

**BENDIGO**  
**WILDLIFE MANAGEMENT RESERVE**  
**MANAGEMENT PLAN**

Draft v14 27/ Jan/ 2025

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## 1.0 Introduction

Lake Dunstan was created on the Clutha River Mata-Au by the construction of the Clyde Dam for the purpose of hydro electricity generation. It was originally consented through the Clutha Development (Clyde Dam) Empowering Act 1982. Lake-fill was undertaken in stages in 1992 and 1993 creating a 26 square kilometre reservoir from Clyde to Bendigo and from Cromwell to the mouth of the Kawarau Gorge

The Environmental Impact Report for the Clyde Power Project recognized the hydro dam's adverse impacts on the Clutha River Mata-Au environment and the compensating wildlife, fisheries and recreational amenity values created by the new lake. The then Electricity Corporation of New Zealand supported the concept of enhancing conservation and recreation values if the primary function of the lake for hydro storage and power generation was not compromised.

Local gamebird hunters' concerns over habitat loss and reduced wildlife populations along the Clutha River Mata-Au were taken up by the N.Z. Wildlife Service and carried forward into the Department of Conservation (DOC) when it was established and took over the functions of the Wildlife Service in the late 1980s. That advocacy resulted in the proposal for a 152.4 hectare wildlife management reserve at the head of Lake Dunstan, near Bendigo, as mitigation for adverse effects on wildlife habitat.

DOC (1989) identified the priority management goals for the Bendigo Wildlife Management Reserve to be:

- To manage the habitat and public use so as to enhance waterfowl populations.
- To provide and optimize opportunities for recreational waterfowl hunting.
- To manage the habitat and public use so as to enhance values for protected wildlife.

These goals have not changed significantly in the intervening period.

This plan recognizes that reserve management must be consistent with the lake's primary purpose as part of a hydro electricity generation facility. This requirement is detailed in a Deed of Covenant for the Wildlife Reserve between Contact Energy Ltd, Land Information New Zealand, Minister of Conservation and Otago Fish and Game Council (Appendix 2)

The proposal was accepted by the then Electricity Corporation of New Zealand who applied for a variation to their consents for the hydro scheme to allow establishment of a reserve and retention of cover for wildlife in the form of woody vegetation (primarily willows). The variation was granted by Otago Regional Council in late 1992.

The natural wetland characteristics of the reserve after lake-fill included extensive shallow water areas, braided river channels, islands and lagoons in the Upper Clutha River Mata-Au delta. This diversity was seen as offering a unique

opportunity to protect and enhance wetland values and associated recreational amenity particularly gamebird hunting and fishing.

The Department of Conservation prepared a draft management strategy to support the proposal (DOC 1989) and the land was set aside as a reserve in 1993 and then classified as a Government Purpose (Wildlife Management) Reserve in 1994.

Legal difficulties with the establishment of the operating easement for the Clyde Dam saw the reserve status revoked in the same year with the intention of later reinstatement. However, reserve reinstatement stalled for twenty-five years because of other legal complications which were only resolved in 2019 allowing the reserve to be regazetted in line with the original intent.

This draft management plan (the plan) draws on the 1989 draft strategy prepared by DOC and is now available for public submissions. That notice re-established a government purpose (wildlife management) reserve on Lake Dunstan at Bendigo and appointed Otago Fish and Game Council to control and manage the reserve.

Interested organisations and individuals are invited to make written feedback to help guide the future management of this important wetland reserve area.

The plan is open for public submissions from 28/01/2025 to 28/03/2025 and submissions should be addressed to:

Bendigo Wildlife Management Reserve Submissions  
Otago Fish and Game Council  
PO Box 76  
Dunedin

or by email to [otago@fishandgame.org.nz](mailto:otago@fishandgame.org.nz)

Yours sincerely

Otago Fish and Game Council

## 2.0 Statutory Framework

This management plan has been prepared in accordance with section 41 of the Reserves Act 1977 to guide the development and management of the Bendigo Wildlife Management Reserve (Bendigo WMR or ‘the reserve’).

The Ngāi Tahu Claims Settlement Act 1998 includes Statutory Acknowledgements for Te Wairere (Lake Dunstan) and for Mata-Au (Clutha River). These record Ngāi Tahu’s association with these two waters and their cultural values.

Otago Fish and Game Council functions in accordance with the provisions of the Conservation Act 1987

## 3.0 Planning Framework

### 3.1 *Kāi Tahu ki Otago Natural Resources Management Plan 2005*

In Otago, the Kāi Tahu ki Otago Natural Resource Management Plan 2005 outlines particular issues in relation to pest management and biodiversity and includes areas or sites of value. Using this plan as a basis, ongoing consultation will be maintained during the life of the plan to consider issues that are having an impact on sites of value to rūnanga.

### 3.2 *Sports Fish and Game Management Plan (SFGMP)*

The Sports Fish and Game Management Plan for Otago (Otago Fish and Game Council 2015 (2025 currently being drafted)) sets outcomes, objectives and policies for the management of sports fish and game resources in Otago including the Bendigo WMR.

