

Tongariro River Works Plan 2013-2014

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1 Introduction

Waikato Regional Council maintains and operates a flood protection scheme on the Tongariro River to protect the Turangi Community from flooding. The Council holds comprehensive Resource Consents for the maintenance of this flood protection scheme. As part of the consent conditions, an annual work plan for the maintenance of the scheme is required for consultation with affected parties. This document outlines the works proposed for the following year, and follows on from the 'Tongariro River Flood Control Scheme Management plan for floodway maintenance 2012' (Doc # 1972444). The assessment identifies current issues within the flood scheme and maintenance required for the 2013-14 season.

2 Background

Waikato Regional Council has constructed a flood protection scheme on the Tongariro River within Turangi Township to protect people and property from flooding up to a 100-year flow event (1% Annual Exceedance Probability = 1% AEP) in agreement with the community. The standard of protection is provided by the formed floodway that includes stopbanks, river channel, river banks, berms and flood plain.

In 2011, Resource consents were granted to the Waikato Regional Council's River and Catchment Services Group (RCS) for the management of the river floodway and flood protection scheme.

These consents are summarized as follows:

RC #	Activity authorised
121305	<i>Erosion control/flood protection works: gravel extraction up to 150,000cum/year, erosion control works and vegetation removal, temporary diversion bunds and culvert crossings.</i>
121306	<i>Divert water and temporarily dam and divert water within the Tongariro River.</i>

These consents require that a Proposed Annual Works Plan be prepared and distributed to;

- a) Department Conservation
- b) Tongariro and Lake Taupo Anglers Club Inc
- c) Advocates for the Tongariro River
- d) Taupo Fishery Advisory Committee
- e) Tuwharetoa Maori Trust Board
- f) Ngati Turangitukua
- g) Genesis Energy
- h) Waipapa and Tokaanu Maori Lands Trust.

3 Assessment of Current River Issues April 2013

The river channel position through the flood scheme has undergone many changes in the past and this can be expected to continue into the future. These changes will depend on the occurrence of future natural events such as floods, eruptions and major erosion events.

a) Upstream of the SH1 Bridge in Turangi the bed has remained relatively stable over the last 12 months. Hydrologically, there has been limited activity in the river which would shift materials from this area. The channel has not altered to any significant degree through this area during this last year. The stopbanks and associated flood control assets have been inspected and should not require anything other than routine maintenance during this year. Some minor vegetation control may be undertaken, mainly to ensure the survey lines remain open and unobstructed. The island above the bridge will at this stage be retained as is, and only minor vegetation management, particularly small willows, will be undertaken. Any vegetation management within this island will primarily consist of chemical control rather than mechanical extraction.

b) Downstream of Turangi major changes in the river's position have occurred in recent history.

Through successive flood events and volcanic activity in the region, large amounts of gravels and fine sediments have been transported through the Tongariro catchment and into the main channel.

To maintain the flood scheme and design floodway, gravel and other sediment extraction is an ongoing activity in this part of the river. Works in the previous year removed approximately 15,000 cubic metres of sediment from the floodway. This material was of no commercial value and was re distributed into a redundant remnant river channel adjacent to the extraction site.

Willow removal from the floodway was undertaken over the 2011/2012 year. This maintenance of the flood protection scheme floodway was deemed essential to establishment of a suitable "coefficient of roughness" to pass the design flood flows. This has been largely successful in that flood flows are now able to move through the floodway relatively unhindered compared to before the works. The combination of sediment extraction and willow removal has resulted in the flood scheme now meeting its design specifications according to the latest model.

One result of willow and sediment extraction has been the number of willow stumps remaining in the river channel and banks between Swirl Pool and Delatours Pool. These are likely to slowly break down, however mechanical extraction could be deemed appropriate in some circumstances. Currently WRC is awaiting recommendations from DOC as to how the channels and fish habitat should be managed through this area. WRC has no plans at present to alter the existing bed not associated with river maintenance works, unless requests are made by DOC for specific alterations for fish habitat or access purposes. It is likely that a reasonable flood through this area will alter the existing channels regardless of human intervention. As this happens, the river bed will again be assessed to ensure flood scheme design specifications are being maintained.

c) The Herekieke St stopbank will require maintenance in the next year. This engineered structure has suffered minor degradation through successive flood events and has been identified for upgrade works in the next year to ensure it can function as it was designed. This is discussed in more detail in section 4.5 below. This work will make up the bulk of the planned work this year for the scheme.

