# Resource Consent Application Form 10D



## For drainage maintenance and stream clearing work in streams and rivers

This application is made under Section 88 of the

Resource Management Act 1991

Phone: 0800 474 082

Website: www.orc.govt.nz

#### IMPORTANT NOTES TO THE APPLICANT

This application form is for activities that relate to stream clearing for the purposes of, but not limited to, land drainage, sediment build up removal and vegetation removal. We recommend that you read factsheet 9 before completing this application form. Guidance notes are also provided to assist in completing this application form; refer to page 10.

We also recommend that you contact Otago Regional Council's (the council) resource science unit to discuss any instream values prior to completing this form.

Applications for drainage maintenance and/or stream clearance works located within a flood protection scheme or drainage scheme identified in the council's Flood Protection Bylaw 2012, should obtain authorisation from the council prior to applying for resource consent. For more information please contact the council's engineering team.

This application form **does not** cover the following activities:

- Structures in, on, or over the bed
- Works relating to dams and water diversion
- Works relating to channel realignment or bed re-grading
- Works relating to culverts and bridges.

For these activities, please see our website, or contact the council's customer services unit to confirm resource consent requirements and which application form you will need to complete.

Ensure that you complete this application Form 10D **and** Resource Consent Application Form 1 **in full**. For any consent application to be processed efficiently in the minimum time and cost, it is critical that as much relevant information as possible is included with the application. If all the necessary information is not entered on the form or supplied with the application then council may **return your application**, request further information or publicly notify your application. This will lead to delays in the processing of your application and may increase processing costs.

This application form, when properly completed, should provide an adequate "Assessment of Effects on the Environment" (AEE) where the adverse effects of a proposal are not significant. However, this can only be determined on application.

If the effects of instream works are considered minor and written approvals are gained from all parties that the council considers may be adversely affected by the activity, then your application will proceed under non-notified consent provisions. If you are unable to supply the necessary written approvals from the affected parties then the council must limited notify or fully notify the application. Such applications take longer to be processed than non-notified applications and will incur additional processing costs. Details of consultation recommended are presented in this document.

_	ase select the activities for which y	ou are seeking consent
	Vegetation removal Sediment removal	
_	Other (please describe briefly)	
	outer (product decented attenty)	
PAI	RT A: LOCATION OF TH	PROPOSED ACTIVITY
<b>A</b> .1	What is the name of the water	er body(s) in which you propose to undertake the activity?
	(If the water body is unnamed, ple	ease note this and give the name of the water body that it flows into)
A.2	Does the water body(s) inc	clude Regionally Significant Wetlands (RSWs)?
If Ye	es, please provide the name of	the Regionally Significant Wetland(s):
A.3  If Ye work	Yes No (RSWs information and location of the property on which is the property of the property on which is the property of the pro	Significant Wetlands within a two kilometre radius of the proposed works?  Significant Wetland on the ORC website)  of the Regionally Significant Wetland(s) and the estimated distance from the proposed  ch the proposed activity is located:
	,	own Land river bed, please note on (d) below)
	Legal Description(s) (as shown	on Certificate of Title):
	Lot	DP
	Sec	Survey District (SD)
	Other (specify)	
	Council will obtain a Certificate	of Title to confirm details, if necessary.
	(d) Is the proposed activity loc	ated on Crown Land river bed?
	If Yes, give the legal descr	iption of the property adjacent to the proposed activity.

	(e)	Location area, surrounding land use, terrain:	
<b>A</b> .5	Please p	provide a property map showing:	
	•	The area where the activity is to occur, including watercourses and flow direction Specific sections of the watercourses for the proposed works (please mark these) The location of any existing structures in or over the section of the watercourse who Road frontages and names Catchment area, where it can be shown North point and scale bar.	ere works will occur
A.6 Take rephoto si	presentativ	include with this application form <i>labelled colour photographs</i> of work sites.  we photos at various locations along the full length of the proposed area, include GPS responsed.	eferences for each of the
A.7	Please o	lescribe the current nature of the waterway(s) for the proposed works:	
		tion for more than one watercourse can be included on separate sheets)	
	•	Range of width of watercourse(s)	m
	•	Approximate maximum depth of water	m
	•	Bed material (e.g. rocky, sandy, silty)	
	•	Flows (estimates of minimum and maximum, litres/second or cubic metres/second)	
	•	Water colour/clarity	
	•	Bank material (e.g. weathered rock, clay)	
	•	Bank vegetation_	
	•	Stability of stream banks (obvious signs of erosion)	
	•	Fish and invertebrate life (inc. native species)	
	•	Bank slope (e.g.1 metre vertically : 2 metres horizontally)	
	Catchme	ent characteristics (e.g. steep, forested catchment easy pastoral catchment)	
	************		

