

Completing the application form to take water for damming?
Please supply more information about your proposed activity.

Please provide an appropriate level of information relative to the scale of your activity. If your proposed dam is relatively small, i.e. < 30,000 m³, is in an ephemeral stream, is only for stock drinking water, i.e. not for irrigation, and there are no other users of the surface waterbody, your description might fit in the space on Form B - you can probably do it yourself.

However, if you seek consent to dam a permanent stream, or propose a larger dam, or if it's in a surface water catchment that's close to, or fully allocated, you will need to engage a technical consultant to help you. Writing 'Not Applicable' is not enough. You need to add comments explaining why you consider the activity is consistent with relevant policies and objectives.

Only particularly relevant parts of policies and objectives are shown here. Full text, relevant objectives and policies are available at: <http://www.hbrc.govt.nz/our-council/policies-plans-strategies/rmp/>

Note: water harvesting or water storage projects involve several related activities - including the construction of a dam in a water way, the damming of water behind the dam, and the subsequent taking and use of water from the dam reservoir. Multiple application forms may need to be completed.

Building Consent requirements apply to **large dams** – containing a depth of water (or any fluid) greater than 4 metres and holding a volume greater than 20,000 m³. In Hawke's Bay, building consents for large dams are administered by Waikato Regional Council. Find more information at Waikato Regional Council: www.waikatoregion.govt.nz, keyword search: dams.

Further resource consents may also be needed, i.e. for earthworks, from local authorities (Hastings District Council, Napier City Council, Central Hawke's Bay District Council or Wairoa District Council). Check with the relevant council what additional consents you may need.

1. Sustainable management (RMA, Part 2)

The purpose of the Resource Management Act is to promote the sustainable management of natural and physical resources. Your proposed activity must use natural and physical resources in a way or at a rate, to enable people and communities to provide for their social, economic, and cultural well-being, and for their health and safety. Your proposed activity must also:

- sustain the potential of natural and physical resources to meet the needs of future generations; and
- safeguard the life-supporting capacity of air, water, soil, and ecosystems; and
- avoid, remedy or mitigate any adverse effects of activities on the environment.

Please explain why you think that your proposed damming activity is sustainable

3. Relevant legislation (Section 104(1)(b))

Regional Policy Statement (RPS)

Objective 25: the maintenance of the water quantity of rivers and lakes needs to sustain aquatic ecosystems in catchments as a whole and ensure resource availability for a variety of purposes across the region, recognising the impact caused by climate fluctuations in Hawke's Bay.

Objective 26: any significant adverse effects of water takes, uses, damming or diversion on lawfully established activities in surface water bodies need to be avoided.

Policy 37(a): takes from certain rivers need to be managed in line with minimum flows and allocatable volumes outlined in the Plan (Policy 74 of the RRMP (see below)).

Policy 38: there must be no adverse effects on existing users. Effects on new takes from surface water must be avoided, mitigated or remedied.

Policy 39: outlines the approach to take to allocate water from rivers. Particularly relevant to your application is:

- Water allocation is based on reasonable needs and the efficiency of end use. Applicants must determine how much water is required for their activity.
- New water permits will not be issued where the demand for water from a stream is greater than the allocatable volume available, except if subject to a substantially higher cut-off (minimum flow) level than in Table 9 and it won't adversely affect other lawfully established activities, or have any other significant adverse environmental effect. Applicants seeking water over allocatable volumes must give a comprehensive assessment of environmental effects to show these effects won't occur, and justify any other minimum flow that may be proposed as a mitigation measure.

Policy 42: no more than crop water requirements for a one in five year drought can be allocated for irrigation takes. An allocation assessment considers information on crop type, rainfall, potential evapotranspiration rates and best irrigation management practices. It may also consider soil type and moisture holding capacity.

Objectives 34-37 and Policies 64-66 in the RPS are a framework to recognise matters of significance to iwi/ hapū and the actions to consider concerning resource consent applications. This includes avoiding significant adverse effects on waahi tapu (sacred places), tauranga waka (landings for waka), taonga raranga (plants used for weaving and resources used for traditional crafts), mahinga kai (food cultivation areas) and the policy requires recognition of the importance of the relationship of Māori with coastal, lake, wetland and river environments.