Relevant sections are - 5 ‘Species Management’; 6 ‘Habitat Protection and Management’; and 7 ‘Angler and Hunter Participation’.

Key objectives from the SFGMP are:

#### **5 Species Management**

5.3.1 To manage sports fish and game resources having regards to sustainability to meet the interests and recreational needs of present and future generations of anglers and hunters.

5.3.3 To optimize angling and hunting opportunity and maintain or improve the recreational opportunity spectrum available in Otago.

#### **6 Habitat Protection and Management**

6.3.1 To protect maintain and enhance the quality and extent of fish and game habitats in Otago as a priority.

#### **7 Angler and Hunter Participation**

7.3.7 To maintain and improve secure public access to rivers lakes and wetlands and land areas supporting fish and game resources.

7.3.10 To set limits on angler or hunter use of fishing and hunting areas where pressure of use threatens to adversely affects the quality of recreational experience and to actively manage those areas for their key characteristics.”

The SFGMP guides Otago Fish and Game Council's relationship with Ngāi Tahu in its section 3.10

### **3.3 Conservation Management Strategy (CMS)**

Conservation land in Otago is managed according to the Conservation Management Strategy for Otago (DOC 2016). In 2018 management plans for individual reserves in Otago were revoked in favour of management guidance through the provisions of the CMS. This change aimed to simplify and streamline management planning across the region.

The preparation of the management plan for Bendigo WMR is an exception based on a pre-existing obligation. This is seen as important because of the history of the reserve, the interests of stakeholders particularly local waterfowl hunters who were the prime movers in the area's protection, and the relationship with Contact Energy who operate the hydro dam which created the lake. The Bendigo WMR management plan aims to be generally consistent with the CMS's objectives and policies

The CMS Vision for Otago 2066 (p 18, DOC 2016) notes "Otago's 'flourishing kete' supports a range of opportunities for hunting and gathering activities that are important to the ongoing expression of Ngāi Tahu and the community's identity".

This vision aligns closely with the motivation of recreational hunters who pushed for establishment of a reserve at Bendigo because of the adverse impact of hydro development on recreational angling and hunting areas on the flooded reach of the Clutha Mata-au upstream from Cromwell.

The CMS recognizes that Otago's 'lowland and coastal wetland systems provide habitats for threatened and at-risk species and are highly valued for their landscape, cultural and recreational values'

Bendigo WMR falls within the CMS's 'Central Otago Drylands/Manuherikia Place' which focuses mostly on dryland habitats and although wetlands are mentioned. Bendigo WMR is not marked on the map for this 'Place' (Map 5.6). This may be because the reserve was not redesignated until 2018.

CMS policies are referenced below in the Bendigo WMR policies where relevant:

### **3.4 Regional Plan Water: for Otago**

Objectives and policies for wetlands are included in the Otago Regional Council's (ORC) Regional Plan Water: for Otago particularly Chapter 9 'Wetlands' which lists Bendigo as a 'regionally significant wetland' in its Schedule 9 and maps its boundary in Map F16. In addition, the ORC website includes a brief summary description of its characteristics and values in a section entitled 'Wetlands and Estuaries' <sup>1</sup>

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<sup>1</sup> [Bendigo Wetland \(orc.govt.nz\)](http://www.orc.govt.nz)

The defined boundary for ORC's regionally significant wetland area differs slightly from the Bendigo WMR boundary with the former extending further upstream to the north and slightly further into Lake Dunstan at the southern end and excludes the western terrace scarp. This difference appears to have arisen because of differences in approach to area definition. The Bendigo WMR was defined by survey utilizing property boundaries whereas the regionally significant wetland boundary followed the physical margin of the wetland area

Water Plan objectives and policies list criteria for recognition as a regionally significant wetland and note Bendigo WMR has values as:

- habitat for nationally or internationally rare or threatened species.
- high diversity of wetland types
- high diversity of indigenous wetland flora and fauna
- regionally significant habitat for waterfowl.

Water Plan Rules in Chapter 13 govern land use activities on lake or riverbeds and in regionally significant wetlands. These activities include introduction and removal of vegetation, alteration of the bed of a lake, river or regionally significant wetland, and erection of structures including maimai, bridges and boardwalks.

### ***3.5 Central Otago District Plan***

The objectives and policies of the Bendigo WMR plan are consistent with and support where applicable the objectives and policies of the Central Otago District Plan.

Areas of significant natural value are listed in Schedule 19.6.1 of the Central Otago District Plan and include Bendigo Wetland with a legal description matching the Bendigo WMR area. The area is defined in Map 48.

## **4.0 Location and Legal Description**

The reserve lies 18 kilometres north of Cromwell at the head of the Clutha River Mata-Au Arm of Lake Dunstan. The reserve includes the reach of the Clutha Mata-Au River immediately above the lake and a large proportion of the shallow river delta area.