A.8 What is the catchment area upstream of the proposed location for the works, if known? (If unknown please ensure that the location of the works is marked clearly on an enclosed plan or map)

hectares / square kilometres :	(please circle the units you use)
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## PART B: WORKS ASSOCIATED WITH THE PROPOSED ACTIVITY

B.2 Please describe how the works will be undertaken, including:  (a) Machinery to be used.  (b) The duration of the proposed works (e.g. 12 hours, 5 days).  (c) The timing of the proposed works (e.g. specific months).  (d) Will the works be undertaken in flowing water, or will the water be diverted in any way to provide a dry working an (If the activity requires you to divert water and you cannot comply with Regional Plan Water (RPW) permitted at rules, Resource Consent Application Form 3 will need to be completed)  (e) Any other relevant details of the works? (e.g. battering or channel/bank reshaping and re-grassing of incised stream to and unstable escarpments to lessen ongoing input of sediment)							
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	eam banks						
(g) If battering or channel/bank reshaping is to occur, what is the approximate length that is estimated to occur we each section of channel clearance? (e.g 10 metres in every 200 metre section)							

B.3	Have any alternatives been considered when planning the proposal? e.g. spraying with glyphosate  Yes (Please list alternatives and explain why the proposed site and method was chosen; refer to fact sheet 9)
	☐ No (Please state why no alternatives have been considered)
B.4	Extent of stream clearing and drainage maintenance work to be undertaken, and intervals between operations in relation to this proposal:  (E.g. 500 metres per year for initial clearance for the first five of years of the consent, then 50 metres per year for ongoing maintenance works for the remainder of the consent)
(a) Hov	w many metres per year of clearance will be undertaken in the initial clearance?
(b) Are	you intending to carry follow up with maintenance clearing?
	(i) If yes, what are the anticipated metres compared with initial clearance?
	(ii) If yes, what is the likely interval between clearing operations, e.g. Specify the number of years

B.5 Please describe how you will minimise and contain the mobilisation of bed sediment, and /or bank disturbance to prevent sediment moving downstream or making its way into the watercourse:


#### PART C: DESIGN OF THE PROPOSED ACTIVITY

- C.1 Design of the proposed activity. This includes any works associated with battering or channel/bank reshaping Note: Please refer to guidance on page 19 to advise on what 'battering' is compared with 'channel/bank reshaping'
- Provide cross section diagrams, extending from at least the top of the left bank to the top of right bank, showing what sections of the watercourse(s) look like at present and what they will look like when works are completed.
- Include before and after depth and width measurements. You may need several cross sections where there are distinct differences either within or between watercourses.
- Note, if your application includes any channel/bank reshaping, you may be requested to provide additional cross sections
  carried out by a surveyor.
- Also note, if your proposal includes substantial channel/bank reshaping, you may require additional information to assist the
  assessment of your application including, as a minimum, an assessment of the effects of the proposed works on flood hazard
  and erosion.

## PART D: ASSESSMENT OF ENVIRONMENTAL EFFECTS OF PROPOSED ACTIVITY AND MITIGATION MEASURES

For questions D.1 through to D.6, please tick whether the statements listed apply to the work you propose to undertake and are applying to Otago Regional Council for resource consent.

D.1	Does the	site of	the prop	osed a	activity	ınclude:	
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(a)	Signs of known aquatic biota (including fish, koura			
	and mussels)?	Yes	No	Unknown
(b)	Areas where food is gathered from the water body?	Yes	No	Unknown
(c)	Natural Wetlands?	Yes	No	Unknown
(d)	Recreational activities (e.g. swimming, fishing, canoeing?)	Yes	No	Unknown
(e)	Areas of special aesthetic value (e.g. waterfalls)?	Yes	No	Unknown
(f)	Areas or aspects of significance to lwi?	Yes	No	Unknown
(g)	Water takes?	Yes	No	Unknown
(h)	Flood hazard?	Yes	No	Unknown

