

Form No: 320



Office use only

Consent number: _____

Application number: _____

Date received: _____

Document number: _____

AEE Document number: _____

New/Renewal

Draft report to be viewed: Yes / No

Eftpos / Cash / Cheque / Int Banking / Credit Card

Amount Paid \$ _____ Date Pd _____

Resource Consent Application

(Pursuant to sections 13(1), 14(1) and 88 of the Resource Management Act 1991)

Damming

(A separate application form is required for each consent being applied for)

Important: Please read carefully before completing the form

All applicants need to respond to all of the questions. If a particular section is not applicable to your application, please say so; do not leave the question blank. Questions may be answered in attached documentation if it is more convenient or insufficient space is provided on the form. If that is done, state specifically on the application form where the answer can be found (**include page numbers if referring to a separate report**).

If you have any questions relating to completion of this application form, please contact the Consents Department, Taranaki Regional Council on telephone (06)765-7127 or email consents@trc.govt.nz.


Lodge the application by signing below and sending the completed form to:

Mail: Taranaki Regional Council, Private Bag 713, Stratford 4352.
Attention: Consents Administration Officer

Email: consents@trc.govt.nz (if application is emailed please do not mail a hard copy unless requested to do so by the consents department.)

If you have not received an email acknowledgement for this application within 5 working days (for new applications) or 10 working days (for renewals) please contact consents@trc.govt.nz.

Application is hereby made for the resource consent detailed in this form

Signature of applicant or authorised agent: _____


Name: Stephen O'Sullivan

Date: 29-05-18

Please print full name of person who signed above.

1 Application Purpose

1.1 What is the purpose of this application?

New consent

Replacement for expiring
consent (renewal)

Consent number of expiring consent [5581-1](#)

Note: If you are applying to change the conditions of your consent, do not complete this form. You will need to complete form 510 instead.

2 Applicant Details

2.1 Applicant's name *(full name of proposed consent holder)*

Please complete either (a), (b) or (c) to whom consent is to be issued.

(a) Company [Opunake Power Ltd](#)

(b) Individual(s)

<i>First Name</i>	<i>Middle Name</i>	<i>Surname</i>
<hr/>		
<hr/>		

(c) Trust/Partnership Name

If Trust/Partnership: Full names of Trustees/Partners:

<i>First Name</i>	<i>Middle Name</i>	<i>Surname</i>
<hr/>		
<hr/>		
<hr/>		

2.2 Applicant's address for service *[not consultant's address]*

E-mail steve.osullivan@xtra.co.nz

Postal [13 Verona Place Stratford](#)

Phone [06 765 5237](#) Mob. [0274 474 555](#)

Name of person to contact regarding this application

Contact Person [Stephen O'Sullivan](#)

Phone

(if different from 2.2) Email.

(if different from 2.2)

2.3 Address for service (if different from above, i.e. consultant, lawyer, or other person handling application)

Contact Person _____

E-mail _____

Postal _____

Phone _____ Mob. _____

The Council will serve all formal documents electronically via the email address in 2.2 and 2.3 (if provided).

3 Site Details

Location

3.1 Name and address of owner or occupier at the site (if different from 2.1 and 2.2)

3.2 Location of activity (Including: Street/road name, number, and locality)

[South Road \(SH45\) Opunake](#)

3.3 Map Co-ordinates at point of dam (either Longitude/Latitude or NZTM):

_____ Longitude _____ Latitude OR

[1674548 E -5632144 N \(NZTM\)](#)

3.4 Legal description of property at site of activity (refer to land title or rates notice)

[Lot1 SS6265 Sub Sec 47 Borough of Opunake Blk IX Opunake SD](#)

3.5 Assessment/Valuation number of property (refer to land title or rates notice)

3.6 What is the name of the river or stream where the dam is to be installed?

[Waiaua River](#)