**Map 1. Bendigo Wildlife Management Reserve**



The reserve is accessible on its eastern boundary from State Highway 8 at Bendigo near the junction of the State Highway and Bendigo Loop Road ('Rocky Point' junction).

Although State Highway 6 runs roughly parallel to the western boundary of the reserve, there is no connecting public road access to the reserve although Gilmore Road, a private road, is commonly used by members of the public accessing the lake and the reserve.

The reserve is described in the NZ Government Gazette Notice as:

'Area marked A on SO Plan 23976 subject to operating easement (YEC 960339.1) in favour of Contact Energy Limited held in Computer Interest Register (CIR) OT18C/859' and covers an area of 152.4 hectares (see Map Y)

There is a short piece (approximately 1 kilometre) of unformed legal road (ULR) on the eastern side of the reserve at the north end which has values consistent with the reserve and with agreement could be managed in conjunction with Bendigo WMR. Movement of the river channel upstream has resulted in the ULR being submerged in the main river channel to the north of the reserve.

There is a marginal strip to the north on the western side which stops short of the reserve but may provide a further opportunity for a public access connection.

Land downstream of the reserve including lakebed is Unallocated Crown Land managed by Land Information New Zealand while the eastern boundary borders private farmland and the western boundary farmland, vineyard and lifestyle blocks. The main road access to the reserve at Bendigo is via Crown land managed by LINZ (Land Information New Zealand)

## **5.0 Natural Resources, Values and Uses**

### ***5.1 Topography***

The Bendigo WMR area occupies a low-lying area within the Upper Clutha valley which is dominated by Lake Dunstan and the Clutha Mata-Au River with a high terrace scarp to the west

The reserve forms a distinct component of the Lake Dunstan environment providing an extensive wetland habitat area not present elsewhere and requiring different management strategies from the lake to maintain and enhance its wetland and wildlife habitat values.

The distinct role of the Bendigo WMR and its future management was outlined in the Ministry of Works and Development (1977)

"HEAD OF LAKE  
Main wildlife area with walking access only. Planting and management aimed to enhance habitat for waterfowl and promote wilderness qualities. Some restrictions on

boating will be required, particularly during the breeding season”  
(Figure 9.4, “Lake Dunstan Recreational Opportunities.”)

This contrasts with the general management of Lake Dunstan and its shoreline by Land Information New Zealand which is aimed primarily at public access and recreational amenity.

River flats on the true left of the river are separated from the main river by side channels and the land surface slopes gently to the south.

The reserve has three distinct zones:

**Terrestrial Zone** - most of the dry land within the reserve lies to the north and is characterized by trees, scrub and open stretches of gravel on the true left, and by grass, scattered willow and gorse on the true right. There has been significant willow growth in this area over the years. The dry land is about 56 ha or 37% of the reserve area.

The estimated lake level for a 500-year return period flood at the head of the lake is RL 195.6m. The area above that level is only 37 ha in area and includes the lake marginal areas (e.g., near the Bendigo car park); land near the true right of the Clutha above its confluence with the lake, and islands on the true left. It also includes the terrace face on the true right.

**Varial Zone** – this is the intermittently flooded land within the operating range of Lake Dunstan (i.e. between RL 193.5m and RL 194.5m). This zone is subject to a one-metre lake level variation. This effect is a dominant feature in the southern portion of the reserve and covers about 36 ha or 20% of the reserve.

**Aquatic zone** – this includes permanently flooded, low lying alluvial river flats, river channels and back water areas all below the minimum Lake Dunstan operating level (RL 193.5 m) and that portion of the Clutha River Mata-Au bed which lies within the area. The aquatic zone has been estimated to be about 60 ha or 40% of the reserve area at the time of lake-fill.

Because of the shallow depth aquatic plants grow prolifically in many areas.

## **5.2 Landscape and Vegetation**

The reserve is a river delta environment since the creation of Lake Dunstan. The dominant elements include the river itself immediately upstream of the lake, the lake shallows and islands in the delta area, the adjacent alluvial flats and terraces, and the typical riverbank and wetland vegetation. The latter is dominated by self-colonising willow and poplar. Gravel and river washed boulder beaches occur near the main river channel. Shallow water areas are dominated by aquatic plants particularly *Lagarosiphon major*

Willow and poplar are the dominant tree species, combining to form woodland areas and occurring in scattered form nearby. They are concentrated on the eastern side of the reserve.

Tree growth has been prolific in the 30 years since lake-fill. While draping woody vegetation is an important habitat element in the reserve, providing cover for waterfowl and fish, active management is warranted to restore optimum habitat diversity. Progressive replacement of crack willow with other less invasive plant species should be considered to enhance biodiversity in more accessible parts of the reserve.

Gorse, briar and lupin occur as scattered clumps without canopy species, often on "islands" on higher ground or disturbed gravel areas. Colonisation of open gravel areas can adversely affect river bird habitat areas.

