APPLICATION FOR RESOURCE CONSENT
FORM B: DAMMING AND DIVERSION OF WATER

Waikato REGIONAL COUNCIL
Te Kaunihera ā Rohe o Waikato

NOTES

Resource use activities must meet all the conditions of any relevant Permitted Activity Rules in the Waikato Regional Plan or a resource consent from the Waikato Regional Council is required. This form will help you apply for a resource consent.

- You must fully complete this activity form and supply all the required information. Provide as much detail as you can where the questions are relevant to your activity. We request that, where possible, you provide electronic copies of any supporting information (for example, on CD). Doing so may reduce administrative costs charged to you.
- You must also supply completed Forms A and C.
- **You must pay the required initial deposit when you submit this consent application.**
- Failure to provide the required information and payment will delay the processing of your application. If you do not provide adequate information then we will not be able to process your application, and will return it to you. If you do not pay the required fees, we may stop processing your application until payment is received.

FOR OFFICE USE ONLY	
File:	
Client ID:	
Project:	

If you need any further help, please phone our Resource Use staff on 0800 800 401.

LOCATION

1. What is the name of the waterbody to be dammed or diverted? (if the waterway is a drain or an unnamed stream, then what is the name of the stream, river, lake or wetland that it flows into)

2. If known, please supply relevant map coordinates of the activity or activities, preferably as New Zealand Transverse Mercator 2000 (NZTM2000 references). These locations must also be clearly identified on the location map you have supplied with Form A

TYPE OF RESOURCE CONSENT SOUGHT

3. The resource consents sought relate to the following activities.

Please tick	Previous consent number
◯ Dam	
◯ Weir	
◯ Streambed diversion	
◯ Stopbank or other diversion	

NATURE OF THE PROPOSAL

Include with this application form labelled photographs of the site in its present form which include:

- any existing structures at the site
- the view of the waterway downstream of the site
- the view of the waterway upstream of the site
- for existing dams: upstream batter, downstream batter and crest
- for diversions: the stream and its banks where it will be affected by the works.

4. Please describe the purpose of the dam, weir or diversion.

5. Please describe the general design of the structure or works required in the watercourse, the materials to be used, and the construction methods to be employed, what compaction will be undertaken, for example.

If there are engineering plans of the proposed structure or plans of the works please enclose a copy with the application. Please include your own diagram on a separate page, if this will assist in describing the proposal, and attach it to this application form.

6. Have any alternatives been considered when planning the proposal?

◯ Yes, please explain ◯ No

7. Please describe the current nature of the waterway at the proposed site for the works.

Water colour/clarity	
Flow	
Bed material (for example, rocky, silty)	
Bank material	
Vegetation	
Erosion	
Fish/invertebrate life	
Other	