Map

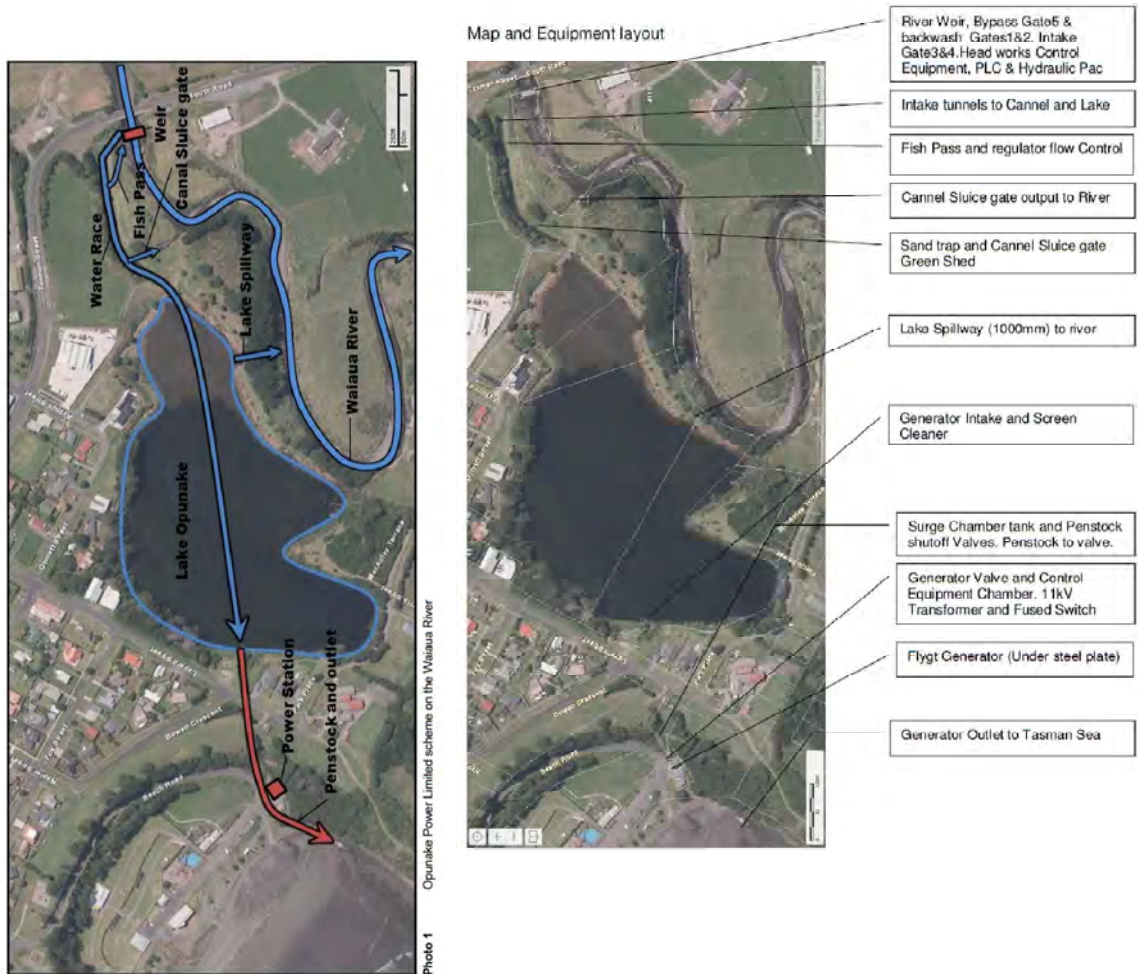
3.7 The application must include an aerial photograph or clear map showing the location of the proposed dam.

An aerial photograph of the site can be obtained free of charge from Taranaki Regional Explorer; <http://www.trc.govt.nz/taranaki-regional-xplorer/>. Alternatively, contact the Consents Department at the Council and request an aerial photograph to be provided.

