Otago Regional Council

Otago Regional Council

Long-term Plan 2021-2031

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Kia ora Koutou

Building a better future for you and for our environment

Focusing on our future is more important than ever, and your submissions on our Long-term Plan (LTP) informed us that you largely agree. We need to take a big step up to do our part.

There are undoubtedly challenges ahead as central government responds to broader concerns of New Zealanders about the environment and climate change. In particular, the replacement of the Resource Management Act with three new pieces of legislation could have a large impact on us and how we work with you in the future.

This comes on top of last year's significant water quality policy changes, as central government responded to increased community expectations of the quality of our cherished waterways. We have added staff and resources to support these changes and have also looked at what other work programmes are important to you.

With these changes in mind and the feedback from your submissions, it's clear that our top four priorities must be: water, biosecurity and biodiversity, transport and air. In this LTP we have attempted to balance your needs with those projects we must undertake.

You agreed with us that we need to invest more to keep pests out of Otago and minimise the damage caused by established pests. You also understood the need to increase rates to achieve a sustainable funding source for our planned work with more submitters supporting this option than the option with more debt funding. Submissions about how we should fund Lake Hayes remediation raised a lot of discussion at the council table; while a majority of submitters supported our preferred option for a new targeted rate, we ultimately agreed with the view that a regional perspective to funding, underpinned by a regional work programme, is needed. We decided that at this stage, spreading the cost across all of the Queenstown Lakes district would be an appropriate interim step.

As we read through your submissions and heard from some of you, it was clear we could still do more to better support your priorities for our region. We are therefore accelerating our integrated catchment management, developing a lakes strategy, and establishing a harbour plan. We have also allocated $50,000 to subsidise some consent fees for activities that support community environmental restoration projects.

While climate change is a lens on all that we do, we are committed to reducing regional carbon emissions. Our current work to understand our emissions is an important start. We acknowledge the recent release of the Climate Change Commission's report and that we must provide better public transport and work to get people out of their cars and onto buses and active forms of transport.

As your councillors, we understand this proposed Long-term Plan (LTP) includes a significant increase in the rates you could pay for year one of this plan, with smaller increases in future years. We are fortunate that this rise is moderated by the subsidisation of General Rates (the rates we all pay across Otago) through dividends from Port Otago.

Thank you for your input and support of this LTP. There's a lot of work to be done but we're excited about what it means for our future here, in Otago.

Ngā mihi nui
Andrew Noone

Chair
Otago Regional Council

Audit Report

Deloitte.

To the reader: **Independent Auditor's Report on Otago Regional Council's 2021-2031 Long-Term Plan**

I am the Auditor-General's appointed auditor for Otago Regional Council (the Council). The Local Government Act 2002 (the Act) requires the Council's long-term plan (plan) to include the information in Part 1 of Schedule 10 of the Act. Section 94 of the Act requires an audit report on the Council's plan. Section 259C of the Act requires a report on disclosures made under certain regulations. I have carried out this work using the staff and resources of Deloitte Limited. We completed our report on 30 June 2021.

Opinion

In our opinion:

- the plan provides a reasonable basis for:
  - long-term, integrated decision-making and co-ordination of the Council's resources; and
  - accountability of the Council to the community;
- the information and assumptions underlying the forecast information in the plan are reasonable; and
- the disclosures on pages 65 to 66 represent a complete list of the disclosures required by Part 2 of the Local Government (Financial Reporting and Prudence) Regulations 2014 (the Regulations) and accurately reflect the information drawn from the plan.

This opinion does not provide assurance that the forecasts in the plan will be achieved, because events do not always occur as expected and variations may be material. Nor does it guarantee the accuracy of the information in the plan.

Basis of opinion

We carried out our work in accordance with the International Standard on Assurance Engagements (New Zealand) 3000 (Revised): *Assurance Engagements Other Than Audits or Reviews of Historical Financial Information*. In meeting the requirements of this standard, we took into account particular elements of the Auditor-General's Auditing Standards and the International Standard on Assurance Engagements 3400: *The Examination of Prospective Financial Information* that were consistent with those requirements.

We assessed the evidence the Council has to support the information and disclosures in the plan and the application of its policies and strategies to the forecast information in the plan. To select appropriate procedures, we assessed the risk of material misstatement and the Council's systems and processes applying to the preparation of the plan.

Our procedures included assessing whether:

- the Council's financial strategy, and the associated financial policies, support prudent financial management by the Council;
- the Council's infrastructure strategy identifies the significant infrastructure issues that the Council is likely to face during the next 30 years;
- the Council's forecasts to replace existing assets are consistent with its approach to replace its assets, and reasonably take into account the Council's knowledge of the assets' condition and performance;
- the information in the plan is based on materially complete and reliable information; the Council's key plans and policies are reflected consistently and appropriately in the development of the forecast information;
- the assumptions set out in the plan are based on the best information currently available to the Council and provide a reasonable and supportable basis for the preparation of the forecast information;
- the forecast financial information has been properly prepared on the basis of the underlying information and the assumptions adopted, and complies with generally accepted accounting practice in New Zealand;
- the rationale for the Council's activities is clearly presented and agreed levels of service are reflected throughout the plan;
- the levels of service and performance measures are reasonable estimates and reflect the main aspects of the Council's intended service delivery and performance; and
- the relationship between the levels of service, performance measures, and forecast financial information has been adequately explained in the plan.

We did not evaluate the security and controls over the electronic publication of the plan.

Responsibilities of the Council and auditor

The Council is responsible for:

- meeting all legal requirements affecting its procedures, decisions, consultation, disclosures, and other actions relating to the preparation of the plan;
- presenting forecast financial information in accordance with generally accepted accounting practice in New Zealand; and
- having systems and processes in place to enable the preparation of a plan that is free from material misstatement.

We are responsible for expressing an independent opinion on the plan and the disclosures required by the Regulations, as required by sections 94 and 259C of the Act. We do not express an opinion on the merits of the plan's policy content.

Independence and quality control

We have complied with the Auditor-General's:

- independence and other ethical requirements, which incorporate the independence and ethical requirements of Professional and Ethical Standard 1 issued by the New Zealand Auditing and Assurance Standards Board; and
- quality control requirements, which incorporate the quality control requirements of Professional and Ethical Standard 3 (Amended) issued by the New Zealand Auditing and Assurance Standards Board.

In addition to this audit and our report on Council's 2019/20 annual report, we have carried out engagements in the areas of tax and other services which are compatible with those independence requirements. Other than these engagements, we have no relationship with or interests in the Council or any of its subsidiaries or controlled entities.

Heidi Rautjoki, for Deloitte Limited
On behalf of the Auditor-General, Dunedin, New Zealand

PART 1
Overview

Why does this document matter?

The purpose of the Long-term Plan is to provide direction for Council decision making and set Council work programme priorities and detailed budgets for the first three years, in less detail to ten years and beyond for our flood protection and drainage infrastructure. It provides a framework that enables ORC to connect with and demonstrate important matters to the community, and with that improve certainty about what can be expected.

As a country we value democracy and associated principles of transparency, accountability and public participation, and this document was developed in a process that invited and considered public feedback. A consultation document, 'Have Your Say On Our Future', was made available to enable this and over 560 submissions were received, including over 70 verbal presentations. Feedback focused on the key proposals of; pest management delivery, funding of pest management, balanced budget, and funding of Lake Hayes. Extensive feedback was also received across the range of Council activity.

The elected Otago Regional Councillors considered this feedback and made the following decisions that directed Council on final adjustments to the draft plan as consulted. This included:

Consultation Proposals

Changing service levels for pest management activity

Council presented two consultation options being: option 1, an immediate and significant increase in capacity and capability to manage pests; option 2 (preferred), a moderate increase in staff capacity to undertake more education, engagement, and enforcement to manage pests.

Feedback from the community was split with 45% support for option 1 and 55% for option 2. While Council acknowledged the strong support for option 1, it decided to stay with its preferred option 2, with the latter reflecting the broader considerations of rates affordability and other service priorities.

How we will fund increased service for pest management

Council presented three consultation options being: option A, a Regional General Rate based on capital value (CV); option B (preferred), a Regional Targeted Rate with biosecurity activity costs shared across all ratepayers based on their land value (LV); option C, mixed rating with biosecurity activity costs split 50:50 being half-paid as a targeted rate by rural and lifestyle ratepayers via land value. The other half applied to all ratepayers via the general rate (capital value).

Council decided to stay with the preferred option B with 67% of submissions in support. Council acknowledged the submitter support and commentary associated with options A and C. It was noted that 17% of submissions supported option C, an option even more closely aligned with funding principles espoused in the Regional Pest Management Plan.

Balancing the budget

Council presented two consultation options being: option 1 (preferred), an increase in total rates to achieve an immediate and sustainable funding source for our operational expenditure; option 2, to use a 'general reserve offset' (reserves) to enable the smoothing of rates increases over the next 10 years to sustainably fund our operational expenditure. Total rates year 1: 47.5%, year 2: 17.0%, year 3: 10.6%, thereafter average: 3.5%.

Council decided to stay with the preferred option 1 with 62% of submissions in support. Council noted that a high portion of comments received were associated with option 2 and reflected strong concerns about rates affordability. This feedback fettered the pressure from the community on Council to add more work to the draft LTP. The impact on total rates following Council deliberations was within the parameters of the consulted Financial Strategy and this proposal, being; year 1: 48.5%, year 2: 18%, year 3: 12%, thereafter average: 3.6% and within a range of 2.8% to 5.1%.

Funding the rehabilitation of Lake Hayes

Council presented three consultation options being: option 1 (preferred), a new targeted rate for Lake Hayes; option 2, fund via existing river and water management targeted rate; option 3, a new uniform targeted rate.

After consideration of community feedback, Council revised its initial preference for option 1 to option 2, with the latter being applied for years 1 and 2 LTP. The change in Council's position reflected a view that less weighting should be placed on the Castalia economic benefits report in favour of taking an increasingly regional approach to waterway remediation over time. This decision was predicated on an understanding that a clear and consulted regional work programme was required before a regional or non-targeted funding approach could be taken.

Our must-do projects

Land, Water and Biodiversity

Submissions reinforced the importance and support for integrated catchment management. Council decided to advance the timing of this work programme to that consulted.

Submissions reinforced the Council's prioritisation of Land and Water activity. Council reinforced this aspect of the draft LTP with a directive to establish and fund a scoping study for an Otago Lakes Strategic Plan. It will be done in association with relevant stakeholders with a view to creating lake management plans aimed at improving the environmental and amenity value of these water bodies. An initial budget of $100,000 in each of years 1 and 2 were added.

An additional $40,000 per annum was included for ECO Fund grant awards.

Air

Council noted the submissions expressing the importance of addressing air quality issues across various airsheds in the region. Council agreed but, mindful of all the regional priorities and funding constraints, decided to stay with the draft LTP decision to pause this programme of work.

Safety and Resilience

Submissions relating to this group of activities continue to demonstrate an increasing awareness and concern about our collective understanding of natural risks and what our options are. Climate change is clearly a critical issue and is firmly on the Council's radar and reflected in LTP work programmes that remain as consulted. It is, however, flagged as a dynamic issue with for example increasing direction from central government, and as such this LTP is likely to reflect adjustments via future Annual Plan process.

A small number of submissions emphasised an important issue regarding services and funding for flood protection and drainage activity. In response, Council will consider options around an independent review of the existing rating basis for all flood protection and drainage schemes and provide potential cost details in year 1 of the LTP.

Transport

Council endorsed the programme as consulted with provision added to resolve the 'living wage' issue for bus drivers. As discussed above, for 'Safety and Resilience' activity there are significant assumptions that can change, for example central government direction and funding, and impact future service delivery.

Regional Leadership

Council made two adjustments to the draft LTP in response to submissions being: establishment of a harbour facilities and management plan in a collaboration with Iwi, Community boards and groups, Dunedin City Council and Port Otago, with budgeted funds of $100,000 in each of financial years 2 and 3 LTP; and a policy for assisting with resource consent costs for environmental enhancement projects being implemented with a budget of $50,000 included in the LTP.

The Otago Region

Otago is the second largest physical region in New Zealand, making up 12% of New Zealand's land mass. It spans from the eastern coastline, across the vast central plains, to the Southern Alps that border the western regional boundary. There are five territorial authorities in Otago: Dunedin City Council, Queenstown Lakes, Waitaki District, Central Otago and Clutha district councils.

Otago's population at the 2018 Census was 225,186,[1] a regional increase of 11% since the 2013 Census. Dunedin City has the largest population of the territorial authorities at 126,255, followed by Queenstown Lakes District at 39,153, Waitaki District at 22,308, Central Otago District at 21,558 and Clutha District at 17,667. The fastest growing district between 2013 and 2018 was Queenstown Lakes, increasing 28% from 28,224 people in 2013 to 39,153 in 2018, making it one of New Zealand's fastest growing urban areas.

Otago's economy centres around agriculture, tourism, historical gold and mineral mining, and education. Tourism usually contributes roughly a quarter of the region's gross domestic product. This is typically the highest of any region in New Zealand and primarily concentrated in the Queenstown Lakes District.

Hydroelectric dams and wind farms[2] provide a large portion of regional energy requirements. Additional secondary sources of power include steam, liquid fuel, biomass and solar. Substantial rivers with high flow periods make the region ideal for hydroelectric generation. Significant hydroelectric generation facilities are located in Central Otago, Clutha, and Queenstown Lakes districts. These facilities provide the national grid with significant renewable energy and have also altered the hydrology of the rivers in places, including the creation of large lakes such as Lake Dunstan and Lake Roxburgh. Additionally, Otago has three wind farms, in Dunedin, Clutha and Central Otago.

Climate

The Otago region experiences two distinct climates due to the geographic variety between the temperate coastal areas, and the almost continental inland areas. The coastal settlements experience a cyclic weather pattern that alternates frequently between a warmer and drier climate, and a cooler, damper climate. Central Otago's climate in particular is famously characterised by hot, dry summers and contrastingly cold, frosty winters.

General temperature ranges for the entire Otago region fall between 18°C to 24°C on summer afternoons, and -2°C to 3°C during winter nights.[3] The average summer temperatures in Central Otago range between 10°C and 30°C, while the average winter temperatures range from -6°C to 15°C.[4] Central Otago has held national records for both New Zealand's hottest and coldest temperature readings.

The heaviest regional rainfalls occur typically over western areas of Otago, such as around the Lakes District and the Southern Alps, averaging 2000 mm per year. In contrast, the average rainfall in Central Otago is the lowest in New Zealand averaging around 400-500 mm per year.

Coast

The Otago coastline stretches for 480 km and is extremely diverse – with environments ranging from pebble beaches, basalt formations, rolling farms, striking cliff heads and sandy beaches. Significant coastal settlements include Dunedin and Oamaru, with Otago's port based in Port Chalmers, Dunedin. Dunedin Harbour is the region's only commercial freight handling harbour, however there are commercial fishing ramps in Oamaru, Moeraki, Karitane and Taieri Mouth. The ecology of the Otago coast is varied and diverse.

Coastal erosion and the steady decline of the regional coastline is well documented, posing a long-term threat to residential and commercial coastal developments. Additionally, the dumping of wastewater into the ocean, including pollution in Otago Harbour and sedimentation, is cause for concern.

Water Bodies

The Otago region has significant freshwater resources: surface water, natural and artificial lakes, groundwater, and wetlands. Otago's communities are reliant on these water resources for their social, cultural, national and economic wellbeing. Rivers and lakes make up most of the regional surface water. Otago's lakes constitute about 23% of New Zealand's total lake surface area. The primary catchments are Lakes Wanaka, Wakatipu and Hāwea, all of which feed into Otago's largest river, the Clutha River/Mata-Au.

1 2018 Census place summaries: Stats NZ. (n.d.). Retrieved June 29, 2020, from https://www.stats.govt.nz/tools/2018-census-place-summaries/otago-region

2 Fitzgerald, W. (2019). *Dunedin Energy Study* 2017-2018. University of Otago.

3 Macara, G. R. (2015). The Climate and Weather of Otago, Second Edition. *NIWA SCIENCE AND TECHNOLOGY SERIES*, 67th ser.

4 Central Otago Climate. (n.d.). Retrieved June 24, 2020, from https://www.centralotagonz.com/living-here/central-otago-climate

Underground geological formations, capable of trapping and holding water, create groundwater sources. Many of the regional groundwater sources contain useable water. Wetlands make up many significant landscape and ecosystem elements in Otago, including blanket and string bogs, saline areas, swamp forest remnants, shallow lake complexes, estuarine saltmarshes, and valley floor swamps.

Natural Character and Landscapes

Otago's environment captures the spiritual and cultural significance of water flowing from the mountains to the sea. Otago's natural character is diverse and reflects the region's striking natural, wild beauty and more modified yet rich cultural heritage. The character of the coast ranges from untouched imposing coastal cliffs to long stretches of sandy beaches; to river mouths, estuaries and inlets; to urbanised and developed pockets, and harbourside waterfronts such as in Oamaru and Dunedin. Moving inland, the natural character and landscapes change dramatically. Rolling plains in central Otago are separated by mountain block ranges, while steep hillsides of tussock, deep gorges and farmland feature in South and Central Otago. This land is dissected by flowing bodies of water, towering mountains, and fascinating geological formations. The natural barrier of the Southern Alps forms Otago's western regional boundary.

Urban Form

Urbanised areas in Otago only cover about 1% of total land area, however 87% of the regional population resides in urban settlements. There are variations in the levels of urbanisation – 58% of Clutha's population is urbanised, compared with 95% in Dunedin.[5]

The Queenstown Lakes District urban population is roughly 91%, however the location's outstanding landscape has determined how the urban form has developed and will continue to create challenges and restrict options for how it evolves .

In the remainder of the region, smaller urban settlements are geographically scattered, maintaining clear distinctions between rural and urban forms, and with significant variability in growth pressures and infrastructure capacity. Population growth is not the only driver of urban change pressures in Otago. Many areas face low or no growth, and all areas are expected to have an ageing population. Maintaining infrastructure and services as well as accommodating changing needs and preferences will be a challenge for almost all urban areas.

Elected Representation

Twelve Otago Regional Council members are elected to represent the region's four constituencies—Dunedin, Dunstan, Moeraki, and Molyneux. They in turn elect a chairperson who facilitates decisions about the committee structure that Council uses for decision-making, the appointment of a Chief Executive Officer, and chairing the Council meetings, that sits over the recommending committees. Importantly, the elected arm of Council employs a Chief Executive Officer (CEO) to lead the Council organisation and its staff. The CEO is responsible for the delivery of advice to the elected arm and ultimately services to the community. An election is planned for late 2022, being year 2 (and every three years) of this LTP, along with the CEO's contract (initial 5 years).

The Dunedin Constituency is represented by six Councillors and is comprised of Central Dunedin and the Waikouaiti Coast, West Harbour, Otago Peninsula and Saddle Hill community board areas located within the Dunedin City territorial area.

The Dunstan Constituency is represented by three Councillors and is comprised of the Central Otago District and Queenstown Lakes District territorial areas.

The Moeraki Constituency is represented by one Councillor and is comprised of the Otago portion of Waitaki District territorial area (part of the Ahuriri and Corriedale wards) and the entirety of the Oamaru and Waihemo wards.

The Molyneux Constituency is represented by two Councillors and is comprised of the Clutha District territorial area and the Mosgiel-Taieri and Strath-Taieri community board areas located within the Dunedin territorial area.

5 The figures and rural/urban area definitions in this paragraph are taken from Statistics New Zealand Urban/Rural Classification at the SA2 geographic level from the 2018 Census.

Partnering with Mana Whenua

The Otago Regional Council values its relationship with Kāi Tahu Papatipu Rūnaka. We continue to work with our iwi partners, to give effect to the Treaty of Waitangi partnership, strengthen it and acknowledge the unique, enduring relationship iwi have with this land.

For LTP 2021/31, the Otago Regional Council is committed to work in partnership with mana whenua to incorporate Te Ao Māori in our work. Working in partnership will deliver better outcomes for Otago, and fulfil on the principles and requirements for engaging with iwi under the Local Government Act and Resource Management Act.

For Council, these legislative requirements are considered a bottom line. We aspire to go beyond these statutory responsibilities to ensure meaningful engagement with Mana Whenua, which recognises the principles of partnership of The Treaty. This also recognises the value that engagement with Māori adds through the sharing of their knowledge and wisdom as Mana Whenua.

Te Rūnanga o Ngāi Tahu is the tribal representative body of Ngāi Tahu Whānui, a body corporate established 24 April 1996. The takiwā (area) of Ngāi Tahu Whānui includes the entire area of Otago Region, as set out in section 5 of the Te Rūnanga o Ngāi Tahu Act 1996.

Te Rūnanga o Ngāi Tahu encourages consultation in the first instance with the Papatipu Rūnanga. There are four Kāi Tahu ki Otago Rūnaka being:

- Te Rūnaka Moeraki;
- Kati Huirapa Rūnaka ki Puketeraki;
- Te Rūnaka o Ōtākou; and
- Hokonui Rūnaka.

There are three Ngāi Tahu ki Murihiku rūnanga with interests in the region as well, which are:

- Awarua Rūnanga
- Waihopai Rūnanga
- Ōraka-Aparima Rūnanga

The Otago Regional Council has current processes and initiatives that give effect to the principles and requirements set out in national legislation. These facilitate participation and building of capacity of Kāi Tahu Papatipu Rūnaka. They include:

- Mana to Mana: Kāi Tahu ki Otago Rūnaka Chairs and Councillors meet to discuss governance related issues of interest to either side
- Two iwi representatives from Kāi Tahu ki Otago are members of the ORC Strategy and Planning Committee
- Memorandum of Understanding and Protocol (2003) between Otago Regional Council, Te Rūnanga Ngāi Tahu and Kāi Tahu ki Otago for Effective Consultation and Liaison
- Charter of Understanding (2016) signed with Te Ao Marama Inc. and Southland Rūnanga
- Co-Governance: Land and Water Regional Plan Governance Group, with two iwi representatives and two ORC Councillors to guide the development of the Land and Water Regional Plan
- Partnership approach with iwi, Aukaha and Te Ao Marama in policy development to ensure that iwi views are being incorporated. The Papatipu Rūnaka consultancy services, Aukaha, representing Otago Rūnaka, and Te Ao Marama Inc., representing the Southland Rūnaka, provide a first point of contact and facilitate engagement in resource management processes.
- Partnership funding to support Aukaha to deliver and participate in Council processes.
- Regular liaison with Aukaha at a Council staff level.

ORC is giving effect to these processes and initiatives via our planned LTP work programme that includes:

- Commencing discussions on establishing a Mana Whakahono Agreement under the Resource Management Act 1991 in the future (timing to be confirmed)
- Refreshing ORC's Significance and Engagement Policy in 2021/22 to confirm how we work in partnership with iwi and to make the priority of the partnership more visible
- Giving effect to the ORC 'Strategic Directions 2020', including working with mana whenua to establish a project to implement:
  - Our vision for Otago: Te Ao Māori and Mātauranga Kāi Tahu are embedded in Otago communities
  - Our commitments: Partner with mana whenua and make Mātauranga Kāi Tahu an integral part of our decision-making
- Committing to sustainable funding of Aukaha and Te Ao Marama to assist with business planning in both organisations
- Encouraging a sense of connection, partnership, and engagement, by building the cultural competence of ORC staff and supporting diversity through Te Reo, Treaty of Waitangi and Tikanga workshops over 2021-2025
- Building cultural awareness and integration of Te Ao Māori (the Māori world view) into ORC's work and culture

Financial and Infrastructure Strategies – overview

The Local Government Act 2002 requires Council to adopt both a Financial Strategy and an Infrastructure Strategy as part of the LTP process. These strategies are included in the body of this document with this section providing the respective executive summaries.

They provide oversight to elected and executive leadership about how Council will deliver its services in a financially sustainable and prudent way.

Financial Strategy

Purpose

This strategy sets out how Otago Regional Council will manage its finances over the next 10 years. It outlines the financial direction Council wishes to take on matters such as levels of future rating, borrowings and investments, and discusses factors that influence those areas. These matters have a significant influence on Council's ability to deliver on its strategic priorities, including: aligning with national direction on freshwater reform; strengthening our leadership on strategic issues such as climate change, urban development and community wellbeing; and ensuring our operational response to maintaining and improving Otago's natural environment and public transport is appropriate. Delivering on these priorities must be done in consideration of what is affordable to the community, and this Financial Strategy sets out a path for the prudent and sustainable funding of this Long-term Plan.

Overview of the Strategy

Council faces a significant financial challenge in this Long-term Plan. Central government requirements have increased as have community expectations. In the 2020-21 Annual Plan Council was required to respond to external reviews, and increased its work programme by $10M. Council was cognisant of the unplanned rates increase this would create and decided to fund $3.9M of this increase from general reserves with a view to reviewing and accessing how this could be funded when the Long-term Plan was prepared.

Subsequent to that decision, Council also decided to reserve fund a further $1M to reduce rates increases further in light of COVID-19. Since the 2020-21 Annual Plan was adopted, further legislative requirements has meant further unbudgeted expenditure has been necessary in the current year as additional staff and resources are added in regulatory, planning and environmental monitoring areas to meet Councils increased statutory obligations. These increases and the funding shortfall in the current year mean Council is facing a significant increase in rates before any new activity is even contemplated in the Long-term Plan itself. On top of that, many targeted rate reserves are already in deficit and increases, as indicated in previous long-term plans, remain necessary to ensure those deficits are repaid.

Over the next 10 years the key financial challenges and how Council is proposing to address them in this financial strategy are:

- There is a significant increase in planned and unplanned expenditure occurring in the current 2020-21 year and that requires a corresponding increase in funding in year 1 of the Long-term Plan. Where possible expenditure has been phased over the first 3 years, but a lot of the increase is required immediately, meaning there will be a significant step up in expenditure in year 1.
- To reduce the rates increase, Port Otago dividends are forecast to increase from current levels and provide $13M in year 1, rising to $20M in year 10.
- There will also be an increased use of reserves over the life of this plan including using general reserves to permanently fund the 2020-21 general rates offset rather than adding that amount to the rate requirement.
- A new targeted rate is being introduced for biosecurity activity and an existing targeted rate applied to Lake Hayes remediation work. This will allow the increases or up-front expenditure in these activities to be deficit-funded and funding increases smoothed over following years.
- Council has renamed and repurposed the river management targeted rates to include other water body activity. This will now include funding specific lake and water body remediation initiatives within each river and water management plan within each district.
- The use of external borrowing is included in this 10-year plan. This will reduce the interest cost for reserves that are in deficit and will allow cashflow to be managed efficiently as internal borrowing is forecast to exceed the level of Council's financial assets.

Infrastructure Strategy

This 10-year Long-term Plan provides for the delivery of flood protection and drainage schemes to protect people and property from flood events and to maintain the productive capability of land. It also provides a programme of river and waterway management to maintain river and stream channel capacity and stability.

Importantly, these activities form the basis of the Otago Regional Council Infrastructure Strategy (IS) that provides the rationale for the 10-year programme of work described in the LTP. As a minimum it looks across the next 30 years, focusing on issues of relevance to the community, the available options or requirements to manage those issues, and the region's infrastructure assets.

Providing and maintaining infrastructure requires good asset management practices and strategic thinking. ORC regularly undertakes asset condition and performance monitoring of its flood protection and drainage infrastructure. Combined with modelling and other investigative activities, this informs asset maintenance, renewal and replacement programmes.

The IS identifies planning assumptions and uncertainties that underpin the work programme and associated projects included in the LTP. There is a higher degree of certainty about

the expenditure forecast for the first three years. The level of certainty decreases over the planning horizon, with projects and programmes identified in the subsequent two decades (years 11-30) likely to change in response to new information, changes in demand, and future needs.

The IS recognises the need and urgency to make better use of information systems and tools in managing assets, and to develop new thinking to assist in making decisions about what is required for the future.

Critical infrastructure assets

Most of Otago's flood protection schemes have been built to protect local communities and agriculture on adjacent floodplains. Their benefits also include providing access to key transport infrastructure and protecting critical lifeline networks such as electricity substations. The schemes are essential to managing communities' natural hazard risks, empowering economic prosperity and contributing to community resilience and well-being.

ORC's critical infrastructure assets (as identified in asset management plans) are:

- The floodbanks that protect Outram, Mosgiel, Balclutha, Alexandra, the Silver Fern Farms Finegand Plant, and Dunedin International Airport.
- The Waipori Pump Station which drains 95% of the West Taieri Drainage Scheme.
- In the Leith Flood Protection Scheme, the protection works through the university area (Dundas St to Forth St). Failures in these assets would cause flooding in much of Dunedin's CBD, including State Highway 1.
- The Shotover Training Line is critical to the performance of the Shotover Delta infrastructure. If this did not function properly then Lake Wakatipu would be affected and there would be flooding in surrounding townships, including Queenstown's CBD.

ORC owns and manages three flood protection schemes and three drainage schemes as well as a combined flood protection and drainage scheme. They are the Alexandra Flood Protection Scheme, the Leith Flood Protection Scheme (mentioned above), the Lower Clutha Flood Protection and Drainage Scheme, the Lower Taieri Flood Protection Scheme, the West Taieri Drainage Scheme, the East Taieri Drainage Scheme and the Tokomairiro Drainage Scheme. ORC also owns but commissions external management for parts of the Lower Waitaki River Control Scheme.

Key issues

Six significant issues have emerged for ORC's infrastructure work programme over the next 10 years. They include:

Condition of Infrastructure

ORC's infrastructure has been constructed over 150 years. As it ages, it can degrade, may need replacing or the technology it relies on may become redundant. This signals a bow wave of asset renewals, repairs and upgrades that will require investment and funding within the next 30 years. Improved asset condition information will be required to achieve this.

> ***Preferred management approach** - to adopt a risk-based approach to prioritise and schedule asset renewals to proactively manage renewals and investment over the lifetime of this strategy.*

Funding

Flood protection and drainage infrastructure is fundamental to the continuing economic prosperity of Otago. It protects many residential, commercial, and agricultural assets. Significant investment is needed to maintain these infrastructure networks.

> ***Preferred management approach** – to maintain the current funding policy but establish future reviews to align services with sustainable sources of funding.*

Climate change

If current and improved levels of service are to be delivered, significant investment will be required to address climate change impacts on scheme infrastructure.

> ***Preferred management approach** – to adopt a more planned and integrated approach by providing for the efficient installation of increased flood capacity, incorporating resilience into the future design of new infrastructure or renewals, and investing in improved understanding of future climate change effects.*

Legislation and Regulatory

Community values and central government's expectations for environmental outcomes have changed and continue to change at pace. Examples that will impact on ORC schemes are the national freshwater improvement programme, fish passage requirements, biodiversity opportunities, tracks and trails on or around assets, and co-benefits.

> ***Preferred management approach** – to seek improved environmental performance and integrate asset diversification by achieving multiple outcomes wherever possible, including adopting a more natural and adaptable approach by integrating environmental enhancement. This will be progressed by continuing to actively manage scheme effects and working with local landowners to achieve full regulatory outcomes across activities, including those associated with biodiversity and recreational opportunities.*

Natural Hazards

Otago's diverse landscape spans flat coastal lowlands and intensively used alluvial floodplains, to large sparsely populated and steep mountainous areas. Otago is exposed to a broad range of natural hazards that can include flooding, landslide, seismic activity, coastal erosion, tsunami and storm surge. All are major hazards to flood protection and drainage infrastructure.

> ***Preferred management approach** – to maintain and improve current practice around hazard readiness, response and recovery as ORC continues to learn from past events. This will include increased efforts to raise awareness and educate communities on local natural hazard risks. ORC will continue to increase understanding and plan for risks related to natural hazards.*

Growth and Development

Changes to the RMA (Section 6) in 2017 highlighted the increasing level of natural hazard risk and the need to ensure growth and development does not increase these risks and associated costs. While household projections for Dunedin City are estimated to decelerate, some growth is proposed in areas of high or increasing natural risk, and there is a need for information to be available to assist in decision-making and managing community expectations. Over the longer term there is potential for some acceleration of land use change outside urban areas, placing additional pressures on flood protection and drainage services to provide protection. A better understanding is needed of the likely distribution of growth and the additional demands this could place on flood management services.

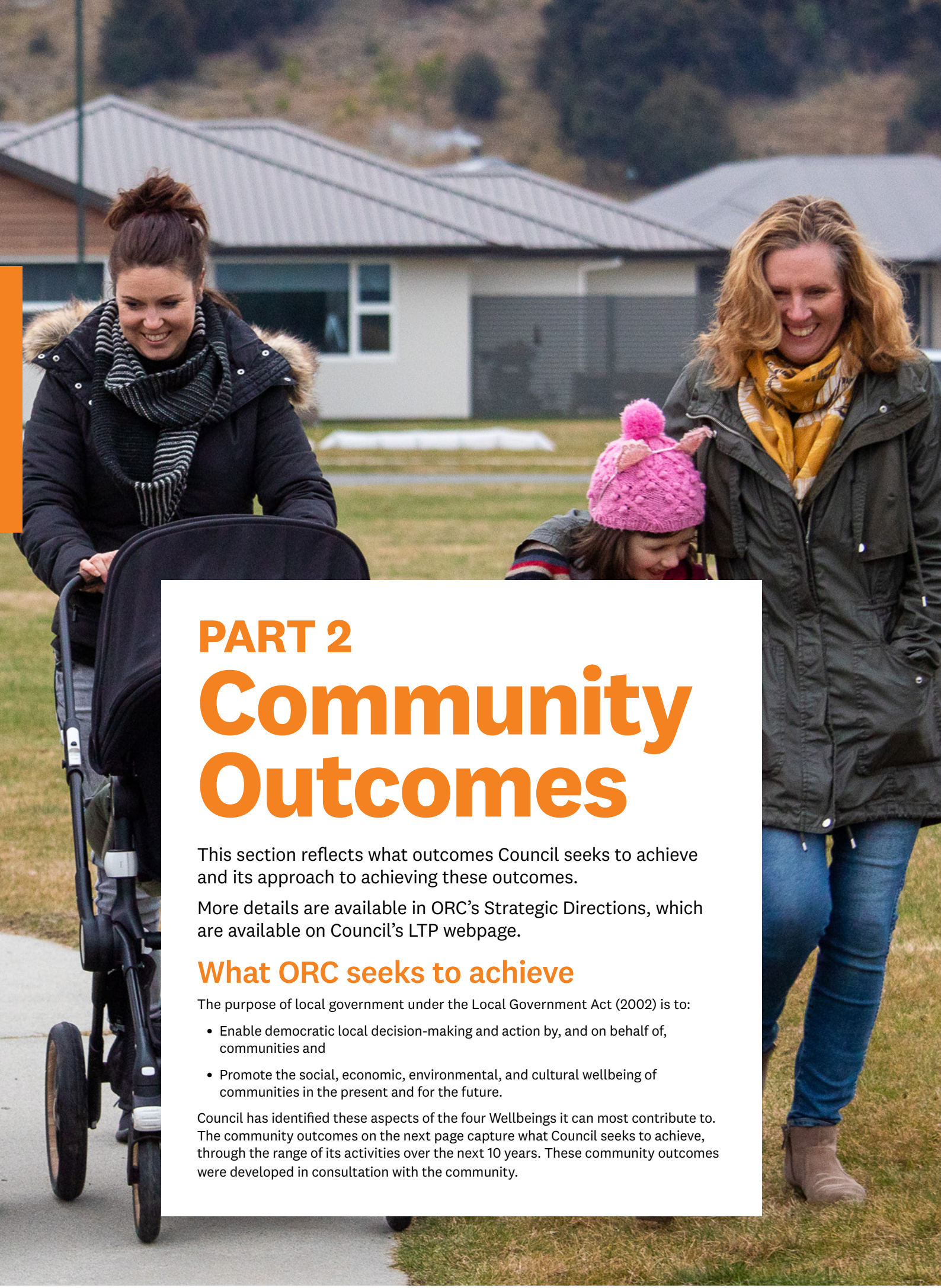
Preferred management approach *– to maintain current practice but to consider innovative approaches to address population growth or decline and to manage demand through land use controls. Collaboration with territorial authorities will need to continue to effectively mitigate the impact of increased runoff through land use change and development. This will include identifying areas of potential risk and may also include opportunities for innovative approaches to manage the impacts of development. There is an ongoing need to ensure sufficient information is available to assist in informing where there may be risks associated with development. Subject to further discussion and agreement with the relevant territorial authorities, ORC aspires to take an integrated, multi-agency approach to land use planning.*

In addition to this, ORC will seek to better understand the impact a failure of its assets and levels of service would have on other key infrastructure in an immediate and wider region. Work is required to develop a sound understanding of the strategic importance that these other key assets hold socially and economically, and how the performance of ORC schemes and assets may directly or indirectly affect their function.

Scheme Performance

Each of the significant issues outlined above will have an impact on a scheme's overall performance. Levels of service are currently based on a scheme's existing design standards (related to an historical flood event).

Preferred management approach *– to maintain levels of service to current standards while noting there will be instances where intervention will be required, and standards will need to be increased. Scheme performance reviews of the Lower Taieri and Lower Clutha, which will include consultation with benefiting communities, landowners and other affected stakeholders, are due to begin within the first five years of this strategy. Options will look at increasing the level of service while allowing for climate change, either now or in the future. Increasing levels of service, with or without climate change adaption, will result in increased costs for the beneficiaries and wider communities.*



PART 2
Community Outcomes

This section reflects what outcomes Council seeks to achieve and its approach to achieving these outcomes.

More details are available in ORC's Strategic Directions, which are available on Council's LTP webpage.

What ORC seeks to achieve

The purpose of local government under the Local Government Act (2002) is to:

- Enable democratic local decision-making and action by, and on behalf of, communities and
- Promote the social, economic, environmental, and cultural wellbeing of communities in the present and for the future.

Council has identified these aspects of the four Wellbeings it can most contribute to. The community outcomes on the next page capture what Council seeks to achieve, through the range of its activities over the next 10 years. These community outcomes were developed in consultation with the community.

Communities that connect with, and care for, Otago's environment

Otago's people are included in decisions made about the environment, and feel empowered to act for the environment, through a community group, or by themselves.

Our natural world and how we care for it contributes to how Otago's communities connect. All residents and visitors in Otago have access to nature, and to Otago's outstanding landscapes, and to its rivers and lakes and coast, be it for fishing, swimming, boating, or for Kāi Tahu customary uses.

Otago's people have a deep appreciation of Otago's heritage, and its natural and cultural landscapes (wāhi tupuna).

An environment that supports healthy people and ecosystems

All living things depend upon the health of the ecosystem they are a part of:

- Otago's ecosystems are diverse, healthy and resilient, and we protect and restore our threatened and indigenous species and ecosystems.
- The mauri of Otago's natural environment is restored.
- Otago people enjoy healthy air quality, good water quality, and all the other "ecosystem services" nature provides to enhance the community's health, and its social, cultural, economic wellbeing.

Communities that are resilient in the face of natural hazards & climate change and other risks

Our communities are aware of climate change and are adapting to its effects on the region. Otago communities, like most of New Zealand, are exposed to the possibility of a wide range of natural hazards: floods, droughts, earthquakes and landslides. Vulnerability to those risks is reduced by building in low-risk areas or designing buildings and infrastructure to cater for these risks.

Otago's people and communities are well equipped to respond to emergency events, be they a pandemic, a natural disaster, or other man-made emergencies.

A sustainable way of life for everyone in Otago

Otago's people enjoy quality of life, and make environmentally sustainable choices, so that future generations can also enjoy a healthy environment. As a community, we minimise, re-use and recycle waste effectively, and adopt 'best' environmental practices to reduce our environmental footprint.

Our communities are built to accommodate environmentally sustainable choices and our industries and economy are viable for the long-term while taking responsibility for their environmental impacts. We all play our part in reducing our greenhouse gas emissions.

Te Ao Māori and Mātauranga Kāi Tahu are embedded in Otago communities

Kāi Tahu whānui are the tangata whenua of and have mana whenua over Otago. Otago is whenua tūpuna (a cultural landscape), treasured for its wāhi tapu (sacred places), spiritual values, traditions, waterways, places and place names, mahinga kai, cultural values and associations and associated mātauranga.