Emergent wetland plants such as flax, raupō, sedges and rushes are established within the varial zone (the intermittently flooded area) of the reserve. Supplementary planting of wetland plants, preferably using local stock will hasten this process.

A variety of water plant species occur here, some fully submerged and some emergent. All have value as components of fish and wildlife habitat and the wetland ecosystem.

### **5.3 Climate**

Climate reflects the typical weather pattern of Central Otago, with hot dry summers and cold frosty winters. Rainfall is low, around 400 mm/year. The prevailing wind for Bendigo is north-easterly, down the Clutha Valley

### **5.4 Fisheries and wildlife**

The impact of the Clyde Dam development on fish and wildlife was clearly recognised in the environmental impact assessment (Ministry of Works and Development 1977) as involving a loss of riverine fish and wildlife resources and associated recreational opportunities and the creation of a lake environment providing habitat for species more suited to still water and a different set of recreational opportunities. For example:

"Fish and wildlife represent the two most important recreation and conservation resources within the area affected by Dunstan Lake".  
(9.4, p.119, Environmental Impact Report (E.I.R.) on design and construction proposals, 1977).

"The existing (river) fishery and recreational fishing opportunities will be completely lost."  
(1.3, Appendix II, E.I.R. on Design and Construction Proposals 1977), and:

"The construction of D.G.7. (The Clyde Dam) will inundate the most extensive, diverse and thus the most important habitat for river dwelling avifauna

in the region. The area referred to is that which lies immediately above Cromwell, past Lowburn to just below the Lindis confluence.”  
(8.1.1, Appendix II, as above) and:

The loss of riverbed habitat and the creation of a large area of open water could result in an increase in birdlife more suited to this type of environment – Canada geese, black swan, N.Z. scaup.”  
(10.1, Appendix II, as above).

The identification of alternative habitat opportunities at Bendigo led directly to the establishment of the Bendigo WMR as mitigation.

#### **5.4.1 Wildlife**

The reserve provides habitat for a broad range of wetland wildlife with differing legal protection as follows:

##### **Wildlife not protected - Schedule 5, Wildlife Act 1953**

This category includes Canada goose, feral goose, black backed gull and spur winged plover.

Feral geese are common within the reserve, more so than Canada geese even though the latter are widespread within the South Island. Feral geese have been controlled in the Bendigo area in the past through hunting and culls

Black backed gulls are common and spur winged plover, Australian magpie and Eurasian skylarks are also present.

##### **Wildlife able to be hunted subject to conditions – Schedule 3 Wildlife Act 1953**

Includes Grey teal, black shag, little shag and Australasian harrier

##### **Wildlife declared to be game – Schedule 1, Wildlife Act 1953**

Bird species classified as ‘game’ under Schedule 1 are commonly called game birds and are primarily waterfowl. Game may be hunted during the defined game hunting season which opens on the first weekend in May each year.

Game birds include mallard, grey and shoveler ducks, paradise shelduck, black swan, pukeko and California quail. Research has shown the existing mallard/grey population is extensively hybridized [Grey duck | Pārera | New Zealand Birds Online \(nzbirdsonline.org.nz\)](http://www.nzbirdsonline.org.nz)

Mallard duck and paradise shelduck are common within the reserve.

California quail have been observed in the reserve in the past but not in significant numbers.

##### **Absolutely Protected Species – s3 Wildlife Act 1953**

Absolutely protected wetland species include: New Zealand scaup (black teal), white faced heron, pied stilt, black fronted tern, black billed gull, New Zealand

falcon, Australian coot, Welcome swallow, South Island fantail, Scared kingfisher, South Island pied oyster catcher and Australasian crested grebe

#### **5.4.2 Fish and fisheries**

The reserve includes a range of fish species both native and introduced, as follows:

#### **Sports fish – Section 2A Freshwater Fisheries Regulations 1983**

Brown and rainbow trout are common in Lake Dunstan and the Clutha River Mata-Au with brown trout being more prevalent in the lake at present. They form the basis for a popular trout fishery

Chinook salmon occur in the lake seasonally due to the outmigration of salmon smolt from landlocked populations in lakes Wānaka, Wakatipu and Hāwea attempting to pass through Lake Dunstan on the way to the sea.

#### **Native fish (DOC 2017)**

Longfin eel (endemic – At Risk-Declining) are present in the lake but both upstream and downstream migration is impeded by the Clyde and Roxburgh hydro dams.

Common bully (endemic – Not Threatened) are abundant in the lake.

Koaro (At Risk-Declining) are also present in the lake.

### **6.0 Proposed Management Outcome for Bendigo WMR**

Bendigo Wildlife Management Reserve is a significant wetland habitat in a landscape where wetlands are uncommon. It sustains wildlife and fisheries, including game birds and sports fish, protected wildlife species and indigenous fish some of which are rare and threatened.

The area is valued by recreational game bird hunters, anglers and those interested in the outdoors for its natural landscape, its biological productivity and diversity, and its sports fishing and game hunting opportunities.