Aerial photograph (or map) included

Please make sure the following is shown on your aerial photograph or map:

- Dam location
- Local Roads
- Property Boundaries
- Any other relevant features



Site Photographs

3.8 Photographs of the site showing the stream and its banks must be included with the application as indicated below:

<u>Photograph</u>	<u>Hard copy</u> (attached and labelled)	<u>Digital file provided</u>
At site of dam	<input type="checkbox"/>	<input checked="" type="checkbox"/> below (<i>filename</i>)
Looking upstream from site	<input type="checkbox"/>	<input checked="" type="checkbox"/> below (<i>filename</i>)
Looking downstream from site	<input type="checkbox"/>	<input checked="" type="checkbox"/> below (<i>filename</i>)

Photo at the site of the dam Waiaua River



Photo Looking up the Waiaua River



Photo from Bridge Looking down the Waiaua River



4 Details of the Activity

4.1 If you have discussed this proposal with a council staff member, please give the person's name here:

Bart Jansma

4.2 In your own words, briefly describe the activity you are undertaking:

The existing Dam that was commissioned in 1922 spans the Waiaua River 25M wide and 4.5M high, it has three automated Bypass/Sluice gates installed. The Dam is designed to divert the water from the Waiaua River to Opunake Lake for the Opunake Hydro Electric Scheme. The intake consists of a sluice box and pipe intake grills.

4.3 Does the dam already exist?

No

Yes Year constructed 1920-22

4.4 What is the purpose of the dam?

The existing Dam that was commissioned in 1922 spans the Waiaua River 25M wide and 4.5M high, it has three automated Bypass/Sluice gates installed. The Dam is designed to divert the water from the Waiaua River to Opunake Lake for the Opunake Hydro Electric Scheme. The intake consists of a sluice box and pipe intake grills

4.5 Is water to be taken from the dam?

No

Yes Rate 3900l/s up to 337,000 m³/day

Purpose To fill the Opunake Lake for the Opunake Hydro Electric Scheme

4.6 Was the dam designed by an engineer? Yes No

If 'yes', name of engineer cannot locate information from 1920's

4.7 Are plans for the dam design enclosed? Yes No

4.8 What is the volume of the dam reservoir (at normal levels)? Run of the River about 100 cubic metres

4.9 What is the catchment area upstream of the dam? 4500 hectares

4.10 What is the dam [to be] constructed of (i.e. building materials)? Concrete Re-enforced steel

4.11 Describe any works or temporary structures in the stream bed (*e.g. coffer dams, diversions, channel realignment*) that are proposed to facilitate dam construction. (*Plans may need to be attached.*)

N/A dam already constructed

OR

4.12 Give details of the construction methodology [*eg. Compaction standards, excavation of unsuitables, preparation of lake bed*].

N/A dam already constructed and consented

OR

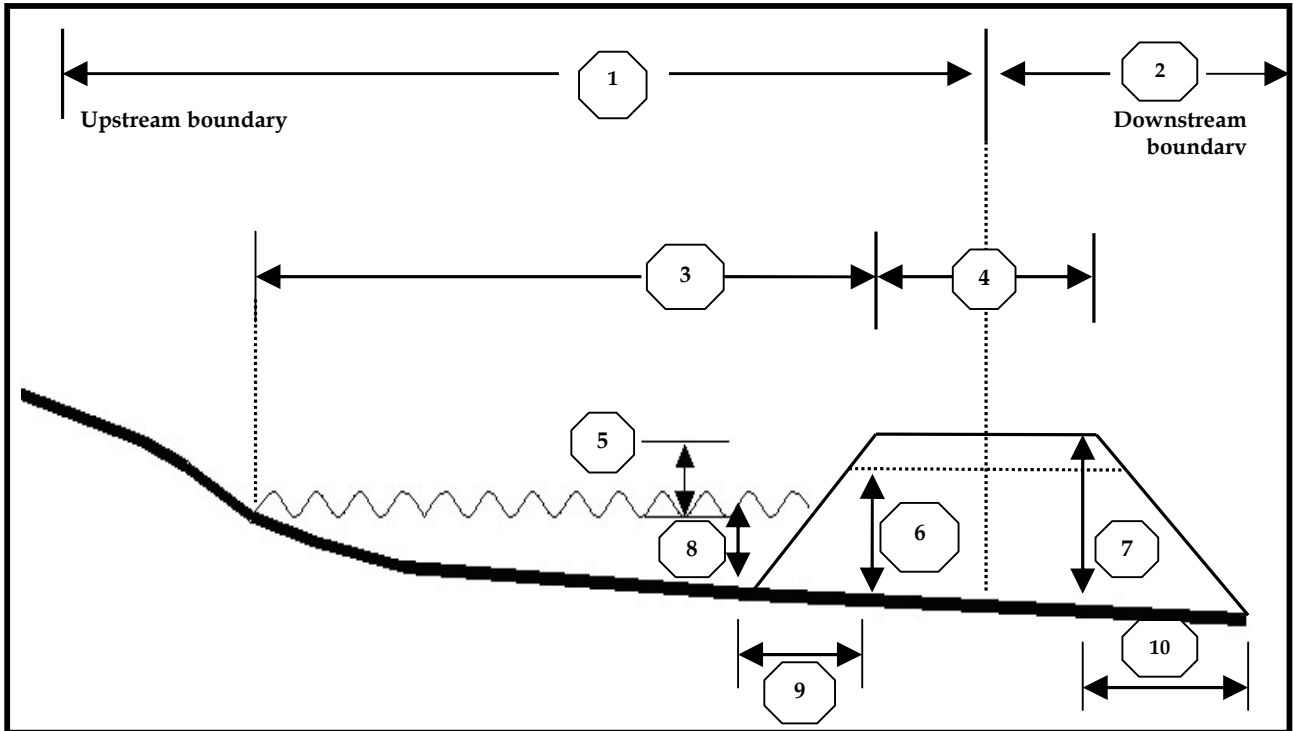
4.13 Describe any permanent works proposed in the stream bed [*eg. excavation of the reservoir*].