As first peoples of the land the iwi established creation traditions and ancestral associations with land, water and sea, with rights to the resources being based on whakapapa and a kinship with the natural world. With rights came the responsibility to manage and maintain values and resources in a manner that future generations would enjoy the same benefits, responsibilities and knowledge. Mātauranga is the accumulated knowledge and observations, codified for example in waiata, pepeha, customs and traditions transferred across the generations to inform and guide resource use and protection. In traditional times the kaitiaki were the Ātua (supernatural beings), the children of Rakinui and Papatūānuku, the advent of new people (settlers) to the land caused tangata whenua to take on the role of kaitiaki due to the rapid change and impacts that were occurring to the natural world.

Sustainable, safe & inclusive transport

People travel safely in Otago, on land and on water. Otago's people transition away of fossil-fuel private cars, and increasingly choose to travel by bus, on foot or on a bike.

Public transport is accessible, and offers a sustainable, safe and inclusive means of transport.

Achieving Community Outcomes

Everything ORC does and will be doing in the next 10 years contributes to achieving the six outcomes above. This is highlighted at the start of each section of Part 3 of this document.

It is Council's intention to establish a community outcome monitoring and reporting approach. During year 1 of this LTP, measures based on information available to Council and indeed its partners will be considered and, where appropriate, included in the approach.

It is hoped that over time the results of this approach will provide insight into Council's performance and assist future decision-making about priorities and allocation of resource.

PART 3
What we will deliver

In this section you'll find an outline of our work represented as ten activities grouped under **four key headings.** Our work activities:

Regional Leadership

- Governance and Community Engagement
- Regional Planning
- Regulatory

Environment

- Land and Water
- Biodiversity and Biosecurity
- Air

Safety and Resilience

- Climate Change and Hazards
- Flood Protection, Drainage and River Management
- Emergency Management

Transport

- Transport (including Regional Land Transport and Public Transport)

Regional Leadership

This Group of Activities include the following council activities:

- Governance and Community Engagement
- Regional Planning
- Regulatory

Contribution to community outcomes

The Regional Leadership group contributes to the achievement of all the community outcomes as described in Part 2. It provides direction and influence over all matters that Council is required and expected to be involved with. The Regional Planning and Regulatory activities provide important levers to elected regional councillors to set direction on resource management for Otago and to influence how individuals, communities and organisations contribute to achieving desired results.

Significant Negative Effects

Council has not identified any significant negative effects associated with this group of activity.

Group Revenue and Expenditure (10yrs) - Regional Leadership

Annual Plan 2020/21 $000s		2021/22 $000s	2022/23 $000s	2023/24 $000s	2024/25 $000s	2025/26 $000s	2026/27 $000s	2027/28 $000s	2028/29 $000s	2029/30 $000s	2030/31 $000s
5,920	Governance and Community Engagement	5,728	6,327	6,351	6,519	6,969	6,871	7,048	7,527	7,418	7,605
1,925	Regional Planning	3,681	3,500	3,998	3,507	3,601	3,696	3,792	3,891	3,991	4,091
8,904	Regulatory	12,363	13,301	14,427	14,825	15,240	15,660	15,983	16,423	16,864	17,312
16,749	**Expenditure**	**21,771**	**23,128**	**24,776**	**24,851**	**25,811**	**26,227**	**26,822**	**27,842**	**28,273**	**29,008**
11,589	General Rates	15,706	16,340	17,730	17,613	18,097	18,587	18,979	19,492	20,005	20,526
188	Targeted Rates	188	200	210	220	230	240	250	260	270	280
4,554	Fees & Charges	5,300	5,805	6,495	6,673	6,859	7,046	7,235	7,431	7,629	7,828
75	Grants	75	75	75	75	75	75	75	75	75	75
296	Other Income	270	276	282	289	295	302	308	315	321	328
47	Reserves	233	432	(16)	(19)	254	(23)	(25)	269	(28)	(29)
16,749	**Revenue**	**21,771**	**23,128**	**24,776**	**24,851**	**25,811**	**26,227**	**26,822**	**27,842**	**28,273**	**29,008**

Governance and Community Engagement

What we do

This activity includes work to support Otago's elected Regional Council representatives to complete their duties. It also ensures Council can enable and strengthen democracy at a regional level through our support of structures and process. Examples include:

- Elected member committee structure, council meetings
- Secretariat support for the 'Otago Mayoral Forum'
- Partnership with Kāi Tahu and iwi liaison
- Council communications and engagement capacity and expertise to assist with connecting council and the community

Why we do it

Supporting governance, good decision-making, and connecting and engaging with our communities are essential features of a civilized society. Connecting the community in a timely and accessible way to decision-making and the work of Council is critical. Legislation also enshrines principles, powers, duties and functions that underpin this activity and the need for it.

Key work for years 1 to 3

This LTP maintains the level of capacity associated with Council's activity to date, albeit with a modest increase associated with capacity to support partnership with Kāi Tahu and iwi liaison. Planned projects are identified above in Part 1 'Partnering with Mana Whenua'.

Level of Service Statements, Measures and Targets

The service statements (LoS), measures and targets for this activity are defined in the table(s) below.

LoS: Provide and promote governance processes and democratic decision-making that is robust and transparent for the community.

PERFORMANCE MEASURES	BASELINE RESULTS	2021/22 TARGET	2022/23 TARGET	2023/24 TARGET	2024-31 TARGET
Percentage of Council agendas that are publicly available two working days or more before a meeting	*2019-20: Achieved*	100%	100%	100%	100%
Percentage of official information requests responded to within 20 working days of being logged	*2019-20: 98.5%*	100%	100%	100%	100%

LoS: Develop and deliver robust and effective corporate planning and reporting.

PERFORMANCE MEASURES	BASELINE RESULTS	2021/22 TARGET	2022/23 TARGET	2023/24 TARGET	2024-31 TARGET
Deliver our statutory requirements with acceptable process and deliverables to decision-makers and the community	*2019-20: Achieved*	Unmodified audit reports received	Unmodified audit reports received	Unmodified audit reports received	Unmodified audit reports received

LoS: Build Mana Whenua participation in Council decision making through a treaty-based partnership approach in our engagement.

PERFORMANCE MEASURES	BASELINE RESULTS	2021/22 TARGET	2022/23 TARGET	2023/24 TARGET	2024-31 TARGET
Work done in partnership with iwi; increase the number of outputs and groups working together on projects	*New measure*	Establish baseline	Maintain or Increase numbers	Maintain or Increase numbers	Maintain or increase numbers
Build the bicultural competency of ORC staff and councillors.	*New measure*	≥50 participants in programme per year	≥50 participants in programme per year	≥50 participants in programme per year	≥30 participants in programme per year

LoS: Provide relevant, timely and accessible communications and engagement activities which enable the community to understand and participate in ORC's programmes and decision making.

PERFORMANCE MEASURES	BASELINE RESULTS	2021/22 TARGET	2022/23 TARGET	2023/24 TARGET	2024-31 TARGET
Annual survey is conducted to understand and improve community awareness, perceptions and expectations of ORC	*New measure*	Survey completed to establish baselines and a report made public	Survey results show increased community awareness and improved perception of ORC performance	Survey results show increased community awareness and improved perception of ORC performance	TBC
Customers express high levels of satisfaction with customer service provision	*New measure*	Determine methodology and conduct benchmarking of customer satisfaction	Customer satisfaction levels are maintained or improve	Customer satisfaction levels are maintained or improve	Customer satisfaction levels are maintained or improve

Regional Planning

What we do and why

This activity includes work that provides overarching strategic direction and support across all Council activity and particularly work under the 'Environment' section of this LTP. It provides leadership with an important lever to effect change where needed. Much of the work under this activity is required by national legislation, and assists Council and the Otago community to align with national direction.

The Regional Policy Statement (RPS) is a critical component of this activity that umbrellas the various plans required under the Resource Management Act. These plans include water (fresh water, land and coast), air, and waste.

There is also a requirement for strategic direction on non-RMA plans, such as biodiversity, and for issues that Council deems important such as climate change and understanding community wellbeing to support better decisions impacting Otago communities.

As part of this activity, we work with our partners to give effect to strategic direction. An important component is working with Otago's city and district councils on resource management matters and urban development. Foundational work to develop an efficient transition to integrated catchment action planning to form the basis of planning, engagement and operational investment, will also be undertaken as part of this activity.

Key work for years 1 to 3

This LTP reflects a stepped increase in capacity to provide direction on non-RMA plans, important regional issues, urban development, and to support our partnership with Kāi Tahu and iwi liaison. We will do more to develop our understanding of broader regional wellbeing issues and what that means for Council and its partners. Leadership will be provided with better advice to make decisions and respond to community needs.

Level of Service Statements, Measures and Targets

The service statements (LoS), measures and targets for this activity are defined in the table(s) below.

LoS: Support Otago's councils and communities to manage environmentally sustainable urban growth.

PERFORMANCE MEASURES	BASELINE RESULTS	2021/22 TARGET	2022/23 TARGET	2023/24 TARGET	2024-31 TARGET
Develop an integrated planning framework that enables well managed urban growth across Otago	*New measure*	Establish partnership agreements with DCC and QLDC by 30 June	Develop draft regional Urban Development Strategy by 30 June	Joint ORC and DCC/QLDC HBA* update and joint FDS** completed by 30 June	No target

*Housing and Business Capacity Assessment (HBA) ** Future development strategy (FDS

LoS: Develop and maintain an environmental planning framework that aligns with national directions and enables sustainable management of natural and physical resources.

PERFORMANCE MEASURES	BASELINE RESULTS	2021/22 TARGET	2022/23 TARGET	2023/24 TARGET	2024-31 TARGET
Complete review of existing Regional Policy Statement (RPS)	*2020-21: on track*	Respond to hearing recommendations within specified timeframes	Make RPS operative by 30 June 2023	No target	No target
Lead the development, implementation and review of Integrated Catchment Plans (ICP), in collaboration with iwi and community	*New measure*	Commence development of an Integrated Catchment Planning programme and report to Council on progress by 30 June	Commence spatial systems and analysis to inform and define ICP programme by 30 June	Prepare Integrated Catchment Plan (Target detail to be determined)	Prepare Integrated Catchment Plans (Target detail to be determined)

LoS: Collect information on Otago regional wellbeing (economic, social, cultural, and environmental) and identify significant issues.

PERFORMANCE MEASURES	BASELINE RESULTS	2021/22 TARGET	2022/23 TARGET	2023/24 TARGET	2024-31 TARGET
Report on community wellbeing indicators	*New measure*	Develop baseline wellbeing indicators and report to Council	Annual report on wellbeing indicators and issues completed and reported to Council	Annual report on wellbeing indicators and issues completed and reported to Council	Annual report on wellbeing indicators and issues completed and reported to Council

LoS: Collect and make publicly available accurate, relevant and timely information on climate change in Otago.

PERFORMANCE MEASURES	BASELINE RESULTS	2021/22 TARGET	2022/23 TARGET	2023/24 TARGET	2024-31 TARGET
Information on climate change in Otago is shared with the community and stakeholders	*New measure*	No target	Regional GHG* inventory completed and reported to Council by 30 June	No target	Regional GHG inventory completed reported to Council by 30 June 2024 OCCRA** completed and reported to Council by 31 Dec 2026

* Greenhouse Gas Inventory **Otago Climate Change Risk Assessment

LoS: Lead a regional approach to climate change in partnership with local councils and iwi.

PERFORMANCE MEASURES	BASELINE RESULTS	2021/22 TARGET	2022/23 TARGET	2023/24 TARGET	2024-31 TARGET
Report on regional stakeholder engagement and collaboration on climate change	*New measure*	No target (programme commences Yr2)	Complete an annual report on regional climate change collaboration and report to Council	Complete an annual report on regional climate change collaboration and report to Council	Regional partnership priorities and approach defined, formalised and reported to Council by 30 June 2025. 2025-2031: Regional partnership approach implemented

Regulatory

What we do and why

As a regulatory authority we provide services to ensure that activities in Otago are consistent with both national and regional rules. This activity gives effect to Council's Regional Plans under the Resource Management Act, and other specific requirements under the Maritime Transport Act, and Building Act. Our regulatory work includes:

- Consent processing
- Compliance monitoring (with consents) and contaminated sites
- Incident response, investigations and enforcement
- Harbours and waterway management

A common theme across this work is our role of applying the rules developed under the various legal/ planning frameworks, and how we work with the communities and individuals to achieve desired results for Otago.

Judgement is required on what the appropriate balance is between enforcement (that can result in legal proceedings), and influencing via advice, education and sometimes support. It provides elected leadership with an important lever to effect change where needed and in an appropriate way. The desire for this dual approach is reflected in our regional plans and bylaws.

We have already taken significant steps with implementing an internal review that recommended substantive improvement in Council service. The steps have included additional staffing for: consent processing, increasing compliance audits, input into plan changes, and incident response coverage to better reflect the demand across the region. The focus of this additional capacity is on Land and Water and reflects Council's broader priority to implement a freshwater framework that aligns Otago with national objectives on freshwater reform.

Key work for years 1 to 3

A significant step in capacity (staff) occurred in 2020/21 as a result of an internal review. This LTP is focused on completing the implementation of that review and, importantly, delivering the desired and increased service including:

1. **Consent processing** – the LTP continues to build, particularly in year 1, on the stepped change in staff capacity that occurred in 2020/21. We will focus on managing expiring consents with the assumption that most will result in applications for replacement, including Deemed Permits. While some uncertainty exists about new consents, such as for intensive winter grazing, there will be other critical work to undertake.
2. **Compliance monitoring** – a stepped change in staff capacity in year 1 reflects the increase in consenting activity in terms of field work, the associated administration and supporting systems. The work programme increases the level of on-site engagement with farmers and consent holders for an education-first approach to the National Environmental Standards Fresh Water (NESFW).
3. **Incident response, Investigations and Enforcement** – some redeployment of staff capacity to compliance monitoring activity is budgeted.

   Service delivery over this LTP will reflect Council's desire to assist those involved in consent activity with understanding the changes, the requirements, and overarching reasons. There is clearly a lot of change that will continue to occur on how Otago manages its freshwater resource – this activity is crucial piece of the integrated delivery jigsaw.
4. **Harbours and waterways management** – modest increase in work that supports education and enforcement of the bylaw via the addition of a trainee harbour master from December 2021 and a small craft in Central Otago.

Level of Service Statements, Measures and Targets

The service statements (LoS), measures and targets for this activity are defined in the table(s) below.

LoS: Provide effective, efficient and customer-centric consenting processes under the Resource Management Act (RMA) 1991 to enable the lawful use of natural and physical resources.

PERFORMANCE MEASURES	BASELINE RESULTS	2021/22 TARGET	2022/23 TARGET	2023/24 TARGET	2024-31 TARGET
Percentage of resource consent applications processed in accordance with Resource Management Act 1991 legislative timeframes	*2019-20: 99.7%*	≥98%	≥98%	≥98%	≥98%
Percentage of public inquiries for consent information completed within 7 working days	*New measure*	Establish baseline	Maintain or increase	Maintain or increase	Maintain or increase

LoS: Provide effective and efficient compliance monitoring, investigations and enforcement services and take appropriate actions to ensure the lawful use of natural and physical resources.

PERFORMANCE MEASURES	BASELINE RESULTS	2021/22 TARGET	2022/23 TARGET	2023/24 TARGET	2024-31 TARGET
Percentage of performance monitoring returns completed each year, as per the Compliance Audit and Performance Monitoring Schedule targets	*New measure*	≥90%	≥90%	≥90%	≥90%
Percentage of programmed inspections/ audits completed each year, as per the Compliance Audit and Performance Monitoring Schedule targets	*New measure*	≥85%	≥90%	≥90%	≥90%
Percentage of significant non-compliances identified where action is taken in accordance with Compliance Policy	*New measure*	100%	100%	100%	100%

LoS: Provide effective and efficient environmental response services to pollution incidents or notifications of non-compliant activities.

PERFORMANCE MEASURES	BASELINE RESULTS	2021/22 TARGET	2022/23 TARGET	2023/24 TARGET	2024-31 TARGET
Maintain 24-hour/7 day a week response for environmental incidents	*2019-20: Achieved*	Pollution hotline staff available/on call 24/7	Pollution hotline staff available/on call 24/7	Pollution hotline staff available/on call 24/7	Pollution hotline staff available/on call 24/7
Maintain 20 appropriately trained responders for maritime oil pollution incidents	*New measure*	20 responders attend 3 exercises per year	20 responders attend 3 exercises per year	20 responders attend 3 exercises per year	20 responders attend 3 exercises per year

LoS: Develop and maintain robust regulations and procedures to enable safe use and navigation of our region's ports, harbours, coastal areas and inland waterways.

PERFORMANCE MEASURES	BASELINE RESULTS	2021/22 TARGET	2022/23 TARGET	2023/24 TARGET	2024-31 TARGET
Maintain compliance with Port and Harbour Marine Safety Code	*New measure*	Annual selfreview* is completed by ORC and POL and signed off by the Chief Executives	Annual selfreview* is completed by ORC and POL and signed off by the Chief Executives	External review** is completed and deemed to be code consistent	Annual selfreview* is completed by ORC and POL and signed off by the Chief Executives

*Annual self-review is conducted by the Harbourmaster and the GM Marine of Port Otago Ltd and it is jointly signed off by the CE of ORC and the CEO of Port Otago Ltd.
**External review is conducted by Maritime NZ every 3 years.

LoS: Promote and encourage safe use of ports, harbours, coastal areas and inland waterways and take appropriate action in response to non-compliance and incidents.

PERFORMANCE MEASURES	BASELINE RESULTS	2021/22 TARGET	2022/23 TARGET	2023/24 TARGET	2024-31 TARGET
Major incidents on Otago's harbours and waterways will be responded to	*New measure*	Major incidents and ORC's response are reported to Council quarterly	Major incidents and ORC's response are reported to Council quarterly	Major incidents and ORC's response are reported to Council quarterly	Major incidents and ORC's response are reported to Council quarterly
On-water engagement, education of recreational users and safety campaigns are documented and reported annually	*New measure*	Report to Council by 30 June	Report to Council by 30 June	Report to Council by 30 June	Report to Council by 30 June

Funding Impact – Regional Leadership Group

Annual Plan 2020/21 $000s		2021/22 $000s	2022/23 $000s	2023/24 $000s	2024/25 $000s	2025/26 $000s	2026/27 $000s	2027/28 $000s	2028/29 $000s	2029/30 $000s	2030/31 $000s
	SOURCES OF OPERATING FUNDING										
11,589	General rates, uniform annual general charges, rates penalties	15,706	16,340	17,730	17,613	18,097	18,587	18,979	19,492	20,005	20,526
188	Targeted rates	188	200	210	220	230	240	250	260	270	280
75	Subsidies and grants for operating purposes	75	75	75	75	75	75	75	75	75	75
4,554	Fees and charges	5,300	5,805	6,495	6,673	6,859	7,046	7,235	7,431	7,629	7,828
260	Internal charges and overheads recovered	0	0	0	0	0	0	0	0	0	0
0	Local authorities fuel tax, fines, infringement fees, and other receipts	260	266	272	279	285	292	298	305	312	318
16,667	**TOTAL OPERATING FUNDING (A)**	**21,529**	**22,686**	**24,782**	**24,859**	**25,546**	**26,240**	**26,837**	**27,563**	**28,290**	**29,028**
	APPLICATIONS OF OPERATING FUNDING										
11,036	Payments to staff and suppliers	15,230	15,983	16,402	16,197	16,864	16,981	17,373	18,075	18,187	18,595
0	Finance costs	0	0	0	0	0	0	0	0	0	0
5,386	Internal charges and overheads applied	6,352	6,950	8,206	8,484	8,775	9,072	9,373	9,687	10,007	10,332
8	Other operating funding applications	8	8	8	9	9	9	9	9	10	10
16,430	**TOTAL APPLICATIONS OF OPERATING FUNDING (B)**	**21,590**	**22,940**	**24,616**	**24,689**	**25,648**	**26,062**	**26,755**	**27,772**	**28,204**	**28,937**
237	**SURPLUS (DEFICIT) OF OPERATING FUNDING (A – B)**	**(61)**	**(254)**	**167**	**170**	**(102)**	**178**	**82**	**(209)**	**86**	**91**
	SOURCES OF CAPITAL FUNDING										
0	Subsidies and grants for capital expenditure	0	0	0	0	0	0	0	0	0	0
0	Development and financial contributions	0	0	0	0	0	0	0	0	0	0
0	Increase (decrease) in debt	0	0	0	0	0	0	0	0	0	0
0	Gross proceeds from sale of assets	0	0	0	0	0	0	0	0	0	0
0	Lump sum contributions	0	0	0	0	0	0	0	0	0	0
0	Other dedicated capital funding	0	0	0	0	0	0	0	0	0	0
0	**TOTAL SOURCES OF CAPITAL FUNDING (C)**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	APPLICATIONS OF CAPITAL FUNDING										
0	Capital expenditure — to meet additional demand	0	0	0	0	0	0	0	0	0	0
0	Capital expenditure — to improve the level of service	30	0	0	0	0	0	0	0	0	0
30	Capital expenditure — to replace existing assets	20	51	21	21	22	23	23	24	24	25
207	Increase (decrease) in reserves	(111)	(305)	146	148	(124)	156	59	(232)	62	66
0	Increase (decrease) of investments	0	0	0	0	0	0	0	0	0	0
237	**TOTAL APPLICATIONS OF CAPITAL FUNDING (D)**	**(61)**	**(254)**	**167**	**170**	**(102)**	**178**	**82**	**(209)**	**86**	**91**
(237)	**SURPLUS (DEFICIT) OF CAPITAL FUNDING (C – D)**	**61**	**254**	**(167)**	**(170)**	**102**	**(178)**	**(82)**	**209**	**(86)**	**(91)**
0	**FUNDING BALANCE ((A – B) + (C – D))**	**0**	**0**	**0**	**0**	**0**	**(0)**	**(0)**	**(0)**	**0**	**(0)**

Environment

This Group of Activities include the following council activities:

- Land and Water
- Biodiversity and Biosecurity
- Air quality

Contribution to Community Outcomes

The Environment group contributes to the achievement of all the community outcomes as described in Part 2 with the exception 'sustainable, safe and inclusive transport'. Land and water are our priorities, with biodiversity woven into the outcome of 'a sustainable way of life for everyone on Otago'. Working to maintain and improve this priority aspect of the environment in a way that 'Mātauranga Kāi Tahu are embedded' and 'connects communities' with Otago's environment is important.

The outcome: 'an environment that supports healthy people and ecosystems' is also embodied in this activity group, with pest management supporting people's livelihoods (e.g. achieve productive land) and air quality having a direct link to people's health (e.g. air emissions).

Overall direction

Environmental management is at the heart of what Otago Regional Council does. Our focus is to enhance the overall effectiveness of environmental management by:

- Continuing the review of our regional plans (for water, air and coast), while still working with community groups, stakeholders and land managers to promote good environmental outcomes
- Increasing our level of work in biosecurity management
- Continuing to promote well-coordinated and cross-agency biodiversity initiatives across the region
- Transitioning towards integrated catchment management, to create synergies in our activities that seek to protect freshwater, land, the coastal environment, or ecosystems
- Increasing our science capacity with a focus on environmental monitoring to better inform our regional planning and to better understand Otago's environment

Due to funding pressures, we are pausing most of our air quality work – except for monitoring – over the next two years. Beyond that, we'll be striving to develop more effective solutions to manage air pollution in Otago.

Significant negative effects

Council has not identified any significant negative effects associated with this group of activity.

Group Revenue and Expenditure (10yrs) - Environment

Annual Plan 2020/21 $000s		2021/22 $000s	2022/23 $000s	2023/24 $000s	2024/25 $000s	2025/26 $000s	2026/27 $000s	2027/28 $000s	2028/29 $000s	2029/30 $000s	2030/31 $000s
10,888	Land & Water	16,034	18,040	18,552	18,406	18,390	18,861	19,669	20,173	20,496	20,999
4,153	Biodiversity & Biosecurity	9,149	9,390	9,824	10,945	11,216	11,511	11,807	12,115	12,425	12,736
518	Air	482	815	786	1,666	2,771	4,595	4,641	4,752	4,934	4,980
15,560	**Expenditure**	**25,665**	**28,245**	**29,162**	**31,018**	**32,378**	**34,966**	**36,117**	**37,040**	**37,854**	**38,715**
11,793	General Rates	13,938	17,078	18,196	18,778	18,863	19,393	19,936	20,497	21,058	21,596
890	Targeted Rates	3,373	5,171	6,575	6,875	7,153	7,432	7,663	7,901	8,141	8,382
5	Fees & Charges	200	205	210	215	220	225	230	236	241	247
905	Grants	3,877	2,536	2,179	4,218	5,420	7,237	7,404	7,577	7,751	7,924
629	Other Income	964	364	364	364	364	364	364	364	364	364
1,338	Reserves	3,313	2,890	1,638	568	358	314	519	464	299	201
15,560	**Revenue**	**25,665**	**28,245**	**29,162**	**31,018**	**32,378**	**34,966**	**36,117**	**37,040**	**37,854**	**38,715**

Land and Water

What we do

- We assess and monitor the health of Otago's fresh- and coastal water and their ecosystems and investigate the risks and issues likely to affect their values
- We prepare, assess, and review the Regional Plan: Water and Coast
- We carry out non-regulatory interventions that support sustainable land management practices and environmental initiatives that enhance Otago's water bodies and coast

Why we do it

Otago's water bodies and its coast are highly valued by the community:

- 82%[6] of Otago's rivers and lakes are swimmable; and support a wide range of recreational activities
- Freshwater is a key resource for domestic use, agriculture and electricity
- Otago's waters provide the habitats for 25 species of indigenous freshwater fish, of which 18 are classified as threatened or at risk; and for a large range of marine life and sea birds

Water also plays a significant role in Kāi Tahu spiritual beliefs and cultural traditions. When the natural environment is strong and healthy, the people are strong and healthy and so too is their mana.

Degrading freshwater quality is a key community concern in the region. Although parts of the region have good or excellent water quality, some catchments have degraded water quality and there have been a greater number of degrading water quality trends than improving trends across ORC's monitoring sites between 2006 and 2017. There have also been strong pressures on water allocation in some parts of the region.

ORC has a key role to play to ensure Otago's water bodies and coast support healthy ecosystems, and a healthy community:

- Only ORC has the power to control the use of water, land, and the coast under the Resource Management Act (1991)
- It must engage with the region's communities to define visions and objectives for the region's freshwater bodies, and identify the methods to achieve these visions and objectives (National Policy Statement for Freshwater (2020))
- It has the technical expertise and knowledge to advise on the region's environmental health, issues and risks, and to monitor the health of Otago's water

Key projects

In addition to strengthening ORC's environmental monitoring programme, and keeping support for catchment groups and land managers who deliver desired environmental outcomes, we will also deliver the following key projects to support long-term improvements.

- **Preparation of the Land and Water Regional Plan**
  - Notified in 2023
  - Will define freshwater objectives, as required by national legislation and set policies and rules for decision-making
  - Includes science support (e.g. modelling, freshwater accounting, land use mapping, groundwater resources, ecological threshold analysis)
- **Review of the Regional Plan: Coast for Otago**
  - Notified by 2025-2026
  - Update existing rules and policies based on latest information and legislation and set policies and rules for decision-making
  - Includes science support (i.e. coastal monitoring, mapping and analysis)
- **Environmental Enhancement**
  - Priority site specific projects of Lake Hayes, Tomahawk Lagoon and Lake Tuakitoto
  - Develop a regional perspective, including a programme and funding approach for enhancement and remediation
  - Complete scoping study for an Otago Lakes Strategic Plan
- **Preparation of Integrated Catchment Plans**
  - Integrates actions for water, ecosystems, biodiversity, and biosecurity, and natural hazards mitigation
  - Year 1 - establish the new works team
  - Year 2 - resources to commence planning including spatial systems and analysis (additional 3fte)
  - Year 3 onwards - planning and implementation (additional 6fte)

6 This estimate applies to larger rivers and lakes, defined as "rivers that are fourth order in the River Environment Classification system and lakes with a perimeter of 1.5km or more" – ORC Policy Committee Report – 29 Nov 2018 - PPRM1843

Level of Service Statements, Measures and Targets

The service statements (LoS), measures and targets for this activity are defined in the table(s) below.

LoS: Monitor the state of Otago's freshwater resources and coastal environment and make accurate, relevant and timely information publicly available.

PERFORMANCE MEASURES	BASELINE RESULTS	2021/22 TARGET	2022/23 TARGET	2023/24 TARGET	2024-31 TARGET
Implement a regional coastal environment monitoring programme	*New measure*	Develop regional coastal monitoring programme and report to Council by 30 June	Annual report on monitoring programme completed and reported to Council	Annual report on monitoring programme completed and reported to Council	Annual report on monitoring programme completed and reported to Council
Implement freshwater and estuarine environment monitoring programmes	*New measure*	Annual report on monitoring programme completed and reported to Council	Annual report on monitoring programme completed and reported to Council	Annual report on monitoring programme completed and reported to Council	Annual report on monitoring programme completed and reported to Council
Percentage of data from the water monitoring network* that is captured quarterly.	*New measure*	≥95% data capture achieved	≥95% data capture achieved	≥95% data capture achieved	≥95% data capture achieved

* Details of the State of the Environment network and the water monitoring sites across Otago are available on the ORC website: https://www.orc.govt.nz/managing-our-environment/water/water-monitoring-and-alerts

LoS: Monitor Otago's land use and make accurate, relevant and timely information on sustainable land use publicly available

PERFORMANCE MEASURES	BASELINE RESULTS	2021/22 TARGET	2022/23 TARGET	2023/24 TARGET	2024-31 TARGET
Develop and implement a regional land use monitoring programme	*New measure*	Develop regional land use monitoring programme and report to Council	Annual report on monitoring programme completed and reported to Council	Annual report on monitoring programme completed and reported to Council	Annual report on monitoring programme completed and reported to Council
Percentage of data from the land-use monitoring network* that is captured quarterly	*New measure*	No target (programme established in Yr2)	≥95% data capture achieved	≥95% data capture achieved	≥95% data capture achieved

* Details of the land-use monitoring network and sites will be available on the ORC website once the programme is established.

LoS: Provide a robust and integrated environmental planning framework for Otago's land, water and coast resources.

PERFORMANCE MEASURES	BASELINE RESULTS	2021/22 TARGET	2022/23 TARGET	2023/24 TARGET	2024-31 TARGET
Complete the Land and Water Regional Plan (LWRP)	*New measure*	Report to Council on proposed management options for 3 Rohe or FMU's* by 30 June	Report to Council on proposed management options for 5 Rohe or FMU's by 30 June	Notify LWRP by 31 December 2023	No target
Complete a review of the Regional Plan Coast	*New measure*	No target (programme commences Yr 2)	Issues and options papers developed and reported to Council by 30 June	Community engagement for development of Regional Plan – Coast completed and reported to Council by 30 June	Notify Regional Coastal Plan for Otago by 30 June 2026

* In Otago there are five Freshwater Management Units (FMU). The Clutha/Mata-au is the largest FMU in Otago and has been divided into five sub areas called rohe. For more detail visit the ORC website: https://www.orc.govt.nz/plans-policies-reports/regional-plans-and-policies/water/freshwater-management-units

LoS: Support Catchment Groups in Otago to deliver their environmental outcomes and objectives.

PERFORMANCE MEASURES	BASELINE RESULTS	2021/22 TARGET	2022/23 TARGET	2023/24 TARGET	2024-31 TARGET
'Otago Catchment Communities' is supported to meet deliverables and targets of funding agreement	*New measure*	Funding is administered as per agreement Report to Council on deliverables and targets achieved by 30 June	Funding is administered as per agreement Report to Council on deliverables and targets achieved by 30 June	Funding is administered as per agreement Report to Council on deliverables and targets achieved by 30 June	Funding is administered as per agreement Report to Council on deliverables and targets achieved by 30 June

LoS: Promote and enable best practice land management for soil conservation, water quality preservation, the efficient use of water and to enhance Otago's biodiversity and ecosystems.

PERFORMANCE MEASURES	BASELINE RESULTS	2021/22 TARGET	2022/23 TARGET	2023/24 TARGET	2024-31 TARGET
Landowner/community led projects promoting best practice land management for soil conservation, water quality and the efficient use of water are identified and supported	*New measure*	Three or more projects supported per year	Three or more projects supported per year	Three or more projects supported per year	Three or more projects supported per year

LoS: Collaborate with iwi, communities and landowners to develop and deliver a programme of actions to improve water quality and indigenous biodiversity in selected degraded waterbodies.

PERFORMANCE MEASURES	BASELINE RESULTS	2021/22 TARGET	2022/23 TARGET	2023/24 TARGET	2024-31 TARGET
At least three site-specific action plans for selected degraded waterbodies are developed, prioritised, and implemented	*New measure*	Projects confirmed and priority actions identified by 30 September 90% of priority actions undertaken as scheduled	Projects confirmed and priority actions identified by 30 September 90% of priority actions undertaken as scheduled	Projects confirmed and priority actions identified by 30 September 90% of priority actions undertaken as scheduled	Projects confirmed and priority actions identified by 30 September 90% of priority actions undertaken as scheduled

Biodiversity and Biosecurity

What we do

- We lead and facilitate collaboration on biodiversity programmes and initiatives in the region
- We investigate, monitor and provide information about Otago's biodiversity, including improving our understanding of its vulnerability to climate change
- We lead pest and biosecurity management in the region
- We promote and support community and farmer initiatives to protect and enhance Otago's biodiversity and ecosystems

Why we do it

Otago's biodiversity is under threat as a result of both past and current human activities. Recent mapping (I.e. 2020) has shown that some ecosystem types are as low as 3% of their historical distribution and there are 10 ecosystems (of 62) with a distribution of less than 10 ha. At the species level, some 44% of Otago's bird species are threatened or at risk; 88% of lizard species; and 72% of indigenous fish species. Current threats to biodiversity include invasive species (both weeds and predators), vegetation clearing, habitat fragmentation and grassland "improvement", poor water quality (nutrients and sediments), dredging and overfishing. Climate change adds significantly to the risks of continuing decline.

There are many agencies and stakeholders across different land tenures involved in and/or with an interest in biodiversity in Otago. Knowledge and data to inform development of programmes and initiatives for protection and restoration is not collated or coordinated across the region.

At a national level the 2020 Te mana o te Taieo, National Indigenous Biodiversity Strategy, articulated the urgency of addressing biodiversity decline in New Zealand and the draft National Policy Statement on Indigenous Biodiversity identified a key role for regional government in leading collaboration and coordinating efforts.

ORC is the only agency with a remit across all of Otago to promote biodiversity protection and enhancement. It has a key role in facilitating regional collaboration, including both developing a monitoring approach and seeking to partner in projects and initiatives. While ORC currently has its own Biodiversity Strategy and Action Plan, these need to be refined and updated alongside development of the regional strategy, to reflect new knowledge about Otago's biodiversity values, which is now available, and which can provide priorities to better target action.

Pest management supports Otago's ability to enable thriving biodiversity (the variety of life in a given habitat), maintain healthy ecosystems and use natural resources for economic gain (e.g. TB free land). Under the Biosecurity Act 1993, Otago's Regional Pest Management Plan (RPMP) identifies 51 species to be managed by land occupiers, with oversight from us.

Key work for years 1 to 3

- **Development of a regional partnership approach to indigenous biodiversity**

  We are taking more of a leadership role in the region by facilitating and coordinating a regional biodiversity hui and working with TA's, other regional agencies and Kai Tahu to develop a regional strategy to inform partnerships and future regional investment in biodiversity protection, restoration and enhancement.

- **Increase indigenous biodiversity knowledge and develop a monitoring approach**

  We will be investing more to improve our knowledge about Otago's biodiversity over this LTP through continuing and building on our mapping and inventory work. This informs the development of our monitoring framework for indigenous biodiversity that is planned for implementation from year 2. This monitoring framework will provide a better understanding of the vulnerability of Otago's biodiversity, including to climate change.

- **Implementing the RPMP**

  This LTP includes a moderate increase in staff capacity to undertake more education, engagement and enforcement to manage pests. This additional work consolidates our existing role as defined under the RPMP. Our work programme will build capacity and capability over years 1 to 3 LTP.

  Our investment for economic outcomes through rabbit control will substantially increase. Increased inspections, monitoring and support of local rabbit control groups will improve rabbit management for Otago. Management of other biosecurity threats, for example in marine ecosystems, will need to be progressively developed over time as resources permit.

  Current regional-scale pest and predator projects addressing biodiversity threats, such as wilding conifer and possum control, will continue to be supported and their coverage over time will increase.

- **Partnerships to maintain the gains already achieved by OSPRI's TBfree work and Predator Free Dunedin start from 2022-23**

  To improve the effectiveness and efficiency of these operations, strategies will be progressively developed to inform on-ground investment for the future. As part this we will increase our investment in biosecurity data and information systems to ensure that progress is monitored and that actions are as effective and efficient as possible.

- **Supporting on-ground biodiversity restoration, enhancement and protection initiatives**

  The Eco Fund grants programme will gradually expand over the LTP providing increasing opportunity for local groups to access support for their activities.

  Otago Catchment groups and their environmental enhancement initiatives will continue to be supported and increasingly ORC will be looking to invest in landscape restoration and enhancement as an integrated part of our regional pest and predator control programmes.

  Education and awareness about Otago's biodiversity and how to protect/restore it will be progressively integrated into our farm support programmes and in the longer term into our approach to farm plans.

Level of Service Statements, Measures and Targets

The service statements (LoS), measures and targets for this activity are defined in the table(s) below.

LoS: Monitor the state of Otago's indigenous biodiversity ecosystems and make accurate, relevant and timely information publicly available.

PERFORMANCE MEASURES	BASELINE RESULTS	2021/22 TARGET	2022/23 TARGET	2023/24 TARGET	2024-31 TARGET
Develop and implement a regional indigenous biodiversity ecosystems monitoring programme	*New measure*	No target (programme not being undertaken)	Develop monitoring programme (including requirements of NPSIB*) and report to Council by 30 June	Annual report on monitoring programme completed and reported to Council	Annual report on monitoring programme completed and reported to Council
Percentage of data from the biodiversity monitoring network* that is captured quarterly.	*New measure*	No target	No target	≥95% data capture achieved	≥95% data capture achieved

*National Policy Statement on Indigenous Biodiversity ** Details of the regional indigenous biodiversity ecosystems monitoring network and sites will be available on the ORC website once the programme is established.

LoS: Collaborate with iwi, DoC and other key organisations to develop, coordinate and deliver a programme of actions to enhance indigenous biodiversity.

PERFORMANCE MEASURES	BASELINE RESULTS	2021/22 TARGET	2022/23 TARGET	2023/24 TARGET	2024-31 TARGET
Actions listed in the Biodiversity Action Plan (BAP) are prioritised and progressed	*New measure*	Priority actions achieved within timeframes specified in annual work plan	Priority actions achieved within timeframes specified in annual work plan	Priority actions achieved within timeframes specified in annual work plan	Priority actions achieved within timeframes specified in annual work plan
Partnerships established in line with the Biodiversity Action Plan and joint projects developed.	*New measure*	Establish baseline number of partnership engagement activities and events, and report to Council Joint projects scoped and milestones identified and reported to Council	Maintain or increase number of partnership engagement activities and events, and report to Council Joint projects developed and progress against milestones publicised and reported to Council	Maintain or increase number of partnership engagement activities and events, and report to Council Joint projects developed and progress against milestones publicised and reported to Council	Maintain or increase number of partnership engagement activities and events, and report to Council Joint projects developed and progress against milestones publicised and reported to Council

LoS: Provide support and funding to selected initiatives and organisations across the region which deliver biosecurity, biodiversity and environmental outcomes that align with our strategic objectives.

PERFORMANCE MEASURES	BASELINE RESULTS	2021/22 TARGET	2022/23 TARGET	2023/24 TARGET	2024-31 TARGET
Complete a report on the initiatives and organisations supported and the key deliverables achieved	*New measure*	Report to Council by 30 June	Report to Council by 30 June	Report to Council by 30 June	Report to Council by 30 June
Percentage of funding administered as per agreements	*New measure*	100%	100%	100%	100%

LoS: Develop and deliver practices and programmes that give effect to the Regional Pest Management Plan (RPMP).