The reserve provides a marked contrast to the more readily accessible and developed areas of Lake Dunstan and contributes positively to the recreational opportunity spectrum afforded by the lake.

Public access to the reserve is enabled in ways which do not detract from its natural character and associated values.

Bendigo WMR remains an important link in the chain of freshwater habitats in the Central Otago area, not only through its direct connection to the upper Clutha River Mata-Au and tributaries, and Lake Dunstan and tributaries, but also as part of a migratory pathway for freshwater fish and bird species.

## **6.1 Objectives**

- To protect maintain and enhance wetland values in the Bendigo Wildlife Management Reserve to maintain biological diversity, productivity, and recreational opportunity
- To manage the Bendigo WMR to preserve its natural wetland landscape characteristics and wilderness values as well as adjacent and connected habitat areas
- To balance the provision of facilities including access tracks, bridges, boardwalks and maimai to ensure its natural and wilderness values are maintained
- To manage recreational activities including commercial activity so that they do not adversely impact on landscape, recreation, and natural values
- To enhance biological diversity and encourage development of indigenous vegetation
- To maintain and enhance recreational opportunity within the reserve consistent with the objectives above
- To advocate for sympathetic and complementary management of adjacent lakeshore and riverbed and riparian areas, wetlands, and public land to enhance wetland values and recreational opportunity

## **6.2 Policies**

### **6.2.1 Relationships**

- Establish and maintain a working relationship with Ngāi Tahu over reserve management and seek input on cultural aspirations
- Encourage greater public awareness of the reserve's values through community engagement
- Encourage community involvement in the management of the reserve in line with this plan
- Establish and maintain good working relationships with relevant government departments, local bodies, adjacent landholders, and Contact Energy
- Establish communication links with adjacent landholders and actively manage issues arising between reserve management and adjacent land uses

### **6.2.2 Management of wetland values**

- Ensure protection of wilderness value
- Ensure protection of landscape values

### **6.2.3 Management of vegetation**

Background – The retention of woody vegetation above the maximum operating range lake level was an agreed feature of the Bendigo WMR establishment to maintain cover for wildlife and fish. It was formalized by a variation to the Clyde power project's consents. However, the lengthy delay in re-gazettal of the reserve has resulted in prolific growth of woody vegetation, mostly willows and poplars, causing a loss of habitat diversity and resulting in a significant deferred maintenance issue.

- Develop a staged program for management of woody vegetation within the reserve and where possible in adjacent public land areas with the following priorities:
  - Selective removal of willows and poplars on lake shore areas to provide a balance of open water to cover.
  - Reduction of woody vegetation in key public access areas such as the reserve adjacent to State Highway at Bendigo
  - Aerial spraying of willows and poplars in the active side channels and lagoon areas within the reserve to create habitat diversity, open water and to restore flow.
  - Establish and encourage replanting programs with indigenous wetland plant species in cleared areas that are accessible.

Note: There are Water Plan and District Plan restriction on removal of woody vegetation from regionally significant wetlands.

#### ***6.2.4 Encouragement of ground nesting river birds***

- Identify areas within the reserve with actual or potential value for ground nesting river birds including black billed gulls, black fronted terns and pied stilts and develop projects for control or removal of terrestrial weeds such as lupins to create optimum habitat conditions.

**Note:** Nesting islands were constructed within the Bendigo WMR area before lakefill and were managed to provide bare gravel areas for nesting birds with initial success but mixed results thereafter.

#### ***6.2.5 Pest plants and animals***

- Protect as far as practical the reserve's wetland values from the adverse impacts of plants and animals declared to be pests in the Otago Pest Management Plan.
- Be a good neighbour in relation to plant pests on land it administers.

#### **Commercial activities**

- Prohibit commercial eel fishing within the reserve area. Ref: CMS Policy 3.13
- Allow commercial uses within the reserve that:
  - are compatible with maintenance of wetland values and
  - do not impact significantly on recreational uses

- Require commercial users to have the approval of Otago Fish and Game Council to operate. Ref CMS Policy 3.8

#### Habitat enhancement

- Enhance habitats within the reserve through management of vegetation, ground contouring/earthworks and water management to improve habitat for wetland birds and fish.

#### Grazing

- Authorise grazing within the reserve at times and intensities, and for durations which positively impacts on the habitat and recreational values of the reserve (Ref: CMS Policy 3.15.2)

#### Recreation and access

- Manage recreational opportunities within the reserve in line with its recognized position on the recreational opportunity's spectrum as a natural resource area with wilderness qualities and maintain as a priority habitat protection before recreation and access.
- Provide signage and interpretation panels at the main reserve access points but limit elsewhere.
- Provide for restrictions on access to the reserve or closure:
  - during the game hunting season and immediately prior
  - at other times when public health and safety is an issue
- Restrict public access on access tracks within the reserve to foot access only except for the Wānaka to Cromwell cycle trail.
- Prohibit freedom camping within the reserve except with the prior permission of Otago Fish and Game Council.