N/A dam already constructed and consented

OR

Dimensions of proposed dam - long section

4.14 Please fill in the diagram below showing all dimensions. Or attach any engineering plans if available.



1	Distance to upstream boundary	River _____ m
2	Distance to downstream boundary	River _____ m
3	Length of reservoir	River _____ m
4	Width of dam crest	0.2 _____ m
5	Freeboard [water level to crest]	River _____ m
6	Height of spillway invert	NA _____ m
7	Height of dam	4.5 _____ m
8	Maximum water depth [at normal level]	4 _____ m
9	Horizontal distance of upstream batter	River _____ m
10	Horizontal distance of downstream batter	River _____ m

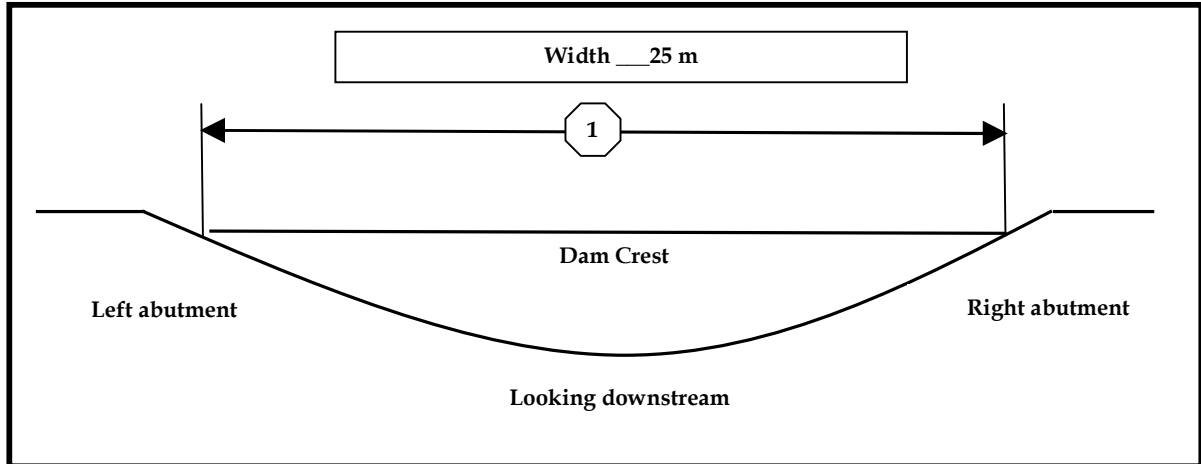
4.15 Plans attached

Yes

No

Dimensions of dam – cross section

4.16 Mark the width of the dam crest and the location of the spillway on the drawing below.

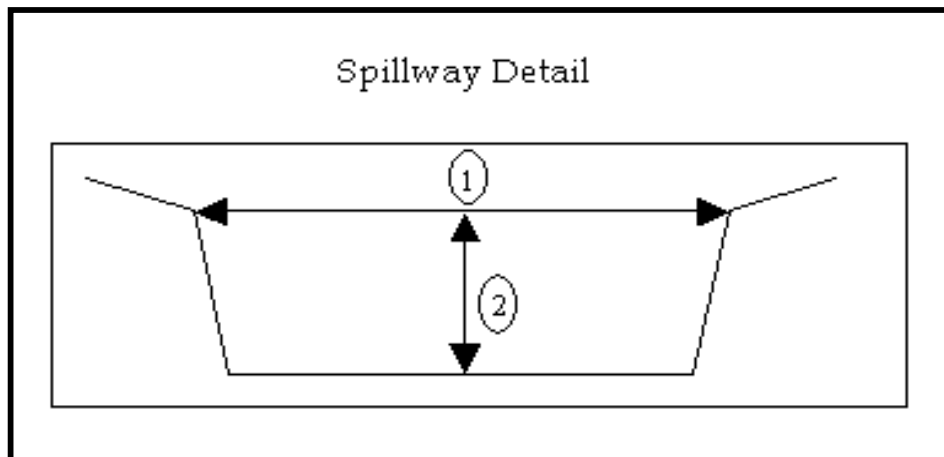


Spillway

4.17 Is a spillway proposed [or existing] to provide for flood flows?

No

Yes Mark the location of the spillway on the cross section diagram [Question 4.16] and give dimensions on diagram below [or attach plan].



1 Spillway width _____ 20 _____ m

2 Spillway depth _____ NA _____ m

- 4.18 How have you determined that the spillway capacity is adequate to pass flood flow? Show below or attach calculations.

The entire dam is designed as a spill way and has handled many 1/100Year floods in the 95 year life of the weir.

5 Assessment of Environmental Effects

An assessment of environmental effects [AEE] in accordance with schedule 4 of the Resource Management Act 1991 must be provided with the application. The AEE detail must correspond to the scale of the effects that the activity may have on the environment.

Completing the AEE section of this form will be sufficient for most applications. However for activities with actual or potential effects that are significant, a separate comprehensive AEE report including specific investigations may be required.

Schedule 4 can be viewed at www.trc.govt.nz/resource-consent-application-forms

- 5.1 If the application is to renew a consent, summarise the monitoring that has been undertaken and the environmental effects as identified by that monitoring.

A separate AEE coving the scheme has been sent to the TRC.