PERFORMANCE MEASURES	BASELINE RESULTS	2021/22 TARGET	2022/23 TARGET	2023/24 TARGET	2024-31 TARGET
Priority targets within the Biosecurity Operational Plan (BOP) are identified and achieved	*New measure*	Priority actions achieved within timeframes specified in annual work plan	Priority actions achieved within timeframes specified in annual work plan	Priority actions achieved within timeframes specified in annual work plan	Priority actions achieved within timeframes specified in annual work plan

Air

What we do

- We monitor air quality and pollutant emissions, and investigate emission sources
- We prepare, assess, and review the Regional Plan: Air for Otago
- We carry out non-regulatory interventions that support clean heating and warm homes and the reduction of other harmful emissions

Why we do it

Some of Otago's communities have among the worst air quality in New Zealand. Unlike in many other countries, air pollution in Otago is mostly driven by emissions from home heating, and thus is seasonal and mostly observed in winter. Arrowtown, Clyde,

Cromwell, Alexandra and Milton are the pollution hotspots of the region. Outdoor burning is an additional factor to air pollution.

The link between air quality and human health has been well established. The pollutant of most concern in Otago is particulate matter (PM). Particulate matter can result in a range of health effects depending on where it ends up in the human body. Fine particles can penetrate deep into the lungs, and ultrafine particles can find their way into the bloodstream. The most vulnerable are the very young, the elderly, and people with pre-existing respiratory or cardiovascular disease.

Air pollution in Otago is closely linked to home heating and to the quality of Otago's housing.

ORC has a key role to play to protect Otago's people from the risks of air pollution. Only ORC has the power to control discharges of pollutants to air under the Resource Management Act (1991) and must implement the National Environmental Standards for Air Quality (2004).

Key projects

While we will keep monitoring air quality over the next 10 years, we will pause our air quality activities over the first 2 years (2021-2022/2022-2023). From July 2023, we will swing back into action and carry out the following projects:

- **Review of the Regional Plan: Air for Otago**
  - Notified by 30 June 2025
  - Update existing rules and policies based on latest information and legislation
- **Air quality programmes**
  - Developed & implemented from 2023-2024
  - Suite of actions that support clean heating and warm homes

Level of Service Statements, Measures and Targets

The service statements (LoS), measures and targets for this activity are defined in the table(s) below.

LoS: Monitor Otago's air quality and make accurate, relevant and timely information publicly available.

PERFORMANCE MEASURES	BASELINE RESULTS	2021/22 TARGET	2022/23 TARGET	2023/24 TARGET	2024-31 TARGET
Implement regional air monitoring programme	*Achieved*	Annual report on monitoring programme completed and reported to Council	Annual report on monitoring programme completed and reported to Council	Annual report on monitoring programme completed and reported to Council	Annual report on monitoring programme completed and reported to Council
Percentage of data from the air monitoring network* that is captured quarterly	*New measure*	≥95% data capture achieved	≥95% data capture achieved	≥95% data capture achieved	≥95% data capture achieved

* Details of the State of the Environment network and the air monitoring sites across Otago are available on the ORC website: https://www.orc.govt.nz/managing-our-environment/air

LoS: Provide a robust and integrated environmental planning framework for Otago's air resource.

PERFORMANCE MEASURES	BASELINE RESULTS	2021/22 TARGET	2022/23 TARGET	2023/24 TARGET	2024-31 TARGET
Complete review of the Regional Plan – Air	*New measure*	No target (programme commences Yr2)	Issues and options papers developed by 30 June	Community engagement for development of Regional Plan - Air completed by 30 June	Regional Plan - Air notified by 30 June 2025

Develop and implement partnerships and programmes to reduce harmful emissions and support clean heating, warm homes and clean air.

PERFORMANCE MEASURES	BASELINE RESULTS	2021/22 TARGET	2022/23 TARGET	2023/24 TARGET	2024-31 TARGET
Clean heat, clean air implementation programme has a high level of local engagement in targeted air sheds	*New measure*	No target (programme commences Yr3)	No target (programme commences Yr3)	Establish engagement levels in all targeted air sheds	Engagement levels improve in all targeted air sheds

Funding Impact – Environment Group

Annual Plan 2020/21 $000s		2021/22 $000s	2022/23 $000s	2023/24 $000s	2024/25 $000s	2025/26 $000s	2026/27 $000s	2027/28 $000s	2028/29 $000s	2029/30 $000s	2030/31 $000s
	SOURCES OF OPERATING FUNDING										
11,793	General rates, uniform annual general charges, rates penalties	13,938	17,078	18,196	18,778	18,863	19,393	19,936	20,497	21,058	21,596
890	Targeted rates	3,373	5,171	6,575	6,875	7,153	7,432	7,663	7,901	8,141	8,382
905	Subsidies and grants for operating purposes	3,877	2,536	2,179	4,218	5,420	7,237	7,404	7,577	7,751	7,924
5	Fees and charges	200	205	210	215	220	225	230	236	241	247
364	Internal charges and overheads recovered	0	0	0	0	0	0	0	0	0	0
0	Local authorities fuel tax, fines, infringement fees, and other receipts	964	364	364	364	364	364	364	364	364	364
13,958	**TOTAL OPERATING FUNDING (A)**	**22,352**	**25,355**	**27,524**	**30,450**	**32,020**	**34,652**	**35,598**	**36,576**	**37,555**	**38,514**
	APPLICATIONS OF OPERATING FUNDING										
10,894	Payments to staff and suppliers	19,472	20,514	21,087	22,819	24,064	26,322	26,930	27,561	28,192	28,823
0	Finance costs	0	0	0	0	0	0	0	0	0	0
3,563	Internal charges and overheads applied	4,412	5,496	6,811	7,042	7,284	7,527	7,775	8,033	8,295	8,562
8	Other operating funding applications	0	0	0	0	0	0	0	0	0	0
14,457	**TOTAL APPLICATIONS OF OPERATING FUNDING (B)**	**23,884**	**26,010**	**27,897**	**29,861**	**31,349**	**33,850**	**34,705**	**35,594**	**36,488**	**37,386**
(499)	**SURPLUS (DEFICIT) OF OPERATING FUNDING (A – B)**	**(1,532)**	**(655)**	**(374)**	**589**	**671**	**802**	**893**	**982**	**1,068**	**1,128**
	SOURCES OF CAPITAL FUNDING										
0	Subsidies and grants for capital expenditure	0	0	0	0	0	0	0	0	0	0
0	Development and financial contributions	0	0	0	0	0	0	0	0	0	0
0	Increase (decrease) in debt	0	0	0	0	0	0	0	0	0	0
0	Gross proceeds from sale of assets	0	0	0	0	0	0	0	0	0	0
0	Lump sum contributions	0	0	0	0	0	0	0	0	0	0
0	Other dedicated capital funding	0	0	0	0	0	0	0	0	0	0
0	**TOTAL SOURCES OF CAPITAL FUNDING (C)**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	APPLICATIONS OF CAPITAL FUNDING										
0	Capital expenditure — to meet additional demand	0	0	0	0	0	0	0	0	0	0
135	Capital expenditure — to improve the level of service	1,090	1,293	537	441	260	180	236	189	193	197
455	Capital expenditure — to replace existing assets	340	486	220	166	220	338	518	542	404	333
(1,089)	Increase (decrease) in reserves	(2,962)	(2,434)	(1,131)	(19)	191	284	139	251	471	598
0	Increase (decrease) of investments	0	0	0	0	0	0	0	0	0	0
(499)	**TOTAL APPLICATIONS OF CAPITAL FUNDING (D)**	**(1,532)**	**(655)**	**(374)**	**589**	**671**	**802**	**893**	**982**	**1,068**	**1,128**
499	**SURPLUS (DEFICIT) OF CAPITAL FUNDING (C – D)**	**1,532**	**655**	**374**	**(589)**	**(671)**	**(802)**	**(893)**	**(982)**	**(1,068)**	**(1,128)**
0	**FUNDING BALANCE ((A – B) + (C – D))**	**0**	**0**	**(0)**	**(0)**	**0**	**(0)**	**(0)**	**0**	**0**	**0**

Safety and Resilience

This Group includes the following council activities:

- Natural Hazards and Climate Change
- Flood Protection, Drainage and River Management
- Emergency Management

Contribution to Community Outcomes

The Safety and Resilience group of activity contributes primarily to the achievement of the outcome 'communities that are resilient in the face of natural hazards & climate change and other risks' as described in Part 2.

The outcome of 'a sustainable way of life for everyone in Otago' is also shown because the choices our communities make about how they live with, and utilise the natural environment have consequences over the long term.

Overall Direction

Risk management and building resilience is a key focus for ORC and we have continued to build on our previous LTP with additional expenditure for this group of activity. This reflects signals from government and our community about climate change and the need to act.

The challenge is to support our communities to understand the implications of risk and to make informed decisions. Our priority focus areas for the next 10 years in safety and hazards are flood protection, drainage control and river management. Climate change is a critical and related issue.

We are focused on developing a comprehensive spatial approach to natural hazard risks to inform future priorities, at the same time as undertaking specific projects for the risks we already know about.

Our LTP contains an Infrastructure Strategy. It identifies the flood and drainage schemes that we manage and highlights key issues that influence the services we provide. From these issues we understand that:

- There is complexity that needs to be better understood about how climate change and development impacts on catchments
- We need to improve our asset management planning to better understand how change impacts on our service and the decisions the community faces
- Our plan to maintain service levels is shadowed by uncertainty about our communities' expectations regarding managing changing risk (e.g. climate change impacts) and the associated costs. We work collaboratively on these issues with government, city and district councils, and technical advisory groups
- This LTP maintains current services and address the issues outlined above

While our planned capacity for natural hazards activity is increasing, we have maintained our resources associated with climate change adaptation over the short term. This reflects our funding priorities, particularly for freshwater work, and an expectation that our level of work will build as direction from central government consolidates. This LTP maintains the existing level of capacity for emergency management response.

Significant Negative Effects

The Council has not identified any significant negative effects associated with this group of activity.

Group Revenue and Expenditure (10yrs) – Safety & Resilience

Annual Plan 2020/21 $000s		2021/22 $000s	2022/23 $000s	2023/24 $000s	2024/25 $000s	2025/26 $000s	2026/27 $000s	2027/28 $000s	2028/29 $000s	2029/30 $000s	2030/31 $000s
2,131	Natural Hazards & Climate Change	2,732	3,763	3,551	3,303	3,596	3,716	3,639	3,756	3,638	3,741
11,371	Flood Protection, Drainage & River Management	12,010	12,400	11,894	11,917	11,975	11,407	13,455	11,075	11,331	12,387
2,658	Emergency Management	2,759	2,796	2,960	3,041	3,124	3,209	3,292	3,381	3,470	3,559
16,161	**Expenditure**	**17,500**	**18,959**	**18,405**	**18,261**	**18,695**	**18,332**	**20,386**	**18,212**	**18,440**	**19,687**
2,952	General Rates	3,116	3,859	4,167	4,214	4,044	4,135	4,657	4,412	4,262	4,655
8,848	Targeted Rates	9,611	10,002	10,680	11,325	11,973	12,552	13,200	13,863	14,417	15,071
249	Fees & Charges	408	462	484	474	486	497	509	521	533	545
0	Grants	1,700	1,558	613	434	208	213	36	37	38	39
245	Other Income	736	831	877	900	924	948	973	998	1,023	1,049
3,866	Reserves	1,929	2,247	1,584	914	1,060	(13)	1,012	(1,619)	(1,832)	(1,671)
16,161	**Revenue**	**17,500**	**18,959**	**18,405**	**18,261**	**18,695**	**18,332**	**20,386**	**18,212**	**18,440**	**19,687**

Natural Hazards and Climate Change

What we do

- We set direction on the management of natural hazard risks and support decision making for the mitigation of natural hazards, climate change and other risks
- We provide information and warnings about natural hazards, climate change and other risks
- We engage with people, communities, iwi partners, and other stakeholders in the region to develop partnerships and implement projects to address natural hazards, climate change and other risks and to increase awareness and understanding

Why we do it

The Otago region is exposed to a wide variety of natural hazards that impact on people, property, infrastructure and the wider environment. The natural hazards threats range from coastal erosion and flooding in lowland coastal areas to alluvial fan deposition, landslip, rock fall, and river breaches in alpine areas of the region. There is a need to consider all of these and their interactions as well as the additional risk and uncertainty created by climate change. The RMA requires that natural hazards risks and climate change are addressed as part of regional scale planning.

While high risk places have been identified there is a need to have comprehensive spatial mapping of the risks to inform planning and decision making. Within communities and businesses there are also different levels of awareness and risk tolerance to hazards, including the implications of climate change and the need for adaptation. Community engagement and communication, including as part of planning for natural hazards and climate change adaptation, is needed to inform the community, and facilitate the awareness and planning necessary to ensure resilient communities.

Key work for years 1 to 3

- Develop comprehensive risk mapping of natural hazards across Otago
- Continue to lead the South Dunedin climate change adaptation project in partnership with DCC
- Planning and strategy development for managing flood risk for Lindsay Creek and Clutha Delta
- Managing natural hazard and climate adaptation risk for Roxburgh and the Head of Lake Wakatipu in conjunction with District Councils
- Continue to monitor and provide information on natural hazards and events, including making improvements to the coastal hazard monitoring network

Level of Service Statements, Measures and Targets

The service statements (LoS), measures and targets for this activity are defined in the table(s) below.

LoS: Provide information on natural hazards and risks, including the effects of climate change, so that communities and stakeholders can make informed decisions.

PERFORMANCE MEASURES	BASELINE RESULTS	2021/22 TARGET	2022/23 TARGET	2023/24 TARGET	2024-31 TARGET
Relevant and up to date natural hazards information is available via the web-based Otago Natural Hazards Database	*2019-20: Achieved*	Database information is checked and updated monthly	Database information is checked and updated monthly	Database information is checked and updated monthly	Database information is checked and updated monthly
Percentage of flood warnings that are issued in accordance with the flood warning manual	*New measure*	100%	100%	100%	100%

LoS: Collaborate with communities and stakeholders to develop and deliver natural hazards adaptation strategies.

PERFORMANCE MEASURES	BASELINE RESULTS	2021/22 TARGET	2022/23 TARGET	2023/24 TARGET	2024-31 TARGET
Complete regional natural hazards risks assessment (NHRA) and develop a regional approach for prioritising adaptation* to inform adaptation planning and implementation	*New measure*	Commence natural hazard risk assessment and investigation of prioritisation approach	Report to Council on progress of natural hazard risk assessment and prioritisation approach	Complete natural hazard risk assessment and define a regional approach for prioritising adaptation	Develop a regional prioritisation plan for natural hazard risks adaptation
Implement prioritised* natural hazard risks adaptation works	*New measure*	Work in priority areas** is delivered as per plan by 30 June	Work in priority areas** is delivered as per plan by 30 June	Work in priority areas** is delivered as per plan by 30 June	Work in priority areas** is delivered as per plan by 30 June
		The Head of Lake Wakatipu natural hazards adaptation strategy progresses as per annual work plan	The Head of Lake Wakatipu natural hazards adaptation strategy progresses as per annual work plan	The first Head of Lake Wakatipu natural hazards adaptation strategy completed by 30 June	Actions developed, implemented and reviewed, as per Head of Lake Wakatipu natural hazard adaptation strategy
		Collaboration framework for South Dunedin and Harbourside natural hazards adaptation strategy is defined by 30 June	South Dunedin and Harbourside natural hazards adaptation strategy progresses as per annual work plan	South Dunedin and Harbourside natural hazards adaptation strategy progresses as per annual work plan	Actions developed, implemented and reviewed, as per South Dunedin and Harbourside natural hazard adaptation strategy

* The regional approach for prioritising adaptation is based on natural hazard risk and other criteria

** Priority areas include Head of Lake Wakatipu and South Dunedin and Harbourside.

Flood Protection, Drainage and River Management

What we do

Council operates and maintains seven flood protection and drainage schemes throughout Otago. The schemes, associated infrastructure assets and more specific detail such as the issues, service standards and work programmes are provided in our Infrastructure Strategy (IS).

Core functions include:

- Maintenance, renewal, and development of infrastructure
- Investigation, development and renewal of amenity projects
- Operation of flood protection and drainage schemes during floods
- Bylaw processing and monitoring of technical compliance with bylaws
- River management including the control of channel erosion, willow maintenance, vegetation control, removing obstructions, and repairing critical erosion works
- Management of gravel extraction through third party consents
- Processing of consents in conjunction with Council's Natural Hazards activity where consent applications may affect flood protections assets and/or rivers

Why we do it

While there is a relationship between the purpose of our flood protection and drainage work there is also a fundamental difference. Flood protection schemes are intended to protect people and property from flood events. Drainage schemes are designed to maintain the productive capability of land on an ongoing basis but within the limitation of the flood protection schemes.

River and waterway management works are carried out to maintain river and stream channel capacity, channel stability and environmental outcomes in scheduled rivers and waterways.

Council also has responsibilities under the Soil Conservation and Rivers Control Act 1941, and other requirements such as ensuring our infrastructure is appropriately managed, and the management and maintenance of Otago rivers.

Operational and Capital Work Programme – 10 years LTP, 30 years Infrastructure Strategy

Up to date information about Council's planned operational and capital works programme is provided on the Long-term Plan website page. The figures presented for years 1 to 3 represent a more detailed level of planning, years 4 to 10 is more indicative, and years 11 to 30 are more subject to changes in strategic direction. An example of the latter planning horizon is the impact completing the year 1-2 scheme performance reviews will have on future services.

Level of Service Statements, Measures and Targets

The service statements (LoS), measures and targets for this activity are defined in the table(s) below.

LoS: Provide the standard of flood protection and control agreed with communities.

PERFORMANCE MEASURES	BASELINE RESULTS	2021/22 TARGET	2022/23 TARGET	2023/24 TARGET	2024-31 TARGET
Major flood protection and control works are maintained, repaired, and renewed to the key standards defined in relevant planning documents	*New targets*	≥80% of planned maintenance programme completed	≥85% of planned maintenance programme completed	≥90% of planned maintenance programme completed	≥90% of planned maintenance programme completed
		Schemes function to their constructed design standards	Schemes function to their constructed design standards	Schemes function to their constructed design standards	Schemes function to their constructed design standards
		≥90% of renewals programme completed	≥90% of renewals programme completed	≥90% of renewals programme completed	≥90% of renewals programme completed

LoS: Respond efficiently and effectively to damage from natural hazard events.

PERFORMANCE MEASURES	BASELINE RESULTS	2021/22 TARGET	2022/23 TARGET	2023/24 TARGET	2024-31 TARGET
Damage identified, prioritised and a repair programme communicated with affected communities in a timely manner	*New target*	Programme developed and communicated within 3 months of the event	Programme developed and communicated within 3 months of the event	Programme developed and communicated within 3 months of the event	Programme developed and communicated within 3 months of the event

LoS: Maintain channel capacity and stability, while balancing environmental outcomes and recognising mana whenua values in rivers.

PERFORMANCE MEASURES	BASELINE RESULTS	2021/22 TARGET	2022/23 TARGET	2023/24 TARGET	2024-31 TARGET
Percentage of identified and reported issues that have been investigated and appropriate action determined and communicated to affected landholders within 20 working days	*2019-20: 100%*	100%	100%	100%	100%
Percentage of planned maintenance actions achieved each year	*New measure*	≥90%	≥90%	≥90%	≥90%

Emergency Management

What we do and why

This activity is responsible for the coordination of hazard reduction, readiness, response and recovery for emergency events. It is provided in partnership with councils, emergency response organisations and other stakeholders of the Otago region.

The work of the Otago CDEM Group is administered and coordinated by Otago Regional Council, while governance and operations are overseen by the Coordinating Executive Group (CEG) and the Otago CDEM Joint Committee.

This Committee has the statutory responsibility for civil defence emergency management in Otago. It is a statutory committee of Council under the Civil Defence Emergency Management Act 2002 (the Act) and the Local Government Act. Ultimately it is responsible for:

- Integrating and coordinating civil defence emergency management planning and activities
- Ensuring the response to and management of the adverse effects of emergencies within Otago
- Overseeing the coordination of the response and recovery activities across a range of agencies

Key work for years 1 to 3

In response to the COVID-19 pandemic Council included additional funding in the 2020-21 Annual Plan for a fixed term increase in emergency management staffing in the Queenstown area. The Council maintaining its staffing levels for this activity.

Level of Service Statements, Measures and Targets

The service statements (LoS), measures and targets for this activity are defined in the table(s) below.

LoS: Support the Otago CDEM Group in improving the resilience of Otago to civil defence emergencies.

PERFORMANCE MEASURES	BASELINE RESULTS	2021/22 TARGET	2022/23 TARGET	2023/24 TARGET	2024-31 TARGET
Support is provided to the Otago CDEM Group as per the CDEM Act and Otago CDEM Partnership Agreement	*New measure*	Fulfil all requirements as the administering authority	Fulfil all requirements as the administering authority	Fulfil all requirements as the administering authority	Fulfil all requirements as the administering authority

LoS: Provide resources to coordinate an efficient and effective region-wide response to a civil defence emergency.

PERFORMANCE MEASURES	BASELINE RESULTS	2021/22 TARGET	2022/23 TARGET	2023/24 TARGET	2024-31 TARGET
An adequate* Emergency Coordination Centre (ECC) facility and staffing are available	*New measure*	Adequate staff* who are trained and available for any activation of the ECC	Adequate staff* who are trained and available for any activation of the ECC	Adequate staff* who are trained and available for any activation of the ECC	Adequate staff* who are trained and available for any activation of the ECC
		An appropriate facility** is available for activation at all times	An appropriate facility** is available for activation at all times	An appropriate facility** is available for activation at all times	An appropriate facility** is available for activation at all times
ECC activated in a timely manner	*2019-20: achieved*	ECC activated within 1 hour of Group Controller's decision to activate	ECC activated within 1 hour of Group Controller's decision to activate	ECC activated within 1 hour of Group Controller's decision to activate	ECC activated within 1 hour of Group Controller's decision to activate

*Adequate staffing consists of staff who are trained (two staff trained as leads across each of the six functions) and available (a minimum of four staff per function) for any activation of the ECC. **An appropriate ECC facility is an IL4 rated building (67% of building code) with power and communication contingencies.

Funding Impact Statement – Safety and Resilience

Annual Plan 2020/21 $000s		2021/22 $000s	2022/23 $000s	2023/24 $000s	2024/25 $000s	2025/26 $000s	2026/27 $000s	2027/28 $000s	2028/29 $000s	2029/30 $000s	2030/31 $000s
	SOURCES OF OPERATING FUNDING										
2,952	General rates, uniform annual general charges, rates penalties	3,116	3,859	4,167	4,214	4,044	4,135	4,657	4,412	4,262	4,655
8,848	Targeted rates	9,611	10,002	10,680	11,325	11,973	12,552	13,200	13,863	14,417	15,071
0	Subsidies and grants for operating purposes	1,700	1,558	613	434	208	213	36	37	38	39
249	Fees and charges	408	462	484	474	486	497	509	521	533	545
245	Internal charges and overheads recovered	0	0	0	0	0	0	0	0	0	0
0	Local authorities fuel tax, fines, infringement fees, and other receipts	245	251	257	263	270	276	283	289	296	302
12,294	**TOTAL OPERATING FUNDING (A)**	**15,081**	**16,132**	**16,201**	**16,711**	**16,980**	**17,673**	**18,684**	**19,122**	**19,545**	**20,612**
	APPLICATIONS OF OPERATING FUNDING										
8,769	Payments to staff and suppliers	9,338	10,638	11,252	10,645	10,386	10,648	11,009	11,291	11,338	11,728
0	Finance costs	0	0	0	0	0	0	0	0	0	0
2,579	Internal charges and overheads applied	2,565	2,717	3,207	3,309	3,420	3,533	3,648	3,769	3,891	4,015
0	Other operating funding applications	0	0	0	0	0	0	0	0	0	0
11,347	**TOTAL APPLICATIONS OF OPERATING FUNDING (B)**	**11,903**	**13,355**	**14,460**	**13,954**	**13,806**	**14,182**	**14,658**	**15,059**	**15,229**	**15,743**
947	**SURPLUS (DEFICIT) OF OPERATING FUNDING (A – B)**	**3,177**	**2,777**	**1,741**	**2,757**	**3,174**	**3,491**	**4,026**	**4,063**	**4,315**	**4,869**
	SOURCES OF CAPITAL FUNDING										
0	Subsidies and grants for capital expenditure	0	0	0	0	0	0	0	0	0	0
0	Development and financial contributions	0	0	0	0	0	0	0	0	0	0
0	Increase (decrease) in debt	0	0	0	0	0	0	0	0	0	0
0	Gross proceeds from sale of assets	0	0	0	0	0	0	0	0	0	0
0	Lump sum contributions	0	0	0	0	0	0	0	0	0	0
0	Other dedicated capital funding	0	0	0	0	0	0	0	0	0	0
0	**TOTAL SOURCES OF CAPITAL FUNDING (C)**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	APPLICATIONS OF CAPITAL FUNDING										
0	Capital expenditure — to meet additional demand	0	0	0	0	0	0	0	0	0	0
680	Capital expenditure — to improve the level of service	100	102	105	0	1,650	1,126	576	1,179	603	0
3,201	Capital expenditure — to replace existing assets	3,995	3,855	2,104	2,580	1,436	1,149	3,352	141	759	2,037
(2,934)	Increase (decrease) in reserves	(918)	(1,181)	(468)	177	89	1,217	98	2,742	2,954	2,832
0	Increase (decrease) of investments	0	0	0	0	0	0	0	0	0	0
947	**TOTAL APPLICATIONS OF CAPITAL FUNDING (D)**	**3,177**	**2,777**	**1,741**	**2,757**	**3,174**	**3,491**	**4,026**	**4,063**	**4,315**	**4,869**
(947)	**SURPLUS (DEFICIT) OF CAPITAL FUNDING (C – D)**	**(3,177)**	**(2,777)**	**(1,741)**	**(2,757)**	**(3,174)**	**(3,491)**	**(4,026)**	**(4,063)**	**(4,315)**	**(4,869)**
0	**FUNDING BALANCE ((A – B) + (C – D))**	**0**	**(0)**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Transport

There is one activity also named Transport. It includes the key work programmes of:

- Regional Land Transport Plan
- Public Transport Dunedin
- Public Transport Queenstown
- Regional Total Mobility Service

Contribution to community outcomes

The Transport group contributes to the achievement of the community outcomes 'Sustainable, safe & inclusive transport' and 'a sustainable way of life for everyone in Otago' as described in Part 2. Council provides direction and influence over public passenger transport matters working within and having regard to the central government strategic and funding framework. The decisions council takes within this framework about the services it provides, in particular to the population centres of Dunedin and Queenstown, influence the achievement of these outcomes

Significant Negative Effects

The Council has not identified any significant negative effects associated with this group of activity.

Group Revenue and Expenditure (10yrs) - Transport

Annual Plan 2020/21 $000s		2021/22 $000s	2022/23 $000s	2023/24 $000s	2024/25 $000s	2025/26 $000s	2026/27 $000s	2027/28 $000s	2028/29 $000s	2029/30 $000s	2030/31 $000s
28,808	Transport	32,880	35,840	37,811	44,892	43,086	43,098	44,750	44,861	45,989	46,902
28,808	**Expenditure**	**32,880**	**35,840**	**37,811**	**44,892**	**43,086**	**43,098**	**44,750**	**44,861**	**45,989**	**46,902**
743	General Rates	745	763	851	819	840	916	880	902	983	945
5,852	Targeted Rates	7,290	8,756	10,416	11,891	13,952	14,621	15,804	16,361	16,817	17,219
241	Fees & Charges	250	256	262	268	275	281	288	295	301	308
10,493	Grants	13,203	14,341	14,893	18,110	17,110	16,902	17,525	17,350	17,700	17,919
9,600	Other Income	8,517	9,293	10,229	10,965	11,418	11,885	12,366	12,871	13,390	13,925
1,879	Reserves	2,874	2,432	1,160	2,838	(510)	(1,508)	(2,112)	(2,918)	(3,202)	(3,414)
28,808	**Revenue**	**32,880**	**35,840**	**37,811**	**44,892**	**43,086**	**43,098**	**44,750**	**44,861**	**45,989**	**46,902**

Regional Land Transport Plan (work programme)

What we do and why

Transport features strongly in our changing world, with climate change, technology and our expectations of lifestyle all in the mix. We are already seeing the opportunities of non-fossil fuelled and autonomous vehicles, along with the use of smart technology in the provision of transport services. Embracing change will require significant decisions about the transport network and how it's used and will provide positive benefits over the long run.

For ORC's part we need to be responsive to Government Policy Statement on Land Transport 2018, Government direction on climate change and urban development. Our regional transport system is an enabler of economic growth and social cohesion, connecting businesses, providing access to and between communities, and ensuring that we can import and export goods.

The LTP provides for a Regional Land Transport Programme that coordinates transport planning across the region. It enables a resilient, multi-modal transport system for the safe efficient and effective movement of people and goods around the region. The Otago and Southland Regional councils share this planning function through the support of a Regional Transport Committee.

Key work for years 1 to 3

By statute, the Committee is responsible for the preparation, review and implementation of the Regional Land Transport Plan. It shapes decisions and actions about Otago's land transport system and reflects central government's strategic direction including:

- Improving accessibility to transport and create more choice in how we travel
- Reducing the impacts of transport on climate change
- Improving urban environments and public health
- Reducing deaths and serious injuries

A new Regional Land Transport Plan must be developed every 6 years and the plan reviewed after 3 years of operation. A new plan must be prepared by 30 June 2021 for the period 2021-2031. This RLTP will influence decisions taken throughout this LTP cycle and potentially beyond.

Level of Service Statements, Measures and Targets

The service statements (LoS), measures and targets for this activity are defined in the table(s) below.

LoS: Advocate for Otago's regional transport planning priorities and aspirations at a national level.

PERFORMANCE MEASURES	BASELINE RESULTS	2021/22 TARGET	2022/23 TARGET	2023/24 TARGET	2024-31 TARGET
The Regional Land Transport Plan (RLTP) is reviewed and submitted in line with the Land Transport Management Act 2003 and any guidance issued by the New Zealand Transport Agency (NZTA)	*New measure*	RLTP implementation progress reported annually to Regional Transport Committee	RLTP implementation progress reported annually to Regional Transport Committee	RLTP review completed and adopted by Council by 30 June 2024	RLTP completed and adopted by Council by 30 June 2027

Public Transport Dunedin and Queenstown (programme)

What we do and why

This LTP has been completed on the assumption that ORC will continue to maintain responsibility for the provision of public passenger transport over the next 10 years. The work programme covers the operation of the buses (Dunedin and Queenstown) and ferries (Queenstown), as well as the 'Total Mobility' scheme.

We contract operators to provide bus services in Dunedin, bus and water ferry services in Queenstown, and to provide the Total Mobility scheme. Orbus, our public transport network, is our largest work programme.

Our LTP supports this strategic direction by outlining how we will continue to improve Otago's public passenger transport services. This includes planning, working with partners on the long-term vision for public transport across the region and on the delivery of infrastructure that supports public transport services in Dunedin and Queenstown, and renewing contracts (with service improvements) for Dunedin and Queenstown public transport services as required.

The next 10 years will be a challenging but exciting period for our public transport system as it responds to changes from population growth and movement to uncertain economic conditions. Technology is improving and more accessible, at the same time we have national goals to lower carbon emissions. Public transport will need to become the preferred mode of travel for more people more often to support broader societal, economic and environmental outcomes.

Importantly this LTP signals, during this 10-year planning horizon, significant decisions on public transport infrastructure, particularly in Queenstown. At this stage Council is working with its partners to bring this vision to life for future community consideration.

This programme faces challenges including:

- COVID impact on patronage numbers for Queenstown. These are not expected to return to pre-COVID levels in the short-term.
- Private motor vehicle use – a large number of urban residents are opting to use alternative modes of travel, largely single occupancy private car trips. This means the Otago region, particularly the areas paying the targeted transport rate, is not fully benefiting from public transport. Higher patronage provides more funding for more public transport service improvement – a virtuous cycle that reduces traffic volumes, reduces greenhouse emissions, reduces the need for infrastructure to accommodate private vehicles (e.g. car parking, roading), improves safety, and encourages more active lifestyles.
- Financial sustainability delivering a service that attracts desired levels of patronage whilst remaining financially sustainable

for our customers, ratepayers and our funding partners is an important issue. Expenditure on public transport needs to be at a level our communities can afford. To date the service has been operating with a shortfall, even with the Waka Kotahi 51% contribution. This shortfall has been supported by reserve funds and additional one-off grants. The transport reserves are in deficit, reflecting this situation. Without the transport services making a positive contribution (via fares), there are reduced funds to keep making desired changes and improvements. The Dunedin Public Transport Joint Committee – consisting of Otago Regional Council and Dunedin City Council and NZTA will consider funding, including fares over this LTP cycle

Key work for years 1 to 3

Over the next three years the Otago Regional Council work programme has included:

1. Dunedin bus service contract renewals in year 2 that will provide opportunity for further service improvements
2. Adjustments and provisions to reflect and accommodate the 'living wage' issue for bus drivers
3. Assumptions on fare revenue for Dunedin services are based on pre-COVID levels
4. Assumptions on Queenstown bus services are based on a delayed recovery of patronage due to COVID Contract renewals with associated service improvements are planned in year 4 of this LTP and development of Queenstown public transport in Year 7 and 8
5. Assumptions on changes in the bus fleet to low greenhouse emission are based on the timing of contract renewals, Government funding and procurement process, and an open mind regarding the type of technology
6. Targeted rating (i.e. those in the areas where there is direct benefit for the services provided) has increased by $1.4M in Year 1 LTP compared to the current year (from $5.9M to $7.3M)
7. The maximum Total Mobility fare subsidy remains unchanged with Council currently subsidising 50 percent of the total fare up to a maximum of $25 per trip

Level of Service Statements, Measures and Targets

The service statements (LoS), measures and targets for this activity are defined in the table(s) below.

LoS: Provide efficient, reliable and accessible public transport services that meet community needs.

PERFORMANCE MEASURES	BASELINE RESULTS	2021/22 TARGET	2022/23 TARGET	2023/24 TARGET	2024-31 TARGET
Annual public transport boardings in Queenstown per capita	*New measure*	Increase*	Increase	Increase	Increase
Annual public transport boardings in Dunedin per capita	*New measure*	Increase*	Increase	Increase	Increase
Overall passenger satisfaction with Wakatipu Public Transport system at annual survey	*2021: 96% 2019: 97%*	97%	97%	97%	97%
Overall passenger satisfaction with Dunedin public transport system at annual survey	*2021: TBC 2019: 88%*	93%	97%	97%	97%
Percentage of scheduled services delivered (reliability)**	*New measure*	95%	95%	95%	95%
Percentage of scheduled services on-time (punctuality – to five minutes)***	*New measure*	95%	95%	95%	95%
Percentage of users who are satisfied with the provision of timetable and services information	*New measure*	Establish baseline	Maintain or increase	Maintain or increase	Maintain or increase
Percentage of users who are satisfied with the overall service of the Total Mobility scheme	*New measure*	Establish baseline	Maintain or increase	Maintain or increase	Maintain or increase

* The 2020-21 boardings per capita will form the baseline for these targets. ** Reliability is based on scheduled trips completed in full. A service trip leaving the origin stop >59 seconds early or >9 minutes and 59 seconds late is deemed not to have operated. *** Punctuality is based on scheduled service trips leaving origin stop between 59 seconds before and four minutes and 59 seconds after the scheduled departure time.

Funding Impact Statement – Transport Group

Annual Plan 2020/21 $000s		2021/22 $000s	2022/23 $000s	2023/24 $000s	2024/25 $000s	2025/26 $000s	2026/27 $000s	2027/28 $000s	2028/29 $000s	2029/30 $000s	2030/31 $000s
	SOURCES OF OPERATING FUNDING										
743	General rates, uniform annual general charges, rates penalties	745	763	851	819	840	916	880	902	983	945
5,852	Targeted rates	7,290	8,756	10,416	11,891	13,952	14,621	15,804	16,361	16,817	17,219
10,493	Subsidies and grants for operating purposes	13,203	14,341	14,893	18,110	17,110	16,902	17,525	17,350	17,700	17,919
241	Fees and charges	250	256	262	268	275	281	288	295	301	308
9,600	Internal charges and overheads recovered	0	0	0	0	0	0	0	0	0	0
0	Local authorities fuel tax, fines, infringement fees, and other receipts	8,517	9,293	10,229	10,965	11,418	11,885	12,366	12,871	13,390	13,925
26,929	**TOTAL OPERATING FUNDING (A)**	**30,005**	**33,408**	**36,651**	**42,054**	**43,596**	**44,606**	**46,863**	**47,779**	**49,191**	**50,316**
	APPLICATIONS OF OPERATING FUNDING										
27,159	Payments to staff and suppliers	31,573	34,418	36,174	38,837	40,437	41,505	43,120	43,187	44,297	45,166
2	Finance costs	0	0	0	0	0	0	0	0	0	0
766	Internal charges and overheads applied	727	843	1,121	1,159	1,199	1,240	1,281	1,324	1,368	1,412
0	Other operating funding applications	0	0	0	0	0	0	0	0	0	0
27,926	**TOTAL APPLICATIONS OF OPERATING FUNDING (B)**	**32,300**	**35,260**	**37,296**	**39,996**	**41,636**	**42,745**	**44,401**	**44,511**	**45,665**	**46,578**
(996)	**SURPLUS (DEFICIT) OF OPERATING FUNDING (A – B)**	**(2,294)**	**(1,852)**	**(644)**	**2,058**	**1,960**	**1,861**	**2,462**	**3,267**	**3,526**	**3,739**
	SOURCES OF CAPITAL FUNDING										
0	Subsidies and grants for capital expenditure	0	0	0	0	0	0	0	0	0	0
0	Development and financial contributions	0	0	0	0	0	0	0	0	0	0
0	Increase (decrease) in debt	0	0	0	0	0	0	0	0	0	0
0	Gross proceeds from sale of assets	0	0	0	0	0	0	0	0	0	0
0	Lump sum contributions	0	0	0	0	0	0	0	0	0	0
0	Other dedicated capital funding	0	0	0	0	0	0	0	0	0	0
0	**TOTAL SOURCES OF CAPITAL FUNDING (C)**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
	APPLICATIONS OF CAPITAL FUNDING										
0	Capital expenditure — to meet additional demand	0	0	0	0	0	0	0	0	0	0
600	Capital expenditure — to improve the level of service	0	0	0	1,074	1,100	0	0	0	0	0
0	Capital expenditure — to replace existing assets	0	0	0	3,222	0	0	0	0	0	0
(1,596)	Increase (decrease) in reserves	(2,294)	(1,852)	(644)	(2,238)	860	1,861	2,462	3,267	3,526	3,739
0	Increase (decrease) of investments	0	0	0	0	0	0	0	0	0	0
(996)	**TOTAL APPLICATIONS OF CAPITAL FUNDING (D)**	**(2,294)**	**(1,852)**	**(644)**	**2,058**	**1,960**	**1,861**	**2,462**	**3,267**	**3,526**	**3,739**
996	**SURPLUS (DEFICIT) OF CAPITAL FUNDING (C – D)**	**2,294**	**1,852**	**644**	**(2,058)**	**(1,960)**	**(1,861)**	**(2,462)**	**(3,267)**	**(3,526)**	**(3,739)**
(0)	**FUNDING BALANCE ((A – B) + (C – D))**	**(0)**	**(0)**	**0**	**0**	**(0)**	**(0)**	**(0)**	**0**	**0**	**(0)**

PART 4
Financial Information
(including planning assumptions)

Planning Assumptions

This section includes the significant forecasting assumptions and the more detailed non-financial assumptions that Council has used to inform the completion of its draft financial estimates and work programmes.

