

Damming and diversion manages dams, weirs, and diversions, including activities associated with their placement, maintenance, and removal. The activities captured include:

- Damming and diversion of water
- Placement, use, maintenance and removal of dams and weirs in the beds of lakes and rivers
- Disturbance of the beds of lakes and rivers associated with dams and weirs
- · Discharge of water and contaminants associated with dams and weirs

Damming occurs throughout Otago for a range of purposes (such as providing drinking water, generating hydro-electric power, harvesting, and storing water, irrigation and treating stormwater). Dams in the region vary in size and age, and are in rivers, lakes, and wetlands (in-stream) and outside of these water bodies (off-stream). Weirs are also used to raise the level of water upstream or regulate its flow, and the diversion of water occurs in the region and involves redirecting the flow of water.

Overview and key changes

The table below provides a high-level comparison of the provisions of the operative Water Plan provisions with those included in the draft Damming and Diversion chapter and highlights the key changes from the operative Water Plan.

Damming and Diversion chapter of draft LWRP

Existing plan

Damming

Key changes:

New definitions for different types of damming structures and activities that are aligned with national direction and the Building Act 2004.

Separate rules for off-stream and in-stream dams and weirs.

Separate rules for temporary and longer-term damming.

Off-stream dams are permitted if:

- they are not classifiable dams
- they are not for the primary purpose of storing contaminants
- they are maintained in a state of good repair
- the water impounded by the dam is accounted for within a take limit
- they are not in a habitat of a threatened species, on contaminated land, or in an area with significant natural hazard risk
- they do not disturb roosting or nesting of indigenous birds
- they do not cause or exacerbate flooding, ponding, or erosion on any land or property owned or occupied by another person
- a map and as-built plans along with a producer statement are supplied to ORC within a one month of the construction of the dam if it impounds more than 1000 cubic metres of water.

If the off-stream dam does not comply with the above permitted activity conditions, a discretionary consent will be required.

Same rules apply to all damming activities regardless of location, type, or duration.

Damming (whether or not it is off-stream or instream) is permitted if:

- the upstream catchment of the dam or weir is no greater than 50 hectares
- the water immediately upstream of the dam is no more than 3 metres deep and the volume of water stored by the dam is no more than 20,000 cubic metres
- no lawful water take is adversely affected
- any damming within a Regionally Significant Wetland was established prior to 2 July 2011 and does not damage fauna or native flora, or change its water levels / hydrological function
- no flooding of any other person's property, erosion, land instability, sedimentation or property damage is caused
- it is not within the Waitaki catchment, or particular areas protected by water conservation orders and legislation.

If the activity does not comply with the above permitted activity conditions, then consent is required (except where damming is prohibited). Activity status ranges from restricted discretionary to non-complying depending on what conditions can't be met.

Limited policy direction to guide the management of damming activities.

Definitions are unclear.

Provisions are not aligned with national direction and the Building Act 2004.

Damming

Activities captured by the following rules include placement of the dam or weir, and any associated damming or diversion, use and disturbance of the bed of a lake or river, and discharge of water or contaminants into water.

New temporary in-stream dams and weirs (in place for no longer than 30 days) are permitted if:

- for weirs, they are authorised under the National Environmental Standards for Freshwater (NES-F)
- they do not occur within an area where damming is prohibited (i.e., the same areas as the Water Plan where damming is prohibited by water conservation orders and legislation)
- the level of a lake or downstream flow of a river is not permanently reduced below an environmental flow or level as a result of the activity
- they do not frustrate or prevent the exercise of any lawful water take
- any bed disturbance does not cause erosion of the surrounding bed or banks
- any discharge complies with the visual clarity standards after reasonable mixing
- the passage of a desired fish species is not impeded
- they do not disturb the roosting or nesting of indigenous birds or occur in the habitat of a threatened species
- there is no fuel storage or placement of any hazardous substance on any part of the bed
- any plant, equipment, or machinery associated with the activity is free of pests
- the surrounding bed is returned as near as practicable to its original shape, area, depth, and gradient that existed prior to the works and the site is left tidy.

If the temporary in-stream dam or weir does not comply with the above permitted activity conditions (except for where damming is prohibited), a discretionary consent will be required.

New longer-term in-stream dams and weirs (in place for longer than 30 days) are a discretionary activity provided they are not located in an area where damming is prohibited.

Damming

Activities captured by the following rules include use of the bed of a lake or river, damming or diversion of water and discharge of water or contaminants into water.

Use of in-stream dams and weirs that existed on 1 July 2024 is permitted if:

- they are lawfully established and, for weirs, authorised under the NES-F
- they are maintained in a state of good repair
- they are not identified in an action plan as requiring remediation to provide for fish passage
- the volume of water impounded is less than 5,000 cubic metres
- the level of any lake or downstream flow in a river is not reduced below an environmental level or flow as a result of the activity.