Annual TRC monitoring reports are available that generally included monthly inspections and that included river residual flow gauging.

The last fish survey was completed in 2014 and temperature and streambed community monitoring has been postponed due to very high sedimentation loading makes it impractical.

15Minute logs of various measurements are taken and provided to the TRC (required at 3 monthly intervals), these measurements are Fish Pass Level, Lake Level and Generation

Additional information includes when the river is in a flood state, operation of the Weir Sluice Bypass Gates.

The ongoing issues with sedimentation of the Waiaua River caused by sand deposition from erosion events on the mountain are causing ongoing problems – we have been working on options to mitigate this issue and the single most effective solution to date is to ensure the South Weir Gate (G5) opens on a regular basis (6hourly) and on heavy flows (1hourly) this has the effect of transporting the sedimentation down the river rather than into the intake canal.

The other major issue is the migration of native fish through the intake tunnels to the upper reaches of the Waiaua River. The native fish appear to traverse the fish pass but have trouble with the high velocity inside the intake tunnels. Previous consent holder has added a fish ladder inside the smaller tunnel. I have seen schools of fish above the intake gates and torrent fish above the intake screen, so some are getting through. There does not seem to be any issues for Eels, Trout and Elvers as I see plenty in the Fish Pass, Canal and both sides of the weir.

The TRC have made recommendations that a catch release program be instigated, we have tried a couple of fish trapping options with varying success, but a 3rd option has been discussed and will need to be implemented before the migratory native fish start to spawn.

OR

New Consent/No monitoring data

5.2 Will the dam be across a permanently flowing stream? Yes No

If the answer is no, comment on duration of dry period [eg. % of time, months per year]

5.3 Comment on the effect the dam will have on flow downstream during dry periods. If provision has been made to allow some flow past the dam, please give details.