**Note:** Otago Fish and Game Council has agreed with the Upper Clutha River Tracks Trust on an alignment for a cycle way to be built at the foot of the terrace along the reserve's western boundary. This agreement is included as Appendix 4

#### Recreational boating

- Provide restrictions on boating in the reserve including:
    - A prohibition on high-speed boating except in the main river channel for the purpose of crossing the reserve from the lake to the Clutha River Mata-Au or vice versa using the shortest possible route or where necessary for accessing maimai.
    - A prohibition on intentional disturbance of wildlife
  - Allow recreational boating at speeds of less than 5 knots within the reserve.
- Ref: CMS Policies 3.5.1 to 3.54

### 6.2.6 Game bird hunting



- Recognise game hunting as the priority use during the game season
- Allocate hunting opportunities within the reserve by permits and designated opening weekend hunting positions
- Allow access for dogs within the reserve except in areas and at times where there are ground nesting birds. Ref: CMS Policy 3.8.

**Note:** Hunting gamebirds within the Bendigo WMR is managed by Otago Fish and Game Council and must comply with the current Game Season Regulations for the South Island. [Hunting Regulations in NZ | Fish & Game New Zealand \(fishandgame.org.nz\)](http://fishandgame.org.nz)

### **6.2.7 Structures including maimai**

- Limit the authorization of structures within the Bendigo WMR to those necessary for recreational hunting of game birds and for the public use and appreciation of the reserve and its natural values.
- Manage structures to ensure they will not significantly impact on natural values and are compliant with regional and district council rules, and hunting regulations.

Ref: CMS 3.10 Structures and utilities

### **6.2.8 Fire Management**

Ref CMS Policy 3.2.4

## **9.0 Bendigo WMR Plan implementation**

Bendigo Plan implementation will be achieved through:

- projects in successive Otago Fish and Game Council annual plans;
- decisions on reserve management within Otago Fish and Game Council's authority;
- general advocacy in other planning processes.

Reports on progress will be included in Otago Fish and Game Council Annual Reports

The Bendigo WMR plan will have a life of at least ten years or until formally amended in full or in part

### **9.1 *Activities preceding plan development***

Because of the lengthy delay in reserve re-gazettal reserve management planning has been superseded by three important developments namely:

- Development of a cycle trail through the reserve on the western boundary as part of the Wānaka to Cromwell Cycle trail. This has been agreed and is

expected to have a neutral effect on wetland values. The agreement has conditions of use designed to manage health and safety during the game hunting season.

- Restoration of discharge capacity in braided channels of the Clutha River Mata-Au on the eastern side of the reserve through clearance of willows and stumps. This work, to be undertaken by Otago Regional Council, is expected to positively affect wetland values within the reserve and represents a useful start to management of woody vegetation throughout the reserve.
- Small scale willow control and planting of eco-sourced wetland plants on the eastern terrace with the support of local community groups.

## 10.0 References

Clutha Development (Clyde Dam) Empowering Act, 1982, [Clutha Development \(Clyde Dam\) Empowering Act 1982 \(1982 No 20\) \(austlii.edu.au\)](#)

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New Zealand Gazette (1993) Reservation of land for a Reserve

Ministry of Works and Development (1977) Environmental Impact Report (E.I.R.) on Design and Construction Proposals for the Clutha Valley development: Clyde power project, Ministry of Works and Development.