If you have answered "Yes" to any of the above, please describe below:

D.2	Water (	Quality	
Yes	Water (	Not App	licable
			Fuel storage tanks and machinery working and stored in the construction area shall be maintained at all times to prevent leakage of oil and other contaminants into water, and no refuelling of machinery shall occur within the watercourse.
			All machinery shall be water-blasted prior to being brought on site, to reduce the potential for pest species being introduced to water.
			At no time during the proposed works shall machinery be washed within the bed of the watercourse.
			All reasonable steps shall be taken to minimise the release of sediment to water by undertaking the following methods:
			☐ Sediment traps
			Undertaking work when flows are low / watercourse is dry
			Other (please specify)
D.3	Bed/Ha	bitat Distu	rbance
Yes	No	Not App	plicable
			Works will be undertaken only when flows in the watercourse are low.
			Works will not be undertaken between certain months to avoid disturbing spawning habitat (please specify months)
			Fish passage will be provided for during works.
			Bed disturbance will be limited only to the extent necessary to carry out the works.
			Machinery used to undertake the works will not be operated from the wet bed.

If you have answered "No" to any of the measures above, you MUST explain why:

D.4	Erosion		
Yes	No	Not Appli	cable
			Damage to riparian vegetation will be minimised when undertaking the works.
			Any damage to the stream banks, including riparian vegetation, as a result of the works will be reinstated within one month from the completion of the works.
If you	have ansv	vered "No"	to any of the measures above, you MUST explain why:
D.5		ater Users	
Yes	No	Not App	
			Lawful water takers downstream of the proposed works will not be adversely affected.  Recreational users of the watercourse will not be affected.
	ful water ta		reational users will be affected, please explain the measures you will take to remedy or mitigate
D.6	Other Wa	aterway Va	alues
Yes	No	Not App	licable
			Amenity and natural character of the watercourse will not be significantly affected.  The site will be tidied upon completion of works.  Public access to the watercourse will not be impeded.

			Hours of work will be between 7.00 am and 7.00 pm, Monday to Friday, and will not be undertaken on public holidays. If hours of work are to differ from that given, please state here:
If you			" to any of the measures above, you MUST explain why:
Yes	No	Not Ap	plicable  Heritage values will not be affected (Schedule 1C of the Regional Plan Water)
			Cultural values will not be affected (Schedule 1D of the Regional Plan Water)
If herit	Ū		es will be affected, please provide measures to remedy or mitigate adverse effects on them:
watero	course or		cts of the proposed works that could adversely impact on the natural and human use values of the y Significant Wetland not identified above? Please list and discuss any proposed measures to avoid, effects:

## PART E Statutory Assessment

The Resource Management Act as of March 2015 requires this application to include an assessment of the proposed activity against the relevant documents. In this case, the Regional Policy Statement, the Regional Plan: Water and Iwi Management Plans are the most relevant documents. Answering the following questions will satisfy this requirement. If you are unable to

answer the questions below, or you believe your proposal is inconsistent with the relevant policies and documents discussed, it is recommended you seek professional planning assistance to help you with your application.

#### F.1 Regional Policy Statement (RPS)

The Regional Policy Statement for Otago (RPS) provides an overview of the resource management issues for the Otago Region and the ways of achieving integrated management of its natural and physical resources. The most relevant objectives and policies are contained in Chapter 6 (Water), Chapter 9 (Built Environment) and Chapter 11 (Natural Hazards). The following policies may be relevant to your application:

- safeguard the life-supporting capacity of Otago's resource through protecting the quantity and quality of those resoruces (6.4.3),
- maintain and enhance the ecological, intrinsic, amenity and cultural values of Otago's water resources (6.4.4),
- avoid, remedy or mitigate degradation of the resource resulting from the use, development or protection of the beds and banks of water bodies and adjacent land areas (6.4.5),
- mitigate the threat of flooding and riverbank erosion from the use, development or protection of water bodies (6.4.6),
- maintain and enhance public access to and along the margins of Otago's water bodies (6.4.7 and 6.5.10),
- allow for the community's use, development or protection of the beds and banks of water bodies providing adverse effects are avoided, remedied or mitigated while considering the maintenance and enhancement of the natural functioning of the river system and the need to provide mitigation for flooding and erosion (6.5.9),
- protect areas of natural character, outstanding natural features and landscapes of Otago's wetlands, lakes, rivers and their margins (6.4.8),
- avoid, remedy or mitigate the adverse effects of Otago's built environment on natural and physical resources (9.4.3),
- minimise the adverse effects of urban development and settlement, including structures, through avoiding, minimising or
  mitigating discharges of contaminants to water, and significant irreversible effects on natural values and character, values of
  significance to Kai Tahu, intrinsic values of ecosystems and habitats of indigenous fauna, heritage values, amenity values,
  and salmon or trout habitat (9.5.4),
- avoid, remedy or mitigate the adverse effects of hazard mitigation measures on natural and physical resources (11.4.4),
- take action necessary to avoid or mitigate adverse effects of natural hazards on human life, infrastructure and property, the natural environment and heritage sites (11.5.2).

Discuss now your proposal is in accordance with the relevant policies above:


#### F2: Proposed Regional Policy Statement (pRPS)

The pRPS was notified on 23 May 2015. Submissions have been heard and a decision is to be released shortly. The pRPS needs to be given consideration and weighting principles apply. The following policies may be relevant to your application:

- taking the principles of Te Tiriti o Waitangi into account (Policy 1.1.2)
- managing the natural environment to support Kāi Tahu wellbeing (Policy 1.2.1)
- recognising and protecting important sites and values of cultural significance to Kāi Tahu (Policy 1.2.2 and 1.2.3)
- managing for freshwater values including
  - o support healthy ecosystems in all Otago's rivers, lakes, wetlands, and their margins
  - o retain the range and extent of habitats provided by freshwater
  - o protect outstanding water bodies and wetlands
  - o protect migratory patterns of freshwater species, unless detrimental to indigenous biodiversity
  - o maintain good water quality or enhance it where it has been degraded
  - o maintain or enhance the natural functioning of rivers, lakes, and wetlands and their riparian margins
  - o retain the quality and reliability of existing drinking water supplies
  - protect Kāi Tahu values
  - o provide for other cultural values
  - o protect important recreational values
  - o maintain the aesthetic and landscape values of rivers, lakes and wetlands
  - o avoid the adverse effects of pest species, prevent their introduction and reduce their spread
  - o mitigate the adverse effects of natural hazards, including flooding and erosion
  - o maintain the ability of existing infrastructure to operate within their design parameters (Policy 2.1.1)
- managing for the values of beds of rivers and lakes, wetlands, and their margins including (in addition to those mentioned above)
  - protect or restore their natural functioning
  - maintain ecosystem health and indigenous biodiversity
  - o retain the range and extent of habitats supported
  - o maintain or enhance natural character
  - o maintain their aesthetic and amenity values
  - o maintain bank stability (Policy 2.1.2)
- managing for ecosystem and indigenous biodiversity values (Policy 2.1.6)
- identifying and managing significant indigenous vegetation and significant habitats of indigenous fauna (Policy 2.2.1 and 2.2.2)
- identifying and managing outstanding water bodies and wetlands (Policy 2.2.12 and 2.2.13)
- applying an integrated management approach among resources and within a resource (Policy 2.3.1 and 2.3.2)
- applying an integrated management approach for freshwater catchments (Policy 2.3.3)
- recognising natural and physical environmental constraints (Policy 3.1.1)