- d) After the recent willow clearance, rapid re-growth of willow seedlings has been observed. During the summer of 2012-13, a spray programme was implemented which saw this re-growth killed. Although largely successful, follow up spraying will be required in the upcoming summer, as well as every year in the future. This area will not be allowed to re-infest with willow species. Desirable native species such as carex sp. And toi toi have become established and these will be allowed to continue to thrive. As identified in the management plan for the river, any woody plant over 1.5m within the main channel through the flood scheme will be targeted for removal or chemical control.
- e) One undesirable result of the willow removal programme was witnessed at Delatours Peninsula during the July 2012 floods. With the willows cleared from the entire peninsula, the river spilled over the bank and proceeded to erode the height of the peninsula in one section. This threatened to break through the bank, which would have created a new channel that would have bypassed Delatours bend. Emergency works were undertaken to stabilise the area, and the bank was reformed utilising local materials and vegetation layering methods. The bank is now back to pre-break out height and will be monitored through successive flood events. This site is particularly vulnerable to being cut through by natural processes, and in major flood events it is possible this could happen again. Any future breakouts at this location will be assessed at the time as to whether it is possible to keep the river in its original channel.
- f) Turangitukua funded through the Ngati Tuwharetoa – Genesis Energy Fund have undertaken a river bank willow removal programme over the last five years downstream of Delatours pool. This work has opened the river up creating greater channel capacity. Some localised riverbank erosion has occurred and it may take some years for this new river regime to stabilise. With this last year of relatively stable flows, no further erosion issues have arisen. Turangitukua will continue with the management of this area of the river in partnership with Waikato Regional Council.
- g) This work plan relates to the issues in the river that impact on the flood control scheme. The annual monitoring program identifies loss of floodway capacity and erosion that may place river assets at risk. Assessment of the risk and the response in the first instance is managed by the Works Supervisor in consultation with the Zone Manager. Waikato Regional Council's Technical team may be called upon, dependent on the severity or complexity of the issue.

4 Annual Works Programme

4.1 Works site meeting

In accordance with consent conditions, a pre-works site meeting will be scheduled with Works Supervisors, WRC staff, affected parties as listed in section 2, and contractors (if known). The purpose of this meeting is to advise interested parties of the works to be undertaken, the methodologies involved and any mitigation measures, and allow interested parties to raise any concerns with the scope of work so as they can be addressed before work plan is finalised.

4.2 Description and nature of works

Scheduled works during the 2013-2014 year relate to maintenance of existing structures. The main work will be maintenance of the Herekiekie stopbank and erosion protection

structure. This is detailed in section 4.5. Other work will be vegetation management (generally a permitted activity). The scale of this is detailed in section 4.6.

Emergency works, such as after flood events, may be undertaken on occasion. In this case every effort will be taken to notify representatives from the parties listed in section 2 above.

4.3 Primary consideration of timing of works

The Tongariro River is a nationally significant Trout fishery. As such the timing of consented in stream works are limited to the months outside of May to October inclusive. This ensures work falls outside of the main trout spawning season.

The river is an internationally renowned trout fishing location. Although Trout fishing is popular all year, the least fishing activity on the river generally falls over the warmer summer months. For this reason works will be scheduled for mid to late summer. This will also coincide with seasonal low river levels. Representatives from DOC will be consulted at various stages prior to the works commencing to ensure the best possible outcomes in the event of late spawning runs or other such natural events.

Other recreational activities on the river include whitewater rafting and kayaking. The works planned for this year will have no impact on these activities.

4.4 Monitoring and Mitigation

All works will be carried out in accordance with the conditions of these consents. Monitoring and mitigation measures are outlined in the detailed work plan in section 4.5.

4.4.1 Best Practice Guidelines

All works will be carried out in accordance with Waikato Regional Council's Best Practice Environmental Guidelines – Vegetation Management & Instream Works.

4.4.2 Other Mitigation Measures

4.4.2.1 Fishing and recreational access

Access to fishing and recreational activities will be retained wherever possible. Access will only be restricted to work sites during hours of operation, and only to the small area where work is being carried out to ensure public safety.

4.4.2.2 Hazardous Substance Spillages

All machinery will be refuelled, serviced and maintained in manner to ensure spillages of contaminants are prevented; and in a location that should a spill occur it will not enter a water way.

Spill prevention and response activities will be undertaken in accordance with the Waikato Regional Council's Oil Spill Contingency Guidelines – River and Catchment Services Operations.

Detailed spill prevention and response plans for each contract will be made available as part of the contract process. This plan will include lists of hazardous materials such as fuels, measures undertaken to prevent spills, work site map showing refuelling locations and fuel storage areas.

4.4.2.3 Dust

It is expected that dust emissions from these works will be minimal. However, should dust become an issue which may result in an objectionable or offensive effect beyond the work site boundary, works shall cease until appropriate dust suppression measures are put in place. These measures may include the use of water carts or irrigation on the exposed areas; and slowing or minimising vehicle movement.

4.4.3 Consent Compliance Monitoring

A resource consent compliance monitoring regime has been developed in consultation with the Resource Use Group (RUG). The RCS Environmental team will be implementing this process.

All relevant resource consent conditions will be monitored and assessed. A Compliance Audit Report will be drafted, and reviewed by RUG prior to approval. This report will identify any areas of non-compliance and identify any remedial actions undertaken to rectify this non-compliance.

A representative number of sites will be selected for monitoring, based on the scale, location and sensitivity of the proposed sites.