Significant Forecasting Assumptions

The significant forecasting assumptions made in preparing this Long-term Plan are set out below. Actual results achieved are likely to vary from the information presented and these variations may be material.

Sources of Funds for Future Replacement of Significant Assets

Sources of funds for the future replacement of significant assets are in accordance with Council's financing policy. For scheme related assets, these are funded through scheme depreciation, reserves, targeted rates from defined scheme areas, grants where possible and, where necessary, borrowings. Council assets are funded from the asset replacement reserve and where necessary, general reserves and borrowings. This assumption is assessed as having a low level of risk.

Growth Change Factors

Economic growth in Otago is dominated by tourism, primary production and education. Economic growth is not expected to impact directly on the level of work carried out by Council, given the nature of its activities.

Primary production growth is dependent on the availability of water. Council has included in this plan increased work on water management issues in this regard.

Population within certain areas of Otago is forecast to grow over the next 10 years, more significantly in the Queenstown Lakes and Central Otago.

Changes in population will impact on the level of certain activities carried out by Council, such as transport, demand on resource use, environmental incidents, civil defence and emergency management and natural hazards.

Council's work programmes have considered the projected growth in the region, with new initiatives and resources being provided to address the impacts of population growth. This assumption is assessed as having a medium level of risk.

Inflation

The financial information is based on the following adjustments for inflation, the BERL forecasts being used as the basis for price level changes.

	2021/22	2022/23	2023/24	2024/25	2025/26	2026/27	2027/28	2028/29	2029/30	2030/31
Staff rates	-	2.4%	2.5%	2.5%	2.6%	2.6%	2.6%	2.7%	2.7%	2.7%
Other	-	2.4%	2.5%	2.5%	2.6%	2.6%	2.6%	2.7%	2.7%	2.7%

The risk of this assumption is assessed as having a medium level of uncertainty. Reliance is placed on the Reserve Bank's use of monetary controls to keep inflation within 3%.

NZ Transport Agency (Waka Kotahi) Subsidy Rates

The following rates of subsidy used are based on rates currently advised by the NZ Transport Agency:

- Transport planning and public passenger transport to receive 51% subsidy
- Total Mobility to receive 60% subsidy
- Total Mobility flat rate payments to receive 100% subsidy

The risks of these assumptions are assessed as having a low to medium level of uncertainty. The NZ Transport Agency has given no indication that the rates may change during the period. If the subsidy for Total Mobility was to decrease; the impact would be directly on general rates. Any changes in subsidy for public passenger transport would impact directly on targeted rates, fares and/or the scope of services.

Useful Lives of Significant Assets

The useful lives of significant assets are as recorded in asset management plans or based upon current financial standards. Depreciation has been calculated in accordance with current accounting policy. This assumption is assessed as having a low level of risk.

Revaluation of Non-Current Assets

The non-current assets that are revalued annually are Council's investment properties and its shareholding in Port Otago Limited. With respect to the Port Otago Limited investment, the actual results are dependent on factors outside the control of Council and the management of Port Otago Limited. For the purposes of this plan, an assumption has been made that the value of Council's investment in Port Otago will grow in value by around 4% every year of the plan.

Investment properties are assumed to increase in value by 1%.

The risk of these assumptions is assessed as having a high level of uncertainty. However, the revaluation of non-current assets does not directly impact rates.

Forecast Return on Investments

Forecast returns used in the estimates are as follows:

- Rate of return of 2% per annum on cash balances and the managed fund
- All Port Otago Limited dividends will be received fully imputed and accordingly no taxation liability will arise in respect of them

The risk of this assumption is assessed as having a low to medium level of uncertainty because Port Otago Limited has a stable trade base. Shipping trends over past years have been consistent, as are predictions for future trade, allowing for stable dividend payments. With respect to earning rates, the Statement of Investment Policy and Objectives for Council's managed fund estimates Council's rate of return at between 2.3%-3.1% plus inflation. As investment income is used to reduce general rates, any change in return on investments will impact directly on the level of general rates.

Capital Expenditure

Various projects require spending of a capital nature. The estimates are prepared using actual costs, adjusted for inflation, where known, or "Rough Order of Costs". These have been determined using methods such as current known costs.

The risk of the assumptions made on capital expenditure are assessed as having a medium level of uncertainty due to risks outside of Council control, such as the cost of construction materials, freight etc. over long timeframes.

Capital purchases in respect of flood and drainage schemes are funded by those schemes and so any variation in costs will impact on their depreciation and reserves. Variations in other capital expenditure will impact on Council's Asset Replacement Reserve.

Investment Properties

This plan assumes that Council will not sell any of its investment properties over the next 10 years.

Legislation

This plan assumes that there will be some changes in the legislation under which Council operates that will impact on its work programmes over the next 10 years. Council is aware of new requirements from central government. Council's work programme has taken account of the known changes coming. The risk of this assumption is low. Changes in Government policy may directly impact the responsibilities of Council.

Climate Change

The assumption is made that climate change will have impacts on parts of Otago over the next 10 years. The infrastructure strategy notes the climate context over next 30 years. To help address this assumption, Council has incorporated some work programmes in the Flood Protection and Control works activity, and in the Safety and Hazards activity, to address the risk of potential additional flooding. The risk of this assumption being incorrect is low.

Natural Disasters and Adverse events

The assumption is made that there could be major natural disasters over the next 10 years that could cause widespread and significant damage to Council's infrastructural assets, i.e. our flood and drainage schemes. What, when, where and how big are impossible to predict, but this Long-term Plan provides for us to be ready to respond. Such initiatives include Council's civil defence and emergency management work programme, the retention of Council's Emergency Response Fund and a proactive approach to managing asset resilience through renewals. This assumption has a high level of uncertainty.

Fare Revenue

COVID-19 has had an impact on patronage for both Dunedin and Queenstown public transport networks. Dunedin patronage is expected to reach pre-COVID levels in year 1 and grow 2% per annum. The Queenstown network is impacted more due to the tourism downturn, so patronage is expected to be 70% of pre-COVID levels in year 1, 80% in year 2, 90% in year 3 and back to pre-COVID levels in year 4. This assumption has a medium level of risk.

Non Financial Assumptions

Demographic change

An increasing and aging population

What we know	• Statistics New Zealand subnational population estimates (as at 30 June 2020) suggested that Otago's population in 2020 was 245,300. • Between 2019 and 2020, Otago's population grew by 5,600 people or 2.4%, which was the third highest growth rate amongst New Zealand's regions and higher than New Zealand average of 2.1%. • In terms of population by age group, Otago's under-15 age group was estimated to be 15.8% of the total population, which was lower than the New Zealand average of 19% while Otago's over-65 age group was estimated to be 16.5% of total population, which was higher than the New Zealand average of 15.6%. • The annual peak numbers of visitors to the region in recent times has been estimated to be around 141,000, which is more than half of the resident population.
Assumptions	• In the next 10 years (2020-2030), the region's population is projected to increase by 10% (24,590 people) to reach 264,855 residential population under the most likely growth scenarios provided by the district councils. • Otago's districts are projected to continue to have different population growth rates. Queenstown-Lakes and Central Otago are projected to have the highest growth rates of 27% and 18% respectively; Clutha district is to have the lowest growth rate of 3%; while Waitaki and Dunedin's population are to grow by 7% and 5% respectively.
Uncertainty level	High
Sources of Uncertainty	• The regional population projection is based on district level projections done by the district councils via consultancy companies. There are some discrepancies between Statistics NZ and district council's 'base year (2020)' data. The next official subnational population projection by Statistics NZ is due out in March 2021. • The currently available projections may not reflect regional or district residential location choices due to unforeseeable international and domestic events/trends (such as COVID-19), and outcomes of future planning processes at the district or regional levels. The region's population growth in the short (1-3 years) to medium term (3-5 years) faces uncertainty and could vary from the projections. In the longer term (5-10 years) population growth could recover due to pent-up demand. • On one hand, the observed population growth might be lower than the projections due to a lack of international migration. The net international migrants for Otago in 2020 was 3,240 compared to the natural population increase of 590 (total birth numbers minus death numbers). • On the other hand, the observed population growth in the region might be higher than the projection from stronger internal migration and attracting a high share of returning New Zealanders, as a result of the ease of remote working, Otago's relative affordability, and a diverse range of well serviced and connected urban, semi-urban and rural living choices at an overall lower density than the rest of NZ. • The net internal migrant number of Otago in 2020 was 1,860 people. The theme for visitor numbers is similar to that for the resident population. • Visitor numbers also could be volatile in the short to medium term. While international visitor numbers are down, domestic visitors have made up for some gaps in some parts of the region. • In the long term, visitor numbers are expected to recover due to New Zealand's stable political environment as well as attractive outdoor activities.

Potential impacts/effects	(a) In the next 10-years, Otago's population is projected to grow by 10%, i.e. 2,459 more people will be residing in the region every year on average. Almost half of this increase will be in the Queenstown-Lakes district, where its average annual population is projected to increase by 1,200. (b) Accommodating increasing numbers of people will require greater use of and investment in infrastructure, public transport, and housing; and place greater demands on ecological services to meet those needs and dispose of waste. (c) Depending on the locational choices (and the planning systems ability to modify these), impacts on air quality, public transport, water use and quality, and coastal areas could occur in a minor or significant way. (d) Population ageing related social and economic issues (e.g. decrease of labour supply, increase of healthcare and social assistance demand) may become increasingly prominent.
Data sources	• Statistics NZ subnational population estimation: at 30 June 2020 https://www.stats.govt.nz/assets/Uploads/Subnational-population-estimates/Subnational-population-estimates-At-30-June-2020/Download-data/subnational-population-estimates-at-30-june-2020.xlsx • Statistics NZ population estimates http://nzdotstat.stats.govt.nz/wbos/Index.aspx?DataSetCode=TABLECODE7510# • District council population and demand projections from various consultation companies
Challenges, Opportunities & Risks	• Population and visitor number growth will put pressure on housing provision, infrastructure, public transportation, amenities, services provision and the environment/natural resources. • Rising house prices could have both negative and positive effects on the economy: - **On the negative side**, it becomes more difficult for non-homeowners to get into the property market; increasing mortgage and rental payments could crowd out spending on goods and services (e.g. entertainment and holidays) for new homeowners; it can also impact on social wellbeing and health through inducing higher hours worked, overcrowding and lack of options to move to more desirable locations. - **On the positive side**, higher housing prices promotes consumer confidence and encourages spending/borrowing/investing and hence encourages economic growth. In the very short term, homeowners are also taking advantage of historical low interest rates and enjoying having more disposable income. • Population ageing could affect productivity. • Population growth could also provide growth opportunities for smaller rural communities.
Implications for ORC	In the short to medium term, international migration and tourism might still be slowly recovering. • **Public Transport:** lower public transport patronage growth, driven mainly by a moderate population increase and elderly population increase but which might be offset by the lack of international visitors and students. - Queenstown-Lakes District feedback suggested that the district could experience more public transport use due to the Council's proposed plan to change behaviour. • **Harbours:** Slowing population growth means that shipping movements might not increase in the next couple of years as international trade slowly recovers back to pre-COVID levels for New Zealand. • **Environment:** Growth in demand for environment monitoring, planning and compliance programmes, such as for water, air and waste (especially those driven by residential development or increased use and exposure to particular environment). In the longer term, international migration and tourism could recover to pre-COVID levels and put increased pressure on the region's natural and built environment. • **Public transport:** There could be an increasing demand for public transport due to an increasing in ageing population and increasing awareness of need for emission reduction in daily lives. • **Harbours:** investment in harbour facilities for increased shipping movements may be required to cope with increasing international trade. • **Environment:** Growth in demand for environment monitoring, planning and compliance programmes continues. Population growth will put increasing pressure on the environment, such as increased demand for waste management and higher demand for water.

Economic growth

A diverse economic profile

What we know	• In 2019, Otago's regional GDP was valued at NZ $13,227 million (an annual increase of 4.1%, which was higher than the national average of 3%). The top three industries in terms of GDP were **Construction**, **Primary Industries** and **Rental, Hiring and Real Estate Services**. • In 2019, Otago industries sustained 129,085 jobs (an annual increase of 3.1%, which was higher than the national average of 1.9%). The top three industries in terms of employment were **Accommodation and Food Services**, **Construction** and **Health Care and Social Assistance**. • Otago districts have different economic structures. Clutha and Waitaki's economies are focused heavily on the primary sector and have a bigger manufacturing sector than other districts; Dunedin's economy is relatively concentrated on tertiary sectors (e.g., food and accommodation, retail and health and social services); Central Otago's economy relies more on both the primary and the tertiary sector; and Queenstown-Lake's economy has the highest tertiary sector concentration in the region.
Assumptions	• Economic modelling suggests that Otago's GDP growth in the next 10 years (2020-2030) will be around 14% in total, which is lower than in the past 10 years (30%). The **Construction**, **Rental, Hiring and Real Estate Services** and **Retail Trade** sectors are estimated to be the top three in the region by GDP, by 2030. • The region's employment growth in the next 10 years is estimated to be 13% (or 1,700 people per year on average), which is lower than the past 10 years (22%). The **Construction**, **Health Care and Social Assistance** and **Accommodation and Food Services** sectors are estimated to be the top three in the region, by employment by 2030. • The Tourism sector is estimated to be a source of economic growth: tourism related sectors (retail, food and accommodation and arts/recreation) are estimated to grow by 22% in the next 10 years, despite the impact of the COVID-19 pandemic, which is expected to have a major impact on these sectors in the short term.
Uncertainty level	Medium/High
Sources of uncertainty	The economic performance of the Otago region is impacted by the global and national economy, national policy, and rapid industrial technological changes. Some more relevant examples include the global COVID-19 pandemic, BREXIT, New Zealand RMA reform, Three Waters reform, climate change policies, and industrial automation.
Potential impacts/effects	On the positive side, New Zealand's domestic economy seems to be recovering after COVID-19 better than the rest of the world; the buoyant housing market could continue for some time. However, demand for non-food product exports and international tourism have declined and could take some time to recover.
Data sources	Infometrics Economic Forecast for Otago
Challenges, Opportunities & Risks	• Uncertainty about the level of impact of global economic performance and national policy directions. • The successful eradication of COVID-19 could be a key to global economic performance, which in turn affects our region's GDP and job growth. • The increase in tourism demand in the long term could put pressure on the region's transport systems, recreational facilities, and natural resources. • The Māori economy will play an increasing role in our region as customary engagement becomes more prominent in every aspect of regional development
Implications for ORC	The growth of Otago's economy in the next 10 years (2020-2030) is estimated to be slower than the previous 10-year period. • **In the short term** a substantive downturn in the global economy and/or NZ's export earnings would ripple through to impact the ability for sectors within the community to sustain rating demands outlined in the Financial Strategy. Other sources of Council funding may also be affected including Port of Otago dividends. To meet balanced budget requirements Council would need to reconsider planned levels of service and expenditure priorities to align with economic realities.

Implications for ORC **(continued)**	• **In the medium term**, the reform and development of national natural resource policies, such as the RMA and climate change, could have some uncertain implications on how various industries, especially more intensive farming sectors, operate their businesses. • **In the longer term**, as international demand for products and tourism/education returns to pre-COVID levels, the pressure of economic development activities on natural resource will become an increasingly prominent issue for the region.

Adverse events

A wide range of natural hazards and increasing exposure to climate change effects

What we know	• Otago is exposed to a large range of natural hazards including floods, landslides, debris flows, droughts, earthquakes and tsunamis. These pose a risk to the well beings of Otago through impacts on public safety, housing, infrastructure and the economy. • Most of the region's population lives within five kilometres of this coastline and several communities along the coast have a level of exposure to hazards from elevated sea level and coastal erosion.
Assumptions	• Otago will experience adverse events. For the purpose of this LTP, it is assumed that: - There will be one flood event impacting on ORC's flood and drainage infrastructure every year. - There will not be any droughts/low flows event – should one happen, it will likely lead to a reprioritisation of work and resources. • Otago's climate is changing, and these changes will continue for the foreseeable future. • Climate change projections for the Otago region include warmer temperatures, with more hot days and fewer frosts. Winter and spring are expected to be wetter, but with significant decreases in seasonal snow likely. More severe extreme rainfall events are anticipated, as is the severity and frequency of windy days. Even with intervention, sea level rise is expected for the next 100 years and more. Hazards associated with these changes in climate are likely to include increased flooding and landslides, drought, coastal inundation and erosion, and increased instances of wildfire.
Uncertainty level	Low to moderate
Sources of uncertainty	• Climate model simulations and scenarios – even though the overall impact of climate change on the region's climate are quite well known, there is uncertainty over specific impacts at a local/catchment level. • The number, nature, location and timing of adverse events is unknown.
Potential impacts/effects	**Adverse events** • Adverse events can have large impacts on community wellbeing and may result in loss of lives, injuries, and property damage • Communities/households can become isolated (road closure, damage to infrastructure) **Climate change** • The highest risks from climate change in Otago are to: - Terrestrial and wetland ecosystems - Water quantity and quality from changes in rainfall, higher temperatures, flooding, drought and reduced snow and ice - Coastal communities, who could be impacted by coastal flooding, coastal erosion, sea level rise or salinity stress - Infrastructure such as flood management schemes, water supply infrastructure and irrigation systems, transport, and landfills - There may also be implications for biosecurity through incursions of new pests and diseases • Climate change is also likely to affect: - The economy, the primary sector and tourist sector in particular - Community cohesion, public health and cultural identity and practices of Māori and non-Māori communities

Data sources	• Climate change projections for the Otago Region (2019) prepared by NIWA for ORC (https://www.orc.govt.nz/media/7591/niwa_climatechangereport_2019_final.pdf) • Otago Climate Change Risk Assessment – unpublished draft
Challenges, opportunities & risks	• Responding to adverse events while still completing the work programme fully (generally, adverse events response divert staff from their day-to-day work) • Completing repair work to ORC infrastructure and riverbanks within ORC's flood protection and drainage schemes following adverse events • Managing the effects of climate change on ORC flood and drainage infrastructure and its performance • Supporting community adaptation to climate change impacts
Implications for ORC	**Adverse events:** • ***Emergency Management*** - An adverse event requiring full activation likely to impact on Council's ability to carry out all its activities for community readiness - ORC ability (& TAs) to provide adequate staffing to respond under a full activation scenario • ***Biosecurity*** - Catchment specific degradation or loss of habitat • ***Natural Hazards*** - Need for the flood warning service / systems to operate effectively - Adverse events may require natural hazards investigations which have not been planned • ***Flood protection, drainage and river management*** - Unplanned repair work to infrastructure and riverbanks within ORC's flood protection and drainage schemes may be needed following adverse events - ORC does not insure its floodbanks, drains and riverbanks - No allowance has been made in LTP for repairs to scheme assets resulting from adverse events. ORC relies on its reserves to respond to adverse events. • ***Land and Water /Regulatory*** - Response to low flows/droughts requires additional monitoring and will likely lead to a reprioritisation of ORC work programme. **Climate change impacts:** • ***Water and Land*** - Greater likelihood of investigations/monitoring/ engagement for the management of droughts. - Expectation that ORC will investigate the impact of climate change on catchment hydrology, climate etc. • ***Biodiversity*** - Carrying out investigations on the impact of climate change on ecosystems and indigenous biodiversity. - Monitoring for biosecurity threats and new incursions. - Increasing demand for programmes / projects for the protection of indigenous ecosystems/species. • ***Natural hazards & climate change*** - Greater demand for low flow forecasts. - Increased participation / involvement in the preparation, review and implementation of community adaptation plans. • ***Transport*** - Need for more emphasis on resilience in transport planning (for both infrastructure and public transport network). - Increasing demand for public transport system that supports mode shift from private vehicles. - Community expectations that low/no emissions modes of transport will be implemented more actively.

Implications for ORC **(continued)**	• ***Flood protection, drainage and river management*** - Climate change will affect the level of protection provided by ORC flood protection and drainage infrastructure – significant decisions will be required about the levels of future flood protection. • ***Regulatory:*** - Regulatory activity will need to adapt to reflect the legal and community response to climate change. • ***Regional Planning*** - Over the short to medium term, the need for oversight and co-ordination across partner agencies is expected to grow. - The ORC's leadership role will continue to develop including its engagement with the community about climate change.

Technology

Increasing innovation that may facilitate more efficient and sustainable uses of natural resources

What we know	We are in a time of rapid innovation that could transform societies, with the growth of digital technologies and the fusion of technologies bringing the physical, digital, and biological spheres together. Key innovations include smart technologies, blockchains, the internet of things, remote sensing, artificial intelligence and 3D printing.
Assumptions	Technology advances are going to have a profound impact on environmental management (from both council and land users), consumer expectations, and transport systems.
Uncertainty level	High
Sources of uncertainty	Drivers and pace of adoption of new technologies in Otago.
Potential impacts/effects	1. Monitoring and data management is likely to be increasingly at the centre of environmental management. Remote sensing, the internet of things, drones, or earth observation technologies, will drive significant advances in environmental management, by allowing an active adaptive approach to managing the environment. 2. There will be increasing expectations of integrating environmental data from various parties and improving access to reliable and up-to-date environmental information. 3. Worldwide, cities embrace new opportunities including to decarbonise and support new lifestyles. New mobility models are designed, many of which depend on the adoption of new technologies. As expectations change, the public transport offer may have to change. 4. The advent of new technologies facilitates more efficient and sustainable uses of natural resources (e.g. precision farming), but could also create new challenges, with new contaminants possibly emerging as new materials get utilized and our knowledge improves. As a result, there is growing pressure for legislative and regulatory mechanisms to be agile and remove barriers for positive innovations while preventing the uncontrolled spread of other technologies.
Challenges, opportunities & risks	(a) Opportunity to lead or promote the adoption of new technologies that support environmental sustainability. (b) Adapting to new technologies and new expectations. (c) Keeping abreast of new risks and opportunities brought about by new technologies and practices. (d) Maintaining data quality assurance in a new model of data integration across various parties and improved data accessibility.

Implications for ORC	**Whole organisation** Creates the need to: • Review and adapt monitoring infrastructure and data management approaches/processes in view of new technologies, changing expectations, and regulation. • Enhance the agility of environmental management and its ability to adapt to new monitoring systems; new knowledge and risks; and new data analysis tools and frameworks. • Review and enhance public access to environmental data and information. • Review environmental data governance; data sharing systems; and data storage systems. • Provide more effectively for self-service data/information provision. **Transport** • The public transport offer may need to be reshaped as needs and expectations change. • Infrastructure investments may be needed to support or adopt innovation.

Land use and the environment

Increasing environmental degradation and development pressures

What we know	Land use and change/intensification, in rural and urban areas, has been one of the main drivers of environmental risks and degradation.
Assumptions	• Population, employment and dwelling growth in the region will be disproportionately concentrated the fast-growing Queenstown and Central Otago districts, and in the already populous Dunedin City. Within those districts, and Waitaki, growth will also be disproportionately concentrated within and around existing urban areas. • Rural intensification will continue at a slower rate than before, due to the new regulations that apply until 2025 (NES for freshwater management). • Forestry may expand, driven by government's incentives and possible regulation, including for climate change mitigation.
Uncertainty level	High
Sources of uncertainty	• Long-term effect of COVID 19 on urban growth and on markets in general. • Market conditions and drivers of intensification. • Location and timing of intensification. • Regulation on intensification post-2025 / Changes in regulation (farm plans, new Land and Water Plan). • Coming regulation and incentives on climate change mitigation and their impact on land use. • Infrastructure investment to support land use intensification.
Potential impacts/effects	• Risk of environmental degradation. • Risk that existing infrastructure (water, transport) is insufficient to meet demand from urban growth.
Data sources	The urban growth assumption reflects both historic and recent data, and existing and evolving planning and policy directions at the national, regional and local levels. This includes National Policy Statements for Urban Development, Regional Policy Statement, District Plans and non-statutory spatial strategies.

Challenges & risks	• Managing environmental risks from land use and its intensification: a. Risk that current measures/ policies and rules are not adequate to manage the effects of land use changes/intensification in Otago. b. Risk that urban growth is managed without sufficient consideration of environmental effects and natural hazards risks. c. Risk that urban infrastructure is inadequate to support urban growth. • Adapting ORC infrastructure to changing land uses: risk that urban growth continues to affect the level of protection provided by ORC flood protection and drainage infrastructure
Implications for ORC	**Whole organisation:** • Greater involvement in the planning and management of urban growth in the region **Environment:** • Need for better forecasting and monitoring of land use changes • Need to adapt rules and policies in Regional Plans, and work programmes, to proactively manage risks from foreseeable land use changes **Regulatory:** • Greater volume of consent applications, resulting from land use intensification and new national rules on land intensification. This will be experienced at least until 2025, when the NES rules on intensification cease to apply. **Flood protection, drainage and river management:** • Urban growth will continue to affect the level of protection provided by ORC flood protection and drainage infrastructure – significant investments may be needed to provide the current level of protection. **Natural hazards and climate change** • More participation and involvement in informing decisions over development in natural hazards risk areas • More investigations in natural hazards **Transport:** • Role of public transport more important as a means of promoting mode shifts in urban areas as a response to urban growth and mobility needs. This may require further investment in infrastructure.

Governance

Working in a dynamic context - legislation, regulation and policy reform

What we know	Central government has initiated a large range of reforms or policy work that could impact on the roles, responsibilities, and work programme of regional councils. Those reforms include: • A new National Policy Statement for Indigenous Biodiversity, due by May 2021 • A new National Policy Statement for Highly Productive Land, due by the middle of 2021 • A review of the National Environmental Standards for Air Quality • A Water Services Bill, which strengthens the protection of community drinking water supply • Regulations for freshwater farm plans • National directions for greenhouse gas emissions (as part of resource management decisions) A comprehensive reform of the resource management system is also underway over the period of this LTP which is expected to deliver three new key pieces of legislation. The Natural and Built Environments Act, the Strategic Planning Act and the managed Retreat and Climate Change Adaptation Act. The reform themes are around needing a fresh and more integrated approach to deal with the increasing resource management challenges facing New Zealand, particularly in the context of climate change, including: halting environmental decline; the need to better recognise Te Tiriti and involve iwi authorities in resource management decision making; and the need to improve the efficiency and effectiveness of planning to facilitate appropriate and needed urban development.

What we know (continued)	In addition, Central Government has initiated: (i) A reform of how drinking water, wastewater and stormwater services are delivered (3 Waters reform) (ii) A review of the Public Transport Operating Model A clearer management framework is also likely to emerge in the coming years, for both climate change adaptation and climate change mitigation. Ngāi Tahu has lodged a statement of claim in the High Court seeking recognition of its rangatiratanga over the freshwater in the Ngāi Tahu takiwā.
Assumptions	• Where a proposed draft or indication of the proposal has been released to the public, it is assumed that that proposal will be adopted without material or significant changes • It is expected that: - The National Policy Statements for Indigenous Biodiversity and for Highly Productive Land will be adopted in the middle of 2021 - The review of the National Environmental Standards for Air Quality will be completed by the end of 2021 - The Water Services Bill will be adopted in 2021 and implemented from 2022 - The regulations for freshwater farm plans will come into force by the end of 2021 and their implementation will be staged over time. - The Public Transport Operating Model will be reviewed in 2021 • The reform of the resource management system will be completed within three years: No specific provision has been made so far for its implementation given the level of uncertainty. • The 3 Waters reform will have no significant impact on ORC's infrastructure services. However, it may impact on ORC's roles and responsibilities in regulating, or reporting on, the adverse effects of stormwater, wastewater and in protecting drinking water supply. • The above two reforms could impact on the make-up of local government – however, no specific provision has been made for implementation given the level of uncertainty. • No other significant reforms will occur beyond those identified above. • The Ngāi Tahu statement of claim will not impact on ORC's roles and responsibilities with regard to freshwater management (see Partnering assumption).
Uncertainty level	Moderate to High
Sources of uncertainty	• Nature and timing of reforms currently unplanned • Changes that will be made to current proposals before adoption • Timeframes for implementation of those reforms • Full extent of the reform of the resource management system
Potential impacts/ effects	These new or revised national instruments will require significant implementation efforts from regional councils. They are likely to require: • Surveys and additional monitoring investments for freshwater, air quality, highly productive land and indigenous biodiversity • A rise in number of consent applications, and the establishment of compliance processes for new national regulations (e.g. land use rules in the NES for the management of freshwater) • A greater focus on involving tangata whenua in decision making • Additional planning processes, with possible changes to the Regional Policy Statements and regional plans, and / or the development of regional strategies. The comprehensive review of the Resource Management Act (1991) is likely to: • Require or provide for greater involvement of mana whenua in resource management • Set a more active role of central government in resource management • Require the development of regional spatial strategies and combined plans by regional and territorial authorities

Potential impacts/ effects **(continued)**	• Provide powers for managed retreat • Enable both regulatory and market-based mechanisms for resource allocation • Seek the establishment of a national environmental data system • Provide for a greater oversight of the overall system and its performance. It may require the establishment of "compliance hubs" outside of councils, in charge of the monitoring, compliance and enforcement activities associated with plans A new Water Services Regulator, Taumata Arowai, is being established. The relationship between Taumata Arowai's role in overseeing stormwater and wastewater services, and regional councils' function of controlling stormwater and wastewater discharges, has still to be clarified. The new Water Services Bill is likely to reinforce regional council's responsibilities to protect source drinking water and monitoring and reporting requirements.
Data sources	• New Directions for Resource Management in New Zealand, Report of the Resource Management Review Panel (June 2020) https://www.mfe.govt.nz/sites/default/files/media/RMA/rm-panel-review-report-web.pdf • Water Services Bill http://legislation.govt.nz/bill/government/2020/0314/latest/LMS374564.html • Draft National Policy Statement for Indigenous Biodiversity https://www.mfe.govt.nz/sites/default/files/media/Biodiversity/draft-npsib.pdf • Valuing highly productive land, a discussion document on a proposed national policy statement for highly productive land https://www.mpi.govt.nz/dmsdocument/36624-Discussion-document-on-a-proposed-National-Policy-Statement-for-Highly-Productive-Land • Proposed amendments to the National Environmental Standards for Air Quality https://www.mfe.govt.nz/sites/default/files/media/Air/proposed-amendments-to-the-national-environmental-standards-for-air-quality-consultation-document_0.pdf
Challenges & risks	• Adjusting work programmes to new requirements/legislation • Funding implementation of new requirements • Having access to staff with required skills to implement new requirements/legislation Risk is essentially a legal risk (not meeting ORC's legal obligations). There is also a risk that new legal obligations divert ORC's resources to legal compliance to the detriment of effective resource management
Implications for ORC	• **Regional planning/Environment:** - Will have to give effect to new national directions in the Regional Policy Statement for Otago and the Regional Plans for Otago - Need to respond/provide feedback to central government on their proposed reforms - The development of a regional spatial strategy and combined plans would likely be large projects – they have not been provided for in this LTP work programme given the level of uncertainty • **Environment:** Will need to give effect to new monitoring/reporting requirements • **Regulatory:** Will have to establish process/system to satisfy the role of the regional council in receiving/monitoring farm plans • **Transport:** Changes in the contracting model for public transport services

Partnership and collaboration

Working together is the way of the future

What we know	**Iwi partnership** There is a strong expectation that local government will work in genuine partnership with mana whenua. A recent amendment to the Resource Management Act (1991) has enhanced opportunities for iwi input to the RMA plan-making processes; and introduced provisions for establishing agreements between iwi authorities and councils. These agreements are called "Mana Whakaono ā Rohe" and can be initiated either by the relevant iwi authorities or by councils. To date, ORC has not entered in a Mana Whakaono ā Rohe agreement with Ngāi Tahu, the region's iwi authority. RMA reforms are expected to further strengthen requirements for iwi participation in natural resource management. National directions are also increasingly requiring consideration of mātauranga māori in decision making and monitoring/reporting. Lastly, as stated in the previous section, Ngāi Tahu has lodged a statement of claim in the High Court seeking recognition of its rangatiratanga over the freshwater in the Ngāi Tahu takiwā **Other collaborative processes** Many third parties are involved in ORC's areas of activities, be they environmental knowledge and science, natural resource management, or transport. ORC has worked in close collaboration with other agencies in some areas (e.g. transport planning – through Way To Go; and Connecting Dunedin - climate change adaptation and natural hazards mitigation). It is also supporting community-driven environmental groups, such as the Otago Catchments Community.
Assumptions	**Iwi partnership** • Ngāi Tahu will initiate a mana whakaono ā rohe agreement in year 2 of this LTP • Legal requirements and community expectation for meaningful partnerships with mana whenua will strengthen over time • Mana whenua has sufficient resources to give effect to the partnership **Other collaborative processes** • Collaboration with third parties is often a key factor in the successful delivery of environmental projects and other services. There is scope to strengthen collaborative links with other agencies, including in such areas as air quality, biodiversity and environmental science. There are also significant opportunities for partnerships with lower South Island local authorities. • Third parties are willing to work in collaboration with ORC and can contribute to key projects in the timeframes underpinning this Long-Term Plan.
Uncertainty level	Low to moderate
Sources of uncertainty	• Timing of iwi request for a mana whakaono ā rohe agreement • Outcome of Ngāi Tahu's statement of claim • Adequacy of mana whenua funding arrangements and access to expertise to input to ORC activities within specified timeframes • Compatibility of ORC's priorities and work programmes with third parties
Challenges & risks	• Risks of delays in key projects to allow for input/feedback and collaboration by mana whenua and third parties • Risk of not considering mana whenua's views, values and interests in decisions; and not reflecting Te Ao Māori and Mātauranga Kāi Tahu in key documents • Challenge of incorporating Mātauranga Kāi Tahu and Te Ao Māori in ORC's processes and decisions • Agility/Flexibility to participate to projects initiated by others

Implications for ORC	**Iwi partnership** • **Governance:** - Responding to iwi request for a mana whakaono ā rohe agreement as required by legislation - Reviewing governance and funding arrangements supporting the partnership between ORC and mana whenua - Enhancing the involvement in mana whenua in ORC's decision-making processes • **Whole organisation:** - Ensuring adequate level of mana whenua involvement - Integrating Mātauranga Kāi Tahu in monitoring, reporting and decision-making process - Implementing the mana whakaono ā rohe agreement **Other collaboration processes** • **Whole organisation:** - Establish and maintain collaborative relationships and partnerships where appropriate

Social change

Changing cultural diversity and expectations of engagement

What we know	New Zealand society has experienced more cultural diversity in recent years. Increasing recognition and empowerment of Iwi, immigration, and growing tourism demand continue to bring more and new cultural elements into the previously European-centric society of the southern part of New Zealand. Local communities and other non-state actors (individuals, groups and businesses) have increasing access to data and technology in a way that has never been possible previously. This technology and data access fuels an opportunity for inclusion and empowerment of cultural identities by deliberation, collaboration and co-creation.
Assumption	• As the diversity of our communities is increasingly recognised and valued, there is a growing expectation for councils and local government to be more inclusive in their engagement, in particular to give effect to Te Tiriti obligations with respect to iwi. • As new technologies get adopted, residents will expect local government to keep up with improvements in customer experience and in how they communicate and inform the community. • More traditional ways of engagement remain relevant to reach some parts of the community. • There is also a growing expectation for local government and councils to be more participatory in their decision-making, and to make full use of the range of new technologies supporting community participation.
Uncertainty level	Low
Challenges & risks	• Understanding and meeting expectations in terms of community engagement and participation • Keeping up with technologies and customer experience expectations • Providing enough information and access to engagement without "over-engaging"
Implications for ORC	**Whole organisation:** • Strengthening community engagement and participation • Adopting new technologies to enhance customer experience; and improve ORC's engagement, communication and information systems • Providing information and resources which are easy to find and culturally appropriate • Need for ORC to be diverse, inclusive and reflective of the community it is serving

Financial Statements

Statement of Comprehensive Revenue and Expense

Annual Plan 2020/21 $000s		2021/22 $000s	2022/23 $000s	2023/24 $000s	2024/25 $000s	2025/26 $000s	2026/27 $000s	2027/28 $000s	2028/29 $000s	2029/30 $000s	2030/31 $000s
	REVENUE FROM NON-EXCHANGE TRANSACTIONS										
26,957	Rates revenue	40,039	47,242	52,898	54,808	57,225	58,949	61,941	63,761	65,524	67,746
11,474	Grant revenue	18,856	18,510	17,760	22,837	22,813	24,427	25,041	25,040	25,564	25,957
14,074	Other revenue	12,649	13,077	17,241	15,019	15,538	16,070	16,617	17,190	17,779	18,383
	REVENUE FROM EXCHANGE TRANSACTIONS										
10,100	Dividends	13,000	14,000	15,000	16,000	17,000	18,000	18,500	19,000	19,500	20,000
1,000	Interest & Investments	750	750	750	750	750	750	750	750	750	750
2,678	Other revenue	4,740	5,073	5,583	5,736	5,896	6,056	6,218	6,386	6,556	6,727
66,282	**TOTAL REVENUE**	**90,034**	**98,651**	**109,231**	**115,149**	**119,221**	**124,252**	**129,066**	**132,128**	**135,672**	**139,564**
	EXPENDITURE										
22,743	Employee Benefits	27,417	30,978	33,174	33,964	34,787	35,609	36,431	37,285	38,139	38,993
2,967	Depreciation	3,574	4,090	4,442	4,738	4,591	4,853	4,916	5,158	5,450	5,608
2	Finance Costs	250	256	262	269	275	270	253	236	217	197
46,156	Operating Expenses	60,964	64,916	68,962	71,930	74,816	78,121	80,697	81,963	83,448	85,329
71,868	**TOTAL EXPENDITURE**	**92,206**	**100,240**	**106,841**	**110,901**	**114,468**	**118,853**	**122,297**	**124,642**	**127,254**	**130,127**
417	Other Gains/Losses	740	1,006	1,029	1,052	1,076	1,225	1,254	1,282	1,437	1,470
(5,168)	**SURPLUS/(DEFICIT)**	**(1,433)**	**(583)**	**3,419**	**5,300**	**5,829**	**6,624**	**8,023**	**8,769**	**9,855**	**10,907**
	OTHER COMPREHENSIVE REVENUE AND EXPENDITURE										
7,000	Revaluation Gain/(Loss)	20,935	21,772	22,643	23,549	24,490	25,470	26,489	27,548	28,650	29,796
1,832	**TOTAL OTHER COMPREHENSIVE REVENUE AND EXPENDITURE**	**19,502**	**21,189**	**26,062**	**28,849**	**30,319**	**32,094**	**34,512**	**36,317**	**38,505**	**40,704**

Depreciation by Activity

Annual Plan 2020/21 $000s		2021/22 $000s	2022/23 $000s	2023/24 $000s	2024/25 $000s	2025/26 $000s	2026/27 $000s	2027/28 $000s	2028/29 $000s	2029/30 $000s	2030/31 $000s
271	Environment	375	480	533	576	576	626	673	730	785	815
898	Safety & Resilience - Flood	961	999	1,042	1,016	1,064	1,107	1,021	1,032	1,029	1,066
13	Safety & Resilience - Hazards	25	42	47	49	58	71	74	76	78	80
206	Regional Leadership	121	126	129	129	130	133	34	36	34	37
282	Transport	580	580	516	600	350	353	349	349	324	325
1,297	Corporate	1,512	1,862	2,175	2,368	2,412	2,565	2,764	2,934	3,200	3,286
2,967	**TOTAL**	**3,574**	**4,090**	**4,442**	**4,738**	**4,591**	**4,853**	**4,916**	**5,158**	**5,450**	**5,608**