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

_____ ◯ ha / ◯ acres / ◯ km2 *(tick the units you use).*

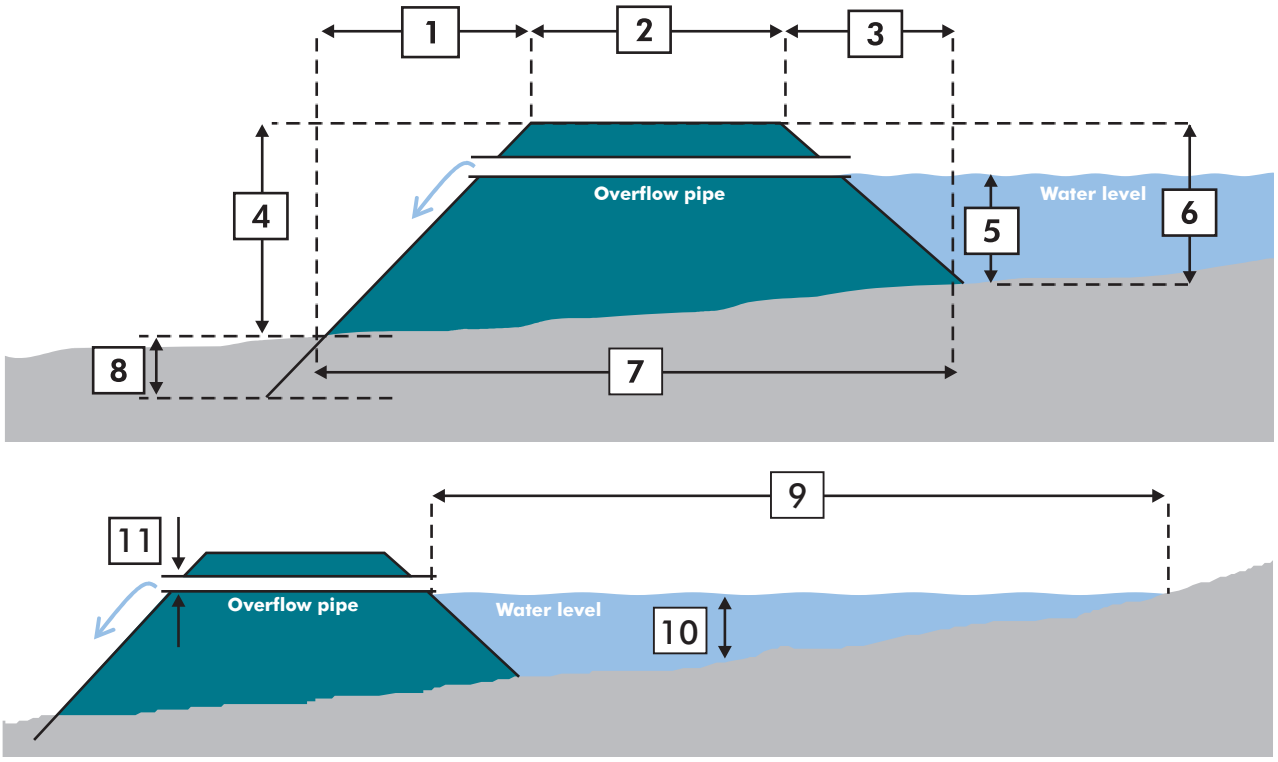
9. Please describe the extent of tracking to be undertaken in relation to this proposal:

(Note: if the tracking works are significant, or on steep or erosion prone land, then an additional application may be required for a land use consent – please contact staff of the resource use group to confirm your requirements.)

10. Please describe the extent of vegetation removal to be undertaken in relation to this proposal:

(Note: if vegetation removal works are significant, or contain a significant area of indigenous vegetation, or will be on steep or erosion prone land, then an additional application may be required for a land use consent – please contact staff of the resource use group to confirm your requirements.)

11. Please fill in the dimensions shown on the diagrams in the lists below (if the dam design is different from that shown below please include a diagram showing all dimensions).



1	Downstream batter width	m
2	Crest width	m
3	Upstream batter width	m
4	Downstream batter height	m
5	Over flow pipe height	m
6	Upstream batter height	m
7	Dam base width	m
8	Depth dam is to be keyed into the ground	m
9	Length of the pond behind the dam	m
10	Average depth of the pond	m
11	Diameter of overflow pipe	m

Other dimensions not shown on the diagrams

12	Crest length	m
13	Spillway width	m
14	Spillway depth	m
15	Spillway inlet height	m
16	Spillway gradient (slope)	m

17	Spillway surface material (for example, rocks, grass)	
18	Average width of the pond behind the dam	m
19	Volume of water retained by the dam	m^3

If dam height is greater than 3m or retains more than 20,000m^3 then a building consent may also be required. Please contact the Waikato Regional Council's staff if this is the case.

12. What is the source of water for the dam?

◯ ground water (that is, spring) ◯ surface water (that is, stream OR captured rainwater runoff)

13. If surface water:

Is the dam?

◯ in stream (the full flow of a stream passes into the dam and over the dam spillway)

◯ off stream (part of a stream is diverted into the dam and may be returned back to the stream after the spillway OR surface rainwater runoff is captured in the dam then discharged)

Is the waterway?

◯ perennial (flows all year round)

◯ ephemeral (flows only intermittently or when there is rain).