4.5 Detailed work plan: Herekieke Stopbank Maintenance

The riprap erosion control structure on the stopbank adjacent to Herekieke St has been identified as requiring some localized top up and the face of this structure is steeper than ideal. This was highlighted last year but the works were not able to proceed due to budget constraints with the other gravel and willow work that occurred.

To undertake this work the river channel on the right will be diverted away from the right bank by blading deposited river material across from the centre island to form a bund upstream and downstream of the work site. Access for machinery will be from the right bank below the bridge. This will separate the work site from the main flow of the river and allow machinery to work without impacting on the main channel.

Rock will then be placed as required at the new toe by accessing from either the bed of the river or from the Herekieke reserve. This rock will be positioned to slump if the channel was reformed during an event. It is predicted that this work will take approximately 3-4 weeks.

Keeping the river flow away from this structure may require on going work from time to time to ensure the flow path is through the centre of the river channel.

As the work site is adjacent to SH1, a traffic management plan will be implemented to the requirements of NZTA. All appropriate measures will be taken to ensure the site access is safe and meets the requirements of the traffic management plan.

Due to the highly visible and potentially sensitive location here the works will be undertaken with a high level of consultation, particularly with Turangatukua, DoC and fishery advocates. The bridge pool itself is a renowned fishing location and will need to be retained as far as possible. It is not anticipated that this work will disturb the main pool itself, however the tail end of the run below may be re directed away from the right bank.

As this structure is quite large, it is anticipated that a 2 year work programme be undertaken, in which the worst parts of the structure will be addressed in this year, and follow up maintenance will be completed in successive years.

Tongariro River, Turangi. Herekieke stopbank and erosion structure Map Ref NZMS260	
Nature of Works	- Repair of erosion control structure. Placement of rip rap rocks along face of stopbank.
Scale, Timing & Duration	- 100 lineal metres of bank erosion protection. - Scheduled Late January- February 2014 - 4 weeks to complete
Receiving Environment	- Stony bottomed channel. - Residential and recreational land use surrounding the river downstream. - No recorded archaeological sites. - No legal water takes recorded within 500m downstream of the works (including permitted activities).
Significant Species/habitat	- Tongariro River is classified Trout Fisheries and Trout Habitat, and Significant Indigenous Fisheries and Fish Habitat water classification.
Mitigation Measures	- Minimise disturbance of main channel by undertaking bunding with local material. - Undertake works during period of low flow. - Sedimentation of main flow to be minimised through bunding. - Use modern and well maintained machines to avoid leaking of engine oil - Time work outside of main fishing season. - Minimise restriction of fishing access. - Follow Best Practice Guidelines.
RC Condition Assessment	c.8- Public access will not be unduly restricted. c.9- Works are scheduled for outside the fishery timing restrictions c.11- Limited hours of operation (Mon-Sat, 8am-6pm max) c.14- Machinery will be cleaned prior to entering work site. c.15-16- Minimise time in flowing water. c.17- Machinery operated in accordance with best practice. c.18-20- Spill prevention plan to be identified and addressed. c.22-28, 29-30- Best practice for sediment will be applied. c.36- Dust emissions to be monitored and managed. c.37-39- Notification and work plan to be circulated.

