are also important elements in the overall mix of responses and solutions. FMP planning also identifies cultural, ecological or amenity needs in relation to river management which a community identifies as being an important component that needs to be addressed in conjunction with flood and erosion protection.

The monitoring and reporting undertaken as part of the proposed consent framework will provide information on RMA/environmental outcomes which will be able to inform subsequent reviews of the FMPs. Therefore we do not consider it is necessary to include a consent condition on this, and instead prefer that this is covered off in the Code. The Code (section 1.3) currently contains objectives to ensure that, as part of the review of an FMP, the adoption of the good practice river management methods in the Code, and lessons learnt through the Kaitiaki Monitoring Plan and the Environmental Monitoring Plan, are considered. Other documents, including the Annual Report, Operational Management Plan and any Site Specific Environmental Management Plan prepared for a particular work will provide information that is then able to be included as part of the FMP review process.

In the future, Integrated Catchment Management Plans or implementation plans from Whaitua processes, will guide implementation, of OMPs and annual work plans. Overtime these will be reflected in reviews of Floodplain Management Plans.

#### *Question 6*

*Please provide detail of your process for the design and review of measures/structures to be constructed under this consent, i.e. is the design of all flood protection measures and structures peer reviewed internal/externally prior to being implemented?*

The structures to be built under the consent may vary as follows:

- Small structures (typically less than 50k) including small additions to existing structures or maintenance of existing works.

This work is normally completed through supervision by GWRC staff or direct labour with plant and operator hire from a contractor. This work would comply with the resource

consent conditions and Code and be supervised by senior staff, Area Engineers or technical staff typically with over 20 years' experience. Works would be noted and checked by senior staff and included within GWRC asset management system. Any ongoing issues would be picked up as a minimum in the annual asset inspections that take place on all river systems.

- Medium sized structures or river works (typically greater than 50k)

This work typically involve a small sketch and an agreed design, methodology and typical costings of the works. Work would be supervised senior river staff, Area Engineers or technical staff typically with over 20 years' experience. A record of the new asset by survey and digitising would also be made.

- Large Structures or river works (typically anything greater than 100k).

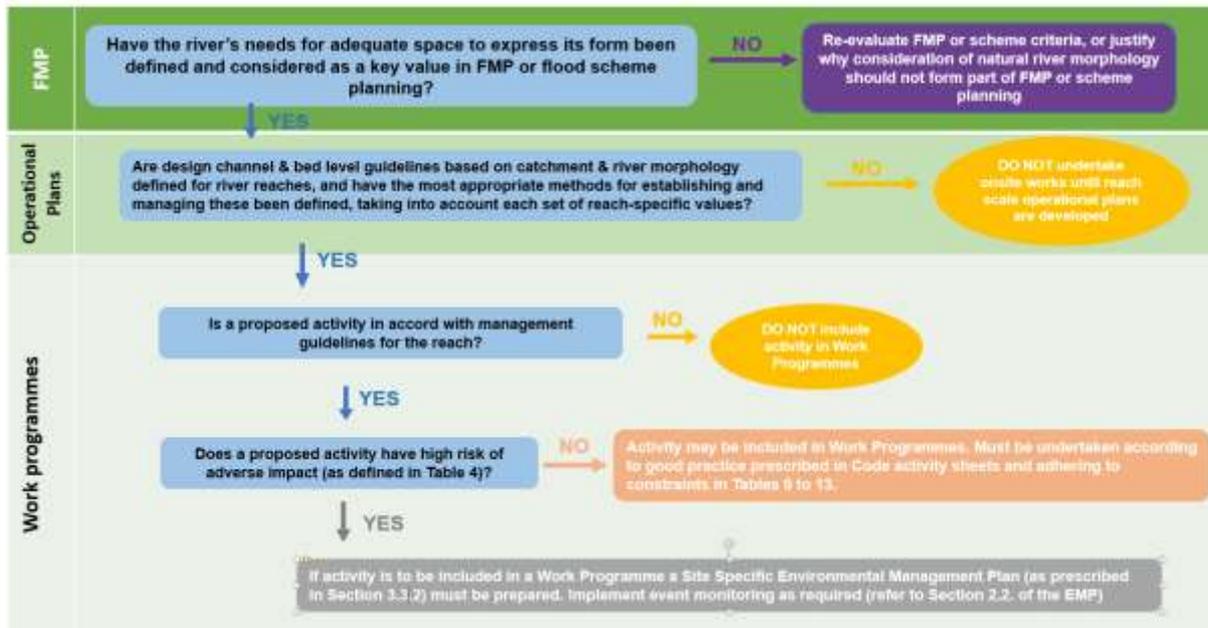
Detailed design for these type of works can be completed in house or by an external consultant (in-house design capacity is currently being increased). Depending on the scale of the works they would be drawn up with survey control points and set-out as well as detailed costings. This work would as a minimum be checked by a suitably qualified Chartered Professional Engineer and if necessary this would be completed by external consultants. These works would be supervised by an Engineer as well as by Senior River staff, Area Engineers or technical staff typically with over 20 years' experience. It is likely to be controlled by daily survey set out and checks by technical staff officers.

- Contract works

These works are completed to the prescribed standard, the detailed design for these works would either be completed in house or by a consultant. This work is checked by a suitably qualified Chartered Professional Engineer. The works are supervised on behalf and to the approval of the Engineer to the Contract. All design and construction decisions require the Engineer to the Contract's approval. Typically there are full records kept of this type of work, and the works are as-built surveyed at the end of construction. These steps are mandated by legislation typically the Construction Contracts Act 2002 and the agreed minimum standards under the Australian and New Zealand (incorporated as conditions into the contract).

### *Question 7*

*Please provide details of the process that the person who implements works under this consent goes through when they decide what measure and methods within the code are to be implemented at a particular location.*



Please feel free to contact me on 04 830 4045 if you have any questions or concerns

Yours sincerely

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## Western Rivers: Framework of consent conditions