Statement of Financial Position

Annual Plan 2020/21 $000s		2021/22 $000s	2022/23 $000s	2023/24 $000s	2024/25 $000s	2025/26 $000s	2026/27 $000s	2027/28 $000s	2028/29 $000s	2029/30 $000s	2030/31 $000s
	CURRENT ASSETS:										
(604)	Cash and cash equivalents	8,466	(1,967)	(2,759)	5,661	3,058	5,608	7,453	7,813	14,416	21,514
23,436	Other financial assets	34,022	34,872	35,744	36,638	42,554	43,618	44,708	50,826	52,096	53,399
9,405	Trade and other receivables	11,398	12,390	13,383	13,375	13,367	13,359	13,351	13,343	13,334	13,325
0	Inventories	0	0	0	0	0	0	0	0	0	0
0	Property intended for sale	0	0	0	0	0	0	0	0	0	0
514	Other current assets	514	514	514	514	514	514	514	514	514	514
32,751	**TOTAL CURRENT ASSETS**	54,400	45,810	46,882	56,188	59,494	63,100	66,026	72,495	80,361	88,752
	NON-CURRENT ASSETS:										
95,176	Property, plant and equipment	97,646	105,137	107,206	102,624	104,004	104,004	106,145	105,526	104,716	104,395
15,365	Investment property	15,519	15,674	15,831	15,989	16,149	16,310	16,474	16,638	16,805	16,973
543,364	Shares in Port Otago Ltd	564,299	586,071	608,713	632,262	656,752	682,222	708,711	736,260	764,910	794,707
5,392	Intangible assets	6,687	8,046	9,168	9,586	10,569	11,426	12,218	12,972	13,605	14,273
98	Deferred tax asset	98	98	98	98	98	98	98	98	98	98
659,395	**TOTAL NON-CURRENT ASSETS**	684,248	715,026	741,016	760,559	787,572	814,061	843,646	871,494	900,134	930,446
692,146	**TOTAL ASSETS**	738,648	760,836	787,898	816,747	847,066	877,160	909,672	943,989	980,495	1,019,198
	CURRENT LIABILITIES:										
10,318	Accounts payable	11,918	12,718	13,518	13,518	13,518	13,518	13,518	13,518	13,518	13,518
1,815	Employee entitlements	2,215	2,415	2,615	2,615	2,615	2,615	2,615	2,615	2,615	2,615
12,133	**TOTAL CURRENT LIABILITIES**	14,133	15,133	16,133	16,133	16,133	16,133	16,133	16,133	16,133	16,133
	NON-CURRENT LIABILITIES:										
0	Other financial instruments	25,000	25,000	25,000	25,000	25,000	23,000	21,000	19,000	17,000	15,000
0	**TOTAL NON-CURRENT LIABILITIES**	25,000	25,000	25,000	25,000	25,000	23,000	21,000	19,000	17,000	15,000
12,133	**TOTAL LIABILITIES**	39,133	40,133	41,133	41,133	41,133	39,133	37,133	35,133	33,133	31,133
680,013	**NET ASSETS**	699,515	720,703	746,765	775,614	805,933	838,027	872,539	908,856	947,362	988,065
	EQUITY:										
115,015	Public equity	122,185	128,062	133,986	138,832	145,037	151,901	160,270	169,268	179,057	189,847
523,364	Available for sale reserve	544,299	566,071	588,713	612,262	636,752	662,222	688,711	716,260	744,910	774,707
3,309	Asset replacement reserve	2,316	1,138	931	1,418	1,075	870	559	365	468	623
13,776	Building reserve	7,235	2,147	49	50	51	52	52	53	54	55
8	Environmental enhancement reserve	(40)	(40)	(41)	(42)	(42)	(43)	(44)	(44)	(45)	(46)
3,999	Emergency response reserve	4,059	4,119	4,181	4,244	4,308	4,372	4,438	4,504	4,572	4,640
919	Water management reserve	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
6,318	Kuriwao endowment reserve	6,003	5,594	5,176	4,922	4,664	4,404	4,140	3,873	3,602	3,328
13,304	Asset revaluation reserve	13,458	13,613	13,770	13,928	14,088	14,249	14,413	14,577	14,744	14,912
680,013	**TOTAL EQUITY**	699,515	720,703	746,765	775,614	805,933	838,027	872,539	908,856	947,362	988,065

Statement of Changes in Net Assets/Equity

Annual Plan 2020/21 $000s		2021/22 $000s	2022/23 $000s	2023/24 $000s	2024/25 $000s	2025/26 $000s	2026/27 $000s	2027/28 $000s	2028/29 $000s	2029/30 $000s	2030/31 $000s
678,181	Balance at 1 July	680,013	699,515	720,703	746,765	775,614	805,933	838,027	872,539	908,856	947,362
1,832	Net Comprehensive Income	19,502	21,189	26,062	28,849	30,319	32,094	34,512	36,317	38,505	40,704
680,013	**BALANCE AT 30 JUNE**	**699,515**	**720,703**	**746,765**	**775,614**	**805,933**	**838,027**	**872,539**	**908,856**	**947,362**	**988,065**
	NET MOVEMENTS										
(5,586)	Net surplus transferred to Public Equity	(2,172)	(1,589)	2,391	4,248	4,753	5,399	6,770	7,486	8,418	9,437
69	Public Equity	9,342	7,466	3,533	598	1,452	1,464	1,600	1,512	1,371	1,353
7,000	Available for Sale Revaluation Reserve	20,935	21,772	22,643	23,549	24,490	25,470	26,489	27,548	28,650	29,796
(447)	Asset Replacement Reserve	(993)	(1,179)	(206)	487	(343)	(205)	(312)	(194)	103	155
98	Emergency Response Reserve	60	61	62	63	64	65	66	67	68	69
(79)	Kuriwao Reserve	(315)	(409)	(419)	(254)	(257)	(261)	(264)	(267)	(271)	(274)
417	Asset Revaluation Reserve	154	155	157	158	160	161	163	165	166	168
22	Water Management Reserve	(920)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)	(0)
336	Building Reserve	(6,541)	(5,088)	(2,097)	1	1	1	1	1	1	1
0	Environmental Enhancement Reserve	(48)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)	(1)
1,832	Net Comprehensive Income	19,502	21,189	26,062	28,849	30,319	32,094	34,512	36,317	38,505	40,704
680,013	**BALANCE AT 30 JUNE**	**699,515**	**720,703**	**746,765**	**775,614**	**805,933**	**838,027**	**872,539**	**908,856**	**947,362**	**988,065**

Statement of Reserves

RESERVE	Opening Balance 1 July 2021 $000s	Transfers in $000s	Transfers Out $000s	Closing Balance 30 June 2031 $000s
Public Equity	69,235	276,271	(233,221)	112,285
Available for Sale Revaluation Reserve	523,364	251,343	0	774,707
Asset Replacement Reserve	3,309	37,003	(39,690)	623
Emergency Response Reserve	3,999	642	0	4,640
Kuriwao Reserve	6,318	1,979	(4,969)	3,328
Asset Revaluation Reserve	13,304	1,608	0	14,912
Water Management Reserve	919	(20)	(900)	(0)
Building Reserve	13,776	(6,503)	(7,218)	55
Environmental Enhancement Reserve	8	837	(891)	(46)
River & Waterway Management Dunedin	1,264	3,951	(4,857)	358
River & Waterway Management Clutha	100	4,654	(4,715)	39
River & Waterway Management Central Otago	373	4,053	(4,539)	(113)
River & Waterway Management Wakatipu	571	3,514	(4,140)	(55)
River & Waterway Management Wanaka	428	3,077	(3,586)	(81)
River & Waterway Management Waitaki	536	4,101	(3,973)	665
Emergency Management	(666)	32,924	(31,574)	684
Alexandra Flood Protection	190	3,196	(2,713)	673
Leith Flood Protection	(15,185)	16,406	(6,480)	(5,259)
Lower Clutha Flood Protection & Drainage	(880)	18,961	(16,995)	1,085
Lower Taieri Flood Protection	(494)	18,029	(17,175)	361
West Taieri Drainage	(2,270)	17,022	(17,107)	(2,355)
East Taieri Drainage	161	11,208	(12,732)	(1,363)
Tokomairiro	197	1,954	(2,186)	(34)
Shotover Delta	223	2	(225)	0
Stoney Creek	154	1	(155)	0
Lower Waitaki Flood Protection & River Control	4	2,118	(2,117)	5
Public Transport Dunedin	(6,208)	264,538	(255,816)	2,514
Public Transport Wakatipu	(840)	129,325	(129,769)	(1,284)
Dairy Compliance	85	2,349	(2,745)	(312)
Lake Hayes Remediation	(370)	3,958	(3,343)	244
Biosecurity	0	45,820	(45,505)	315
Wilding Pines	(208)	2,229	(2,262)	(241)
Rural Water Quality	1,207	25,378	(26,552)	33
Infrastructure Assets	67,409	24,611	(10,337)	81,684
TOTAL	680,013	1,206,537	(898,484)	988,065

Statement of Cashflows

Annual Plan 2020/21 $000s		2021/22 $000s	2022/23 $000s	2023/24 $000s	2024/25 $000s	2025/26 $000s	2026/27 $000s	2027/28 $000s	2028/29 $000s	2029/30 $000s	2030/31 $000s
	CASHFLOWS FROM OPERATING ACTIVITIES										
	Cash provided from:										
26,957	Rate Receipts	40,039	47,242	52,898	54,808	57,225	58,949	61,941	63,761	65,524	67,746
16,759	Other Receipts	17,396	18,157	22,831	20,762	21,441	22,134	22,843	23,585	24,343	25,119
11,474	Grant Income	18,856	18,510	17,760	22,837	22,813	24,427	25,041	25,040	25,564	25,957
10,100	Dividends	13,000	14,000	15,000	16,000	17,000	18,000	18,500	19,000	19,500	20,000
1,000	Interest	750	750	750	750	750	750	750	750	750	750
66,290	**TOTAL INCOME**	**90,041**	**98,658**	**109,239**	**115,157**	**119,229**	**124,260**	**129,075**	**132,136**	**135,681**	**139,572**
	Cash applied to:										
68,899	Payments to Employees & Suppliers	88,382	95,894	102,136	105,895	109,602	113,730	117,128	119,248	121,587	124,321
2	Interest	250	256	262	269	275	270	253	236	217	197
68,901	**TOTAL EXPENDITURE**	**88,632**	**96,150**	**102,398**	**106,163**	**109,877**	**114,000**	**117,381**	**119,484**	**121,804**	**124,519**
(2,611)	**NET CASH FROM OPERATING ACTIVITIES**	**1,409**	**2,508**	**6,840**	**8,994**	**9,351**	**10,260**	**11,693**	**12,652**	**13,877**	**15,054**
	CASHFLOWS FROM INVESTING ACTIVITIES										
	Cash provided from:										
410	Property, Plant & Equipment Sales	410	420	7,430	440	451	462	472	483	494	506
0	Term Investment Maturity	0	0	0	0	0	0	0	0	0	0
0	Deferred Tax Asset realised	0	0	0	0	0	0	0	0	0	0
0	Managed Fund Withdrawal	0	0	0	0	0	0	0	0	0	0
410	**TOTAL CASH**	**410**	**420**	**7,430**	**440**	**451**	**462**	**472**	**483**	**494**	**506**
	Cash applied to:										
0	Managed Fund	10,000	0	0	0	5,000	0	0	5,000	0	0
5,401	Property, Plant & Equipment	6,224	11,467	13,044	(705)	4,958	3,666	5,758	3,152	3,084	3,718
900	Intangible Assets	1,525	1,894	2,019	1,718	2,448	2,505	2,563	2,623	2,683	2,743
6,301	**TOTAL**	**17,749**	**13,361**	**15,063**	**1,014**	**12,405**	**6,172**	**8,321**	**10,775**	**5,768**	**6,462**
(5,891)	**NET CASH FROM INVESTING ACTIVITIES**	**(17,339)**	**(12,941)**	**(7,633)**	**(573)**	**(11,954)**	**(5,710)**	**(7,849)**	**(10,292)**	**(5,273)**	**(5,956)**
	CASHFLOWS FROM FINANCING ACTIVITIES										
	Cash provided from:										
0	Borrowings	25,000	0	0	0	0	0	0	0	0	0
	Cash applied to:										
0	Repayment of Borrowings	0	0	0	0	0	2,000	2,000	2,000	2,000	2,000
0	**NET CASH FROM FINANCING ACTIVITIES**	**25,000**	**0**	**0**	**0**	**0**	**(2,000)**	**(2,000)**	**(2,000)**	**(2,000)**	**(2,000)**
(8,502)	**NET INCREASE/ (DECREASE) IN CASH HELD**	**9,070**	**(10,433)**	**(793)**	**8,420**	**(2,603)**	**2,550**	**1,844**	**360**	**6,604**	**7,098**
15,487	**CASH AT 1 JULY**	**(604)**	**8,466**	**(1,967)**	**(2,759)**	**5,661**	**3,058**	**5,608**	**7,453**	**7,813**	**14,416**
6,985	**CASH AT 30 JUNE**	**8,466**	**(1,967)**	**(2,759)**	**5,661**	**3,058**	**5,608**	**7,453**	**7,813**	**14,416**	**21,514**

Reconciliation of Net Surplus to Net Cash from Operating Activities

Annual Plan 2020/21 $000s		2021/22 $000s	2022/23 $000s	2023/24 $000s	2024/25 $000s	2025/26 $000s	2026/27 $000s	2027/28 $000s	2028/29 $000s	2029/30 $000s	2030/31 $000s
(5,168)	**NET SURPLUS(DEFICIT) FROM ACTIVITIES**	**(1,433)**	**(583)**	**3,419**	**5,300**	**5,829**	**6,624**	**8,023**	**8,769**	**9,855**	**10,907**
	ADD(DEDUCT) NON-CASH ITEMS:										
2,967	Depreciation	3,574	4,090	4,442	4,738	4,591	4,853	4,916	5,158	5,450	5,608
(417)	Other (gains)/losses	(740)	(1,006)	(1,029)	(1,052)	(1,076)	(1,225)	(1,254)	(1,282)	(1,437)	(1,470)
7	Bad Debts	7	7	7	8	8	8	8	8	9	9
(2,611)	**NET CASH FROM OPERATING ACTIVITIES**	**1,409**	**2,508**	**6,840**	**8,994**	**9,351**	**10,260**	**11,693**	**12,652**	**13,877**	**15,054**

Schedule of Capital Expenditure

Annual Plan 2020/21 $000s		2021/22 $000s	2022/23 $000s	2023/24 $000s	2024/25 $000s	2025/26 $000s	2026/27 $000s	2027/28 $000s	2028/29 $000s	2029/30 $000s	2030/31 $000s
	ENVIRONMENTAL										
60	Air Monitoring	45	92	73	48	17	79	17	18	84	18
5	Pest Management	0	0	0	0	0	0	0	0	0	0
525	Water Monitoring Sites	1,295	1,595	590	463	364	338	634	607	404	401
30	Harbour Management	20	51	21	21	22	23	23	24	24	25
0	Biodiversity	90	92	94	97	99	101	104	106	109	111
0	Hazards	470	650	52	54	330	338	58	59	60	62
0	Compliance	30	0	0	0	0	0	0	0	0	0
	TRANSPORT										
600	Transport	0	0	0	4,296	1,100	0	0	0	0	0
	FLOOD PROTECTION & CONTROL WORKS										
0	Alexandra Flood Protection	0	20	21	0	0	0	0	0	0	0
680	Leith Flood Protection	0	154	105	0	385	0	576	0	603	0
740	Lower Clutha Flood & Drainage	1,000	799	336	118	83	84	52	0	41	46
1,600	Lower Taieri Flood Protection	1,020	973	157	1,611	0	0	2,304	0	0	1,850
563	West Taieri Drainage	1,195	1,157	1,234	709	1,100	1,216	52	1,238	30	55
218	East Taieri Drainage	380	184	178	67	1,166	614	864	0	603	0
80	Tokomairiro	30	20	21	21	22	23	23	24	24	25
0	Wanaka River Management	0	0	105	0	0	0	0	0	0	0
	COUNCIL										
100	Property	100	5,222	2,203	107	110	113	115	118	121	123
675	Vehicles	675	691	708	725	743	760	778	796	814	832
955	Computers & Software	1,625	1,997	2,124	1,826	2,558	2,618	2,678	2,741	2,804	2,867
20	Plant	20	20	21	21	22	23	23	24	24	25
50	Sundry	50	51	52	54	55	56	58	59	60	62
6,901	**TOTAL**	8,045	13,771	8,096	10,238	8,174	6,384	8,358	5,812	5,806	6,500

Summary of Accounting Policies

Overview

Reporting Entity

The Council is a regional local authority governed by the Local Government Act 2002.

The Council Group (Group) consists of the Council and its subsidiary Port Otago Limited (100% owned). The Port Otago Limited Group consists of Port Otago Limited, its subsidiaries, associates and joint ventures.

The primary objective of the Council is to provide goods or services for the community or social benefit rather than making a financial return. Accordingly, the Council has designated itself and the Group as public benefit entities for financial reporting purposes.

The prospective financial information contained in this Long-term Plan relates to the Council only as the group parent. The Council has not presented group prospective financial statements because the Council believes that the parent prospective financial statements are more relevant to users. The main purpose of prospective financial statements in the Long-term Plan is to provide users with information about the core services that the Council intends to provide ratepayers, the expected cost of those services and, as a consequence, how much the Council requires by way of rates to fund the intended levels of service. The level of rate funding required is not affected by subsidiaries except to the extent that the Council obtains distributions from those subsidiaries. Distributions from the Council's subsidiary Port Otago Limited are included in the prospective financial statements of the Council.

The Prospective Financial Statements of Council are to be adopted by Council on 23 June 2021.

Statement of Compliance

The prospective financial statements have been prepared in accordance with PBE FRS 42, Prospective Financial Statements, and in accordance with Tier 1 PBE Standards appropriate for public benefit entities, as it relates to prospective financial statements.

The actual results achieved for any given financial year are likely to vary from the information presented and may vary materially depending upon the circumstances that arise during the period. The prospective financial information is prepared in accordance with Section 93 of the Local Government Act 2002. The information may not be suitable for use in any other capacity. No actual results have been incorporated in these prospective financial statements.

Council is responsible for the prospective financial statements presented, including the appropriateness of the assumptions underlying the prospective financial statements and all other required disclosures.

Basis of Accounting

The prospective financial statements have been prepared on the historical cost basis, except for the revaluation of certain assets. They are presented in New Zealand dollars, rounded to the nearest thousand.

Standards and interpretations issues but not yet adopted

Council has not yet adopted the below standards and expects to adopt them in the period they become mandatory. Council anticipates that the below standards are not expected to have a material impact on the financial statements.

PBE IPSAS 40 : PBE Combinations

PBE IPSAS 41 : Financial Instruments

PBE IPSAS 48 : Service Performance Reporting

Significant Accounting Policies

Revenue Recognition

Revenue from Exchange Transactions

Fees received for the following activities are recognised as revenue from exchange transactions.

- Dividend income is recognised on the date of the dividend declaration.
- Interest revenue is recognised on a time proportionate basis using the effective interest method.
- Revenue from port services is recognised in the accounting period in which the actual service is provided. Revenue from the rendering of services, including relating to contracts and consent application that are in progress at balance date, is recognised by reference to the stage of completion of the transaction at balance date, based on the actual service provided as a percentage of the total services to be provided.
- Rental income from operating leases is recognised on a straight line basis over the term of the relevant lease. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognised as an expense on a straight-line basis over the lease term.
- Fees and charges are recognised as income when supplies and services have been rendered. Fees received from the following activities are recognised as revenue from exchange transactions: resource consent processing, pest animal and plant contract work, grazing leases and licenses and enforcement work.

Revenue from Non-Exchange Transactions

Fees received for the following activities are recognised as revenue from non- exchange transactions.

- Rates revenue is recognised as income when levied. Council levies general rates for those functions that are assessed as providing benefits to all ratepayers within each of the constituent districts and city, and levies targeted rates where functions benefit a defined group of ratepayers.
- Grants and subsidies are recognised upon entitlement, as conditions pertaining to expenditure have been fulfilled.
- Other fee income from non-exchange transactions is recognised when the supplies and services have been rendered.

Other Gains and Losses

Gains and losses on the sale of investment property, property, plant and equipment are recognised when an unconditional contract is in place, and it is probable that the Council will receive the consideration due and significant risks and rewards of ownership of assets have been transferred to the buyer.

Where a physical asset is acquired for nil or nominal consideration, the fair value of the asset received is recognised as revenue. Assets vested in the Council are recognised as revenue when control over the asset is obtained.

Trade and Other Receivables

Trade and other receivables that have fixed or determinable payments that are not quoted in an active market are classified as 'loans and receivables'. Loans and receivables are measured at amortised cost using the effective interest method less impairment.

Trade and other receivables are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method, less provision for impairment. A provision for doubtful debts is established when there is objective evidence that Council will not be able to collect all amounts due according to the original terms of the receivables. The amount of the provision is the difference between the asset's carrying amount and the present value of estimated future cash flows, discounted at the effective interest rate. The amount of the provision is expensed in the surplus/(deficit).

Intangible Assets

Computer Software

Computer software assets are stated at cost, less accumulated amortisation and impairment. The amortisation periods range from 1 to 5 years.

Impairment

At each reporting date, Council reviews the carrying amounts of intangible assets to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss (if any). Where the asset does not generate cash flows that are independent from other assets, Council estimates the recoverable amount of the cash-generating unit to which the asset belongs.

Property, Plant and Equipment

Property, plant and equipment consist of the following.

Operational Assets

Operational assets include Council-owned land, endowment land, buildings, and plant and vehicles.

Infrastructural Assets

Infrastructural assets deliver benefits direct to the community and are mostly associated with major flood protection and land drainage schemes. Infrastructural assets include floodbanks, protection works, structures, drains, bridges and culverts, and in the passenger transport, Dunedin bus hub and associated shelters.

Transport infrastructure assets and hardware deliver benefits to the transport bus network in Queenstown and Dunedin.

Restricted Assets

Endowment land is vested in Council by the Otago Regional Council (Kuriwao Endowment Lands) Act. The Act restricts disposition of this land to freeholding initiated by lessees.

(a) Cost

Land and Buildings are recorded at cost or deemed cost less accumulated depreciation and any accumulated impairment losses.

Other property, plant and equipment are recorded at cost less accumulated depreciation and any accumulated impairment losses. Cost includes expenditure that is directly attributable to the acquisition of the assets. Where an asset is acquired for no cost, or for a nominal cost, it is recognised at fair value at the date of acquisition. When significant, interest costs incurred during the period required to construct an item of property, plant and equipment are capitalised as part of the asset's total cost.

(b) Depreciation

Operational assets, with the exception of land, are depreciated on a straight-line basis to write-off the cost of the asset to its estimated residual value over its estimated useful life.

Infrastructural assets including floodbanks, protection works, and drains and culverts are constructions or excavations of natural materials on the land and have substantially the same characteristics as land, in that they are considered to have unlimited useful lives and in the absence of natural events, these assets are not subject to ongoing obsolescence or deterioration of service performance, and are not subject to depreciation. Other infrastructural assets are depreciated on a straight-line basis to write off the cost of the asset to its estimated residual values over its estimated useful life.

Expenditure incurred to maintain these assets at full operating capability is charged to the surplus/(deficit) in the year incurred.

The following estimated useful lives are used in the calculation of depreciation:

ASSET	LIFE
OPERATIONAL ASSETS	
Buildings – Council	10-50 years
Plant and vehicles – Council	3-20 years

ASSET	LIFE
INFRASTRUCTURAL ASSETS	
Floodbanks	Unlimited
Protection works	Unlimited
Drains	Unlimited
Culverts	Unlimited
Structures	8-100 years
Bridges	33-100 years
Transport infrastructure and hardware	5-15 years

The estimated useful lives, residual values and depreciation method are reviewed at the end of each annual reporting period.

(c) Disposal

An item of property, plant and equipment is derecognised upon disposal or recognised as impaired when no future economic benefits are expected to arise from the continued use of the asset.

Any gain or loss arising on derecognition of the asset (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in the surplus/(deficit) in the period the asset is derecognised.

(d) Critical Judgements and Assumptions

Council owns a number of properties that are held for service delivery objectives as part of Council's various flood protection schemes. The receipt of market-based rental from these properties is incidental to holding these properties. These properties are accounted for as property, plant and equipment.

Investment Property

Investment property, which is property held to earn rentals and/or for capital appreciation, is measured initially at cost and subsequently at fair value. Revaluation gains or losses arising from changes in the fair value of investment property are reported in the surplus/(deficit) in the period in which they arise.

Subsequent expenditure is charged to the asset's carrying amount only when it is probable that future economic benefits associated with the item will flow to Council and the cost of the item can be measured reliably. The fair value of investment property reflects the best use of each property and, amongst other things, rental income, from current leases and assumptions about rental income from future leases in light of current market conditions. The fair value also reflects the cash outflows that could be expected in respect of the property. No depreciation or amortisation is provided for on investment properties.

(a) Fair Value of Property Portfolio Assets

The fair value of Council's investment property requires estimation and judgement and has been arrived at on the basis of valuations carried out at that date by independent registered valuers who conform with the New Zealand Property Institute Practice Standards. The valuers have extensive market knowledge in the types of investment properties owned by Council. The fair value was determined using Level 3 valuation techniques via a combination of the following approaches:

- **Direct Capitalisation:** The subject property rental is divided by a market derived capitalisation rate to assess the market value of the asset. Further adjustments are then made to the market value to reflect under or over renting, additional revenue and required capital expenditure.
- **Discounted Cash Flow:** Discounted cash flow projections for the subject property are based on estimates of future cash flows, supported by the terms of any existing lease and by external evidence such as market rents for similar properties in the same location and condition, and using discount rates that reflect current market assessments of the uncertainty in the amount and timing of the cash flows.
- **Sales Comparison:** The subject property is related at a rate per square metre as a means of comparing evidence. In applying this approach, a number of factors are taken into account, such as but not limited to, size, location, zoning, contour, access, development potential/end use, availability of services, profile and exposure, current use of surrounding properties, geotechnical and topographical constraints.

Financial Instruments

Financial assets and financial liabilities are recognised on Council's Statement of Financial Position when Council becomes a party to contractual provisions of the instrument.

Financial Assets

Financial assets are classified on initial recognition at fair value through surplus of deficit or loans and receivables.

(a) Loans and Receivables at Amortised Cost

Loans and receivables are subsequently measured at amortised cost using the effective interest rate method.

(b) Financial Assets at Fair Value through Surplus of Deficit

Financial assets are classified as financial assets at fair value through surplus or deficit where the financial asset:

- Has been acquired principally for the purpose of selling in the near future;
- Is a part of an identified portfolio of financial instruments that the Council manages together and has a recent actual pattern of short-term profit-taking; or
- Is a derivative that is not designated and effective as a hedging instrument.

Financial assets at fair value through surplus or deficit are stated at fair value, with any resultant gain or loss recognised in the Statement of Comprehensive Revenue and Expense. The net gain or loss is recognised in the Statement of Comprehensive Revenue and Expense and incorporates any dividend or interest earned on the financial asset. Fair value is determined in the manner described later in this note.

- Council have classified their managed funds held for trading. This classification has been determined as all assets within this category are available for trading at any point. Financial assets held for trading purposes are classified as current assets and are stated at fair value, with any resultant gain or loss recognised in the surplus/(deficit).
- Council holds fixed interest bonds via its managed fund portfolio, the maturity dates range between 2022-2030.

(c) Fair Value

The fair values of financial assets and financial liabilities are

determined as follows:

Level 1 – the fair value of financial assets and financial liabilities with standard terms and conditions and traded on active liquid markets is determined with reference to quoted market prices. Financial assets in this category include managed fund equities and shares in listed companies.

Level 2 – the fair value of other financial assets and financial liabilities (excluding derivative instruments) is determined in accordance with generally accepted pricing models based on discounted cash flow analysis using prices from observable current market transactions and dealer quotes for similar instruments.

Level 3 – fair value measurements are those derived from valuation techniques that include inputs for the asset or liability that are not based on observable market data (unobservable inputs)

> *The valuation for the shares in Port Otago Limited is a combination of a discounted cashflow and net tangible assets approach based on information provided by the entity and investment property valuations.*

Financial Liabilities

(a) Trade and Other Payables

Trade payables and other accounts payable are recognised when the Council becomes obliged to make future payments resulting from the purchase of goods and services.

Trade and other payables are initially recognised at fair value and are subsequently measured at amortised cost, using the effective interest method.

(b) Borrowings

Borrowings are recognised initially at fair value, net of transaction costs. Borrowing costs attributable to qualifying assets are capitalised as part of the cost of those assets.

Subsequent to initial recognition, borrowings are measured at amortised cost with any difference between the initial recognised amount and the redemption value being recognised in the surplus/(deficit) over the period of the borrowing using the effective interest method.

Employee Entitlements

Provision is made for benefits accruing to employees in respect of wages and salaries, annual leave, long service leave, and sick leave when it is probable that settlement will be required, and they are capable of being measured reliably.

Provisions made in respect of employee benefits expected to be settled within 12 months, are measured at their nominal values using the remuneration rate expected to apply at the time of settlement.

Provisions made in respect of employee benefits which are not expected to be settled within 12 months are measured as the present value of the estimated future cash outflows to be made by Council in respect of services provided by employees up to reporting date.

Equity

Equity is the community's interest in Council and is measured as the difference between total assets and total liabilities. Equity is disaggregated and classified into a number of reserves.

Reserves are a component of equity generally representing a particular use to which various parts of equity have been assigned. Reserves may be legally restricted or created by Council.

Restricted and Council Created Reserves

Restricted reserves are those subject to specific conditions accepted as binding by Council and which may not be revised by Council without reference to the Courts or a third party. Transfers from these reserves may be made only for certain specified purposes or when certain specified conditions are met.

Also included in restricted reserves are reserves restricted by Council decision. Council may alter them without references to any third party or the Courts. Transfers to and from these reserves are at the discretion of Council.

Other Disclosures

Balancing of Budget

Council has resolved, under section 100(2) of the Local Government Act 2002, that it is financially prudent to not balance its operating budget in the first 2 years. The primary reason is to allow Council to use reserves to fund certain one-off operating expenditure.

Reserves are to be used to fund Environmental Enhancement initiatives, research and development for improving Otago's water quality, water management initiatives, climate change adaptation, flood protection designations and lakes monitoring equipment.

Dunedin transport reserves are also used to implement bus service improvements and to complete the bus hub for Dunedin City.

The impact of this decision is that both general rates and the Dunedin transport rate will be kept at appropriate levels, as reserves are available to fund these works.

Rating base information

The projected rating base information for the Otago region is as follows:

FINANCIAL YEAR	PROJECTED RATING UNITS
2020/21	***117,753***
2021/22	119,519
2022/23	121,312
2023/24	123,132
2024/25	124,979
2025/26	126,853
2026/27	128,756
2027/28	130,688
2028/29	132,648
2029/30	134,638
2030/31	136,657

Prudence Disclosures

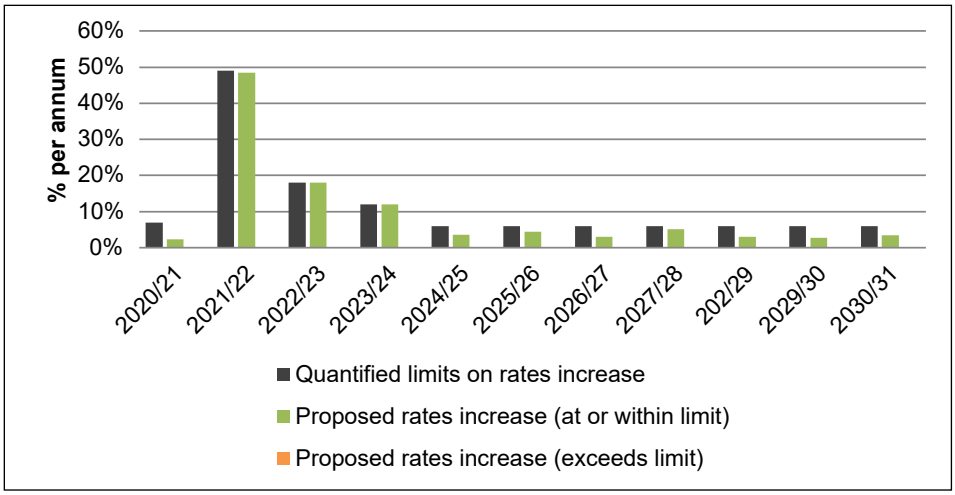
The purpose of this statement is to disclose Council's planned financial performance in relation to various benchmarks to enable the assessment of whether Council is prudently managing its revenues, expenses, assets, liabilities, and general financial dealings.

Council is required to include this statement in its Long-term Plan in accordance with the Local Government (Financial Reporting and Prudence) Regulations 2014 (the regulations). Refer to the regulations for more information, including definitions of some of the terms used in this statement.

Rates (Increases) Affordability

The following graph compares Council's planned rates increases with a quantified limit on rates increases contained in the financial strategy included in this Long-term Plan.

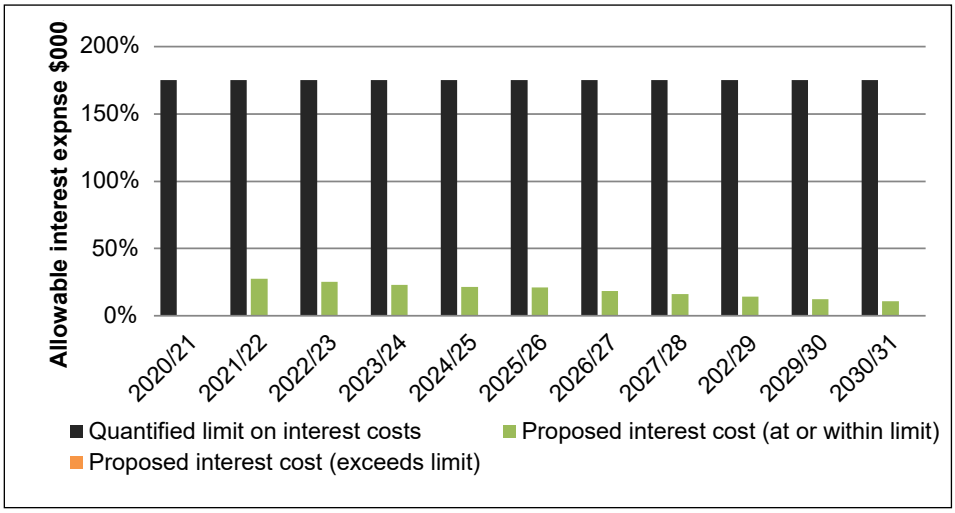
The quantified limit is 49% for 2021/22, 18% for 2022/23, 12% for 2023/24 and subsequently 6% in 2024/25 to 2030/31.



Debt Affordability

Council meets the debt affordability benchmark if its planned borrowing is within each quantified limit on borrowing.

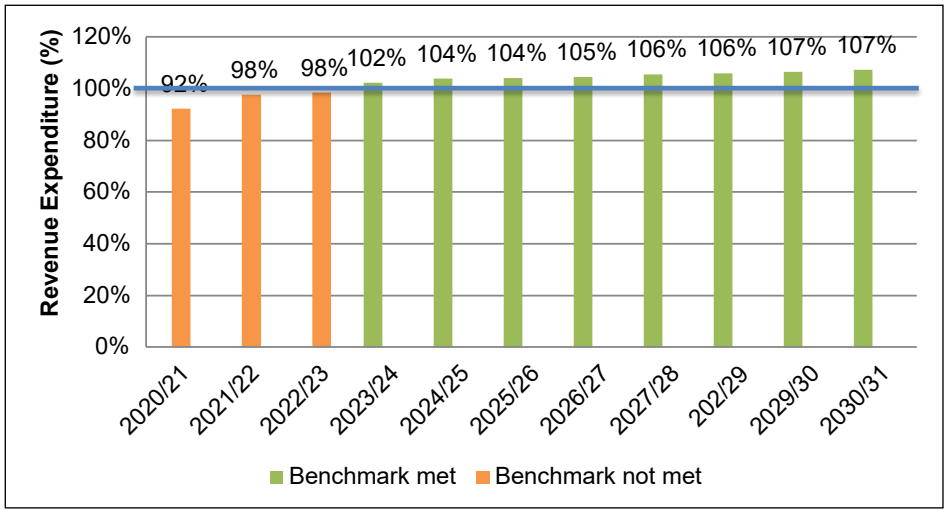
The following graph compares Council's planned debt with a quantified limit on borrowing contained in the financial strategy included in this Long-term Plan. The quantified limit is that debt cannot exceed 175% of the total revenue.



Balanced Budget Benchmark

The following graph displays Council's planned revenue (excluding financial contributions, vested assets, gains on derivative financial instruments, and revaluations of property, plant, or equipment) as a proportion of planned operating expenses (excluding losses on derivative financial instruments and revaluation of property, plant, or equipment).

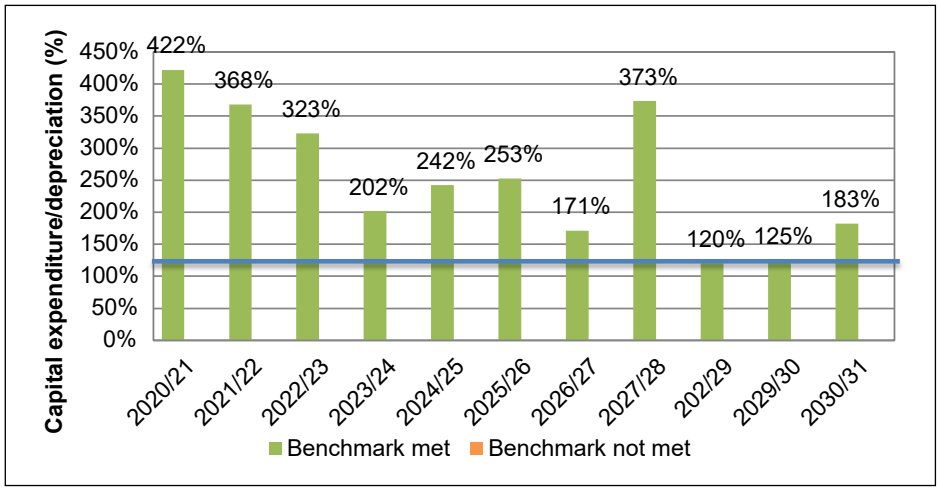
Council meets the balanced budget benchmark if its planned revenue equals or is greater than its planned operating expenses.



Essential Services Benchmark

The following graph displays Council's planned capital expenditure on network services as a proportion of expected depreciation on network services. Council's network services comprise flood protection and control works.

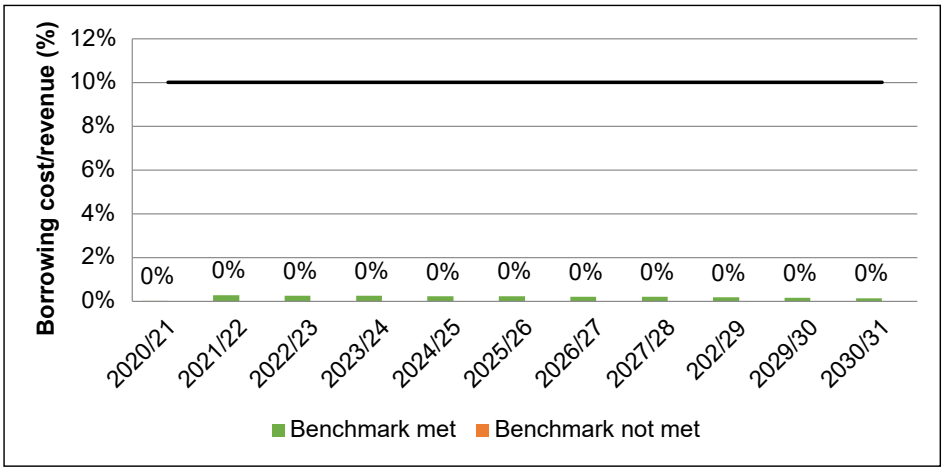
Council meets the essential services benchmark if its planned capital expenditure on network services equals or is greater than expected depreciation on network services.



Debt Services Benchmark

The following graph displays Council's planned borrowing costs as a proportion of planned revenue (excluding financial contributions, vested assets, gains on derivative financial instruments, and revaluations of property, plant or equipment).

Because Statistics New Zealand projects Otago's population will grow more slowly that the national population is projected to grow, it meets the debt servicing benchmark if its planned borrowing costs are equal to or less than 10% of its planned revenue.