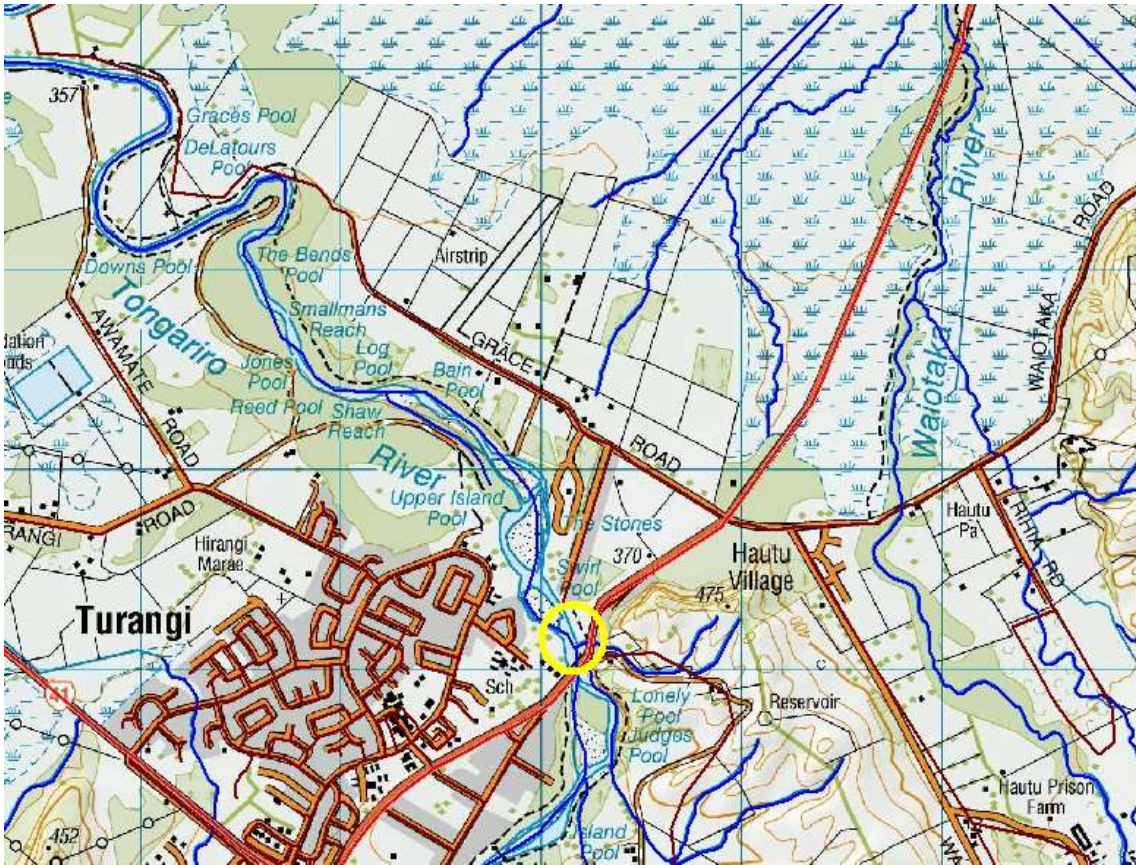


Fig 1. Location of works

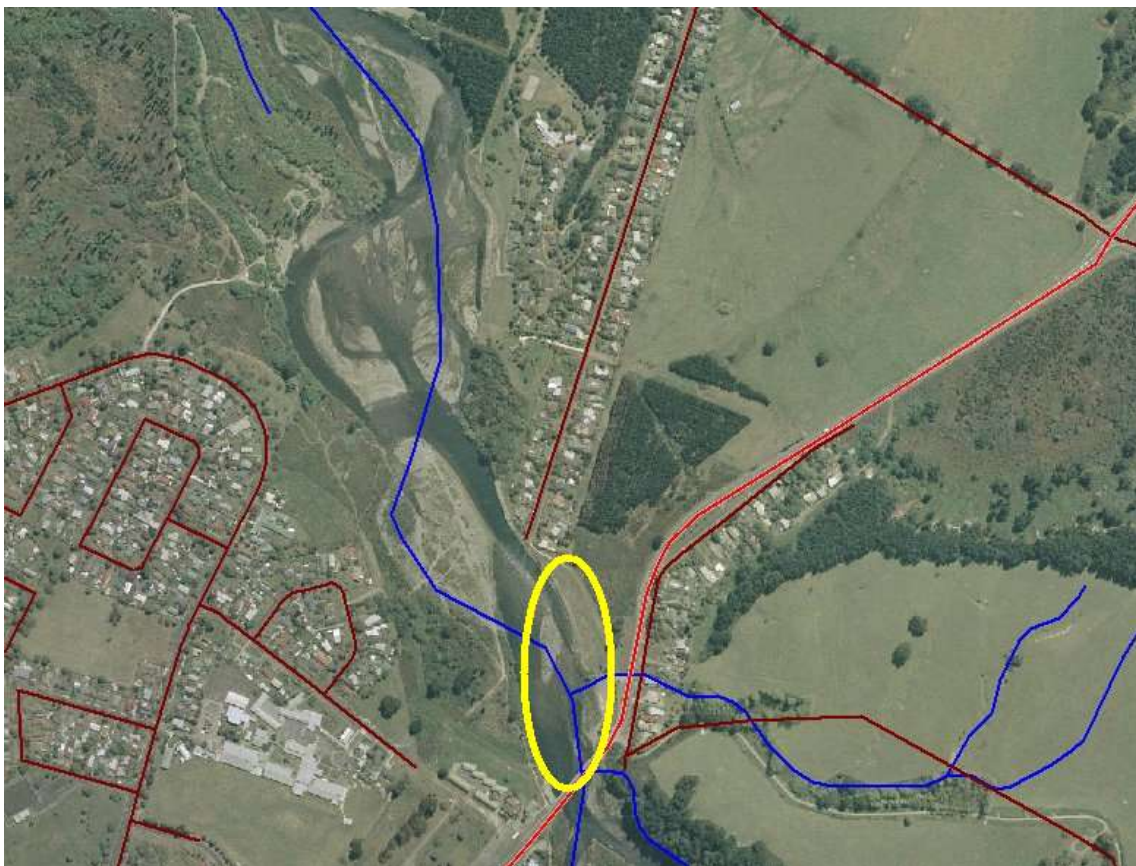


Fig 2. Location of works.



Fig 3. Access and work site description

4.6 Tongariro River Vegetation Management

River flood modeling of the outcome of the 2011/12 removal of scrub and willow infestation from the floodway shows that the 100 yr modeled flood level adjacent to Tongariro Lodge have been lowered due to this vegetation management.

The bulk of this area has mostly been mechanically cleared with some of the smaller vegetation established in the last few years sprayed. For the continued elimination of willow and other larger woody species within the floodway further work will be required on an ongoing basis to keep these areas free of dense vegetation that impede flood flows (Map 8). Low growing vegetation or grass varieties are the preferred species for ground cover within the floodway. This vegetation cover should be fully achieved in the next 3-4 years but as stated this will require continued vegetation management.