- assessing natural hazard likelihood and consequence, managing natural hazard risk, assessing activities for natural hazard risk, avoiding increased natural hazard risk and reducing natural hazard risk (Policy 3.2.2 to 3.2.7)
- protecting features and systems that provide hazard mitigation (Policy 3.2.9)
- mitigating natural hazards and locating hard mitigation measures (Policy 3.2.10 and 3.2.11)
- adapting to, or mitigating the effect of climate change (Policy 3.3.2)
- integrating infrastructure with land use including
  - Recognising functional needs of infrastructure of regional or national importance
  - Designing infrastructure to take into account: actual and reasonably foreseeable land use change; the current population and projected demographic changes; actual and reasonably foreseeable change in supply of, and demand for infrastructure services; natural and physical resource constraints; effects on the values of natural and physical resources; co-dependence with other infrastructural services; and the effects of climate change on the long term viability of that infrastructure
  - Managing urban growth within areas that have sufficient infrastructure capacity; or where infrastructure services can be upgraded or extended efficiently and effectively
  - Co-ordinating the design and development of infrastructure with the staging of land use change, including with: structural design and release of land for new urban development; or structural redesign and redevelopment within existing urban areas (Policy 3.4.1)
- managing infrastructure activities
  - Maintain or enhance the health and safety of the community
  - o Reduce adverse effects of those activities, including cumulative adverse effects on natural and physical resources
  - o Support economic, social and community activities
  - o Improve efficiency of use of natural resources
  - o Protect infrastructure corridors for infrastructure needs, now and for the future
  - o Increase the ability of communities to respond and adapt to emergencies, and disruptive or natural hazard events
  - o Protect the functioning of lifeline utilities and essential or emergency services (Policy 3.4.2)
- managing hazard mitigation measures, lifeline utilities, and essential and emergency services (Policy 3.4.4)
- recognising national and regional significance of infrastructure, managing adverse effects of infrastructure that has national or regional significance and protecting infrastructure of national or regional significance (Policy 3.5.1 to 3.5.3)
- using existing renewable electricity generation structures and facilities, promoting small scale renewable electricity
  generation, protecting the capacity of renewable electricity generation, enabling more efficient transport of energy and
  protecting electricity generation infrastructure (Policy 3.6.1-3.6.5)
- maintaining and enhancing public access (Policy 4.1.1)
- recognising heritage themes and managing historic heritage values (Policy 4.2.1 and 4.2.3)
- encouraging environmental enhancement (Policy 4.4.3)
- applying an adaptive management approach (Policy 4.5.2)
- controlling the introduction and spread of pest plants and animals (Policy 4.5.5)

Discuss how your proposal is in accordance with the relevant policies above:


#### F3: Regional Plan: Water for Otago (RPW)

The following policies from the RPW may be relevant to your application:

- to undertake the works in a manner that avoids, in preference to remedying or mitigating, adverse effects on natural values and character, ecology and habitat, water supply values, historic places or archaeological sites, values of significance to Kai Tahu, amenity values, lawful water users and causing or exacerbate flooding, erosion, land instability, sedimentation or property damage (5.4.2).
- to avoid adverse effects on existing lawful uses and priorities (5.4.3).
- to recognise Kai Tahu's interests in Otago's lakes and rivers by promoting opportunities for their involvement in resource consent processing (5.4.4).
- to recognise the Water Conservation (Kawarau) Order 1997 by preserving, as far as possible, the waters set out in Schedule 1 of the Water Conservation Order in their natural state, protecting the outstanding characteristics of waters set out in Schedule 2 of the Water Conservation Order, and sustaining the outstanding amenity and intrinsic values set out in both Schedules of this order (5.4.5).
- legal public access to and along the margins of lakes and rivers will only be restricted where necessary...to protect the health or safety of people and communities, to ensure a level of security consistent with the purposes of a resource consent; or in other exceptional circumstances sufficient to justify the restriction notwithstanding the national importance of maintaining that access (5.4.6).
- where existing public access to or along the margins of Otago's lakes or rivers is restricted, the provision or enhancement of alternative access may be required with respect to the restriction of existing legal public access, and will be promoted with respect to the restriction of informal access arrangements (5.4.7).
- requires regard to topography, natural flow characteristics or water levels, water colour and clarity, ecology, the extent of
  use or development within the catchment, when considering adverse effects on natural character of lakes, rivers and their
  margins (5.4.8).
- requires regard to aesthetic values and recreational opportunities provided by a lake or river, or its margins when considering adverse effects on amenity values (5.4.9).
- requires regard to any heritage values of any site, building, place or area for any activity involving surface water or the bed or margin of any lake or river (5.4.10).
- Council will encourage and support community initiatives that assist in the achievement of the maintenance or enhancement of lakes and rivers and their margins (5.4.13).
- manage water quality in Otago lakes, rivers, wetlands and groundwater by: recognising the differences in the effects and management of point source and non-point source discharges; defining in Schedule 15, characteristics and standards that describe good quality water; maintaining good quality water; enhancing water quality where is does not meet Schedule 15 standards; and recognising discharge effects on groundwater (7.B.1).