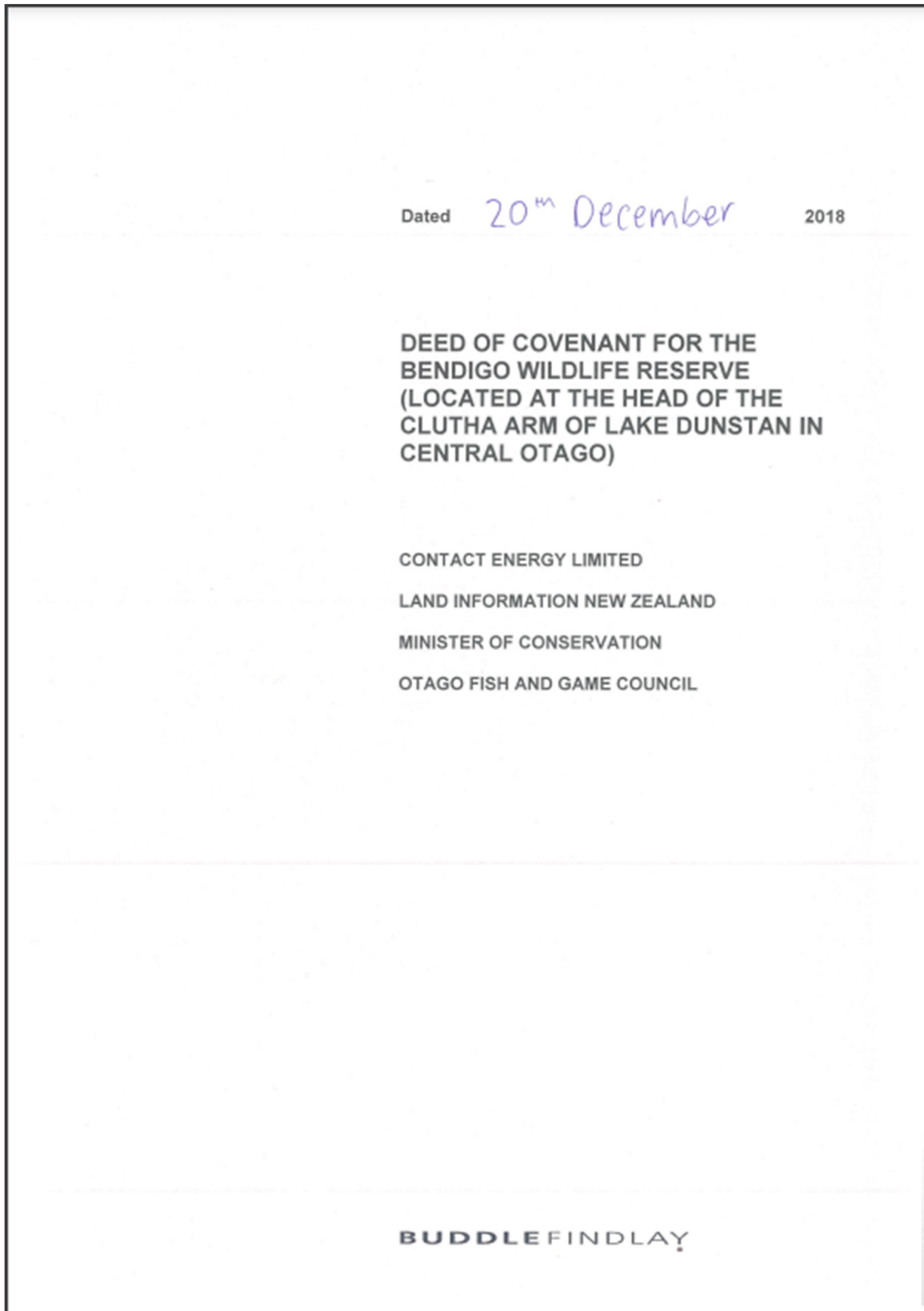
New Zealand Gazette (1994) Classification of Reserve as a Government purpose (wildlife management) reserve and appointment of Otago Fish and Game Council to control and manage.

## 11.0 Appendices

**Appendix 1 - New Zealand Gazette Notice - 08.02.2019** establishing government purpose (wildlife management) reserve on Lake Dunstan at Bendigo and appointing Otago Fish and Game Council to control and manage the reserve.

NEW ZEALAND GAZETTE	
<b>Crown Land Set Apart as Reserve, Classification and Appointment to Control and Manage With the Otago Fish and Game Council</b>	
Pursuant to section 167 of the Land Act 1948, the Director Operations, Southern South Island Region, Department of Conservation, hereby sets apart the Crown land described in the Schedule as reserve, and further, pursuant to the Reserves Act 1977, classifies the reserve as a government purpose (wildlife management) reserve and further appoints the Otago Fish and Game Council to control and manage the said reserve subject to the provisions of the Reserves Act 1977.	
<b>Otago Land District—Otago District</b>	
<b>Schedule</b>	
Area ha	Description
152.4000	Area marked "A" on SO Plan 23976 subject to an operating easement (YEC 960339.1) in favour of Contact Energy Limited held in Computer Interest Register (CIR) OT18C/859. All <i>New Zealand Gazette</i> , 24 October 1996, No. 155, page 4122.
Dated at Queenstown this 29th day of January 2019.	
AARON FLEMING, Director Operations, Southern South Island, Department of Conservation.	
2019-01-29	08-02-2019 11:32

**Appendix 2 - Deed of Covenant for the Bendigo Wildlife Reserve** between Contact Energy, Otago Fish and Game Council, and the Minister of Conservation



Bendigo Deed of Covenant.PDF

Physical copies available on request, Please email [otago@fishandgame.org.nz](mailto:otago@fishandgame.org.nz)