Rate Funding and Funding Impact Statements

Funding Impact Statement

Annual Plan 2020/21 $000s		2021/22 $000s	2022/23 $000s	2023/24 $000s	2024/25 $000s	2025/26 $000s	2026/27 $000s	2027/28 $000s	2028/29 $000s	2029/30 $000s	2030/31 $000s
	SOURCES OF OPERATING FUNDING										
11,180	General rates, uniform annual general charges, rates penalties	19,577	23,113	25,016	24,497	23,917	24,104	25,025	25,376	25,879	26,794
15,777	Targeted rates	20,462	24,128	27,882	30,311	33,308	34,845	36,916	38,385	39,644	40,952
11,474	Subsidies and grants for operating purposes	18,856	18,510	17,760	22,837	22,813	24,427	25,041	25,040	25,564	25,957
11,702	Local authorities fuel tax, fines, infringement fees, and other receipts	11,231	11,422	15,373	13,124	13,594	14,077	14,573	15,094	15,631	16,182
5,050	Fees and charges	6,158	6,728	7,451	7,631	7,839	8,050	8,262	8,482	8,704	8,928
11,100	Interest and dividends from investments	13,750	14,750	15,750	16,750	17,750	18,750	19,250	19,750	20,250	20,750
66,282	**TOTAL OPERATING FUNDING (A)**	**90,034**	**98,651**	**109,231**	**115,149**	**119,221**	**124,252**	**129,066**	**132,128**	**135,672**	**139,564**
	APPLICATIONS OF OPERATING FUNDING										
68,732	Payments to staff and suppliers	88,216	95,725	101,963	105,717	109,421	113,544	116,938	119,053	121,388	124,118
104	Finance costs	350	358	367	376	385	383	369	354	338	321
651	Other operating funding applications	465	496	547	842	936	1,027	1,186	1,393	1,517	1,837
69,487	**TOTAL APPLICATIONS OF OPERATING FUNDING (B)**	**89,032**	**96,579**	**102,877**	**106,935**	**110,742**	**114,954**	**118,492**	**120,800**	**123,242**	**126,276**
(3,204)	**SURPLUS (DEFICIT) OF OPERATING FUNDING (A – B)**	**1,002**	**2,072**	**6,354**	**8,214**	**8,479**	**9,298**	**10,574**	**11,328**	**12,430**	**13,288**
	SOURCES OF CAPITAL FUNDING										
0	Subsidies and grants for capital expenditure	0	0	0	0	0	0	0	0	0	0
0	Development and financial contributions	0	0	0	0	0	0	0	0	0	0
0	Increase (decrease) in debt	0	0	0	0	0	0	0	0	0	0
410	Gross proceeds from sale of assets	410	420	7,430	440	451	462	472	483	494	506
0	Lump sum contributions	0	0	0	0	0	0	0	0	0	0
0	Other dedicated capital funding	0	0	0	0	0	0	0	0	0	0
410	**TOTAL SOURCES OF CAPITAL FUNDING (C)**	**410**	**420**	**7,430**	**440**	**451**	**462**	**472**	**483**	**494**	**506**
	APPLICATIONS OF CAPITAL FUNDING										
0	Capital expenditure — to meet additional demand	0	0	0	0	0	0	0	0	0	0
1,965	Capital expenditure — to improve the level of service	1,995	2,676	1,901	2,321	4,495	2,826	2,367	2,959	2,424	1,862
4,936	Capital expenditure — to replace existing assets	6,050	11,095	6,195	7,918	3,680	3,558	5,990	2,853	3,382	4,639
(9,695)	Increase (decrease) in reserves	(6,633)	(11,279)	5,688	(1,584)	756	3,375	2,688	5,999	7,119	7,293
0	Increase (decrease) of investments	0	0	0	0	0	0	0	0	0	0
(2,794)	**TOTAL APPLICATIONS OF CAPITAL FUNDING (D)**	**1,412**	**2,492**	**13,784**	**8,654**	**8,930**	**9,760**	**11,046**	**11,811**	**12,924**	**13,793**
3,204	**SURPLUS (DEFICIT) OF CAPITAL FUNDING (C – D)**	**(1,002)**	**(2,072)**	**(6,354)**	**(8,214)**	**(8,479)**	**(9,298)**	**(10,574)**	**(11,328)**	**(12,430)**	**(13,288)**
(0)	**FUNDING BALANCE ((A – B) + (C – D))**	**0**	**0**	**0**	**0**	**0**	**(0)**	**0**	**0**	**0**	**0**

Reconciliation of Funding Impact Statement to Statement of Comprehensive Revenue and Expense

Annual Plan 2020/21 $000s		2021/22 $000s	2022/23 $000s	2023/24 $000s	2024/25 $000s	2025/26 $000s	2026/27 $000s	2027/28 $000s	2028/29 $000s	2029/30 $000s	2030/31 $000s
(3,204)	**SURPLUS/(DEFICIT) OF OPERATING FUNDING PER FUNDING IMPACT STATEMENT**	**1,002**	**2,072**	**6,354**	**8,214**	**8,479**	**9,298**	**10,574**	**11,328**	**12,430**	**13,288**
	ADD/(DEDUCT)										
(2,967)	Depreciation	(3,574)	(4,090)	(4,442)	(4,738)	(4,591)	(4,853)	(4,916)	(5,158)	(5,450)	(5,608)
417	Other Gains/(Losses)	740	1,006	1,029	1,052	1,076	1,225	1,254	1,282	1,437	1,470
586	Other	400	429	479	772	864	954	1,111	1,316	1,438	1,757
(5,168)	**SURPLUS/(DEFICIT) FROM ACTIVITIES PER STATEMENT OF COMPREHENSIVE REVENUE AND EXPENSE**	**(1,433)**	**(583)**	**3,419**	**5,300**	**5,829**	**6,624**	**8,023**	**8,769**	**9,855**	**10,907**

Funding Impact Statement – Calculation of Rates for the 2021/2022 Year

Source of funding and activities	Valuation system and basis of calculation	Matters for differentiation	Est. Revenue sought for 2021-22 including GST		Estimated rates payable including GST		
					Capital Value $250,000	Capital Value $500,000	Capital Value $4,000,000
General rates:							
General rates							
- contributes to all activities of council.	Capital value	Where the property is situated.	**Allocated as:**	**$16,886,000**			
			Central Otago	$1,970,000	$39.43	$78.86	$630.89
			Clutha	$1,424,000	$41.06	$82.11	$656.89
			Dunedin	$7,054,000	$56.19	$112.39	$899.11
			Queenstown	$5,313,000	$37.10	$74.20	$593.61
			Waitaki	$1,125,000	$39.16	$78.32	$626.59
Uniform Annual General Charge							
- contributes to all activities of council.	Fixed charge per rating unit.		Calculated as $49.32 per rating unit.	**$5,629,000**	$49.32	$49.32	$49.32
Targeted rates – refer to maps of targeted rating areas							
Dairy monitoring	Fixed charge per rating unit.	The activity of being a dairy farm	Calculated as $508.71 per dairy shed.	**$216,000**	$508.71	$508.71	$508.71
Flood protection and control works							
Leith flood protection scheme	Capital value	Where the property is situated within the defined scheme area.	**Allocated as:**	**$1,680,000**			
			Direct benefit zone:				
			* Forsyth Barr Stadium	$34,000	$43.84	$87.69	$701.50
			* Excluding stadium	$806,000	$192.12	$384.24	$3,073.93
			* Indirect benefit zone	$840,000	$9.98	$19.96	$159.67

Source of funding and activities	Valuation system and basis of calculation	Matters for differentiation	Est. Revenue sought for 2021-22 including GST		Estimated rates payable including GST		
					Capital Value	Capital Value	Capital Value
					$250,000	$500,000	$4,000,000
Lower Clutha flood and drainage Scheme	Capital value	Where the property is situated using approved classifications.	**Allocated as:**	**$978,000**			
			Flood Protection & Drainage A	$61,000	$1,683.64	$3,367.27	$26,938.17
			Flood Protection & Drainage B	$159,000	$668.51	$1,337.01	$10,696.11
			Flood Protection & Drainage C	$310,000	$631.37	$1,262.74	$10,101.90
			Flood Protection & Drainage D	$57,000	$396.15	$792.30	$6,338.38
			Flood Protection & Drainage E	$52,000	$210.46	$420.91	$3,367.29
			Flood Protection & Drainage F	$34,000	$24.76	$49.52	$396.15
			Flood Protection & Drainage U1	$4,000	$668.50	$1,337.00	$10,695.97
			Flood Protection & Drainage U2	$220,000	$222.84	$445.67	$3,565.38
			Flood Protection & Drainage U3	$16,000	$49.52	$99.04	$792.31
			Flood Protection & Drainage U4	$65,000	$37.14	$74.28	$594.23
Lower Taieri flood protection scheme	Capital value	Where the property is situated using approved classifications.	**Allocated as:**	**$1,093,881**			
			Lower Taieri Flood Protection WF1	$480,000	$592.06	$1,184.13	$9,473.01
			Lower Taieri Flood Protection WF2	$486,000	$350.32	$700.64	$5,605.13
			Lower Taieri Flood Protection WF3	$251	$5.54	$11.07	$88.57
			Lower Taieri Flood Protection WF4	$150	$8.67	$17.35	$138.76
			Lower Taieri Flood Protection WF5	$0	$0.00	$0.00	$0.00
			Lower Taieri Flood Protection WF6	$0	$0.00	$0.00	$0.00
			Lower Taieri Flood Protection WF7	$0	$0.00	$0.00	$0.00
			Lower Taieri Flood Protection WF8	$1,000	$41.61	$83.22	$665.80
			Lower Taieri Flood Protection WF9	$0	$0.00	$0.00	$0.00
			Lower Taieri Flood Protection EF1	$30,000	$319.08	$638.16	$5,105.30
			Lower Taieri Flood Protection EF2	$32,000	$333.78	$667.55	$5,340.43
			Lower Taieri Flood Protection EF3	$480	$332.41	$664.82	$5,318.56
			Lower Taieri Flood Protection EF4	$12,000	$269.55	$539.11	$4,312.84
			Lower Taieri Flood Protection EF5	$2,000	$7.49	$14.98	$119.83
			Lower Taieri Flood Protection EF6	$1,000	$331.47	$662.95	$5,303.57
			Lower Taieri Flood Protection EF7	$1,000	$4.55	$9.09	$72.75
			Lower Taieri Flood Protection EF8	$37,000	$4.30	$8.60	$68.82
			Lower Taieri Flood Protection EF9	$4,000	$1.99	$3.99	$31.91
			Lower Taieri Flood Protection EF10	$2,000	$2.48	$4.97	$39.73
			Lower Taieri Flood Protection EF12	$2,000	$391.78	$783.56	$6,268.47
			Lower Taieri Flood Protection EF13	$3,000	$391.76	$783.52	$6,268.12

Source of funding and activities	Valuation system and basis of calculation	Matters for differentiation	Est. Revenue sought for 2021-22 including GST		Estimated rates payable including GST		
					Capital Value / Hectare	Capital Value / Hectare	Capital Value / Hectare
				CV Ha	$250,000 0.07	$500,000 2.00	$4,000,000 20.00
East Taieri drainage scheme	Fixed charge per hectare	Where the property is situated within the defined scheme area.	**Allocated as:**	**$500,000**			
			East Taieri Drainage - ED1	$194,000	$15.27	$436.36	$4,363.62
			East Taieri Drainage - ED2	$104,000	$11.88	$339.46	$3,394.56
			East Taieri Drainage - ED4	$20,000	$12.88	$367.89	$3,678.87
			East Taieri Drainage - ED5	$78,000	$5.81	$165.95	$1,659.51
			East Taieri Drainage - ED7	$16,000	$13.93	$398.02	$3,980.23
			East Taieri Drainage - ED8	$43,000	$3.85	$110.10	$1,100.98
			East Taieri Drainage - ED9	$32,000	$3.34	$95.50	$954.96
			East Taieri Drainage - ED10	$13,000	$2.97	$84.84	$848.44
	Fixed charge per hectare	Where the property is situated within the defined scheme area.	Allocated across ED1, ED2, ED4, ED5, ED8, ED9 and ED10	**$167,000**	$2.71	$77.30	$773.00
West Taieri drainage scheme	Fixed charge per hectare	Where the property is situated within the defined scheme area.	**Allocated as:**	**$587,235**			
			West Taieri Drainage - WD1	$465,000	$8.47	$241.98	$2,419.83
			West Taieri Drainage - WD2	$82,000	$2.33	$66.49	$664.89
			West Taieri Drainage - WD3	$27,000	$6.32	$180.55	$1,805.52
			West Taieri Drainage - WD4	$13,000	$8.47	$241.99	$2,419.95
			West Taieri Drainage - WD5	$235	$0.03	$0.98	$9.83
	Fixed charge per hectare	Where the property is situated within the defined scheme area.	Allocated across WD1, WD2, WD3 and WD4.	**$252,000**	$2.62	$74.89	$748.93
Tokomairiro drainage scheme	Capital value	Where the property is situated within the defined scheme area.	**Allocated as:**	**$172,000**			
			Tokomairiro Drainage A	$9,000	$201.06	$402.13	$3,217.03
			Tokomairiro Drainage B	$17,000	$150.79	$301.59	$2,412.71
			Tokomairiro Drainage C	$23,000	$120.63	$241.26	$1,930.08
			Tokomairiro Drainage D	$31,000	$90.47	$180.94	$1,447.53
			Tokomairiro Drainage E	$18,000	$50.26	$100.52	$804.16
			Tokomairiro Drainage F	$25,000	$20.11	$40.21	$321.69
			Tokomairiro Drainage U1	$49,000	$30.16	$60.31	$482.51

Source of funding and activities	Valuation system and basis of calculation	Matters for differentiation	Est. Revenue sought for 2021-22 including GST		Estimated rates payable including GST		
					Capital Value $250,000	Capital Value $500,000	Capital Value $4,000,000
River and waterway management							
City and district waterway and river management	Capital value	Where the property is situated	**Allocated as:**	**$2,270,000**			
			Central Otago	$368,000	$7.36	$14.73	$117.83
			Clutha	$414,000	$11.93	$23.86	$190.92
			Dunedin	$322,000	$2.57	$5.13	$41.05
			Waitaki	$460,000	$16.01	$32.03	$256.23
			Wakatipu	$402,000	$4.11	$8.22	$65.79
			Wanaka	$304,000	$6.69	$13.39	$107.12
Lower Waitaki	Capital value	Where the property is situated within the defined scheme area	**Allocated as:**	**$196,000**			
			Lower Waitaki A	$125,000	$371.06	$742.12	$5,936.92
			Lower Waitaki B	$71,000	$185.53	$371.06	$2,968.47
Rural water quality	Capital value	Land use type being:	**Allocated as:**	**$602,000**			
		- Rural arable farming	Central Otago	$137,000	$7.03	$14.06	$112.47
		- Rural dairy	Clutha	$153,000	$6.51	$13.02	$104.16
		- Rural forestry	Dunedin	$104,000	$7.77	$15.55	$124.38
		- Rural market gardens and orchards	Queenstown	$120,000	$7.22	$14.44	$115.50
		- Rural mineral extraction	Waitaki	$88,000	$6.51	$13.02	$104.16
		- Rural multi use within rural industry					
		- Rural specialist livestock					
		- Rural stock finishing					
		- Rural store livestock					
		- Rural vacant					
		- Lifestyle 2 hectares and above					
Wilding trees	Fixed charge per rating unit		Calculated as $2.02 per rating unit	**$230,000**	$2.02	$2.02	$2.02

Source of funding and activities	Valuation system and basis of calculation	Matters for differentiation	Est. Revenue sought for 2021-22 including GST		Estimated rates payable including GST		
					Capital Value $250,000	Capital Value $500,000	Capital Value $4,000,000
Emergency Management	Fixed charge per rating unit		Allocated as $29.82 per rating unit	**$3,403,000**	$29.82	$29.82	$29.82
Transport							
Dunedin passenger transport	Capital value	Where the property is situated within the defined scheme area, and differentiated on basis of land use –	**Allocated as:**	**$6,900,000**			
		Class A – non-residential	Class A	$1,873,000	$196.18	$392.36	$3,138.84
		Class B - others	Class B				
			* Dunedin	$1,997,000	$52.31	$104.63	$837.02
			* Waitaki	$30,000	$43.81	$87.62	$700.95
Wakatipu passenger transport	Capital value	Where the property is situated within the defined scheme area, and differentiated on basis of land use	**Allocated as:**	**$1,484,000**			
		Class A – non-residential	Class A	$381,000	$29.64	$59.29	$474.31
		Class B - others	Class B	$1,103,000	$14.82	$29.64	$237.16

Source of funding and activities	Valuation system and basis of calculation	Matters for differentiation	Est. Revenue sought for 2021-22 including GST		Estimated rates payable including GST		
					Land Value $250,000	Land Value $500,000	Land Value $4,000,000
Biosecurity							
City and district pest management plan	Land value	Where the property is situated	**Allocated as:**	**$2,801,000**			
			Central Otago	$352,000	$13.41	$26.81	$214.49
			Clutha	$277,000	$12.43	$24.85	$198.81
			Dunedin	$847,000	$15.03	$30.07	$240.56
			Queenstown	$1,141,000	$14.34	$28.67	$229.38
			Waitaki	$184,000	$12.43	$24.85	$198.81

Otago Regional Council does not require a lump sum contribution for any of its targeted rates.

Effect of Rating

Annual Plan 2020/21 $000s		2021/22 $000s	2022/23 $000s	2023/24 $000s	2024/25 $000s	2025/26 $000s	2026/27 $000s	2027/28 $000s	2028/29 $000s	2029/30 $000s	2030/31 $000s
11,180	**GENERAL RATES**	**19,577**	**23,113**	**25,016**	**24,497**	**23,917**	**24,104**	**25,025**	**25,376**	**25,879**	**26,794**
	TARGETED RATES										
680	Rural Water Quality rate	523	1,208	1,767	2,045	2,101	2,157	2,214	2,273	2,332	2,392
0	Air Quality rate	0	0	210	0	0	0	0	0	0	0
188	Dairy Inspection rate	188	200	210	220	230	240	250	260	270	280
2,658	Emergency Management rate	2,959	2,996	3,160	3,141	3,224	3,309	3,392	3,481	3,570	3,659
210	Wilding Pines rate	200	205	210	215	220	225	230	236	241	247
0	Biosecurity	2,436	3,385	4,002	4,315	4,481	4,650	4,819	4,993	5,168	5,344
	TARGETED RIVER & WATERWAY MANAGEMENT RATES										
300	Central Otago	320	340	360	380	400	420	440	460	460	460
330	Clutha	360	390	420	450	480	510	510	510	510	510
250	Dunedin	280	313	346	370	400	430	460	490	520	550
150	Wakatipu	350	388	415	480	545	610	640	680	730	780
180	Wanaka	264	292	315	350	385	420	440	460	480	500
400	Waitaki	400	400	400	400	400	400	400	400	400	400
149	Lower Waitaki river control	171	175	179	184	188	193	197	202	206	211
	TARGETED TRANSPORT RATES										
4,862	Dunedin Public Transport	6,000	7,019	8,355	9,362	11,190	11,531	12,095	12,313	12,478	12,640
990	Wakatipu Public Transport	1,290	1,737	2,062	2,530	2,762	3,090	3,708	4,049	4,339	4,579
	TARGETED CATCHMENT RATES										
1,461	Leith Flood Protection	1,461	1,461	1,461	1,461	1,461	1,461	1,461	1,461	1,461	1,461
750	Lower Clutha Flood Protection & Drainage	850	950	1,050	1,150	1,250	1,250	1,250	1,250	1,250	1,250
850	Lower Taieri Flood Protection	950	1,050	1,150	1,250	1,350	1,450	1,550	1,650	1,750	1,850
650	West Taieri Drainage	730	820	920	1,030	1,150	1,300	1,500	1,700	1,800	2,000
500	East Taieri Drainage	580	640	720	800	900	1,000	1,150	1,300	1,450	1,600
140	Tokomairiro Drainage	150	160	170	180	190	200	210	220	230	240
80	Shotover Delta	1,461	1,461	1,461	1,461	1,461	1,461	1,461	1,461	1,461	1,461

Schedule of Fees and Charges

Scale of Charges

The following Scale of Charges is to be applied where indicated to activities includes in this Schedule of Fees and Charges:

Charge

Staff time per hour:

- Management **$190**
- Team Leader/Principal **$170**
- Senior Technical **$150**
- Technical **$130**
- Field staff **$130**
- Administration **$100**

Disbursements	**Actual**
Additional Site Notice	**Actual**
Advertisements	**Actual**
Vehicle use per kilometre	**$0.70**
Harbourmaster vessel per hour	**$375**
Travel and accommodation	**Actual**
Testing charges	**Actual**

Consultants	**Actual**
Commissioners	**Actual**

Councillor Hearing fees per hour:

- Chairperson **$100**
- Member **$80**
- Expenses **Actual**

**These are subject to the RMA, which means they are subject to the 'fair and reasonable' test.*

Resource Management Act – Section 36 Charges

Set out below are details of the amounts payable for those activities to be funded by fees and charges, as authorised by Section 36(1) of the Resource Management Act 1991.

Resource Consent Application Fees

Note that the fees shown below are a deposit to be paid on lodgement of a consent application and applications for exemptions in respect of water measuring devices. The deposit will not usually cover the full cost of processing the application, and further actual and reasonable costs are incurred at the rate shown in the scale of charges. GST is included in all fees and charges.

Pre-Application Work

Fees payable for pre-application work carried out before a consent application is lodged with Council will be incurred at the rates shown in the scale of charges.

Deposits		
Publicly Notified Applications Deposits: [3]	First application	$10,000
Non-Notified Applications and Limited Notification Applications Deposits: [3]	First application	$1,750
	Multiple Applications	$2,300
Other Application Types		
	Variation to Conditions – s127	$1,750
	Administrative Variation – s127	$1,750
	Multiple Bores	$1,500
Fixed Fees		
Single Bore		$750
Exemption under regulation 7A of the Water Metering Regulations		$150
Exemption under regulations 9 or 10 of the Water Metering Regulations		$450
Hearings		Per Note 2 below
	Payment for Commissioner request – s100A	Per Note 4 below
Objections	Payment for Commissioner request – s357AB	Per Note 4 below
Transfer of Consent Holder and Certificates Deposits:		
	Transfer of permits and consents	$200
	Priority Table	$200
	Section 417 Certificate	$500
	Certificate of Compliance	$1,750
	All Other Costs	As per Scale of Charges

Notes:

1. For additional permits in respect of the same site, activity, applicant, time of application, and closely related effect as the first application.
2. The deposit payable shall be 90% of the cost of a hearing as calculated by Council in accordance with information contained in the application file and using the scale of charges. The amount payable will be due at least 10 working days before the commencement of the hearing. If the amount is not paid by the due date, then the Council reserves the right under S36(7) of the Resource Management Act to stop processing the application. This may include cancellation of the hearing.

   Should a hearing be cancelled or postponed due to the non-payment of the charge, the applicant will be invoiced for any costs that arise from that cancellation or postponement.

   Following completion of the hearing process, any shortfall in the recovery of hearing costs will be invoiced, or any over recovery will be refunded to the applicant.
3. Where actual and reasonable costs are less than the deposit paid, a refund will be given.
4. Where an applicant requests under s100A (for a consent hearing) or under s357AB (for the hearing of an objection) an independent commissioner(s); the applicant will be required to pay any increase in cost of having the commissioner(s).

   Where a submitter(s) requests under s100A an independent commissioner(s) any increase in cost that is in addition to what the applicant would have paid shall be paid by the submitter. If there is more than one submitter who has made such request the costs shall be evenly shared.

Review of Consent Conditions

Following the granting of a consent, a subsequent review of consent conditions may be carried out at either the request of the consent holder, or as authorised under Section 128, as a requirement of Council. Costs incurred in undertaking reviews requested by the consent holder will be payable by the consent holder at the rates shown in the Scale of Charges above.

Reviews initiated by Council will not be charged to consent holders.

Compliance Monitoring

Performance Monitoring

The following charges will apply to the review of performance monitoring reports for all consent holders, except those in *'Fees for Specific Consent Holders'* below. The charges shown are annual fixed fees per performance monitoring report or plan, and are inclusive of GST.

Resource Consent Monitoring and Annual Administration Charges	
One off compliance administration fee to be charged on all new applications. Covers the cost of compliance monitoring systems	$150
Ongoing compliance administration fee to be charged on consents with Performance Monitoring requirements	$50
Late performance monitoring fee to be charged as required	$150

Annual Consent Compliance Monitoring Charges	
Compliance monitoring charge for each other item due during the financial year (unless covered by one of the fees below) examples include management plans, provision of photos, bore logs, notifications, record of complaints, annual reports	$70
Annual charge for the receipt and processing of telemetered water take data/information (including verifications returns)	$175
Each additional telemetered water measuring device	$50
Annual charge for the receipt and processing of manual and data logger water take data/information (including verification returns), excludes those who hold a WEX for the installation of telemetry	$225
Each additional non telemetered water measuring device	$100
Annual charge for the receipt and processing of all returns relating to small/simple discharge consents	$75
Annual charge for the receipt and processing of all returns relating to medium/moderately complex discharge consents	$300
Annual charge for the receipt and processing of all returns relating to large/complex discharge consents	$900
Inspection reports for small dams	$145
Inspection reports for large dams	$280
Structural integrity report	$100

Low flow monitoring charges	
Kakanui at McCones	$350
Unnamed Stream at Gemmels	$1,550

Fees for Specific Consent Holders

Performance monitoring will be charged as 75% of actual costs where applying the fixed charges listed above do not represent a fair and reasonable charge. This includes major consent holders who hold a large number of individual consents and/or consents which contain complex monitoring requirements. It also includes consents where data or information is consistently submitted in a way which generates significant extra costs for Council.

Additional charges may be incurred for new consents granted during the year.

Audit of Consents

Audit of consents will be charged at the actual cost incurred, with the actual costs being calculated using the Scale of Charges.

Other Compliance Activities

The following activities will be charged at the actual cost incurred, using the Scale of Charges:

- Performance and Compliance monitoring of permitted activities under a National Environmental Standard
- Monitoring Compliance Certificates

Non-Compliance, Incidents and Complaints

Enforcement work on consent conditions and remedying negative effects – Scale of Charges.

Gravel Inspection and Management

Gravel extraction fee – $0.66 per cubic metre (incl. GST). Where more than 10,000 cubic metres of gravel is extracted within a prior notified continuous two-month period, the actual inspection and management costs will be charged, as approved by the Director Corporate Services.

Resource Monitoring

Water or air monitoring work carried out for external parties – Scale of Charges.

Private Plan Changes

Work carried out on privately initiated plan changes – Scale of Charges.

Contaminated Sites Management

Clean up and remediation works – Scale of Charges.

Incident and Complaint, Non-Compliance with Permitted Activity Rules

Dealing with pollution incidents and enforcement work including investigating, monitoring, reporting, remediation and clean-up. The 'Scale of Charges' applies.

Biosecurity Act – Section 135 Charges

Pest Management Strategy Implementation

Work carried out resulting from inaction of landowners not complying with Council's Pest Management Strategy for Otago. The 'Scale of Charges' applies.

Review of Rabbit Control Programmes from non-compliant farms, and work associated with ensuring implementation of those programmes – Scale of Charges.

Local Government Act – Section 150 Charges

Transport Licensing Exempt Services

Apply to register or vary an existing registration – Scale of Charges; deposit payable of $575.

Bylaw Application Processing

Processing bylaw applications with the 'Scale of Charges' applying and deposit payable of $300.

Local Government Official Information and Meetings Act – Section 13 and Resource Management Act Section 36(1)

Information Requests

Information requests that require more than half an hour to respond to, and multiple copies of Council reports. The 'Scale of Charges' applies.

Local Government (Rating) Act 2002 – Section 88 Charges

Postponement

A postponement fee to cover administration and financial costs may be charged on postponed rates – scale of charges.

PART 5
Policies and Strategy

Financial Strategy

Purpose

This strategy sets out how Otago Regional Council will manage its finances over the next 10 years. It outlines the financial direction Council wishes to take on matters such as levels of future rating, borrowings and investments and discusses factors that influence those areas. These matters have a significant influence on Council's ability to deliver on its strategic priorities including: aligning with national direction on freshwater reform; strengthening our leadership on strategic issues such as climate change, urban development and community wellbeing; and ensuring our operational response to maintaining and improving Otago's natural environment and public transport is appropriate. Delivering on these priorities must be done in consideration of what is affordable to the community and this Financial Strategy sets out a path for the prudent and sustainable funding of this Long-term Plan.

Executive Summary

Council faces a significant financial challenge in this Long-term Plan. Central government requirements have increased as have community expectations. In the 2020-21 Annual Plan Council was required to respond to external reviews and increased its work programme by $10M. Council was cognisant of the unplanned rates increase this would create and decided to fund $3.9M of this increase from general reserves with a view to reviewing and accessing how this could be funded when the Long-term Plan was prepared.

Subsequent to that decision, Council also decided to reserve fund a further $1M to reduce rates increases further in light of COVID-19. Since the 2020-21 Annual Plan was adopted further legislative requirements has meant further unbudgeted expenditure has been necessary in the current year as additional staff and resources are added in regulatory, planning and environmental monitoring areas to meet Council's increased statutory obligations.

These increases and the funding shortfall in the current year means Council is facing a significant increase in rates before any new activity is even contemplated in the Long-term Plan itself. On top of that, many targeted rate reserves are already in deficit and increases as indicated in previous Long-term Plans remain necessary to ensure those deficits are repaid.

Over the next 10 years the key financial challenges and how Council is proposing to address them in this financial strategy are:

- There is a significant increase in planned and unplanned expenditure occurring in the current 2020-21 year and that requires a corresponding increase in funding in year 1 of the Long-term Plan. Where possible, expenditure has been phased over the first 3 years, but a lot of the increase is required immediately, meaning there will be a significant step up in expenditure in year 1.
- To reduce the rates increase, Port Otago dividends are forecast to increase from current levels and provide $13M in year 1 rising to $20M in year 10.
- There will also be an increased use of reserves over the life of this plan, including using general reserves to permanently fund the 2020-21 general rates offset, rather than adding that amount to the rate requirement.
- A new targeted rate is being introduced for biosecurity activity and an existing targeted rate applied to Lake Hayes remediation work. This will allow the initial increases or up-front expenditure in these activities to be deficit funded and funding increases smoothed over following years.
- Council has renamed and repurposed river management targeted rates to include other water body activity. This will now include funding specific lake and water body remediation initiatives within each river and water management within each district.
- The use of external borrowing is included in this 10-year plan. This will reduce the interest cost for reserves that are in deficit and will allow cashflow to be managed efficiently as internal borrowing is forecast to exceed the level of Council's financial assets.

Background

For the 10 year period of this plan, work programmes and initiatives have been developed that will contribute to achieving Council's overall vision, ensuring the sustainable use of its natural resources, water, air and land, and to protect them now and future generations.

The process we used to develop our work programme was to firstly consider and review our core business programme of work and provide for the continuation of those activities. This work is all about maintaining our existing services and continuing funding on programmes already underway and committed to. To prioritise new expenditure, we undertook a review to identify any gaps in our work programme for activities that we must undertake as they are required under legislation and then we considered those activities that would be desirable to do to meet our community's expectations.

These programmes and initiatives come at a cost. Affordability for ratepayers is a key aspect of this strategy and Council is mindful of the potential burden on ratepayers to fund the proposed work programme. Council's Revenue and Financing Policy details how each of its activities should be funded, whether through rating, fees and charges, or some other funding tool and in doing so, has given consideration to who will benefit from each activity and how much they will benefit.

Council holds a number of investments and most of the income derived from those investments is used to contribute to the cost of our work. All ratepayers benefit from this income, as the contribution is used to reduce the general rate requirement each year. Council's Treasury Management Policy covers borrowing and investment terms, including a Statement of Investment Policy and Objectives for our financial investments.

Council has a strong balance sheet. Its aim is to use its balance sheet strategically to preserve the financial stability it currently enjoys. Historically Council has preferred to use internal borrowing, that is, to lend from its general reserves to fund certain activities, as the cost of internal borrowing has been lower to the ratepayers than if Council were to borrow externally. Over the next 10 years Council will use external borrowing where the cost of doing so is more cost effective and efficient than utilising internal borrowing.

Principles

This financial strategy and the associated Revenue and Financing Policy are based on the following financial principles:

- **Prudence**
  Council will not take undue financial risks and aims to ensure spending and funding requirements are affordable and sustainable.
- **Fairness**
  Council will ensure spending reflects the needs of the community and that those who enjoy the benefit of that spending or are responsible for that spending occurring pay a fair share to fund that spending. That includes providing for intergenerational and community equity in both expenditure and funding decisions.
- **Value for money**
  Council will ensure that all expenditure provides the best possible value for money in terms of impact and effectiveness. That includes considering the lifetime cost and most efficient form of funding for that expenditure.
- **Transparency**
  Council aims to provide clear information to the community on its financial direction and decision-making framework Council is undertaking around that financial direction.

Key issues that have a significant financial impact

There are key issues associated with the Long-term Plan 2021-31 that have significant financial impacts. They include:

- The tension between land use intensification, both rural and urban, and national direction to maintain and improve our freshwater resource
- The need for a collaborative and inclusive approach for achieving acceptable environmental, economic and social outcomes in particular for land and water issues
- Planning for and responding to the risk associated with providing flood protection and drainage schemes
- Ensuring our operational response to maintaining and improving Otago's natural environment is appropriate
- Meeting the need for effective public passenger transport services in Dunedin and the Wakatipu Basin

Council is addressing these issues in the following ways:

- Council's regional planning framework formed a critical component of a 2019 central government review of Council's approach to freshwater management. The recommendations of that review have already been acted on and this LTP further consolidates the provision for this ongoing programme of work. It includes: Regional Policy Statement, Regional Land and Water Plan review, and increased capacity for consenting and consent monitoring activity. To support the delivery of the regional planning work this LTP makes further substantive provision for science and monitoring resource. This is largely staff who design, collect, manage, analyse and report information requirements for the planning process. A planning conversation that is based on relevant and quality science is more likely to result in a better result for the community.
- In conjunction with regional planning Council is signalling support in this LTP for achieving desired results through working with community at a catchment level. While new funding provision is modest over years one to three, there is an expectation that over the medium-long term activity at the catchment level will increase.
- Our Infrastructure Strategy is an important component of deciding how Otago communities adapt to change and it signals a commitment to explore and communicate options relating to flood and drainage activity. While the achievement of freshwater outcomes is the top priority for Council, this LTP also includes immediate and substantive increase in the provision of core Biosecurity services.

- The LTP currently does not include provision for any substantive Air implementation programme. There is an expectation that over the medium-longer term that this will need to be addressed. Given the scale of the issue substantive funding may be required.
- Council has the expectation that national direction on climate change will continue to strengthen, and that transport will be a significant part of achieving desired outcomes. As such this LTP, despite the COVID impact on Queenstown patronage, is investing to grow patronage and provide quality public passenger transport services over the long term. Sufficient provision is made in years one to three to complete business case work that will inform decisions in the medium-long term on substantive service development in Queenstown. It is anticipated that during years 1-3 consideration and decisions on expenditure and funding will be required to achieve both service improvements and affordability for users and the community.

Other assumptions that have a financial impact

Population growth

Statistics New Zealand subnational population estimates (as at 30 June 2020) suggested that Otago's population in 2020 was 245,300. Between 2019 and 2020, Otago's population grew by 5,600 people or 2.4%, which was the third highest growth rate amongst New Zealand's regions and higher than New Zealand average of 2.1%.

In terms of population by age group, Otago's under-15 age group was estimated to be 15.8% of the total population, which was lower than the New Zealand average of 19% while Otago's over-65 age group was estimated to be 16.5% of total population, which was higher than the New Zealand average of 15.6%.

The annual peak numbers of visitors to the region in recent times has been estimated to be around 141,000, which is more than half of the resident population.

In the next 10 years (2020-2030), the region's population is projected to increase by 10% (24,590 people) to reach 264,855 residential population under the most likely growth scenarios provided by the district councils. Otago's districts are projected to continue to have different population growth rates. Queenstown-Lakes and Central Otago are projected to have the highest growth rates of 27% and 18% respectively; Clutha district is to have the lowest growth rate of 3%; while Waitaki and Dunedin's population are to grow by 7% and 5% respectively.

Currently there are approximately 120,000 ratepayers in Otago. The forecasted growth outlined above will translate into an increase in the ratepayer base. Over the 10-year period the population growth could translate to growth of the ratepayer base of 10,000 to 12,000 (ie approx. 10%). This level of growth will impact on the level of activity undertaken by Council over the 10-year period, including in the areas of public passenger transport and urban development, and management of natural resources such as fresh water and land. This LTP makes provision for a programme of work that builds into the requirements of growth alongside other non-growth related issues.

Natural Hazards

Otago is exposed to a large range of natural hazards including floods, landslides, debris flows, droughts, earthquakes and tsunamis. These pose a risk to the wellbeing of Otago through impacts on public safety, housing, infrastructure and the economy. Most of the region's population lives within five kilometres of this coastline and several communities along the coast have a level of exposure to hazards from elevated sea level and coastal erosion.

Otago will experience adverse events. For the purpose of this LTP, it is assumed that:

- There will be one flood event impacting on ORC's flood and drainage infrastructure every year
- There will not be any droughts/low flows event – should one happen, it will likely lead to a reprioritisation of work and resources

Otago's climate is changing, and these changes will continue for the foreseeable future. Climate change projections for the Otago region include warmer temperatures, with more hot days and fewer frosts. Winter and spring are expected to be wetter, but with significant decreases in seasonal snow likely. More severe extreme rainfall events are anticipated, as is the severity and frequency of windy days. Even with intervention, sea level rise is expected for the next 100 years and more. Hazards associated with these changes in climate are likely to include increased flooding and landslides, drought, coastal inundation and erosion, and increased instances of wildfire.

Land use change

How land use may change in Otago is unknown. With population growth, there will be a need for more urban development, farming may change because of climate change effects, and there may a switch from intensive farming to more cropping. Whatever those changes may be, there will be likely impacts on the demand for water, and the need for greater efficiency in

water use and changes in land use practice to achieve water quality objectives. Future decisions by the community about protecting property and maintaining land productivity from flooding and inundation will also be an important factor.

COVID-19

Council has been fortunate that COVID-19 has not had a material impact on its commercial revenue streams. Port Otago has been impacted but maintains diversified revenue streams and forecast dividends over the life of this plan are not expected to be impacted. Likewise, investment returns via the managed fund were impacted in the short term but have subsequently recovered and are not expected to be materially impacted in the financial forecasts.

Bus fare revenue was impacted in the short term however lost fare revenue was underwritten by NZTA. Decreased fare revenue is expected to continue in Queenstown in the early part of this 10-year plan. Council will maintain its existing levels of service and will continue to provide contracted public transport services. Any shortfall in fare revenue will be funded by increased NZTA grants and transport reserves.