14. How will fish get past the dam? Please describe (for example, fish pass, diversion, climbing surface).

15. What material(s) is the dam made of (or to be made of)?

16. What is the design life of the dam?

_____ years

17. Is the dam?

◯ existing ◯ to be built

STOPBANKS

18. What material(s) is the stopbank made of (or to be made of)?

19. What is the design life of the stopbank? _____ years

During what size storm is the stopbank designed to overtop? (for example, a 1 in 50 year storm)

_____

20. What is the proposed length of the stopbank? _____ m

21. Draw a cross section diagram of the stopbank and show all dimensions including:

Height	Distance from stream banks	Stream bank levels	Batter slope
Width	Annual flood water level	Stream bed level	

22. Is the stopbank: ◯ existing ◯ to be built

MAINTENANCE AND MITIGATION OF DAMS AND STOPBANKS

A: EXISTING DAMS AND STOPBANKS

23. When was the dam/stopbank constructed?

24. Describe the maintenance programme for the dam/stopbank:

(Note: the following aspects of a dam should be checked at least annually: green cover, erosion, any stock or vehicle damage, whether crest levels have consolidated, seepage – any seepage problems should be further investigated by an engineer.)

25. How will stock be prevented from access to the structure and its banks, batters and/or spillway? Please describe:

26. For dams only – describe what plants exist, or are proposed, to provide shading over the water in the pond behind the dam?

B: NEW DAMS AND STOPBANKS

27. When is construction of the dam/stopbank proposed to start?

28. How long is it expected to take to complete the dam/stopbank?

29. What instream excavations are required for the dam/stopbank?

30. Describe the proposed maintenance programme for the dam/stopbank:

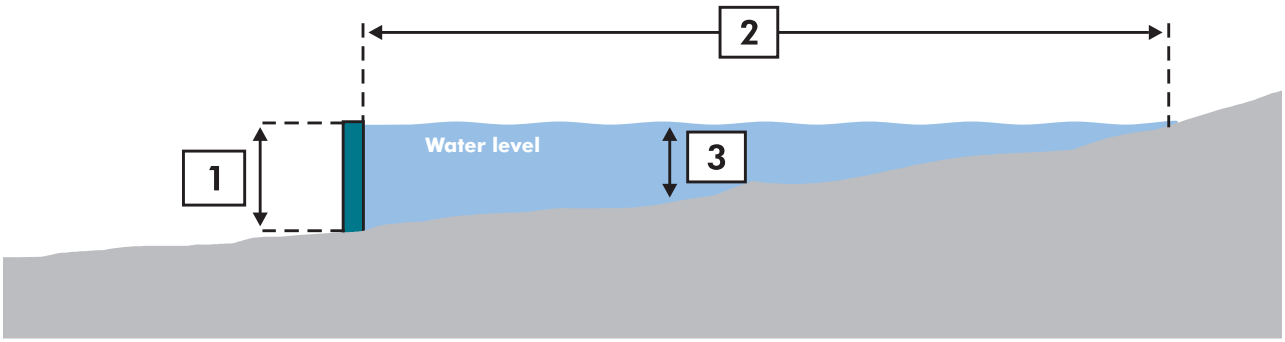
(Note: the following aspects of a dam should be checked at least annually: green cover, erosion, any stock or vehicle damage, whether crest levels have consolidated, seepage – any seepage problems should be further investigated by an engineer.)

31. How will stock be prevented from accessing the structure and its banks, batters and/or spillway? Please describe:

32. For dams only – describe what plants will be provided for shading over the water in the pond behind the dam? (If planting already exists please describe.)

33. How will fish get past the weir? Please describe:

34. Please fill in the dimensions shown on the diagram in the lists below: (if the weir design is different from that shown below please include a diagram showing all dimensions.)