### Appendix 3

<b>Wetland Bird Species and Status</b>			
<b>Name</b>	<b>Scientific name</b>	<b>Occurrence within WMR</b>	<b>Status</b>
<b>Absolutely protected wildlife - section 3, Wildlife Act (1953)</b>			
New Zealand scaup / Pāpango	<i>Aythya novaeseelandiae</i>	common	Endemic – Not threatened
White-faced heron / Matuku moana	<i>Egretta novaehollandiae</i>	frequently seen	Native – Not threatened
Pied stilt / Poaka	<i>Himantopus himantopus</i>	common	Native – Not threatened
Black billed gull/ Tarāpuka	<i>Chroicocephalus bulleri</i>	common	Endemic – Declining
New Zealand Fantail / Pīwakawaka	<i>Rhipidura fuliginosa</i>	frequently seen	Endemic – Not threatened
South Island pied oystercatcher / Tōrea	<i>Haematopus finschi</i>	common	Native – Declining
Sacred kingfisher   Kōtare	<i>Todiramphus sanctus</i>	occasionally seen	Native – Not threatened
Welcome swallow / Warou	<i>Hirundo neoxena</i>	frequently seen	Native – Not threatened
N.Z. Falcon / Kārearea	<i>Falco novaeseelandiae</i>	occasionally seen	Endemic - Recovering
Black fronted Tern / Tarapirohe	<i>Chidonias albastriatus</i>	common	Endemic – Nationally endangered
Australian coot	<i>Fulica atra</i>	common	Native –not threatened
Australasian crested grebe/ Pūteketeke	<i>Podiceps cristatus</i>	frequently seen	Native – Nationally endangered
<b>Wildlife declared to be game - Wildlife Act (1953) Schedule 1</b>			
Mallard/Grey /Rakiraki/Pārera	<i>Anas platyrhynchos / Anas superciliosa</i>	common	Introduced and naturalised
Paradise shelduck / Pūtangitangi	<i>Tadorna variegata</i>	common	Endemic – Not threatened
Black swan / Kākānau	<i>Cygnus atratus</i>	common	Native – Not threatened
Australasian shoveler / Kuruwhengi	<i>Spatula rhynchotis</i>	common	Native – Not threatened
Pūkeko	<i>Porphyrio melanotus</i>	frequently seen	Native – Not threatened

California quail / Tikaokao	<i>Callipepla californica</i>	occasionally seen	Introduced and naturalised
<b>Partially protected wildlife - Wildlife Act (1953) Schedule 2</b>			
Little Owl / Ruru nohinohi	<i>Athene noctua</i>	occasionally seen	Introduced and naturalised
<b>Wildlife able to be hunted subject to conditions - Wildlife Act (1953) Schedule 3</b>			
Grey teal / Tētē-moroiti	<i>Anas gracilis</i>	common	Native - Not threatened
Black shag / Māpunga	<i>Phalacrocorax carbo</i>	frequently seen	Native – Relict
Little shag / Kawaupaka	<i>Microcarbo melanoleucos</i>	frequently seen	Native - Relict
Australasian Swamp Harrier / Kāhu	<i>Circus approximans</i>	common	Native – Not threatened
<b>Wildlife not protected - Wildlife Act (1953) Schedule 4</b>			
Greylag goose / Kuihi	<i>Anser anser</i>	common	Introduced and naturalised
Canada goose / Kuihi	<i>Branta Canadensis</i>	frequently seen	Introduced and naturalised
Black backed gulls / Karoro	<i>Larus dominicanus</i>	common	Native – Not threatened
Spurwing Plover	<i>Vanellus miles novaehollandiae</i>	frequently seen	Native – Not threatened
Australian Magpie/ Makipai	<i>Gymnorhina tibicen</i>	frequently seen	Introduced and naturalised
Eurasian skylark	<i>Alauda arvensis</i>	occasionally seen	Introduced and naturalised

## Appendix 4

<b>Fish Species and Status</b>			
<b>Name</b>	<b>Scientific name</b>	<b>Occurrence within WMR</b>	<b>Status</b>
<b>Sports fish</b>			
Brown Trout / Tarauta	<i>Salmo trutta</i>	common	Introduced and naturalised
Rainbow trout / Tarauta	<i>Oncorhynchus mykiss</i>	common	Introduced and naturalised
Chinook salmon / Hāmana	<i>Oncorhynchus tshawytscha</i>	common	Introduced and naturalised
<b>Native fish</b>			
Common bully / Toitoi	<i>Gobiomorphus cotidianus</i>	common	Endemic – Not threatened
Kōaro	<i>Galaxias brevipinnis</i>	present	Declining

Longfin eel / Tuna kuwharuwharu	<i>Anguilla dieffenhachi</i>	present	Declining
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## **Appendix 5 – Relevant regulations, policies and plans**

### **Regional Plan Water: for Otago -**

Various aspects of wetland management are covered by policies and rules in the Regional Plan Water: for Otago including management of vegetation in Regionally Significant Wetlands such as Bendigo WMR. [Water \(orc.govt.nz\)](http://www.orc.govt.nz)

### **National Policy Statement for Freshwater Management 2020**

The [National Policy Statement for Freshwater Management 2020](#) includes policies to avoid the reduction of natural inland wetlands, protect their values and promote their restoration.

### **National Environmental Standards for Freshwater 2020**

The [National Environmental Standards for Freshwater 2020](#) has regulations that place restrictions on damaging activities in and near natural wetlands.

Maimai are included in the definition of wetland utility structures in section 3 of the NES and construction and maintenance are covered in sections 42 and 55 respectively.