Expenditure

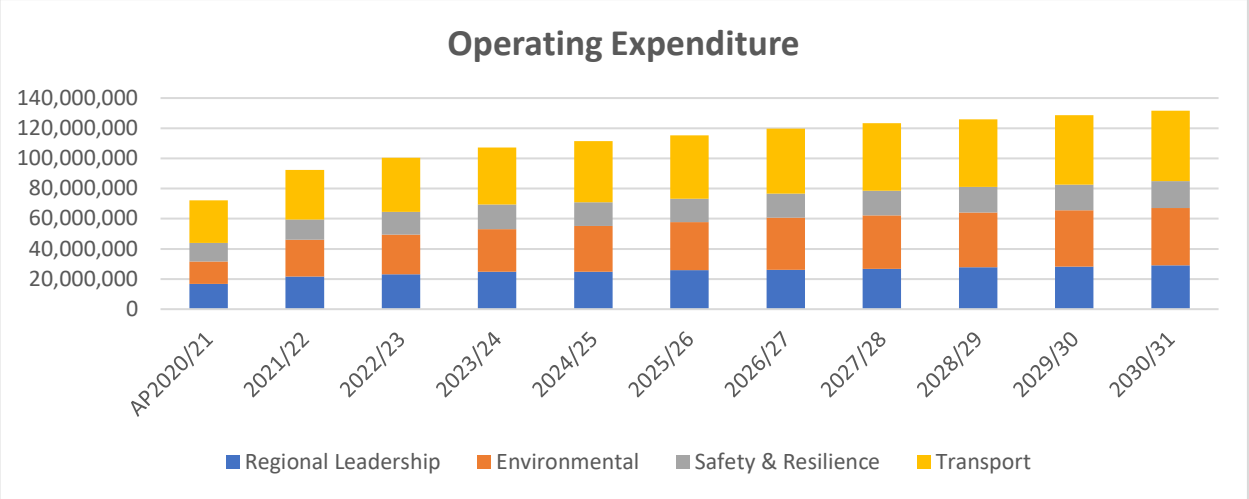
Operating expenditure

Council's strategy is that operating expenditure is to be funded from operating revenue, being rates, fees and charges, grants, investment and other income. Council's strategy is also that it will not use reserves to fund day to day, business as usual type operating costs, as this is not considered a prudent use of reserves. There are, however, special cases where Council's revenue policy does allow for operating expenditure to be funded from general reserves, for example, research and development costs, or specific one-off activities or projects and activities have benefits that continue over the following years.

In the 2020-21 Annual Plan Council decided to use general reserves to offset a significant increase in general rates with a view to recovering that amount over the early years in this 10-year plan. With significant additional expenditure now required in the next 10 years, Council has decided to fund the 2020-21 shortfall as a one-off from general reserves. Going forward over the next 10 years Council is not proposing to offset general rates in this way as the uncertainty that further expenditure increases may compound future year rates increases is too great.

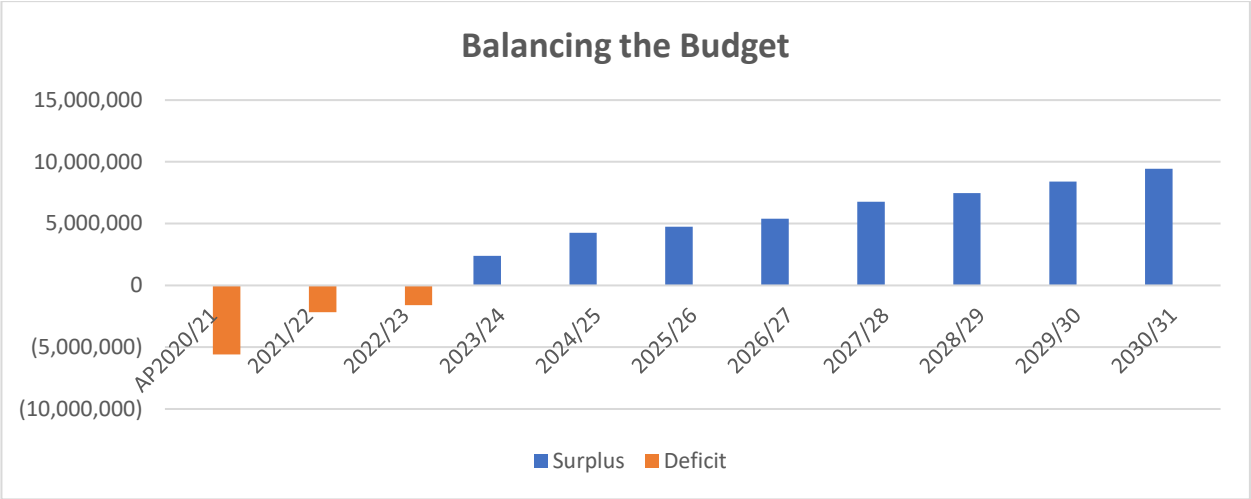
Council has a number of activities which are funded by targeted rates, such as public passenger transport, flood and drainage schemes, and river and water management. Reserves are maintained for activities funded by targeted rates. There are times when these reserves may be used to fund scheme operating costs, to allow certainty around the level of rates that are required from year to year. Expenditure in these activities can be volatile in nature, with some years spend being very high, and other years very low. Targeted rate reserves are used to help smooth the impacts of these variations in expenditure. Targeted rate reserve deficits may be internally or externally debt funded.

The graph below shows estimated operating expenditure over the 10-year period of the Long-term Plan, by significant activity.



Operating surplus and balancing the budget

Council is required to ensure that, for each year, estimated revenue is sufficient to cover its estimated operating costs. Council is, however, allowed to set its revenue at a different level if it resolves that it is financially prudent to do so. It is estimated that in the first two years of this plan, the estimated revenue will not cover estimated operating costs.



The primary reason for the shortfall in revenue is that Council plans to use reserves to fund one-off operating expenditure. This has been planned for several activities of Council as follows:

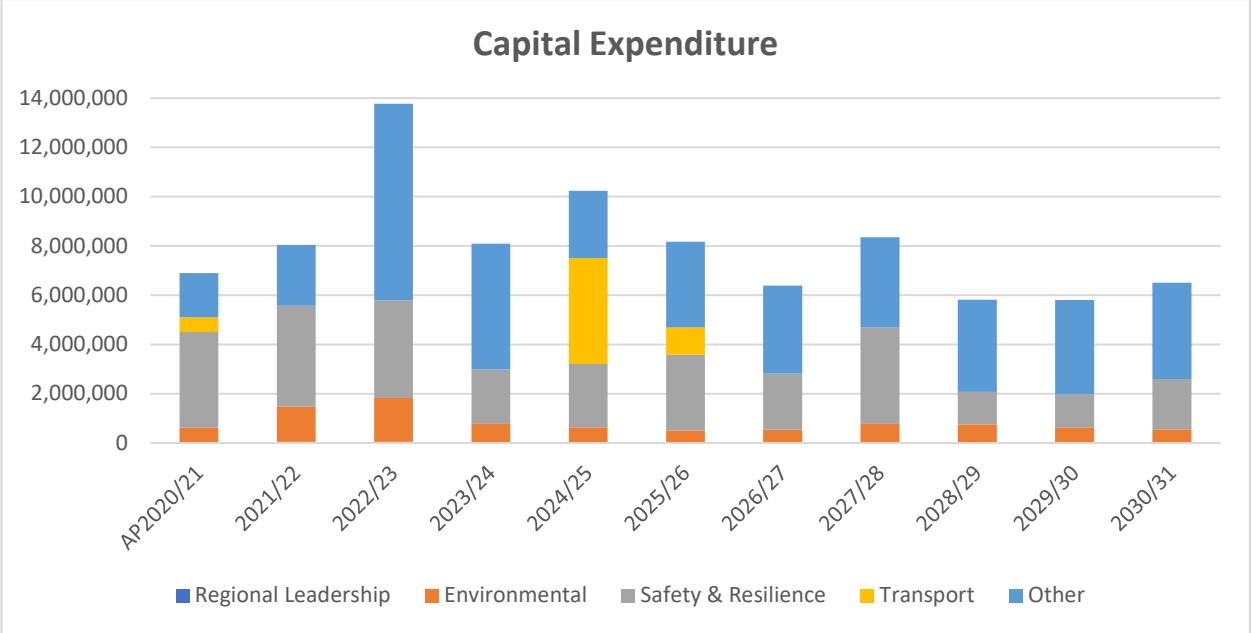
- ECO Fund
- Climate Change Adaptation
- FMU water modelling

The 2020-21 Annual Plan deficit includes the use of a general rates offset. This amount is not being recovered via rates in the Long-term Plan and will be permanently funded from general reserves.

Capital expenditure

Most infrastructural assets, such as floodbanks, pumping stations and drains, belong to flood and drainage schemes. Ratepayers within these schemes fund the depreciation on these assets through targeted rates. Each scheme has its own reserves made up of funded depreciation, unspent targeted rates and interest earned on reserve balances. These reserves are used to fund capital expenditure. If there are insufficient reserves available to fund the capital expenditure, then either internal or external borrowing will be used.

The graph below shows estimated capital expenditure over the 10-year period of the Long-term Plan, by significant activity.



Scheme Infrastructure Asset Investment

Significant expenditure is required during the life of this plan on flood and drainage scheme infrastructure. Generally, capital works in established schemes are funded by the depreciation reserve built up for each of the schemes, and maintenance work is funded by targeted scheme rates. However, depreciation reserves are not always sufficient to cover capital investment so increases in targeted rating have been planned where appropriate, along with the utilisation of internal and external borrowings.

The planned capital expenditure for each scheme over the 10 years is as follows:

	Increase in Levels of Service $000s	Renew / Replace $000s	Total 10-Years to 2031 $000s
Alexandra Flood	0	41	41
Leith Flood Protection	0	1,823	1,823
West Taieri Drainage	3,405	4,581	7,986
East Taieri Drainage	1,729	2,327	4,056
Lower Taieri Flood Protection	0	7,915	7,915
Lower Clutha Flood and Drainage	307	2,251	2,558
Tokomairiro	0	233	233
Total	**5,441**	**19,170**	**24,611**

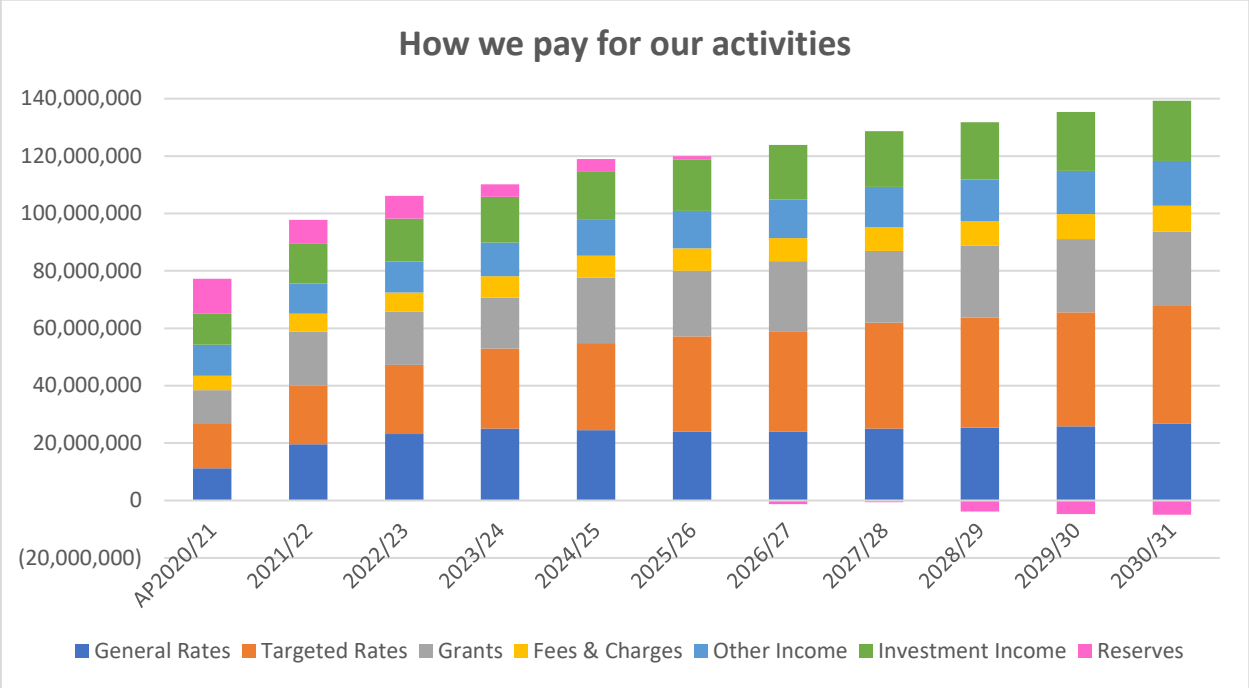
Each scheme has its designed level of service (or protection). Climate change risk assessment work for the Taieri Plain, Clutha Delta and South Dunedin continues within this LTP. This work will influence future decisions on infrastructure and associated levels of service for existing flood and drainage schemes and non-scheme areas.

The expansion of Mosgiel and Wingatui within the boundaries of the Taieri Scheme will result in a need to address and manage the stormwater/land drainage interface.

Other scheme works involves implementing an on-going and planned renewal and asset replacement to maintain the current levels of services. This work is outlined in the ORC Infrastructure Strategy.

Revenue

Council pays for its services through a variety of revenue sources. The graph below shows the mix of sources for each year of this 10-year plan.



General Rates

General rates are charged where there is a wider community benefit or where a defined benefit area or group cannot be determined, or it is uneconomic to separately rate or charge that area or group.

Each year general rates are subsidised by dividends received from Port Otago Limited, and by income earned on Council's managed fund, cash balances and investment properties. Generally, investment income subsidies reduce the general rate requirement by around half of the gross rate requirement.

The amount of general rates we collect is low, currently contributing around 14% towards Council's total expenditure although this will increase over this 10-year plan to around 20% of total expenditure. This low general rate means that any general rate increases, whilst small in monetary terms, are generally high in percentage terms. A 1% increase in general rates equates to approximately $128,500 (including GST). This, spread across 120,000 ratepayers, averages out to an increase of around $1.07 per annum, per ratepayer.

The average amount of general rates payable across the region is also low at $107. The proposed increase in general rates will increase this by $81 to $188 on average.

Over the past few years, general rate increases have been higher than we have historically experienced. Council has recognised that with additional demands from central government and a growing work programme to meet community expectations, we need to increase our general rates to a sustainable level. This will continue being done over the first three years of this Long-term Plan.

To help us do this, our subsidiary company, Port Otago Limited, is increasing the forecast level of dividends significantly. Despite this, general rates will also need to increase significantly over the first three years of this Long-term Plan to cover our estimated expenditure.

These increases will bring our general rates to around $24 million at the end of year three. Any increases after 2024/25 in our general rates will be modest, generally taking account of inflation. The movement in general rates from year-to-year ranges from an average rate increase of 33.8% in the first three years of the plan, to and average increase of 1.0% for the remaining seven years of the plan.

This plan provides for inflation each year of between 2.4% and 2.7% over the 10-year period on its expenses.

Of the total general rate to be collected each year, 25% is to be charged as a uniform annual general charge (UAGC).

If a specific project shows major fluctuations in the level of rate from year to year, council may smooth the impacts of those charges over a longer period of time, ensuring that the full contribution is achieved. It is not proposed to do this in the 10-years of this plan.

Targeted Rates

Targeted rates are used where there is a defined area of benefit, or a defined group benefiting from an activity.

Council has around 23 targeted rates established for emergency management, air quality, wilding tree control, rural water quality, dairy inspections, river management works, flood and drainage schemes and public transport services provided in Dunedin and the Wakatipu Basin.

Each targeted rate has its own reserve. So, any unspent rating is allocated to the appropriate reserve and used to fund expenditure applicable to that targeted rate in future years.

For river and waterway management, Council aims to have reserves in funds equating to approximately one year's worth of operating costs. This provides some financial security, should a flood event occur, so that additional work can be undertaken as necessary without the need for a significant rate increase in any one year.

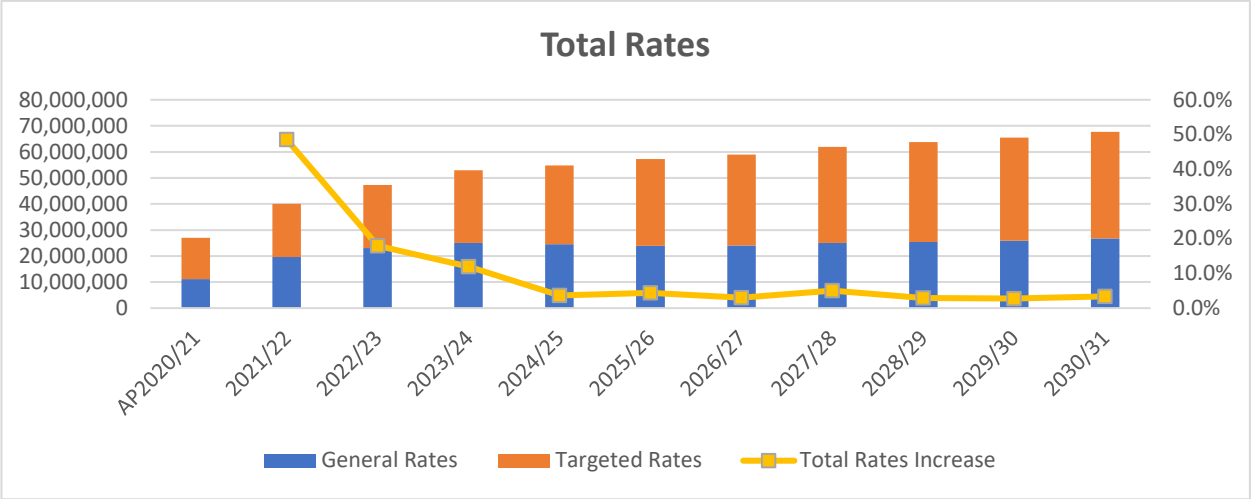
In this Long-term Plan Council is renaming and repurposing the river management rate and reserve to utilise that as the funding mechanism for river and waterway management generally. This will now include funding certain lake and other water body remediation initiatives within each river and waterway management district.

Where significant capital expenditure is required on our flood and drainage schemes, Council will not support the repayment of scheme works over a period longer than 20 years. The interest expense associated with longer repayment terms is not considered justifiable in terms of future rate payments. The 20-year term however, appropriately recognises the spread in benefits to future generations.

The movement in targeted rates from year-to-year ranges from an average rate increase of 21.1% in the first three years of the plan, to and average increase of 5.7% for the remaining seven years of the plan. These increases are required to ensure current deficits and operating expenditure is funded over the 10 years of this plan.

Total Rates

Total rates to be charged over the 10-year period are as follows:



Rate Limits

Total rate increases will be limited to 49% in year 1, 18% in year 2, 12% in year 3 and 6% for years 4 to 10.

Borrowing

External Borrowing

Council currently has no external borrowing; however, this is proposed to change from year one of this Long-term Plan.

Council may borrow for the following primary purposes:

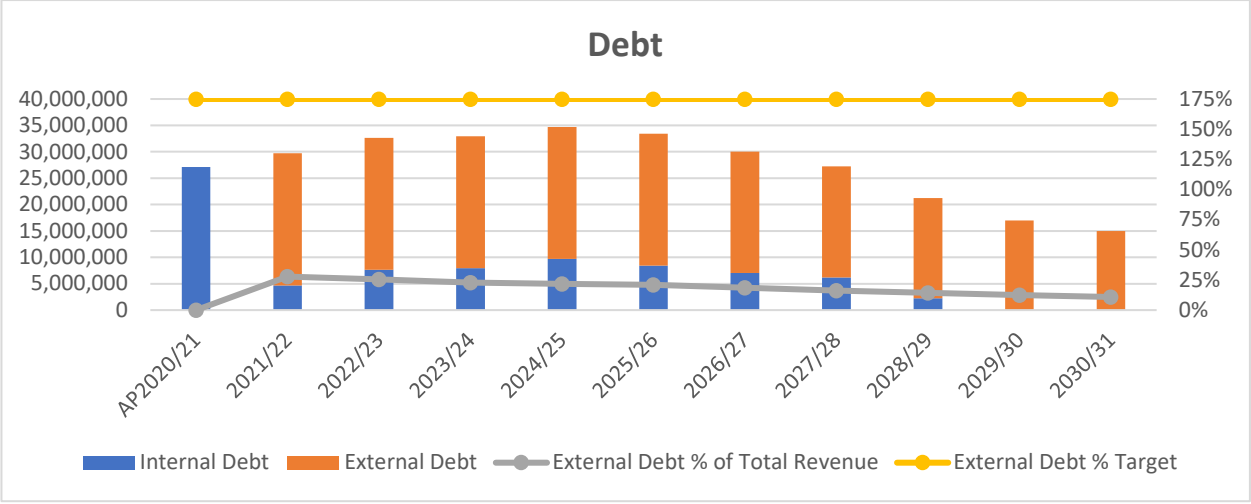
- To fund special one-off type projects
- To fund expenditure for items of an intergenerational nature
- Short-term borrowing to manage timing differences between cash inflows and outflows
- To replace an unexpected loss in dividend or investment income

Borrowing limits are set as follows:

- Interest expense cannot exceed 20% of the total rates per annum
- Interest expense shall not exceed 25% of total revenue
- Debt shall not exceed 175% of total revenue

(Note the above limits will be amended as Council considers joining the Local Government Funding Agency).

Total graph below shows proposed external debt over the 10-year period of the Long-term Plan:



It is Council policy to offer security for any borrowing by way of a charge over its rates. In the normal course of business, Council policy is not to offer security over any of the other assets of the Council. However, in special circumstances and if it is considered appropriate, Council may resolve to offer such security on a case-by-case basis.

Internal Borrowing

When considered appropriate, Council uses accumulated reserves as a borrowing mechanism primarily for the flood and drainage and transport schemes, thereby reducing the level of external borrowings required. The following operational guidelines apply to the use of reserves for funding rather than external borrowings:

- Interest is charged on the month end loan balances
- The interest rate charged is equivalent what Council would earn if it had been invested
- Reserves available for internal borrowing are limited to 50% of total reserves

The interest earned from internal borrowing is used in the same way as interest earned on investments, that is, to fund interest on reserve balances in funds and to subsidise general rates.

Investments

Council's primary objective when investing is to earn a return whilst protecting its initial investment. Accordingly, the risk profile of all investment portfolios must be conservative. Within approved credit limits, Council seeks to maximise investment returns, and manage potential capital losses due to interest rate movements, currency movements and price movements. Council's investments are discussed below.

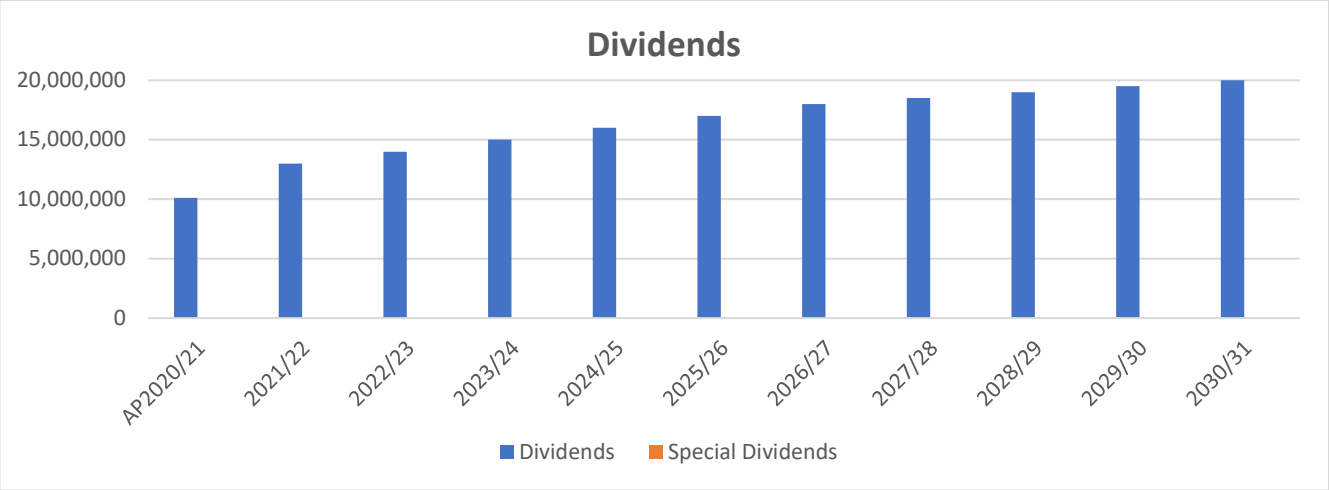
Port Otago Limited

Council holds 100% ownership of Port Otago Limited. Each year, dividends are received from Port Otago Limited that significantly reduce the general rate requirement. Council is of the view the this is a strategic asset held on behalf of the Otago community and through subsidising general rates, every ratepayer enjoys the benefit of that ownership. Port Otago's dividend policy aims to provide a dividend of between 50-70% of normalised operating profit after tax. This allows Council to receive an acceptable and sustainable return while still allowing the Port to retain capital for reinvestment in the long-term future of the business.

Dividends are forecast to increase significantly in the next 10 years. This increases Council's funding reliance on the Port which comes with additional risk should the Port be unable to maintain this level of dividend. Over the 10 years of this plan Council aims to mitigate this risk by holding sufficient financial reserves to cover an unexpected dividend shortfall. While this may reduce the rates impact of reduced dividends in the short term, it will impact other investment income and significant rates increases are likely to be required if dividend levels reduce.

From time to time, special dividends may be received from Port Otago Limited for specific purposes. Before requesting special dividends, Council will discuss with Port Otago its ability to pay such dividends, taking account of factors such as the company's own programme of capital expenditure. No special dividends are proposed in the 10 years of this Long-term Plan.

Over the next 10 years, dividends are estimated to be as follows:



Investment Property

Council doesn't generally invest in property but does own investment property within Dunedin City that was vested to it when Council was established. Some of this is land leased by the University of Otago and the Otago Polytechnic. Council also owns property on the Dunedin harbour basin, being the Custom House building and the Monarch building.

The return by way of rentals on all these properties is at commercial rates and is used to subsidise general rate funding each year.

Managed Funds

Council holds a long-term managed investment fund incorporating classes of cash, fixed interest bonds and equities (New Zealand and international). Council's primary investment objectives when investing is the managed fund are:

- To protect and maintain the purchasing power of the current investment assets and all future additions to the investment assets
- To maximise investment returns within reasonable and prudent levels of risk
- To maintain an appropriate asset allocation in order to make distributions as required while preserving the real value of the Council's capital from the effects of inflation

Investment in the managed fund is based on an investment horizon of greater than seven years. Council is risk adverse in its investments and has a low willingness to accept risk but seeks to achieve return equivalent to inflation plus 2.3% to 3.1% (net of fees).

Based on Council's required return and risk appetite the managed fund incorporates an asset allocation that allows for 40% to 60% of the portfolio to be invested in growth assets. Accordingly, the aim is to achieve a 50% income assets, 50% growth assets split.

Our assumption in this plan is that the managed fund will achieve an overall return of 4.5% per annum. This income is used to pay interest on reserve balances that are in funds and the remaining balance is used to subsidise general rates.

Reserves

Restricted and Council Created Reserves

Restricted reserves are a component of public equity generally representing a particular use to which various parts of equity have been assigned. Reserves may be legally restricted or created by Council.

Restricted reserves are those subject to specific conditions accepted as binding by Council and which may not be revised by Council without reference to the Courts or a third party. Transfers from these reserves may be made only for certain specified purposes or when certain specified conditions are met.

Also included in restricted reserves are reserves restricted by Council decision. These Council created reserves may altered by Council without references to any third party or the Courts. Transfers to and from these reserves are at the discretion of Council.

The majority of Council's reserves relate to the revaluation of assets and therefore do not represent cash reserves available for Council's use.

- **Available-for-Sale Revaluation Reserve**
  The available-for-sale revaluation reserve arises on the revaluation of the shares in Council's subsidiary company, Port Otago Limited. This is an unrealised non-cash reserve.

- **Asset Revaluation Reserve**
  This reserve arises on the revaluation of investment property. This is an unrealised non-cash reserve.

- **Kuriwao Endowment Reserve – Restricted**
  This reserve represents the accumulation of sale proceeds and net income from Kuriwao Endowment land less any distribution of that income. The reserve is available to fund works for the benefit of the Lower Clutha District.

- **Asset Replacement Reserve**
  This reserve represents funds held for the replacement of Council operational assets (excludes targeted rate scheme assets). It is funded by rating for depreciation on those operational assets.

- **Emergency Response Reserve**
  This is a contingency reserve to enable Council to respond appropriately to emergency situations. It was initially established to provide funds for assets that Council is self-insuring its terms of use have been expanded to cover any emergency event.

  The reserve was created from transfers from general reserves and accumulated interest income. If the reserve is used for any non-general rate activity it is expected that scheme will repay this reserve. If it is used for general rate funded activity, then it may be replenished through general rates or a transfer from general reserves.

- **Water Management Reserve**
  The purpose of this reserve is to provide funding for water management initiatives in Otago.

  This reserve was established to provide funding for water management investigations including irrigation scheme feasibility. It has also been used to fund water allocation work. In year 1 of this plan it will be used to fund FMU water modelling work. This is expected to fully exhaust this reserve at which stage any remaining funds will be incorporated back into the general reserve and this this reserve will be closed.

- **Building Reserve**
  The purpose of this reserve is to set aside funding for the development of a new head office for the Council.

  Council has indicated it is unlikely to pursue investment in a new Council owned head office. Despite that the challenge of housing increasing levels of Council's staff both in Head Office and throughout the region remains. This financial strategy assumes Council will spend approximately half of the building reserve in years 2 and 3 to facilitate a move to new leased premises and or to redevelop and expand existing sites.

  Setting aside this amount, the remainder of the reserve is being transferred back to general reserves where it will be used to fund the 2020-21 general rates offset and assist with funding other general rate activity.

- **Environmental Enhancement Reserve**
  The purpose of this reserve is to provide funding for the maintenance or enhancement of areas of the natural environment within the Otago region.

- **General Reserve**
  The balance of Council public equity after accounting for restricted reserves is the general reserve. This reserve can be used for the planned funding one-off activities. It also provides contingency funding for emergency events and a source of funding for essential unbudgeted expenditure.

  The general reserve will be replenished in year 1 of the LTP as internal borrowing is repaid and replaced by external borrowing. Further funds will be added to the general reserve following relocation to a new head office when any other surplus operational property will be sold.

Targeted Rate Reserves

Reserves are maintained for each targeted rate. This allows any unspent rating expenditure to be allocated to the appropriate reserve and used to fund expenditure applicable to that targeted rate in future years. Expenditure in these activities can be volatile in nature, with some years spend being very high, and other years very low. Targeted rate reserves are used to help smooth the impacts of these variations in expenditure.

Targeted rate reserves may go into deficit to allow significant expenditure to occur immediately and rate funding to repay that expenditure over time. Where significant capital expenditure is required on flood and drainage schemes, Council will not support the repayment of scheme works over a period longer than 20 years.

- **River and Waterway Management Reserves**
  Targeted rating has been used to fund river management works across the city and districts within Otago. In this Long-term Plan this reserve will be extended and also used for other waterway management activities. That will include restoration and remediation initiatives of an operational nature including clearing, planting, smaller scale one-off works and larger on-going infrastructure solutions.

  Council aims to maintain these reserves in surplus equating to approximately one year's worth of operating costs. This provides some financial security, should a flood event occur, so that additional work can be undertaken as necessary without the need for a significant rate increase in any one year.

- **Flood and Drainage Scheme Reserves**
  Targeted rating is used to fund the costs associated with maintaining the level of flood protection and drainage provided by these schemes. This includes funding both operating and capital expenditure.

- **Transport Reserves**
  Targeted rating is used in Dunedin and Queenstown to fund the Council's costs associated with the provision of public transport services including buses, ferries and the associated infrastructure.

- **Clean Heat Clear Air Reserve**
  The purpose of this reserve is to fund costs associated with the provision of funding associated with the improvement of insulation and heating in homes located within the targeted rating district.

- **Rural Water Quality Reserve**
  The purpose of this reserve is to fund costs associated with rural liaison and integrated catchment functions within the water quality implementation activity.

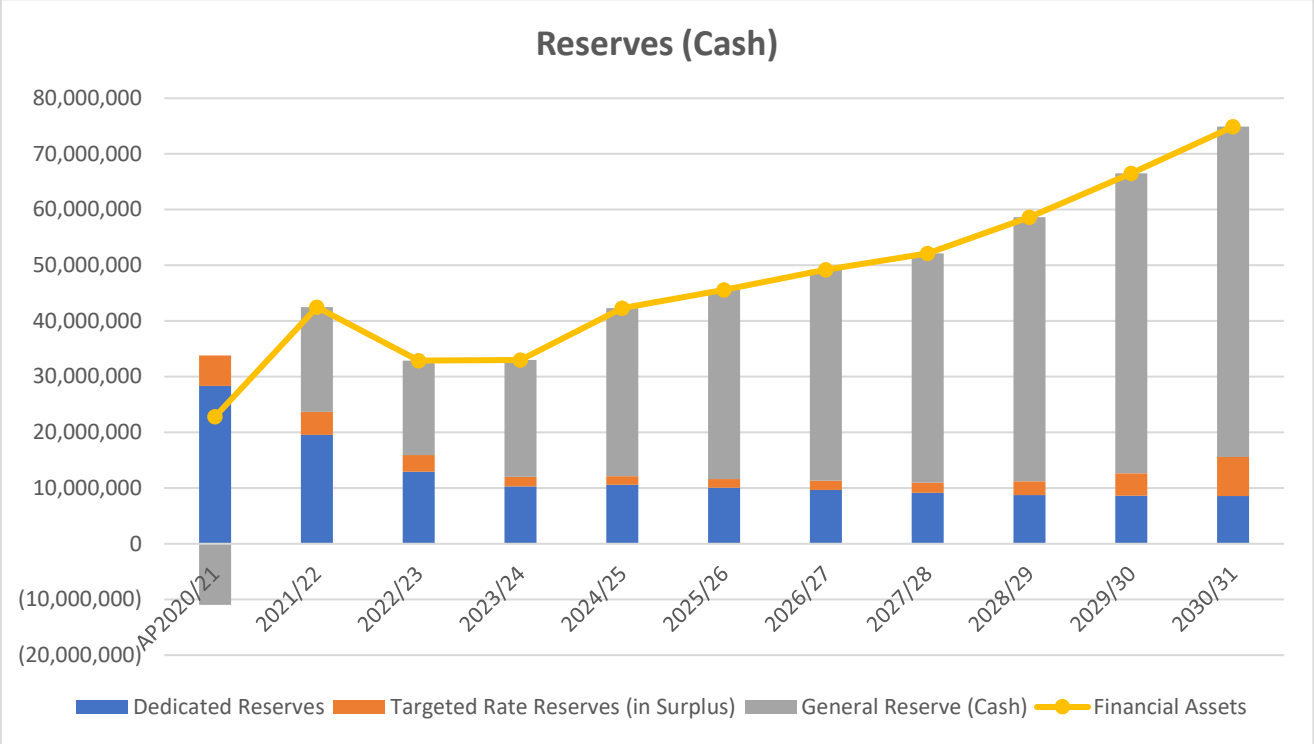
- **Dairy Monitoring Reserve**
  This reserve is primarily used to smooth rates increases and reallocate any under or over spent funding to future years.

- **Wilding Pines Reserve**
  This reserve is primarily used to smooth rates increases and reallocate any under or over spent funding to future years.

- **Emergency Management Reserve**
  This reserve is primarily used to smooth rates increases and reallocate any under or over spent funding to future years.

- **Lake Hayes Remediation Reserve**
  The purpose of this reserve is to fund the upfront costs associated with the restoration of Lake Hayes and smooth rates increases over subsequent years. This reserve is initially being funded from River and Waterway Management Targeted Rates until Council has further considered alternative funding methods for this type of activity.

The graph below shows Council's reserves of the 10 years of the Long-term Plan. The General Reserve has been balanced to reflect the underlying reserve amount available in cash on hand an in the managed fund.



Insurance

Council holds comprehensive insurance through a range of policies to manage the financial risk of loss due to unforeseen events. Operational assets such as buildings, vehicles and plant are fully insured.

Infrastructure assets are not fully insured due to the nature of the assets and the low probability that all assets would be affected by a single event. These assets are either fully or partially self-insured. Included in self-insured assets are flood protection and drainage infrastructural assets including floodbanks, protection works and drains and culverts. Assets of this nature are constructions or excavations of natural materials on the land and have substantially the same characteristics of land.

Council does not maintain separate self-insurance funds and considers that the level of reserve funds held is sufficient for the purpose of self-insuring assets that are not covered by insurance contracts. Operational budgets also provide for repairs of a smaller scale and amount.

Infrastructure Strategy

Introduction

Otago is administered by Otago Regional Council. Situated in the southern half of the South Island, and with an area of approximately 32,000 square kilometres, it is the second largest local government region in the country.Council provides flood protection and land drainage to approximately 43,000ha of rural and urban land in Otago. This is achieved through managing infrastructural assets that include 218km of floodbanks, 12 pumping stations, 55 bridges, culverts, and various other assets, across the region's rivers and a total of seven flood protection and/or drainage schemes.

Different types of assets are situated within our rivers to maintain river and stream channel capacity, and bank stability in targeted areas, as well as satisfying environmental needs. These assets may include rock buttresses, groynes and floodbanks, outside of those within Council's flood protection and drainage schemes.

Council's flood protection schemes are designed to protect people, property and stock during a flood event. These schemes typically consist of floodbanks, flood pumps, ponding areas, gravity gates and floodways. Council's drainage schemes are designed to drain land so that it remains viable for farming activities. Drainage schemes are located on the low-lying plains in parts of Otago and typically consist of pump stations and a network of open drains.

The context within which Council's infrastructure must operate is ever-changing as influenced by several factors:

- Demographics – The Otago region has been experiencing very high growth and this is projected to remain strong into the future.
- Economy – Different economic structures across the Otago region with the economies of the Clutha and Waitaki districts focussed heavily on the primary sector and bigger manufacturing sector than other districts; Dunedin and Queenstown Lake economies heavily reliant on the tertiary sector (food and accommodation, retail, health and social services); and Central Otago reliant on both the primary and tertiary sectors.
- Physical environment – Management of infrastructure within an ever-changing physical environment brought about by the dynamic geomorphology of the Otago region e.g. over 2,000 alluvial fans across the region.
- Climate – Variable impact of climate change likely across the region, with sea level rise and shoreline retreat near our coasts, and more frequent and high intensity rainfall events across the region.

The community are dependent on the effective performance of Council's infrastructure for their safety and economic wellbeing. This infrastructure has a key role to play in the protection of non-Council assets and businesses, including KiwiRail, Waka Kotahi, Dunedin's Central Business District, University of Otago, Dunedin International Airport, Finegand Freezing Works, and the townships of Balclutha, Alexandra and Mosgiel. ORC acknowledges that collaborative working arrangements will be required with other asset owners to ensure synergies in infrastructural function is achieved.

Strategic planning positions council to make informed decisions about the management of assets. This enables council to optimise asset performance to meet the level of service to the customer, with consideration and a balance of expenditure and risk in the long term. This document describes that planning process and the resulting approaches that Council intends to pursue in managing its assets. This planning has a 30-year horizon which enables consideration of the entire lifecycle of assets as well as accounting for external factors and changes over time.

Purpose

The purpose of this Infrastructure Strategy (Strategy) is to provide Council and the Otago community with information about what significant issues the flood protection and drainage infrastructure face over the next 30 years and beyond, and to identify the principal options for managing those challenges, including the implications of those options, before presenting the most likely scenarios for each issue and when any significant decisions will need to be made.

When setting out how Otago Regional Council (Council) intends to manage the flood protection, land drainage, and river asset infrastructure in accordance with the requirements of the Local Government Act[1], Council needs to consider how:

- To manage the renewal or replacement of existing assets over their lifetime
- To respond to growth or decline in demand
- Increases or decreases in levels of service will be planned for
- Public health and environmental outcomes will be maintained
- Natural hazard risks and resilience will be addressed

[1] Local Government Act 2002 Amendment Act 2014

Each of these are discussed and addressed within the Strategy.

The high-level direction presented in this Strategy has formed the basis of infrastructure planning decisions included in the Long-term Plan 2021-2031. In doing so it links with Council's Financial Strategy to provide an integrated approach to providing value for money for Otago communities.

The Strategy is a statement of current assumptions and thinking on what infrastructure is required to address the major issues facing the flood protection, land drainage and river management activities over the next 30 years. It presents a clear picture of where we are now, where we are going and how we intend to get there.

Statutory Requirements

In August 2014, the Local Government Act introduced a new requirement for infrastructure strategies and asset management planning. *Table 1* below sets out the relevant requirements of this Act and outlines the corresponding section of this Strategy where it is addressed.

Table 1. LGA 2002 Amendment Act 2014 requirements for Infrastructure Strategy.