- avoid objectionable discharges of water or contaminants that degrade the natural and human use values of Otago lakes, rivers, wetlands and groundwater (7.B.2).
- allow discharges of water or contaminants to Otago lakes, rivers, wetlands and groundwater that minor effects or are short term (7.B.3).
- encourage adaptive management and innovation that reduces the level of contaminants in discharges (7.B.8)
- to give priority to avoiding changes in the nature of flow and sediment processes in those water bodies, where those changes will cause adverse effects on the stability and function of existing structures; associated erosion, sedimentation or land instability; or any reduction in the flood carrying capacity of any lake or river (8.4.1).
- provides for fish migration through structures in watercourses (8.5.1).
- to have regard to any adverse effect on the spawning requirements of indigenous fauna, and trout or salmon; bed and bank stability; water quality; amenity values caused by any reduction in water clarity; and downstream users (8.6.1).
- to promote best management practices for activities that occur within or adjacent to the bed of lakes and rivers in order to avoid, remedy or mitigate any adverse effect (8.6.2).
- requires practical alternatives to the reclamation of the bed of any lake or river, and the deposition of any substance in, on or under, the bed or margin of any lake or river to be considered (8.8.1).
- requires only cleanfill be used to create any reclamation of the bed of a lake or river (8.8.2).
- identifies the regionally significant wetland values of Otago's wetlands (10.4.1).
- priority will be given to the avoidance of adverse effects of activities on Regionally Significant Wetlands and values. Remedying or mitigating adverse effects will be considered only where those effects can not be avoided. (10.4.2).
- financial contributions may be required where the avoidance, remedy or mitigation of adverse effects is not possible (10.4.2A).

Discuss how your proposal is in accordance with the relevant policies above:

F.4: Kai Tahu ki Otago Natural Resource Management Plan 2005 (NRMP).

The following requirements apply to river and instream works:

- To require that work be undertaken when water levels are naturally low or dry.
- To require that works are not undertaken during spawning season of certain fish species and fish passage is provided for at all times.
- To require that any visual impacts at the site of the activity are minimal.
- To require that all practical measures are undertaken to minimise sediment or other contaminant discharge and that wet concrete does not enter active flow channels.
- To require that machinery only enters the dry bed of the waterway to the extent necessary to undertake the work, and that
  it is kept clean and well-maintained, with refuelling occurring away from the waterway. Machinery operating in flowing water
  is to be discouraged.
- To require that buffer zones are established and agreed upon with the Papatipu Runaka between the flowing water and the site of any river or instream work.

Discu	ss how your proposal is in accordance with the relevant policies above:
PAR	T F: CONSULTATION
E.1	Please comment on any consultation undertaken with those persons/parties who may be interested in, or potentially affected by, your proposal. (e.g. downstream landowner, other water users, neighbours, The Department of Conservation, The Fish and Game Council (Otago or Central South Island), Iwi (Aukaha, Te Ao Marama Incorporated):
E.2	Please attach any written approvals obtained using the council's standard Form 1 - Resource Consent Application.

#### PART G: IS YOUR APPLICATION COMPLETE?

In order to provide a complete application, have you remembered to:

(a)	Fully complete this schedule and Form 1 (Resource Consent Application)	
(b)	Include a location/site plan	
(c)	Include labelled colour photographs	
(d)	Include any technical plans or drawings	
(e)	Attach any appropriate additional information	

## NOTES TO PROVIDE GUIDANCE ON COMPLETING THE ABOVE FORM

#### PART A: LOCATION OF THE PROPOSED ACTIVITY

#### Question A.1

In many instances tributaries to larger water bodies do not have official (or legally recognised) names. If this is the case describe the water body as "an unnamed tributary of ......". If the water body has an unofficial local name you could continue to write "... locally known as......". You can determine if a name is legally recognised by seeing if it is written on published topographic maps, or if any road bridges crossing it state the name of the water body (i.e. New Zealand Transport Agency or Automobile Association signs).

#### Question A.2 and A.3

Locations of Regionally Significant Wetlands within Otago can be found on the Otago Regional Council website: <a href="http://www.orc.govt.nz/Information-and-Services/Wetlands-Inventory/">http://www.orc.govt.nz/Information-and-Services/Wetlands-Inventory/</a>. Please note that any wetland located more than 800 metres above sea level is considered regionally significant.

#### Question A.4

Please provide the name and address of the owner of the land where the works will be undertaken or, if owned by the Crown (i.e. Crown Land river bed), the land adjacent to it.