The HEP scheme has been operating with a residual flow of 180 l/s for 12 Years. Scientific studies of the available in stream habitat make recommendations that 180 l/s is suffice to support native fish and brown trout life at 15% food producing habitat.

The residual flow is made up of 80l/s flow down the Fish Pass and the additional 100l/s is made up from weir gate seepages and flow from the canal sluice gate.

5.4 What provision is made for fish passage past the dam? Indicate species that will be provided for, and attach drawing of fish pass if appropriate. If no provision for fish passage is proposed explain why not.

There is a fish pass install that work very well with a flow of 80 l/s, but major issue is the migration of native fish through the intake tunnels to the upper reaches of the Waiaua River.

The native fish appear to traverse the fish pass but have trouble with the high velocity inside the intake tunnels. Previous consent holder has added a fish ladder inside the smaller tunnel. I have seen schools of fish above the intake gates and torrent fish above the intake screen, so some are getting through. There does not seem to be any issues for Eels, Trout and Elvers as I see plenty in the Fish Pass, Canal and both sides of the weir.

The TRC have made recommendations that a catch release program be instigated, we have tried a couple of fish trapping options with varying success, but a 3rd option has been discussed and will need to be implemented before the migratory native fish start to spawn

5.5 What provision has been made to cope with flood flows? If there is no spillway explain how floodwaters will pass safely.

The weir is essentially a diversion weir with minimal upstream storage with the full width of the river available to allow flood waters to flow over the weir.

5.6 Comment on the potential for damage in the event of dam failure (eg. effects on downstream bridges, roads, property).

There are no downstream bridges, and the weir is essentially a diversion weir with minimal upstream storage.

5.7 Comment on the effects of the reservoir (eg. potential flooding or other effects to neighbours).

The weir is essentially a diversion weir with minimal upstream storage.

5.8 Please note any other information that may assist the Council in processing your application.

6 Other Consents Required

6.1 What consents are required from other authorities for the proposed activity?

None

Consent Required

Authority: Taranaki Regional Council

Consent No Expiry Date	Location	Activity authorised
1795-4 1 st June 2018	South Road, (State Highway 45), Opunake	To take water from the Waiaua River in association with the Opunake hydro electric power scheme.
1796-3 1 st June 2018	Lake Opunake, Layard Street, Opunake	To take and use water from Lake Opunake for hydroelectric power generation in association with the Opunake hydroelectric power scheme
1797-3 1 st June 2018	Lake Opunake, Layard St, Opunake	To discharge sand and silt deposits from a diversion canal sand trap via a spillway to the Waiaua River in association with the Opunake hydroelectric power scheme
4658-2 1 st June 2024	Lake Opunake, Layard St, Opunake	To disturb the bed of Lake Opunake in the Waiaua catchment by removing reeds and flaxes from the edge of the lake.
4563-2 1 st June 2018	Opunake Beach, Beach Road, Opunake	To erect, place and maintain an outfall structure in the coastal marine area on the Opunake Beach foreshore in association with the Opunake hydroelectric power scheme
4744-2 1 st June 2018	Beach Road, Opunake	To discharge water from hydroelectric power generation through two marine outfall pipes into the Tasman Sea
5692-1 1 st June 2018	South Road [State Highway 45], Opunake	To disturb the bed of the Waiaua River by removing sediment build-up upstream of a weir for the purpose of maintaining the Opunake hydroelectric scheme intake
5581-1 1 st June 2018	South Road [State Highway 45], Opunake	To dam the Waiaua River in association with the Opunake hydroelectric power scheme

All are being applied for _____ Yes No

Note: For new dams where the dam height is at least 4 metres and the storage volume is at least 20,000 m³, a Building Consent is required. Building consents for dams are administered by Waikato Regional Council. Further information is available from the Council website www.trc.govt.nz [follow the links from the 'Resource Consents' Tab]

6.2 Will a building consent be required for your Dam?

No

Yes Dam height is at least 4 metres and storage volume is at least 20,000 m³

7 Assessment of Part 2 Matters and Policy

An assessment of the activity against the matters set out in Part 2 of the RMA and against any relevant provision of policy documents and regulations must be provided with the application. The assessment must be in sufficient detail to satisfy the purpose for which its required.