Similarly above the bridge some vegetation clearing is required. This will be carried out in the main using chemical rather than mechanical means. The areas identified in map 9 have been identified due to the vegetation at these sites restricting the floodway such that there is additional pressure on existing riprap structures. The existing stop-bank freeboard in this reach of floodway above the bridge exceeds the design and currently does not require any gravel extraction.

As stipulated by permitted activity rules, notification for the spray works will be via advertisements placed in local papers advising of the spray programme for Tongariro for the 2013-14 season. In addition, appropriate signage will be in place in the days leading up to spray programme as well as while the spraying is being undertaken.

Chemicals used for each spray programme will be assessed to be appropriate for the site and purpose. All spraying will be undertaken by Growsafe accredited contractors.

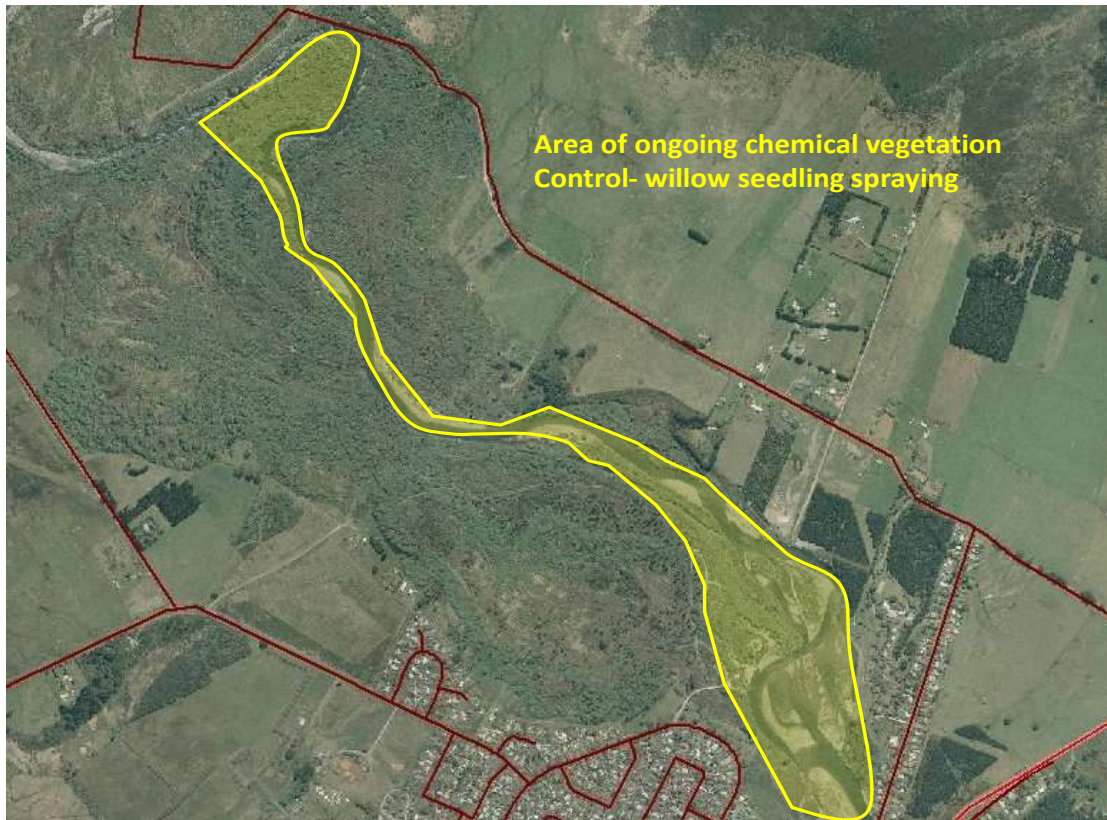


Fig 4. Vegetation management downstream SH1 bridge

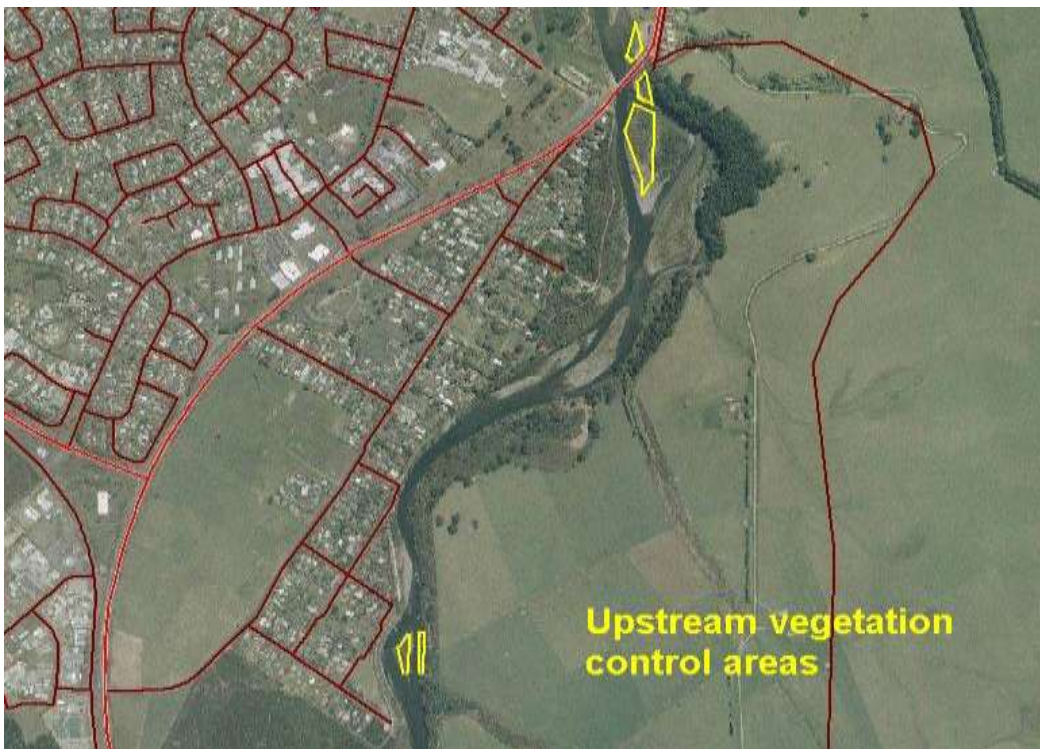


Fig 5. Vegetation management upstream SH1 Bridge.

5 Appendix One: Resource Consent Conditions.

General Conditions for Resource Consent Numbers 121305 and 121306

1. The activities authorised by this consent shall be undertaken in general accordance with the documents titled “*Land Use & Water Resource Consent Application and Assessment of Environmental Effects for the Tongariro River Gravel Management - Revised October 2010*”, Sherie McHardy, Taupo Planning Consultant & Design Services except as otherwise identified in the following resource consent conditions.
2. A copy of this resource consent shall be kept onsite at all times that physical works authorised by this consent are being undertaken, and shall be produced without unreasonable delay upon request from a servant or agent of the Waikato Regional Council.
3. The Consent Holder shall notify the Waikato Regional Council in writing of the commencement of activities authorised by this consent, at least 5 days prior to discrete sections of work authorised by this consent commencing.
4. The Consent Holder shall appoint a representative(s) prior to the exercise of this resource consent, who shall be the Waikato Regional Council’s principal contact person(s) in regard to matters relating to this resource consent. The Consent Holder shall inform the Waikato Regional Council of the representative’s name and how they can be contacted at least 1 working day prior to the commencement of the works authorised by this resource consent. Should the representative(s) change during the term of this resource consent, the Consent Holder shall immediately inform the Waikato Regional Council and shall also give written notice to the Waikato Regional Council of the new representative’s name and contact details.
5. The Consent Holder shall arrange and conduct a pre-works site meeting each year that works are proposed and invite, with a minimum of 10 working days notice, the parties listed in condition 38, the Waikato Regional Council Resource Use Group, the site representative(s) appointed under condition 4 of this consent, the contractor if known, and any other party representing the consent holder, prior to commencing the consultative phase of each Proposed Annual Works Programme detailed in condition 37 below.