An example for section (e): The property includes x streams and creeks draining off the base of Green Range into the Black river. The streams run for 12 months of the year with higher flows in the winter. The majority of streams are fenced and are generally clear during steady flows.

#### Question A.5

Maps with New Zealand Transverse Mercator (NZTM) co-ordinates can also be found at your local library, bookstores or can be downloaded from the Land Information New Zealand website: http://www.linz.govt.nz/topography/topo-maps/index.aspx

#### **Question A.6**

Attach labelled coloured photographs of the proposed area. Include labels to indicate key variables. Colour photographs will assist Otago Regional Council engineers to make an assessment of your application. In applications with large scale intended clearance, photos provided should show the main sections that require clearance (areas with most sediment/vegetation build up).

Use New Zealand Transverse Mercator (NZTM 2000) e.g. E1756730 N591974. If possible, use a Geographic Positioning System (GPS) device to obtain a map reference accurate to 10 metres. The northing follows the easting.

#### Question A.7

Record your observations on site.

Obvious signs of erosion would be slumping, scarping and unstable banks.

Bank slopes can be recorded as an estimate ratio, e.g. 1 metre vertically to 2 metres horizontally (1:2).

#### Question A.8

The catchment area upstream of the works is important to determine if the works are appropriately designed to pass expected flood flows.

### PART B: WORKS ASSOCIATED WITH THE PROPOSED ACTIVITY

#### Question B.1

Please state the reasons for the proposed works. (Eg to improve drainage)

#### Question B.2

Please describe how the works will be undertaken (step-by-step process) in as much detail as possible. Explain what materials and machinery will be used and when the works will occur. If measures are proposed to reduce potential effects (e.g. diverting the flow around the works sites, no undertaking works during game fish spawning season etc.), discuss these measures here.

#### Question B.3

What alternative options were considered?

#### Question B.4

In this section you will specify how much clearance works you wish to achieve over the term of the consent. This will include the initial capital work for the first 'x' number of years, then the ongoing maintenance works for the remainder of the consent (the maintenance works will be considerably smaller than initial).

You should think about the likely interval between clearing operations in any one location. When determining this period you need to take into account the time it would take for sediment and vegetation to build up to the point that it would need to be removed again. Time should also be given for the natural ecosystem of the watercourse to recover.

Spot clearance is considered small scale clearance, primarily to remove obstructions and small quantities of accumulated sediment and vegetation. Cases where the obstructions need to be removed as a result of a storm event may meet Permitted Rule 13.5.1.2. For more information on our permitted activity rules please refer to our website: <a href="http://www.orc.govt.nz/Publications-and-Reports/Regional-Policies-and-Plans/Regional-Plan-Water/">http://www.orc.govt.nz/Publications-and-Reports/Regional-Policies-and-Plans/Regional-Plan-Water/</a>

#### **Question B.5**

Please describe measures to reduce the dry bed disturbance e.g. sediment traps

## PART C: WORKS ASSOCIATED WITH THE PROPOSED ACTIVITY

#### Questions C.1

The cross sections can be used to accurately determine the extent of bed disturbance that will be required. Please provide cross sections of what the waterway currently looks like and what it will look like after the channel clearance. The cross sections should at least extend from the top of the left bank to the top of the right bank. If any battering/bank disturbance is to occur also identify this in the cross sections.

The cross sections can be as simple as a sketched diagram with a scale (metres) identifying the left and right banks and showing the height/bank full depth, width and areas of clearance identified. If the cross section of the watercourse differs between sites, or if you propose to clear on more than one watercourse, please provide additional cross sections that are representative.

If you are planning on undertaking channel/bank reshaping you may be required to use a surveyor to provide the cross sections; note that minor bed disturbance is not channel reshaping. Refer to the description below of what the council would consider as 'battering' in comparison to 'channel reshaping'.

Battering is a term used for small scale bank disturbance; the bank disturbance is only to remove the upper-most bank of a channel and does not considerably change the hydraulics of the stream or the cross-sectional area. Bank or channel reshaping is a more large-scale bank disturbance extending further towards the wet bed of the watercourse. This would change the cross-sectional area of the watercourse and the stream hydraulics. Figure 1 below shows a cross section a typical

waterway (blue solid line). The green dashed line is an example of what would be considered as 'battering', the red dashed line is an example of what would be considered as 'bank or channel reshaping'.