1	Height of the weir	m
2	Length of the water level increase behind the weir	m
3	Average depth of the water level increase	m

Other dimensions not shown on the diagram

4	Natural width of the stream at the weir	m
5	Natural average depth of the stream	m
6	Design life of the weir	yrs
7	Material(s) to be used for the weir	
8	Volume of water retained by the weir	m

35. Will the stream need to be temporarily diverted during construction and placement of the weir? Please describe:

STREAMBED DIVERSION

36. What is the proposed commencement date of the diversion?

37. How long will the diversion works take to complete ?

38. What is the length of the existing stream to be diverted?

39. What is the length of the new stream path to be constructed? _____ m

40. Describe the material that is proposed for the bed and banks of the diverted length of the waterway.

41. Draw a plan diagram in the box below of the location of the stream including the existing stream in relation to the proposed diversion, showing location of any meanders and planting proposed (alternatively enclose with the application an appropriately marked plan with these details). Please indicate all dimensions on the diagram.

42. Show a cross section of the existing stream bed and banks including the bank slopes and depth, width between stream banks, for example.	43. Show a cross section of the existing stream bed and banks including the bank slopes and depth, width between stream banks, for example.

Indicate all dimensions on the diagrams and show the relative heights of the existing stream bed and proposed stream bed

44. What is the flood flow volume of the stream at the point of the proposed diversion (if known)?

_____ m3/s

45. From your observation of the site will the proposed stream diversion channel hold winter flows of the stream?

◯ Yes ◯ No

46. Please describe how the works will be carried out and the order that they will take place:

(for example, will the diversion be constructed by firstly digging the new stream channel, and then diverting the stream flow through this channel when completed?)

47. During the construction of the diversion how will scouring of the bed and bank material be prevented? Please describe:

48. Please describe the provisions to be made to prevent stock access to the stream (for example, fencing):

49. WATER QUALITY

Construction of structures in, over, or near a waterway, or diversion of a waterway, have the potential to affect water quality. Contamination can come in the form of sediment runoff, stream bed disturbance, building debris, machinery fuels and other objects or chemicals entering the waterway. This can affect the waterway in a number of ways including the uses that the water is suitable for, fish migration and other aquatic life and their habitats.

a. What are the actual and potential effects of your proposed activity in terms of water quality and how do you propose to avoid or minimise these effects?

Exposure of bare soil from vegetation clearance and excavation works associated with construction/diversion may result in runoff of sediment to the waterway when it rains.

b. What works or methods are proposed to minimise and control sediment runoff?

Dams can have adverse effects on the flow of a waterway under low flow conditions due to evaporation unless the dam is off stream or a residual flow is maintained. Slowing of water flows and increasing the area of water by dams can have the effect of raising the temperature of the water unless trees and other vegetation are provided to shade the water.

c. For dam proposals only – what are the actual and potential effects of your proposed activity in terms of low flows and how do you propose to avoid or minimise these effects?

50. MACHINERY

Machinery in or on the banks of a waterway have the potential to affect the waterway in many ways. Contamination can arise from sediment, fuel and other chemicals entering the waterway. Banks can be eroded by heavy machinery and wildlife habitat can be destroyed by its operation. (Note: if the works are significant in terms of the machinery required then a management plan for the use of machinery during the works may be required as part of the consent.)

Describe the extent to which machinery is required to undertake your activity and whether machinery is to enter the waterway. How do you propose to minimise the effects of machinery near or in the waterway?

51. FISH

Placement of structures in a waterway have the potential to affect the passage of fish past a structure due to alterations in water flow and physical barriers to fish passage both up and down stream.

a. For dam and weir proposals only – what are the actual and potential effects of your proposed activity in terms of fish passage and how do you propose to avoid or minimise these effects?

Fish and their habitats can be affected by diversions. It is important that a diverted section of a stream has meanders (corners and curves), pools and riffles and that the gradient of the stream bed is not changed as increased flows can change the ecology of a stream. New stream banks require planting to provide shade, habitat areas and organic material as the primary source of energy for aquatic communities (and to provide bank stabilisation).

b. For diversion proposals only – what are the actual and potential effects of your proposed activity in terms of fish habitat and how do you propose to avoid or minimise these effects?

52. EROSION

Placement of structures in the bed or banks of a waterway can cause or increase erosion due to changes in water flow velocities and water flow paths and through the removal of vegetation associated with the works.