***Advice Note:** In the case that any of the invited parties, other than the site representative does not attend this meeting, the consent holder will have complied with this condition, provided the invitation requirement is met.*
6. The Consent Holder shall be responsible for all contracted operations related to the exercise of this resource consent, and shall ensure contractors are made aware of the conditions of this resource consent relevant to their work area, and comply with those conditions.

Notices

7. The Consent Holder shall erect and maintain notices upstream and downstream of each section of the works not less than 5 working days prior to the commencement of the works. These notices shall provide appropriate warning of:
 - a) the proposed works;
 - b) any relevant safety advice;
 - c) the period over which these works will be occurring.

Access to Tongariro River

8. The Consent Holder shall, in respect of the works authorised by this resource consent, maintain any existing public access at any location where works authorised by this consent are carried out except where the public are required to be excluded for safety purposes. In the latter situation, every effort must be made to ensure that through or by-pass access to up or down river locations is either available or provided.

Timing of Works

9. Works authorised by this consent shall not be undertaken in the wet river channel during the months May to October inclusive each year, except where:
 - a) flood flows have resulted in stopbank freeboard loss and the remaining freeboard in the reach upstream of the bridge being less than 150mm and/or the remaining freeboard in the reach downstream of the bridge being less than 400mm; or,
 - b) there is a reduction in a cross sectional area which is more than the product of 0.30 times the design width at the design flood level, or
 - c) erosion control works to maintain the integrity of the Tongariro River Flood Control Scheme are required.
10. The Consent Holder shall provide survey information to the Waikato Regional Council confirming the trigger levels set in 9a or 9b above have been met prior to undertaking works provided by condition 9.
11. Works may be undertaken up to a maximum of 10 hours per day during the period 8am to 6pm; and, up to six days per week Monday to Saturday. No works shall be undertaken on a Sunday or a Public Holiday.
12. The Department of Conservation shall be notified prior to any works occurring during the months of May to October.
13. The Consent Holder shall check daily and weekly weather forecasts. In the event of a rain forecast which could result in flood flows which may, in conjunction with undertaking the works authorised by this consent, adversely affect the Tongariro River environment, the works shall be postponed, or be suspended if already commenced, and all machinery shall be removed from the river bed and flood plain until the identified flood risk has passed.