If the activity does not comply with the above permitted activity conditions, a discretionary consent will be required.

Maintenance of lawfully established in-stream dams and weirs is permitted provided there is no increase in the volume of water impounded or the footprint of the dam or weir, and many of the same conditions as placement are met i.e., complying with environmental flows and levels, not affecting lawful water takes, not disturbing indigenous birds etc. If the activity is unable to comply with the permitted activity conditions, a discretionary consent will be required.

Activities captured by the following rules include disturbance of the bed of a lake or river, discharge of water or contaminants, and damming or diversion associated with the removal.

Removal of in-stream dams and weirs is permitted if:

- for a dam, it is not a classifiable dam
- where any part of the dam or weir remains in situ, nothing remains above the level of the bed
- there is no use of explosives
- it does not frustrate or prevent the exercise of a lawful water take
- it does not disturb the roosting or nesting of indigenous birds
- it does not occur in the habitat of threatened species
- it does not cause any permanent increase in the risk of flooding or erosion downstream
- it does not spread pests
- any discharge complies with the visual clarity standard after reasonable mixing
- there is no fuel storage or placement of any hazardous substance on any part of the bed

Damming

the site is left tidy.

Clear policy direction for restricting the construction of new in-stream dams and weirs but facilitating off-stream dams

Clear policy direction on managing the effects of damming activities and recognising hydro-electricity generation.

Diversion

Key changes:

Definitions clarify that diverting water outside the bed of a water body, even if non-consumptive, is managed as a take and discharge of water rather than a diversion.

Separate diversion rules supported by policy direction focusing on ensuring that fish passage is provided for, diversions are kept to the smallest practicable extent, and they have minor or transitory adverse effects on the environment.

Diversion rules distinguish between diversions of water outside of the bed of a water body (e.g., to alleviate flooding) and those within a water body (e.g., to facilitate temporary works on a structure).

Diversions where they occur fully outside of the bed of a lake or river are permitted if:

- they are for land drainage or alleviating flooding
- · they are not on contaminated land
- they do not cause or exacerbate flooding, ponding or erosion of any land owned or occupied by another person
- they do not frustrate or prevent the exercise of any lawful water take
- they do not disturb the roosting or nesting of indigenous birds
- water levels or flows are not reduced in any aquifer, spring, river, lake, or natural inland wetland.

Diversion rules bundled with damming rules. A diversion is permitted if:

- the size of the catchment upstream of the diversion is no greater than 50 hectares
- the water conveyed is from one part of any lake or river, or tributary, to another part of the same lake, river, or tributary
- no lawful take of water is adversely affected
- any diversion within a Regionally Significant
 Wetland was established prior to 2 July 2011 and
 the activity does not damage fauna or native
 flora, or change water levels or the hydrological
 function of a Regionally Significant Wetland
- no flooding of any other person's property, erosion, land instability, sedimentation or property damage is caused
- the diversion is not within the Waitaki catchment, from Lake Tuakitoto at certain levels, or in particular areas protected by water conservation orders and legislation.

Diversions for the purpose of land drainage are permitted if:

- the wetland conditions above are met
- the level of a lake or river is not lowered
- the diversion does not cause flooding of any other person's property, erosion, land instability, sedimentation, or property damage.

Diversion

Diversions within the bed of a lake or river are permitted if:

- they are not located in an area where diversions are prohibited, a habitat of a threatened species or the Waitaki catchment
- they are for enabling temporary works associated with a lawfully established structure, the protection, restoration, or enhancement of the ecosystem health, indigenous biodiversity, or hydrological functioning of water bodies, or maintaining the operation of lawfully established intake structures
- they are carried out completely within the bed of a lake or river
- they do not they do not cause or exacerbate flooding or erosion within any water body or property
- the level of any lake or downstream flow of any river is not reduced below an environmental level or flow
- they do not impede the passage of a desired fish species
- they do not disturb the roosting or nesting of indigenous birds
- they do not frustrate or prevent the exercise of any lawful water take
- the course of the water is returned to its natural course after completion of the activity, no later than one week after it occurs.

If the activity does not comply with the above permitted activity conditions, a discretionary consent will be required (except where diversions are prohibited e.g., areas protected by water conservation orders or legislation and in Lake Tuakitoto as per the Water Plan).

Associated activities

Key changes:

All relevant activities associated with the damming or diversion of water; for example, disturbance of the bed of a lake or river, discharge of water or contaminants, and damming or diversion etc. are managed under the same rules in the DAM chapter and are permitted or consented along with the primary activity.

Multiple rules spread across different Water Plan chapters apply for various activities associated with damming and diversion e.g., structures, bed disturbance, discharges of water and contaminants etc.