What are the actual and potential effects of your proposed activity in terms of erosion and how do you propose to avoid or minimise these effects?

53. NEIGHBOURS AND OTHER PEOPLE

Other people may be affected by activities in a waterway such as dams and diversions. Effects can be changes in water flow velocities, restricted water flow causing upstream ponding or flooding, changes in water quality and effects on cultural, heritage and archaeological values. People may be particularly affected if they take water downstream or use the water recreationally. See the consultation section of this application form – all affected or potentially affected parties must be consulted regarding your proposal.

What are the actual and potential effects of your proposed activity in terms of effects on other people or groups and how do you propose to avoid or minimise these effects?

54. OTHER EFFECTS

Are there any other actual or potential effects of your proposed activity and how do you propose to avoid or minimise these effects (for example, visual effects, other physical effects)?

CONSULTATION

Identify and consult with any parties that may be potentially affected by or interested in your activity. This generally involves your immediate neighbours. It may also include local authorities, iwi and interest groups such as local recreational and care groups. If you are in doubt about who you should be talking to, then call Waikato Regional Council staff.

Make sure you provide everyone with sufficient information that they can fully understand what it is you want to do and how they may be affected by it. This could include a copy of this application form once it is completed and and/or any plans or maps. Make sure you make yourself available to explain the application, answer any questions and discuss options for resolving any concerns.

55. Identify the parties that may be affected by or interested in your discharge activity and consent application

Party details/relationship *(such as neighbour, local iwi, interest group)*		
Contact person		
Postal address		
Phone number/s	Home:	Business:
	Mobile:	

Party details/relationship *(such as neighbour, local iwi, interest group)*		
Contact person		
Postal address		
Phone number/s	Home:	Business:
	Mobile:	

Party details/relationship *(such as neighbour, local iwi, interest group)*		
Contact person		
Postal address		
Phone number/s	Home:	Business:
	Mobile:	

Other affected or interested parties

56. Provide details of your consultation

Provide details about the consultation you have undertaken, or explain why consultation was not considered necessary. If possible you should provide written comment or approval from those you have identified. A consultation form is provided at the end of this form that will help you with this. Photocopy off a separate form for each party identified. Otherwise, make sure you let us know:

- who you consulted with
- how we can contact these people
- their relationship to you (for example, neighbour, local iwi, interest group)
- any concerns they may have about your activity, and how you intend to avoid or mitigate (lessen) these effects.

FINAL CHECKLIST

57. Have you? (please tick)

- ◯ Filled in all parts of this form (Form B) that are relevant to your activity, provided all the information required, and completed and attached any other related activity forms.
- ◯ Completed and attached Forms A and C.
- ◯ Applied for any district council consents that are also required for your proposal.
- ◯ Consulted with all interested and affected parties, and included their comments and/or written approval (if possible).
- ◯ Included or paid the required deposit fee for this application.

CONSULTATION FORM

PHOTOCOPY THIS FORM FOR EACH PERSON OR GROUP TO BE CONSULTED

Applicant	
Description of proposal	

Person/group consulted in regard to this proposal

Name of contact person	
Name of group	
Street address	
Email address	
Contact number/s	phone:

Consulted party's views on the proposal (to be completed by person/group consulted)

If you would like the Waikato Regional Council to know your views on the applicant's proposal, and/or if you consider you may be adversely affected, please indicate your views below (attach additional pages if necessary). Consider the following: How do you consider you will be affected? How would you like the applicant's proposal to be modified to take account of your views? What other comments do you have on the proposal that you would like the Waikato Regional Council to consider in making a decision on these resource consent applications?

Applicant's response to views of consulted parties (to be completed by applicant)

Please indicate how your proposal can be modified to take account of the views of the party you have consulted with (or why the proposal may not be able to be modified to take account of those views).

Consulted party's response to the proposal (to be completed by person/group consulted) *Please tick one only*

◉ I/We give my/our approval for the proposal ◯ I/We do not give my/our approval for the proposal

◯ I/We are not affected by this proposal

Signed _____ **Date** _____