Machinery Maintenance and Hazardous Substances Spill Prevention and Response Plan

14. The Consent Holder shall ensure that all machinery used in the exercising of this consent is cleaned prior to being transported to the construction site to ensure that all seed and/or plant matter has been removed.
15. All machinery, including bulldozers, loaders, diggers and trucks, shall be operated in a manner so as to minimise time spent in flowing water.
16. No river-bed material extraction shall be undertaken in flowing water.
17. The Consent Holder shall ensure that all machinery shall be maintained and operated in a manner which ensures that spillages of fuel, oil and similar contaminants are prevented. Particular care shall be taken during refuelling and machinery servicing and maintenance. Such activities shall be carried out away from any water body and in such a manner that any spillage can be contained so it does not enter the Tongariro River.
18. The Consent Holder shall provide the Waikato Regional Council with a "Spill Prevention and Response Plan" at least 20 working days prior to the commencement of activities authorised by this consent. This Plan shall be submitted to the Waikato Regional Council for their written approval, acting in a technical certification capacity. The aim of the Plan shall be to minimise the possibility of contamination of water. This Plan shall address, but not necessarily be limited to, the following matters:
 - a) a list of the hazardous materials and their quantities kept on site and their storage details;
 - b) the prevention measures that will be undertaken on site in order to avoid a spill of hazardous materials;
 - c) the equipment available to contain and/or remove spills of hazardous materials;
 - d) specific procedures and measures that will be undertaken when machinery is operating within close proximity to water bodies that are designed to minimise the risk of any spillages or significant leakages of hazardous materials entering the water body;
 - e) the training staff will receive in the use of hazardous materials spill prevention, containment and clean up measures and associated equipment;
 - f) how the disposal of any contaminated materials arising from spills or leakages of hazardous materials will be undertaken; and,
 - g) the procedures involved in reporting of any such incidents to the Waikato Regional Council.
19. The Consent Holder shall in exercising this consent comply with the approved "Spill Prevention and Response Plan". Any subsequent changes to the "Spill Prevention and Response Plan" shall only be made with the prior written approval of the Waikato Regional Council, acting in a technical certification capacity.
20. The Consent Holder shall notify the Waikato Regional Council and the Department of Conservation as soon as is practicable, and as a minimum requirement within 12 hours, of the Consent Holder becoming aware of a spill of hazardous materials, fuel, oil, hydraulic fluid or other similar contaminants. The Consent Holder shall, within 7 days of the incident occurring, provide a written report to the Waikato Regional Council, identifying the following:
 - a) the possible causes;
 - b) steps undertaken to remedy the effects of the incident; and,

- c) any additional measures that will be undertaken to avoid future spills.

Responsibility for Erosion Control Works

- 21. The Consent Holder shall be responsible for the provision and maintenance of any erosion control works that may be necessary as a result of the exercise of this resource consent.

Sediment Control and Debris Removal

- 22. The Consent Holder shall ensure that sediment losses to natural water arising from the exercise of this resource consent are minimised for the duration of the works and during the term of this consent.
- 23. Stormwater runoff from the river-bed material extraction area access road shall be controlled to such an extent that it is discharged into the ground and not discharged directly into the Tongariro River.
- 24. River-bed material shall only be removed below the adjacent River water level when the excavation site is bunded from direct surface connection with the River.
- 25. Excavations below water level shall be backfilled to a level not deeper than 1m below the adjacent river channel water level using river bed material from within the site. Inlet and outlet channels shall be provided to a depth similar to that of the completed backfilled area to maximise continuous river flows through the site. A minimum buffer of 10m from the undisturbed river channels shall be left intact.
- 26. Debris collected during river-bed material extraction shall be removed from the river bed and the floodplain of the river.
- 27. Should the works authorised by this consent cause a conspicuous change in the visual clarity of the river after a mixing distance of 100 metres downstream from the activity, then the consent holder or its delegate shall measure the concentration of suspended solids in the river at this location and upstream from the activity and provide those measurements to the Waikato Regional Council within 10 working days.
- 28. The activities authorised by this consent shall not result in any of the following standards in the Tongariro River being breached after reasonable mixing and at a point 100m downstream of the works:
 - a) black disc horizontal visibility less than 1.6 metres;
 - b) a conspicuous change in the visual clarity of the river;
 - c) An increase in the concentration of suspended solids above 25g/m^3 after a mixing distance of 100 metres downstream from the activity except when the concentration of suspended solids in the Tongariro River above the work site is greater than 25g/m^3 . Then there shall not be any increase in the Tongariro River suspended solids concentration as a result of the activity.