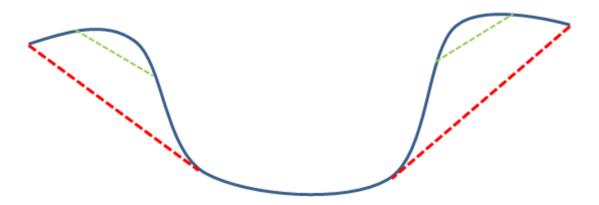


Figure 1: Cross section of water course with example of battering compared with bank/channel reshaping

#### PART D: ASSESSMENT OF ENVIRONMENTAL EFFECTS

#### Questions D.1 to D.7

A typical set of measures to avoid, remedy or mitigate effects from instream works are detailed. These have been provided as tick boxes to check if you intend to undertake these measures. However, if you do not intend to undertake these measures, you must state why (they may not be relevant to your application, or you may be undertaking work in an atypical manner and proposing an alternative method to avoid, remedy or mitigate those effects). In addition, if you can think of any other effects of your proposed works you should list them in the space provided, and methods to avoid, remedy or mitigate them. Schedules of the Regional Plan Water (RPW) can be found on the ORC website: <a href="http://www.orc.govt.nz/Publications-and-Reports/Regional-Plans/Regional-Plan-Water/">http://www.orc.govt.nz/Publications-and-Reports/Regional-Plans/Regional-Plan-Water/</a>

#### PART E: STATUTORY ASSESSEMENT

The Resource Management Act requires every consent application to include an assessment of the proposed activity against the objectives and policies of the relevant council plans and other statutory documents such as regulations and national policy statements.

In this section of the form we have set out what we consider to be the relevant matters that must be considered. We agree that this section looks daunting; however we have included it to save you the time of having to source these provisions yourself.

Copies of the RPS, PRPS and RPW can be found on the Councils website (<a href="http://www.orc.govt.nz/Publications-and-Reports/Regional-Policies-and-Plans/">http://www.orc.govt.nz/Publications-and-Reports/Regional-Policies-and-Plans/</a>). Copies of the Kai Tahu ki Otago Limited Resource Management Plan can be found on their website (<a href="http://www.ktkoltd.co.nz/pages/13/Resource-Management">http://www.ktkoltd.co.nz/pages/13/Resource-Management</a>).

#### PART E: CONSULTATION

#### Questions E.1 and E.2

In the first instance, it is recommended that you contact the council's resource science unit (water scientists) to determine if we have any information about instream values in the waterways. Where there is scientific data on the national fresh water database, they can help you with information on the types of fish present, what issues are important for that catchment, some do's and don't's in terms of how the works are carried out, (eg timing to avoid fish spawning).

The council can advise you of any parties considered to be potentially adversely affected by your proposed activity and can also instruct you regarding iwi consultation.

If an application is submitted without written approvals from potentially affected parties (if any are identified), the application goes "on hold" until these written approvals have been received.

#### Contact details:

Department of Conservation: 77 Stuart Street Dunedin 9058 or PO Box 5244 Ph: 03 4770677
Kai Tahu Ki Otago: Fourth Floor, 258 Stuart Street, Dunedin 9054 or PO Box 446 Ph: 03 477 0071
Te Ao Marama Incorporated: Murihiku Marae, 408 Tramway Road, Invercargill 9844 or PO Box 7078 Ph: 03 931 1242
Otago Fish and Game Council: Corner Hanover & Harrow Streets, Dunedin 9054 or PO Box 76 Ph: 03 479 6552
Central South Island Fish and Game Council: 32 Richard Pearse Drive, Temuka 7948 or PO Box 150 Ph: 03 615 8400

#### PART F: IS YOUR APPLICATION COMPLETE?

A complete application will assist Otago Regional Council in efficiently processing your application. If information is missing or inadequate your application may be returned to you or declined. Applications that are incomplete or do not provide sufficient information will be delayed and will cost more.

If you have any queries relating to information requirements, please contact the Otago Regional Council offices:

Dunedin office 70 Stafford St Private Bag 1954 Dunedin 9054 Phone 03 474 0827 Fax 03 479 0015 Alexandra office Dunorling St PO Box 44 Alexandra 9340 Phone 03 448 8063

Fax 03 448 6112

Freephone: 0800 474 082 Website: www.orc.govt.nz