For most applications, the brief assessment provided below will be adequate. However for activities with significant policy implications, a specific, more comprehensive assessment is likely to be required.

The proposal is consistent with Part 2 of the RMA (the focus of which is to promote sustainable management of natural resources) and supported by the relevant Regional Plan.

The Regional Fresh Water Plan for Taranaki generally supports damming of water if the effects during construction and ongoing adverse effects such as those associated with restricted fish passage, reduced flow downstream and flooding are avoided, remedied or mitigated. These requirements can be met by including reasonable conditions on any consent granted.

I will adopt the RMA assessment above; or

will attach an alternative assessment

8 Consultation / Affected Parties

8.1 Please list the persons that you believe to have an interest in or that may be affected by the proposal.

PROPOSAL.

Name	Surname	Organisation	Att.	Phone	Cell Phone	Email
Bart	Jansma	TRC	Yes		272112362	Bart.Jansma@trc.govt.nz
Brian	Vincent	OPK Community Board	Yes		272000515	
Brian	Roach	STDC - Councillor	Yes		274457888	
Brent	Manning	STDC - Engineer	TBC	06 278 0555		Brent.Manning@STDC.govt.nz
Nikki	Palmer	Department of Conservation	TBC			npalmer@doc.govt.nz
Allen	Stancliff	Fish and Game New Zealand	Yes	06 757 9676	272639152	AStancliff@fishandgame.org.nz
Paddy	Walsh	Opunake angling & Surfcasting Club	Yes		272305820	paddy@actionaki.co.nz
Leanne	Horo	Taranaki Iwi - Authorised voice of Te Kāhui o Taranaki Trust	TBC	06 763 8242	274988746	admin@taranaki.iwi.nz
Nigel	Robinson	Landowner	Yes		274756073	elite.fs@xtra.co.nz
Heather	Sharpe	Landowner	Yes		211311961	
Rex	Langton	Opunake Lions Club	Yes		276527271	randllangton@xtra.co.nz

8.2 Detail the consultation undertaken with any interested/affected parties, and the views of those consulted. Attach correspondence if appropriate. The consultation undertaken and the information provided is to aid the Council in determining who may be adversely affected by the proposal.

Stake holders meeting held in 2011, Stake holders meeting to be held 1st June 2018.
Discussions have been had with Rex Langton and Heather Sharpe.

Meetings have been held on site with STDC councillor Brian Roach.

Discussions have been held with Allen Stancliff, Taranaki Fish and Game, he has indicated that the residual flow to be left about as is and to have a limited notification as it is a renewal.

Please note: Council may determine that your application is to be notified. But generally it will be non-notified if there are no more than minor adverse effects beyond the adjacent land, and if written approval is obtained from all those people who are likely to be adversely affected in a minor or more than minor way. Council will determine the people who are likely to be adversely affected and you will have the option of obtaining their written approval so that your application can be non-notified.

9 Draft report and conditions

9.1 Do you wish to review and make comment on a draft report and recommendation [including consent conditions] before any consent is issued?

Yes No

If you answered 'Yes' please consider agreeing to a timeframe extension [See section 10 below.]

10 Processing Timeframes

The RMA specifies timeframes for processing resource consent applications, [for example 20 working days for a non-notified application], however these timeframes can be extended with the applicant's agreement.

10.1 Do you agree to the Taranaki Regional Council extending RMA consent processing timeframes?

- Yes, provided that I can continue to exercise my existing consent until processing of this application is completed *[renewal applications]*.
- Yes, provided that the extension is for the specific purpose of discussing and trying to agree on consent conditions.
- Yes, provided that the application process is completed before ____/____/____ *[enter date]*

11 Value of investment (renewal applications)

Please complete this section only if your application is to renew an existing consent

11.1 Provide an assessment of the value of your investment that is dependent on this consent.

- | | | | |
|-----------------------|-------------------------------------|--------------------------|--------------------------|
| < \$10,000 | <input type="checkbox"/> | \$10,000 to \$50,000 | <input type="checkbox"/> |
| \$50,000 to \$250,000 | <input checked="" type="checkbox"/> | \$250,000 to \$1,000,000 | <input type="checkbox"/> |
| \$1 M to \$5 M | <input type="checkbox"/> | \$5 M to \$50 M | <input type="checkbox"/> |
| >\$50 M | <input type="checkbox"/> | | |

12 Surrender of existing consent [renewal applications only]

Please note that your existing consent is to be surrendered on the granting of this application.