Regional Resource Management Plan (RRMP)

Objective 41: the water quantity of specific rivers must be maintained to sustain existing aquatic species and natural character, also ensuring resource availability for a variety of purposes, including groundwater recharge.

Policy 73: sets out environmental guidelines to manage surface water quantity:

- On rivers (or water management zones) where minimum flows have been established, all takes needing a resource consent must cease when the river is flowing at or below minimum flow (except where the main purpose is to provide drinking water to people or animals - the level should be sufficient to maintain human or animal welfare).

- To provide a known level of risk to resource users. For rivers with an established minimum flow, the total allocation authorised through the resource consent process doesn't result in authorised takes being apportioned, restricted or suspended for more than 5% of the time on average during November-April.

Policy 74 and Table 9: → show the minimum flows and allocatable volumes for specific rivers.

Policy 74A and 80A: give effect to interim provisions of the National Policy Statement for Freshwater Management 2014 (NPSFW). Council must consider to what degree the application would adversely affect safeguarding the life-supporting capacity of fresh water and of any associated ecosystem, and to what degree it is feasible and dependable that any adverse effect on the life-supporting capacity of fresh water and of any associated ecosystem resulting from the

River name	Minimum Flow Site Name	Minimum Flow (l/s)	Allocatable Volume (m ³ /week)	Map Reference
Awanui Stream	At The Flume	120	0	V21:357613
Awanui Stream	At Paki Paki Culvert	35	0	V21:351608
Esk River	At Shingle Works	1,400	355,018	V20:432945
Esk River	At SH2	1,000		V20:438939
Irongate Stream	At Clarks Weir	100	0	V21:367666
Kahahakuri Stream	At Onga Onga Road Bridge	200	17,250	U22:096357
Karamu River	At Floodgates	1,100	18,023	V21:427708
Karewarewa River	At Turamoe Road	75	-	V21:341622
Louisa Stream	At Te Aute Road	30	0	V21:410625
Maharakeke Stream	At Station Road	140	0	U23:041255
Makaretu Stream	At Watson Reach	170	53,827	U23:924270
Mangateretere Stream	At Napier Road	100	0	V21:438659
Maraekakaho River	At Taitis Road	100	5,443	V21:170668
Maraetotara River	At Te Awanga Bridge	220	30,971	W21:520661
Ngaruroro River	At Fernhill Bridge	2,400	956,189	V21:330729
Nuhaka River	At Valley Road	80	41,731	X19:225329
Ongaru Drain	Wenley Road	5	0	V21:234653
Papanui Stream	At Middle Road	45	0	V22:278433
Porangahau Stream	At Oruawharo Road	50	-	U23:977259
Pouhokio Stream	At Allens Bridge	80	-	V22:498441
Poukawa Inflow	Site No. 1 (d/s dam)	10	0	V22:282504
Poukawa Inflow	Site No. 1a (u/s dam)	10	0	V22:285502
Poukawa Inflow	Site No. 6	3	0	V22:266478
Poukawa Stream	At Douglas Road	20	0	V22:298533
Raupare Stream	At Ormond Road	300	83,844	V21:398713
Te Waikaha Stream	At Mutiny Road	25	-	V22:361572
Trib. of Kauhauroa Stream	(Taylors)	5	0	X19:970397
Tukipo Stream	At SH 50	150	0	U22:948324
Tukituki River	At Red Bridge	3,500	1,407,751	V22:466581
Tukituki River	At Tapairu Road	1,900	492,307	V22:183312
Tutaekuri River	At Puketapu	2,000	928,972	V21:357812
Tutaekuri-Waimate	At Goods Bridge	1,200	367,114	V21:384751
Waimaunu Stream	At Duncans	10	15,304	X19:229300
Waipawa River	At Waipawa (SH2)	2,300	342,317	V22:163337

change would be avoided. This includes waterways where an allocation limit and minimum flow restriction is not yet set in Policy 74.