Flow Diversion and Re-contouring

- 29. The Consent Holder shall, immediately after the construction of each temporary diversion bund either maintain fish passage past the bund or, in conjunction with the Department of Conservation, salvage any fish stranded in pools in the diverted section of river channel and return them to the main channel of the Tongariro River.

30. Except as provided for by conditions 24-25, on completion of river-bed material extraction at any one location, the Consent Holder shall re-contour the surface of the extraction area back to its original form, to the satisfaction of an officer of the Waikato Regional Council's Resource Use Group.

Erosion Control Structures

31. Structures and floodways in the immediate vicinity of structures shall be maintained clear of debris.
32. Structures shall not decrease the cross sectional area of the river.
33. All construction materials and equipment shall be removed from the river upon completion of the activity.
34. Where the weight of the structure is insufficient to keep it in place it shall be permanently anchored to the bed of the river.
35. All structures shall be maintained in a structurally sound condition at all times.

Dust Emissions

36. All activities undertaken on site shall be conducted and managed in a manner that ensures that all dust emissions are kept to a practicable minimum. To this end there shall be no discharge of dust as a result of the activities authorised by this consent that causes an objectionable or offensive effect beyond the boundary of the property on which works are authorised by this consent.

Proposed Annual Works Programme

37. The Consent Holder shall prepare a Proposed Annual Works Programme including (but not limited to) the following:
- a) details of scheduled works and maintenance requirements authorised by this consent that are to be carried out for the 12 months commencing 1 November including a description of the nature, scale and location of the works; and
 - b) the proposed timing of the works; and
 - c) any contingency procedures that may be required for specific activities; and
 - d) any specific mitigation measures that will be undertaken; and
 - e) riparian planting proposed using eco-sourced indigenous plants;

Any changes to the Proposed Annual Works Programme (with the exception of works required to be undertaken without delay, for example, unscheduled works in response to flood events) shall be advised in writing by the Consent Holder to the Waikato Regional Council within 10 working days of the work commencing.

38. The Consent Holder shall distribute the Proposed Annual Works Programme required by condition 37, to the following parties on or before 30 June each year requesting comment(s) on the proposed works (if any) to be provided in writing within 20 working days of receipt:
- a) Department of Conservation;
 - b) Tongariro and Lake Taupo Anglers Club Inc.;

- c) Advocates for the Tongariro River;
- d) Taupo Fishery Advisory Committee via DOC;
- e) Tuwharetoa Maori Trust Board; and
- f) Ngati Turangitukua,
- g) Genesis Energy; and,
- h) Waipapa and Tokaanu Maori Lands Trust.

Comments received by the Consent Holder from the above parties regarding the proposed works shall be copied to the Waikato Regional Council.

Any changes to the Proposed Annual Works Programme (with the exception of works required to be undertaken without delay, for example, unscheduled works in response to flood events) shall be advised in writing to the groups listed in this condition.

39. The Consent Holder shall address any comments from the parties listed in condition 38, and upon completion of any related changes to the Proposed Annual Works Programme, advise these parties in writing of any changes. The Consent Holder shall submit the Proposed Annual Works Programme to the Waikato Regional Council prior to 1 October annually. The Consent Holder shall not commence these works until the Proposed Annual Works Programme has been approved by the Waikato Regional Council acting in a technical certification capacity.

Tangata Whenua Values

38. In the event that any archaeological remains are discovered, the works shall cease immediately in the vicinity of the discovery, and Tangata Whenua, the Historic Places Trust and the Waikato Regional Council shall be notified as soon as practicable and within 48 hours of a discovery. Works may recommence with the written approval of the Waikato Regional Council. Such approval shall only be given after the Waikato Regional Council has considered:

- a) Tangata Whenua interests and values,
- b) the Consent Holder's interests,
- c) Historic Places Trust advice, and
- d) any archaeological or scientific evidence.

Review

39. During the April to June period each year for the term of this consent Waikato Regional Council Resource Use Group may, following service of notice on the Consent Holder, commence a review of this consent under section 128(1) of the Resource Management Act 1991, for the following purposes:

- a) To review the effectiveness of the conditions of this resource consent in avoiding or mitigating any adverse effects on the environment from the exercise of this resource consent and if necessary to avoid, remedy or mitigate such effects by way of further or amended conditions; or
- b) To review the adequacy of and the necessity for monitoring undertaken by the Consent Holder and specifically to review the method and frequency of record collection for the purposes of determining the most appropriate method and frequency; or
- c) If necessary and appropriate, to require the holder of this resource consent to adopt the best practicable option to remove or reduce adverse effects on the environment.

Administration

40. The Consent Holder shall pay to the Waikato Regional Council any administrative charge fixed in accordance with section 36 of the Resource Management Act 1991, or any charge prescribed in accordance with regulations made under section 360 of the Resource Management Act.

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