13 Fees and charges

13.1 Initial Deposit payment – All applications must have a deposit paid before processing of the application will begin.

Non-notified applications

Amount to be Paid \$ 1196.00 (GST incl.) per application x _____ no. of applications lodged

= Total Amount Paid \$ _____ Payment date _____

Notified applications

Amount to be Paid \$ 8,050.00 (GST inclusive) per proposal

= Total Amount Paid \$8,050.00 Payment date 29-05-18

Note:

- 1) Assume your application is non-notified unless Council has informed you otherwise.
- 2) Purchase orders are not acceptable as payment for the deposit.
- 3) An invoice/receipt for the deposit will be issued shortly after payment has been received.

13.2 Payment method for initial deposit

Cheque made payable to Taranaki Regional Council (to be lodged with application documents)

Cash/Eftpos (to be made at Taranaki Regional Council offices, 47 Cloten Rd, Stratford)

Credit card payment made via Online Services at <https://onlineservices.trc.govt.nz>

Internet Banking – **please complete below, and enter all details on your internet banking payment to enable us to correctly identify your payment, otherwise processing of your application may be delayed.**

Payer Particulars:	C	O	N	S	E	N	T		D	E	P	
--------------------	---	---	---	---	---	---	---	--	---	---	---	--

Payer Reference:	O	P	L	-	5	5	8	1	-	1		
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Enter the reference you have used for your internet banking payment above. We suggest using your company name or surname, or if you make multiple applications use the location (road name or river) where activity is occurring, or consent number if known.

Taranaki Regional Council Account Details for Internet Banking

Bank	Branch	Account No.	Suffix
0 2	0 7 5 6	0 0 4 0 5 5 5	0 0 2

Please note this is a separate account for consent deposits only. It is a different account number to where you may make other Council payments, such as annual monitoring fees, or plant purchases.

13.3 Invoicing details: (where to send the invoice for this consent application)

Applicant or Consultant

13.4 Is the Council required to quote a purchase order number on future invoices for this application?

Yes

Order Number:

No

The deposit amount is required when an application is submitted and is an **initial deposit** towards the final cost of processing the application. Processing of the application will begin when the deposit is received. Purchase orders are not acceptable as payment for the deposit and we are unable to issue you an invoice/receipt until payment has been received. The final cost of processing is based on actual and reasonable staff time and disbursements spent processing the application. The final cost (less the deposit) is invoiced at the end of the application process, but there may also be interim invoices during the process.

Where there is more than one application required for the same proposal, an initial deposit is required for each application (non notified applications).

If the consent is notified, a larger deposit will be required. We will advise if the application is to be notified.

Withdrawn applications will incur the cost for work done up to the date of withdrawal.

Applications returned due to inadequate information will incur the cost of work done in receiving the application, assessing the information and returning the application.

All collection costs incurred in the recovery of a debt will be added to the invoice amount due. Overdue invoices will incur an interest charge of 12% per annum.

Details of Council's charging policy are in its 2015/2025 Long-Term Plan.
(www.trc.govt.nz/council/plans-and-reports/strategy-policy-and-plans)

The information you provide with your application is official information. It is used to help process your resource consent application and assess the impact of your activity on the environment and other people.

Your information is held and administered by the Taranaki Regional Council in accordance with the Local Government Official Information and Meetings Act 1987 and the Privacy Act 1993. This means that your information may be disclosed to other people who request it in accordance with the terms of these Acts. It is therefore important you let us know if your application includes trade secrets, commercially sensitive material or any other information you consider should not be disclosed.

Mail: Taranaki Regional Council, Private Bag 713, Stratford 4352.
Attention: Consents Administration Officer

Email: consents@trc.govt.nz (if application is emailed please do not mail a hard copy unless requested to do so by the consents department.)