Objective 45: seeks to ensure that natural and physical resources are maintained or enhanced, and includes the use and values of river and lake beds.

Policy 79: states that environmental activities affecting river beds should be managed considering:

Issue	Guideline
1. Fish passage	The activity should be undertaken in a manner that continues to provide for the existing passage of fish past the structure.
2. Fish spawning	In areas of fish spawning the activity should be undertaken in a manner that minimises adverse effects on overall fish spawning patterns.
3. Bed stability	No long term or ongoing acceleration of the rate of erosion or accretion of the bed of a river or lake as a result of any activity in a river bed or lake bed.
4. Habitat	Adverse effects on the habitat of aquatic and terrestrial flora and fauna within the bed of a river or lake should be avoided, remedied or mitigated.
5. Flow regimes	Adverse effects on natural flow regimes should be avoided where this is possible, or remedied or mitigated where avoidance is not possible.
6. Other structures & activities	There should be no significant adverse effects, including by way of destabilisation, on lawful existing structures or activities within the bed of a river or lake.
7. Flood & debris risk	There should be no reduction in the ability of the channel to convey flood flows, and no significant impedance to the passage of floating debris.
8. Damage to property	There should be no damage caused, and no increase in the risk of damage, to any property, including river control works, unless written approval is obtained from any affected parties.
9. Temporary activities	Upon completion of any temporary activity affecting the bed of a river or lake, the bed should as far as practicable be restored to no less than the state it was in prior to the activity taking place.
10. Outstanding natural features	Adverse effects on any outstanding natural features within river and lake beds should be avoided, remedied or mitigated.

4. Assessment of Environmental Effects (AEE)

Please try and add a sentence or two about each of these points

- The actual or potential effects on the environment of your proposed dam, and the subsequent taking of water from this dam? You can comment on positive effects, as well as possible adverse/negative effects.

Have a think about:

- The surface water body to be dammed – is it permanent or ephemeral? What do you call it? Is it a soft bottomed, stony or grassy stream? How big is its catchment area? What are its flow rates at different times of the year, i.e. summer lows and winter peaks?
- What aquatic animals and plants live in the water body and on the banks of the stream that you want to take from? How will your dam impact them?
- How will fish move past the dam structure?
- What is the surface waterbody used for, i.e. recreation, food cultivation?
- Will your proposed dam and take affect the ability of other users of surface water to take water?
- Will the dam and take impact amenity, social, recreational and cultural values associated with the waterway?

- Are there any waahi tapu or other significant cultural sites at or near your proposed dam site? Will your proposed activity impact the values associated with those sites?
- How will flows downstream be affected when the dam is in place? What will happen over summer when flow levels are low and if you are taking water from the dam? What will happen in winter if there is a flood?
- How have you calculated the amount of water you require? The volume you wish to store in the dam? The volume you need to take from the dam, i.e. for irrigation or frost protection?
- During what times of the year will your dam refill? How will you ensure this is the case? How will you prevent the dam filling during summer when river flows are lower? Is a minimum flow or level proposed and if so, why is this appropriate?
- What is the distance between your proposed point of take and the closest surface water abstraction? Where is the closest public water supply?
- Information about anything you intend to do to try and reduce the effect that your dam and take may have on the environment, i.e. is a residual flow proposed? How has this been calculated to be adequate?
- Details of any alternative sites or ways of storing water you have thought about. Why do you consider the proposed method is the best option?
- Details of anyone you have talked to about your proposed dam and take because you think the activity might affect them.
- How will you construct the dam and when? How will you stop sediment loss downstream during construction? How will you allow for fish passage during construction? Will any concrete be used in construction of the dam and how will its use be managed to prevent adverse effects on fish?

HBRC has technical publications that may be a useful reference, covering a range of topics from small dam design to erosion and sediment control. Go to www.hbrc.govt.nz, keyword search: #waterways.

If you have questions about what to provide, or want to arrange a meeting to discuss your application before you formally lodge it with HBRC
- contact the Consents Advisor on 06 833 8090.