LGA 2002 Section 101B		Strategy Section
1	A local authority must, as part of its long-term plan, prepare and adopt an infrastructure strategy for a period of at least 30 consecutive financial years.	**1.3**
2(a)	The purpose of the infrastructure strategy is to identify significant infrastructure issues for the local authority over the period covered by the strategy.	**5**
2(b)	The purpose of the infrastructure strategy is to identify the principal options for managing those issues and the implications of those options	**5**
3	The infrastructure strategy must outline how the local authority intends to manage its infrastructure assets, considering the need to: a. renew or replace existing assets b. respond to growth/decline in the demand for services reliant on those assets c. allow for planned increases or decreases in levels of service provided through those assets d. maintain or improve public health and environmental outcomes or mitigate adverse effects on them e. provide for the resilience of infrastructure assets by identifying and managing risks relating to natural hazards and by making appropriate financial provision for those risks	**5**
4	The infrastructure strategy must outline the most likely scenario for the management of the local authority's infrastructure assets over the period of the strategy and, in that context, must:	**5**
4(a)	Show indicative estimates of the projected capital and operating expenditure associated with the management of those assets: i. in each of the first 10 years covered by the strategy ii. in each subsequent period of 5 years covered by the strategy	**6.3**
4(b)	Identify: i. the significant decisions about capital expenditure the local authority expects it will be required to make ii. when the local authority expects those decisions will be required iii. for each decision, the principal options the local authority expects to have to consider iv. the approximate scale or extent of the costs associated with each decision	**5**
4(c)	Include the following assumptions on which the scenario is based: i. the assumptions of the local authority about the life cycle of significant infrastructure assets ii. the assumptions of the local authority about growth or decline in the demand for relevant services iii. the assumptions of the local authority about increases or decreases in relevant levels of service	**6.2**
4(d)	If assumptions referred to in paragraph (c) involve a high level of uncertainty: i. identify the nature of that uncertainty ii. include an outline of the potential effects of that uncertainty	**6.2**

Strategy Scope

Providing and maintaining infrastructure requires good asset management practices and strategic thinking. This Strategy has been prepared for the flood protection, land drainage, and river asset infrastructure of ORC as required under the LGA 2002 Amendment 101B. It covers the following infrastructural assets:

Flood Protection

Assets that prevent or mitigate the impact of flood waters

- Flood banks
- Flood pumps
- Gravity gates and locks
- Spillways
- Ponding areas and floodways
- Culverts & Bridges

Land Drainage

Assets that facilitate the drainage of low-lying land

- Pump stations
- Scheduled drains
- Culverts & Bridges

River Assets

Assets that exist within river systems to aid in channel management

- Rock buttresses
- Groynes
- Flood banks
- Trees

This Strategy outlines the key issues, implications and most likely scenarios for how Council intends to manage its flood protection, land drainage and river asset infrastructure over the next 30 years.

The Infrastructure Strategy fits within a decision-making and operational framework that ultimately provides direction for the Long-term Plan (LTP). This is depicted in Figure 1.

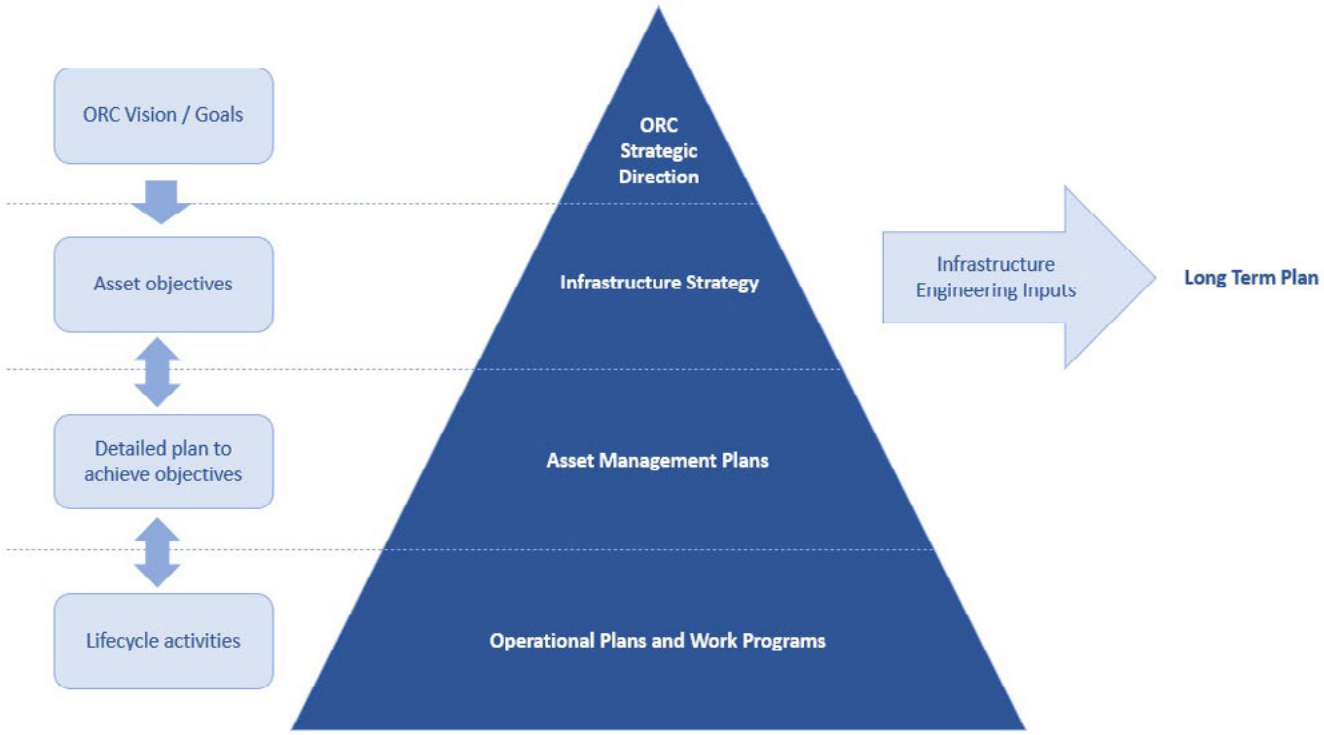


Figure 1 Linkages between the Infrastructure Strategy and other key Council documents.

This Strategy has a 30-year planning horizon and will be reviewed every three (3) years. The planning horizon extends well beyond the more detailed planning included in the Long-term Plan as a longer time horizon is required to consider the whole life cycle of the infrastructural assets. This helps Council and the community to see the longer-term approaches planned and what can be expected for Otago up to 2050, and beyond.

The Strategy is structured into the following six sections:

Introduction	This section discusses the purpose of the Infrastructure Strategy, the minimum legislative requirements to meet, how the Infrastructure Strategy links with other key Council documents, and what progress has been made since 2015.
Setting the Context	This section provides the context across the 6 areas: geographic, demographic, economic, strategic, and environmental and climate. Council's purpose, vision, and strategic objectives are presented, along with the various levels of service.
Infrastructure Overview	This section provides a summary of the flood protection and drainage activity and infrastructure asset portfolio including asset condition, performance, and criticality. A summary of data confidence in the asset information is provided.
Infrastructure management Approach	This section outlines Council's approach to managing infrastructure in line with its strategic directions. This sets the scene for how Council applies these principles in response to the significant issues that follow.
Significant Issues & Directions	Key significant issues are highlighted and discussed alongside various options considered to address the issues, the implications of each of those options, the most likely scenarios, and when any key decisions will need to be made.
Infrastructure Investment Programme	Infrastructure priorities and principles are outlined. Key projects are presented including which significant issues will be addressed. The funding and expenditure required for the projects and programmes are presented.

Progress and milestones between 2015 and 2021

The year 2021 marks Council's third Infrastructure Strategy since the inaugural strategies were developed in 2015. Throughout this time various reviews and reports, outlined below, have disseminated best practice in infrastructure management in the Local Government Sector. As well as these reports, best practice has been pulled from other Local Authorities who have set great examples in developing their infrastructure strategies.

The main updates from Council's previous strategies include:

- Incorporating appropriate recommendations and learnings from Audit NZ's report "Asset management and long-term planning: Learnings from audit findings 2015 to 2017"
- Incorporating appropriate recommendations and learnings from the Office of the Auditor General's report, "Matters arising from the 2015-25 local authority long term plans"
- Major structural changes and development to the overall strategy document
- Addition of asset information and current state of the flood and drainage infrastructure
- Updates to asset and demographic data to reflect the most recent information available
- Addition of significant infrastructure issues, principal options, and their implications

ORC understands that providing and maintaining Council's infrastructure requires good asset management practices and strategic thinking. In response to this ORC have also:

- Updated the Flood Protection and Drainage Asset Management Plans (previously completed in 2014)
- Carried out an asset management maturity assessment of flood protection and drainage assets

Figure 2 River channel asset, Albert Town (Clutha River/ Mata-Au) Rock Buttress flood repair works completed in February 2021."

Setting the Context

Geographic Context

The Otago region is located in the southern half of the South Island (Figure 3) and is the second largest region in New Zealand by land area; covering approximately 32,000 km^2. The region incorporates the full extent of the coastline stretching approximately 470 km from the Waitaki River in the north to Wallace Beach in the south; the coastal marine area extends 22.2 km (12 nautical miles) out to sea. To the west the region is largely bounded by the high alpine mountains and catchment watersheds of the Clutha/Mata-Au River and its tributaries, and also the Taieri River which rises in the Lammerlaw Ranges.

The Otago region is made up of five territorial authorities:

- Queenstown Lakes District Council
- Central Otago District Council
- Clutha District Council
- Waitaki District Council
- Dunedin City Council

It should be noted that while Waitaki District lies across both the Otago and Canterbury regions (predominant river catchment area), around 90% of its population live within the Otago region.

Major centres include Dunedin, Oamaru, Balclutha, Alexandra, Cromwell, Wanaka and Queenstown.

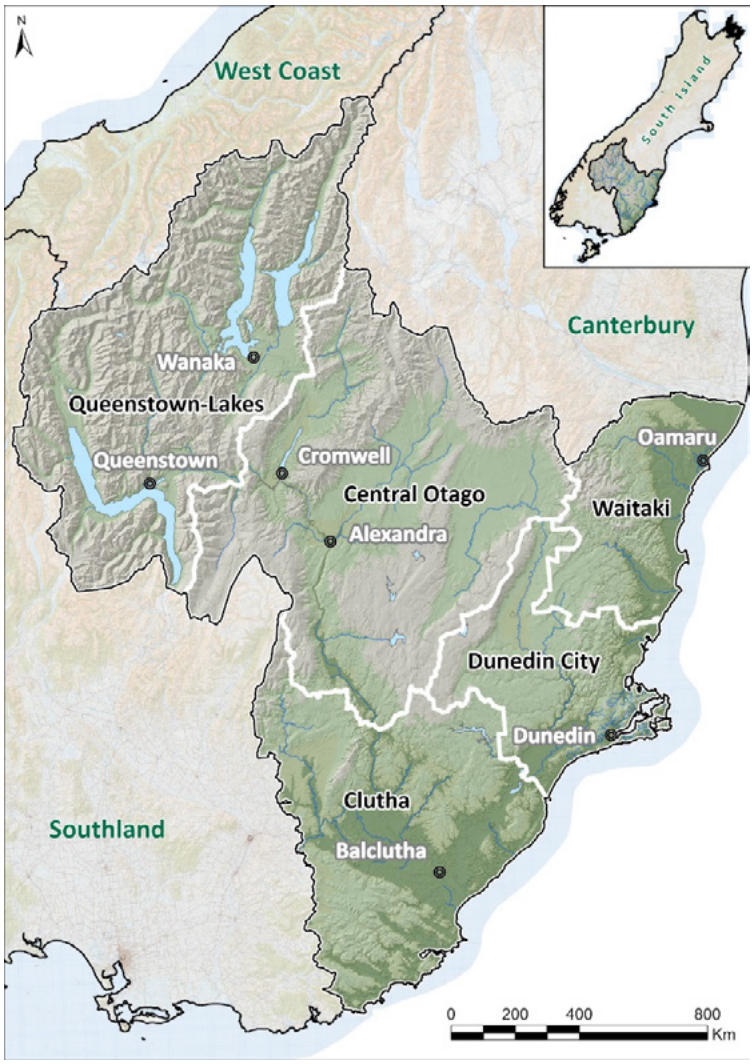


Figure 3 Map of the Otago Region and territorial authorities

Demographic Context

The population of Otago is 245,300[2], approximately 4.8% of New Zealand's total population. The Otago region has been experiencing very high growth and the current population is already ahead of the growth projections based on the 2013 census (Figure 4). This figure also demonstrates that growth is projected to remain strong through until 2043 (no projections beyond this).

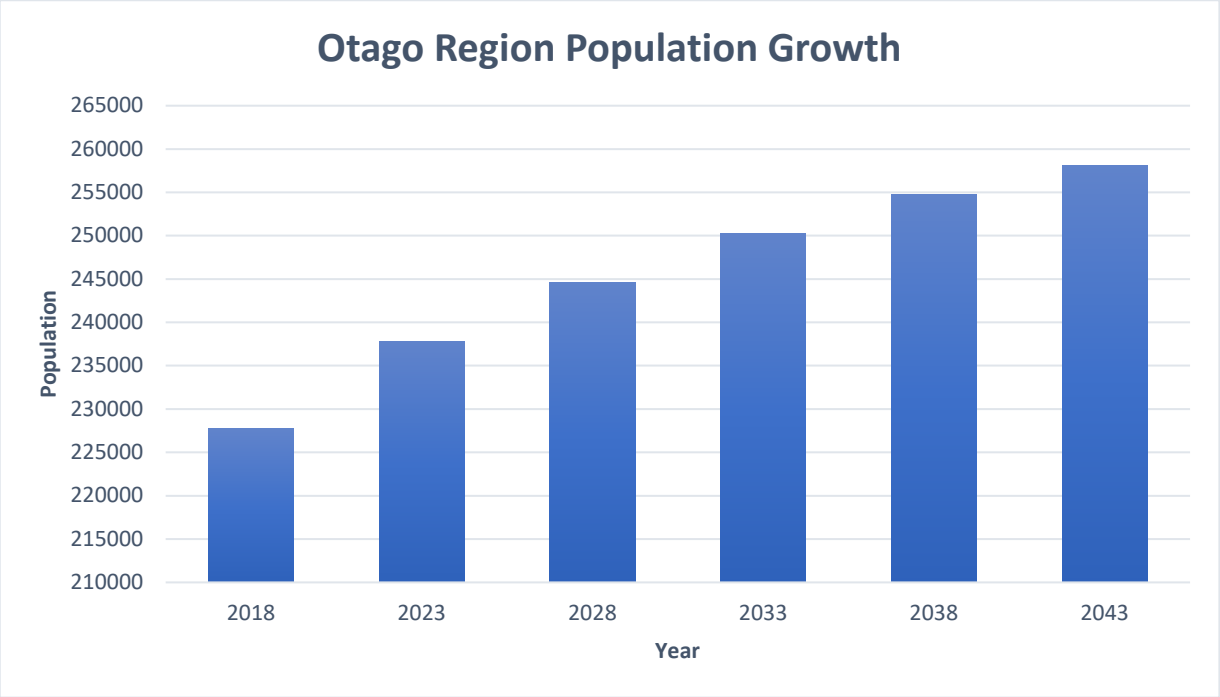


Figure 4 Projected population growth in Otago from 2018-2043[3] .N.b. 2013 consensus used as based figures. Projection figures using 2018 consensus not available. Population projection beyond 2043 not available.

Dunedin City (including Taieri) and Clutha districts contain the majority of flood protection and drainage schemes that the ORC manages and maintains. Changes in population are projected to differ in both areas as follows:

- Dunedin City – Population numbers are projected to increase from 2018 to 2028 by 6% and to 2048 by 10%, however the rate of change is projected to decrease[4]
- Clutha District – Population numbers are projected to increase from 2021 to 2031 by 3% and to 2051 with no change of population[5]

The Otago region also has an ageing population. In 2020 around 16.5% of the region's population was aged 65 and over; this is above the national average of 15.6%. This population trend is projected to continue with the number of people aged 65 and over expected to more than double from 32,400 in 2013, to 65,800 in 2043. This projected figure will account for more than a quarter of the Otago population (25.7%) in 2043, which will remain higher than the national average of around 23%.

In developing this Strategy, it is important to consider population and demographic projections as they give insight into the future challenges, community drivers and desires that will influence the flood protection, drainage and river services provided.

Economic Context

While Otago region comprises the sixth largest regional economy in New Zealand, with the latest official estimates from Statistics New Zealand showing a regional gross domestic product (GDP) of approximately $13.6 billion in the year to March 2019[6], which is 4.5% of New Zealand's national GDP, overall the income of residents across the Otago region is lower than for New Zealand. Otago's regional GDP per capita was estimated at $57,974, which is $4,195 below the national average of $62,165 per capita.

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[2] https://www.stats.govt.nz/assets/Uploads/Subnational-population-estimates/Subnational-population-estimates-At-30-June-2020/Download-data/subnational-population-estimates-at-30-june-2020.xlsx

[3] //www.stats.govt.nz/assets/Uploads/Subnational-population-projections/Download-data/subnational-pop-projections-2013-43-update.xlsx

[4] Dunedin City Council statistics

[5] Clutha District Council statistics

[6] Regional gross domestic product: Year ended March 2019. Statistics NZ

Otago districts have different economic structures. Clutha and Waitaki's economies are focused heavily on the primary sector and bigger manufacturing sector than other districts; Dunedin's economy is relatively concentrated on tertiary sectors (e.g., food and accommodation, retail and health and social services); Central Otago's economy relies more on both the primary and the tertiary sector; and Queenstown-lake's economy has the highest tertiary sector concentration in the region. This makes up for a diverse range of economies across the district, as demonstrated in Figure 5 below.

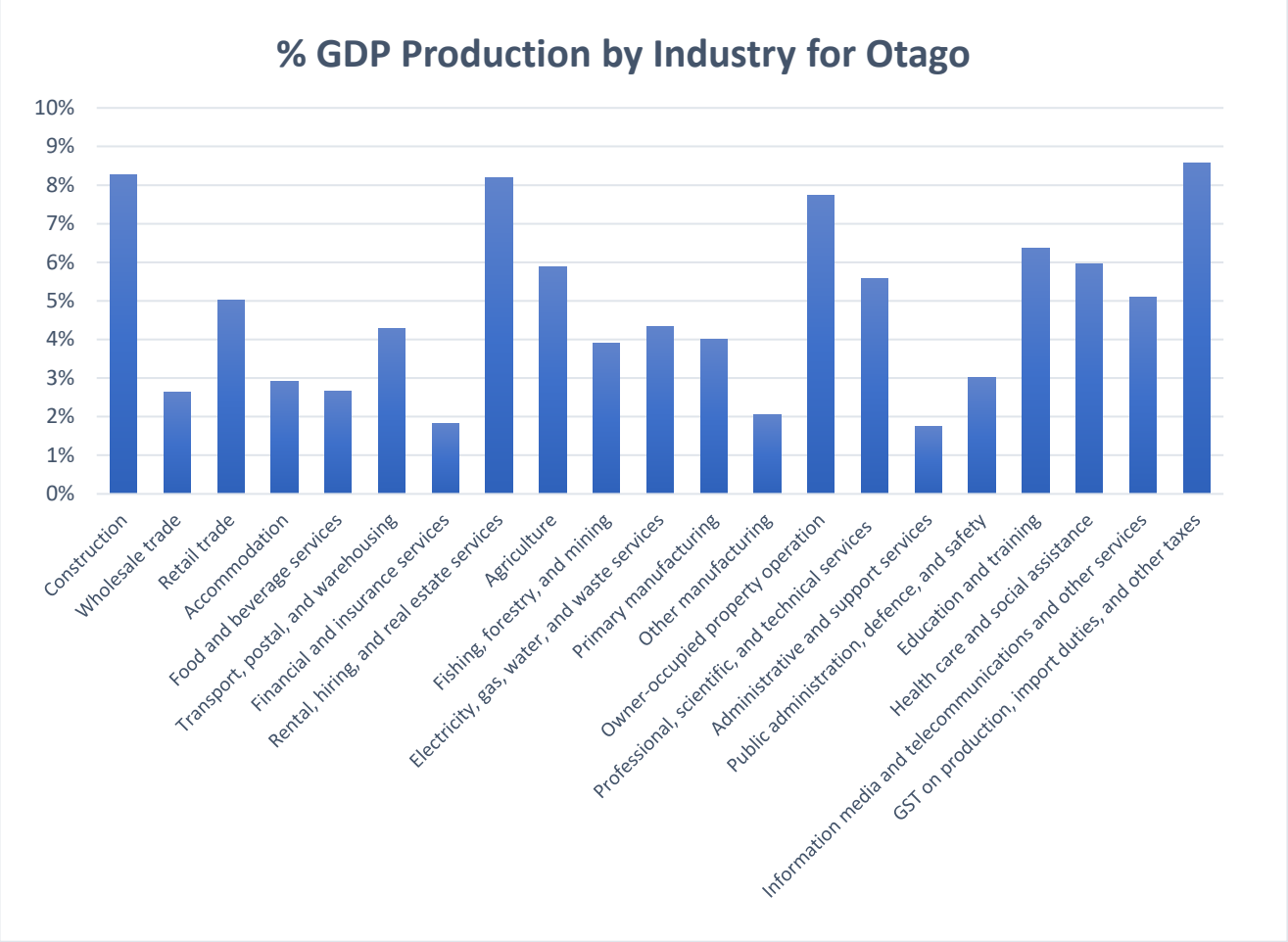


Figure 5 2018 percentage contribution to Otago GDP by Industry (Source: Statistics NZ 2019)

Whilst agriculture is one of the main sectors that benefits, the services provided by the flood protection and land drainage schemes have a variety of other quantifiable benefits, which enables further contribution to the region's economy, including but not limited to:

- Protection of land/property, which reduces potential damage and increases the productive value of the land
- Protection of regionally and nationally important infrastructure associated with activities such as transport (e.g. roads including state highways) and Dunedin International Airport
- Avoided costs from flood damage that would otherwise result if the schemes were not in place (or maintained to the necessary standard)

Climate Context

The effects of climate change will impact the environment regionally, nationally, and globally. There will be changes in sea level rise, wind and weather patterns, and the frequency of extreme weather events are anticipated to increase. Furthermore, these changes will occur to differing extents in different places. Significant upgrades of infrastructure are expected as a result, to maintain the current and future level of security from flooding.

In October 2019, the ORC commissioned the National Institute of Water and Atmospheric Research (NIWA) to undertake a review of climate change projections for the Otago region over the 21st Century[7]. The study states that changes to Otago's future climate are likely to be significant, with the key messages from this report being:

- Annual rainfall is projected to increase by between 0-10% for most of the region by 2040

[7] https://www.orc.govt.nz/media/7591/niwa_climatechangereport_2019_final.pdf

- Increases in winter and spring rainfall of between 5-20% are projected for many western and inland parts of Otago by 2040
- Annual rainfall increases of 10-20% are projected for the majority of Otago by 2090 with smallest increases expected near Ranfurly (0-5%)
- Winter rainfall is projected to increase considerably by 2090, with 20-40% more rainfall projected for many parts of the region
- Decreases in summer rainfall of 5-10% are projected around Ranfurly and Middlemarch by 2090
- Mean annual flood is expected to become larger everywhere, with increases up to 100% in some locations by the end of the century
- Extreme, rare rainfall events are likely to increase in intensity in Otago because a warmer atmosphere can hold more moisture
- Short duration rainfall events have the largest relative increases

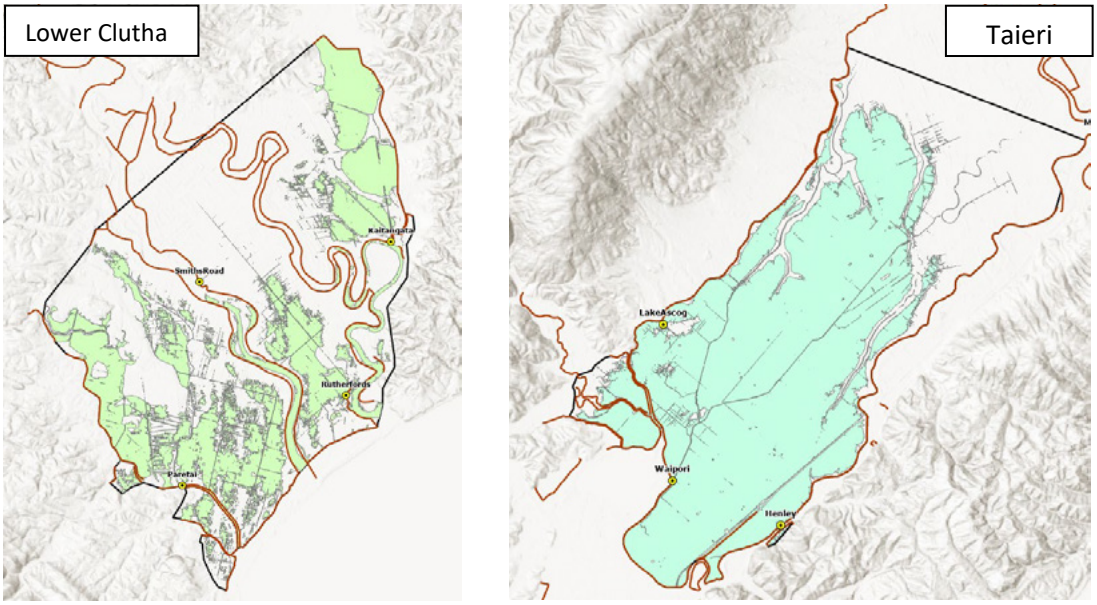


Figure 6 Lower Clutha & Taieri catchments, highlighting land areas less than 1 metre above mean sea level

Furthermore, other climate change studies and reports have indicated that New Zealand can expect sea levels to rise over the 21st Century. From 1899-2015 the annual mean sea level rise for Dunedin was 1.42mm (Ministry for the Environment, 2017), and this is predicted to not only continue throughout this century, but also increase.

Sea level rise has the potential to have a significant impact on the flood and drainage schemes. With 45,462 Ha of the land that relies on ORC's flood protection and land drainage infrastructure less than one metre above current mean sea level. This is demonstrated in Figure 6 above.

Whilst the changes in climate are predicted to increase rainfall amounts/frequencies, coincided with sea level rise, this does not directly result in proportional increases in the peak flood flows. Relationships within and across catchments are complex, thus regular hydrodynamic modelling is required to assess changes in the performance of infrastructure and flood risk.

Environmental Context

Whilst there are a number of significant, positive contributions to social and economic outcomes from the flood protection and drainage activity, there are also a number of other consequences, such as:

- The construction of infrastructure assets, particularly floodbanks and modified river channels, permanently alters the natural character and behaviour of a river, and may have adverse effects for the long-term character and quality of instream and riparian ecology and biodiversity
- The provision of river infrastructure assets imposes ongoing channel management works which have the potential to periodically disrupt recreational use, as well as instream and riparian ecology on an on-going basis
- The provision and management of river infrastructure assets has the potential to conflict with the traditional use of rivers and river margins by Mana Whenua

Over recent times there has been a paradigm shift that has occurred in response to environmental regulation, community expectations, and an increasing awareness of the interrelationships between land use and water quality. Legislation such as the Resource Management Act (RMA) 1991 requires that any adverse effects of future modifications to the natural

environment are avoided or mitigated, are pivotal elements of law driving parts of this change. The Local Government Amendment Act (May 2019) also reinstated the four aspects of community well-being – social, environmental, economic and environmental.

Figure 7 River Channel Tree defence assets, Lower Clutha River, February 2021

The National Policy Statement for Freshwater Management (2014) that came into effect in September 2020, provides local authorities with updated direction on how they should manage freshwater under the RMA 1991, including requirements such as:

- managing fresh water in a way that gives effect to the principles of Te Mana o te Wai
- improving degraded water bodies, and maintaining or improving all others using minimum baselines
- working towards target outcomes for fish abundance, diversity and passage

Otago's Regional Policy Statement (RPS) also sets the direction for future management of Otago's natural and physical resources. It provides the foundation for the development of regional plans and district plans. It also gives an overview of the significant resource management issues facing the region, sets out objectives, policies and methods to resolve those issues, and aims to achieve the integrated management of the natural and physical resources of Otago.

Infrastructure Overview

Existing Flood Protection and Drainage Schemes

ORC owns and manages three flood protection schemes and three drainage schemes as well as a combined flood protection and drainage scheme. They are the Alexandra Flood Protection Scheme, the Leith Flood Protection Scheme, the Lower Clutha Flood Protection and Drainage Scheme, the Lower Taieri Flood Protection Scheme, the West Taieri Drainage Scheme, the East Taieri Drainage Scheme and the Tokomairiro Drainage Scheme. ORC also owns but commissions external management for parts of the Lower Waitaki River Control Scheme.

The majority of the schemes were initially built to provide protection to local communities and agriculture on the adjacent floodplains. These benefits include access to key transport infrastructure such as Dunedin Airport and State Highways, and protection of critical lifeline networks such as electricity substations. The schemes are essential to managing risks to communities associated with natural hazards, empowering economic prosperity and contributing to community resilience and wellbeing.

Central Government investment into flood protection and drainage projects ceased after the 1989 local government reforms, leaving it up to local ratepayers to develop and maintain the schemes. The schemes developed and constructed prior to this were largely funded by central government. There remains an ongoing need to operate and maintain these assets, ensuring the benefits they provide remain to be utilised.

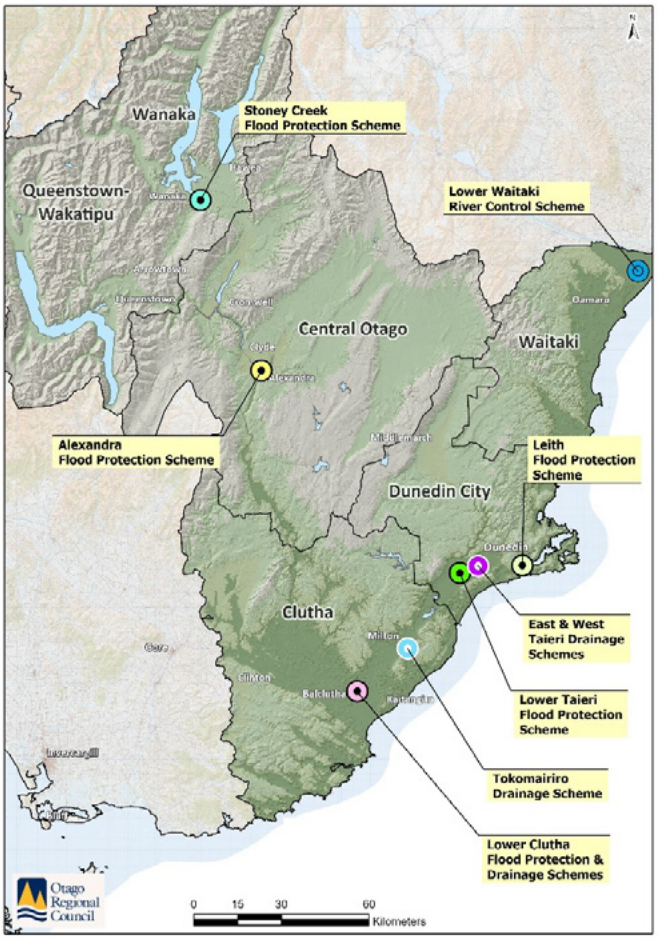


Figure 8 Location of Otago flood protection schemes.

Alexandra Flood Protection Scheme

The Alexandra Flood Protection Scheme was built in 2001 to protect Alexandra's central business area against flooding from the Clutha and Manuherikia Rivers. Stormwater drainage systems owned by the Central Otago District Council normally drain into the river by gravity, but in some events high river levels prevent the drains from discharging into the river. This is where the pumps in the flood protection scheme serve. The total length of floodbanks in this scheme is just over 1 km. Two roads penetrate the floodbanks, so the roads must be closed, and stoplogs installed, during severe floods.

Leith Flood Protection Scheme

The Water of Leith catchment is located to the north of (and includes) the Dunedin Central Business District (CBD), and has a catchment area of approximately 42 square kilometres. This scheme protects the area from the risk of steep headwaters overwhelming the shallower grade channels through the North Dunedin floodplain. Key Dunedin infrastructure such as the hospital, Otago University, Otago Polytechnic and stadium are protected by the scheme. Flood mitigation measures in the Water of the Leith include:

- Substantial lengths of concrete and stone wall to prevent bank erosion and facilitate urban development of the floodplain (e.g. University Campus)
- A boulder trap upstream of George Street (constructed in the 1950s) and a debris/boulder trap upstream of the Lower Malvern Street Bridge (constructed in 1963)
- Straightened channels including a high-velocity channel between George Street and Cumberland Street
- Grade control weirs of varying heights along the Water of Leith
- A double concrete-lined channel between Clyde Street and the Otago Harbour
- Channel enhancements downstream of Dundas St, constructed progressively since 2013

Lower Clutha Flood Protection and Drainage Scheme

This scheme combines both flood protection and drainage works. Construction of this scheme started in 1960 and was completed in 1991. The area protected by the flood protection component is the Clutha Delta, which extends from 4km north of Balclutha to the sea. The Clutha is the second longest river in New Zealand, and the largest by mean flow. The Clutha's headwaters are in the Southern Alps above lakes Wakatipu, Wanaka, and Hawea. The Clutha River bifurcates (splits into two) just downstream of Balclutha. Between 60% and 70% of the flow goes down the Koau Branch and 30% to 40%

down the Matau Branch. The island formed between the branches is called Inch Clutha. There is a floodway (area designed to carry floodwaters when the river level rises) at the top of Inch Clutha. As well as the Clutha River, water flows into the delta from several other sources including Lovells Stream and Lake Tuakitoto; Waitepeka River; Puerua River and Barrata Creek. Land drainage is provided by a network of 153 km of drains in four regions: Barnego; Stirling/Kaitangata; Inch Clutha; and Otanomomo/Paretai. Drainage in Balclutha and Finegand is not ORC's responsibility.

Tokomairiro Drainage Scheme

The Tokomairiro Drainage Scheme is located in the flat basin surrounding Milton, surrounded on three sides by inland hills, and by coastal hills to the southeast. It has no pumps or control structures. Many of the drains were originally creeks that have been realigned.

Lower Waitaki River Control Scheme

Some flood protection assets on the Waitaki river are owned by ORC. This includes small floodways and river groynes within the Otago portion of the river. The management of these is contracted to Environment Canterbury as they manage other river assets in the area.

Lower Taieri Flood Protection Scheme

The Lower Taieri Flood Protection Scheme protects the Taieri Plain during flood events. It was the first to be developed, alongside the East and West Taieri Drainage Schemes, when works commence in 1870 (Figure 9). It is complex, with multiple rivers affecting the scheme. This means flows can increase dramatically in widespread and prolonged rainfall events. The Silver Stream is also a significant river in the scheme. It flows out of the Silver Peaks area and has a far quicker response time than the Taieri River. Other rivers managed in this scheme are Waipori River and Owhiro Stream.

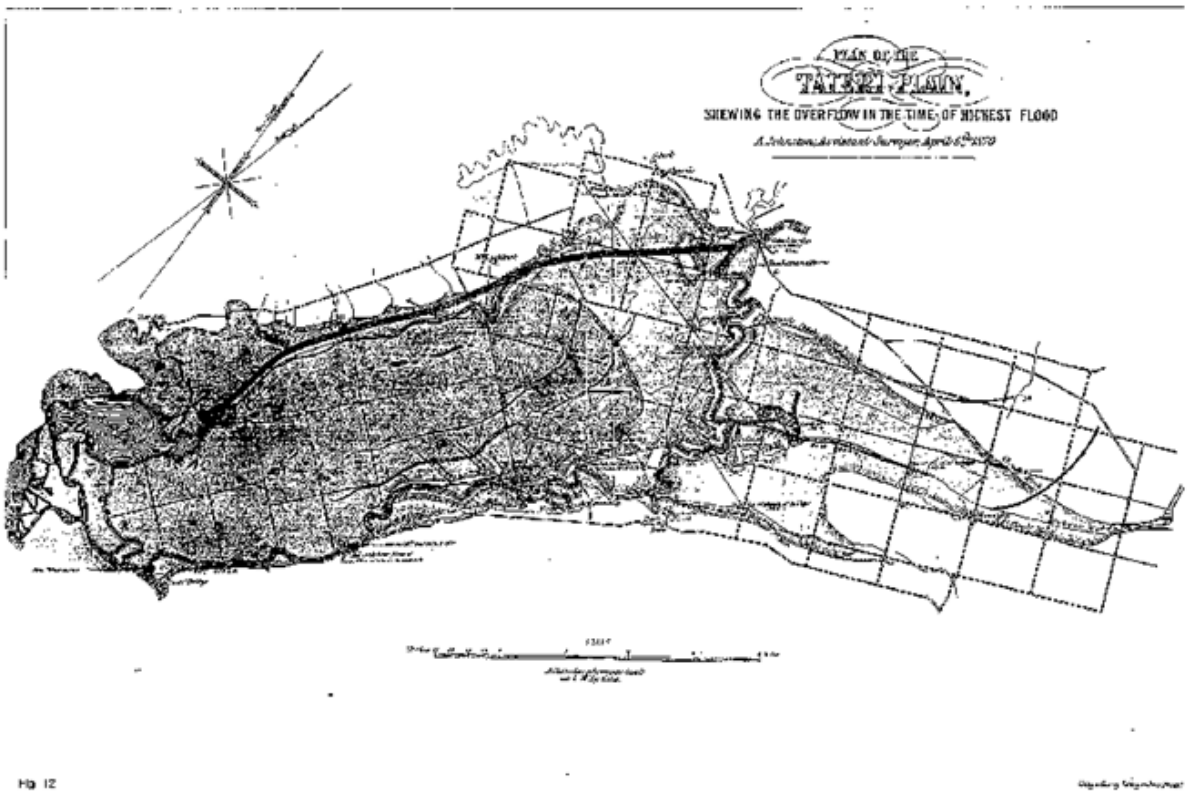


Figure 9 Early development of the Lower Taieri Flood Protection Scheme, showing the extent of a flood event in the late nineteenth century

West Taieri Drainage Scheme

The West Taieri Drainage Scheme covers the area bounded by the Taieri River, Lake Waipori, and the West Taieri Contour Channel. A small part of the scheme lies in the Henley Floodway. The West Taieri area differs from the other drainage schemes in that water cannot drain out of the scheme under gravity: it must be pumped out. There are three pump stations in the West Taieri Drainage Scheme: Waipori; Henley; and Lake Ascog.

East Taieri Drainage Scheme

The East Taieri Drainage Scheme is physically divided into two areas by the Silver Stream, which flows across the Taieri Plain in a south-westerly direction. Drains on the northern side of the Silver Stream generally flow toward what is called the Upper Pond area. Drains on the Southern side of the Silver Stream flow toward the Lower Pond area. When the Taieri river is at low

flow these drains flow out to the river by gravity, whereas when the Taieri is at high flows, gravity gates close and pumps must be used.

Stoney Creek Flood Protection Scheme

Stoney Creek has a steep alpine catchment that discharges into Lake Wanaka across an alluvial fan. Increased urban development of the alluvial fan in the early 2000's led to the need for infrastructure to be established to mitigate the risk of alluvial fan migration and flood risk. The work consisted of constructing debris traps and a rock drop structure. Some channel modifications were also made at the time.

Asset Summary by Scheme

The flood protection, river and drainage assets, and the schemes they make up, primarily consist of floodbanks, pump stations, floodgates and culverts. Table 2 provides a summary of the key flood protection and drainage infrastructural assets that are included within this strategy.

Table 2 Asset portfolio summary for flood and drainage protection schemes across Otago.

Scheme	Catchment Area (,000 ha)	Area Protected (,000 ha)	Assets
Alexandra Flood Protection	1,511	0.01	1 - 3 - -
Leith Flood Protection	4	0.2	- - - - -
Lower Clutha Flood Protection and Drainage	2,110	9.3	110 153 5 189 5
Lower Taieri Flood Protection	565	13	107 - - - -
West Taieri Drainage	8	8.1	- 144 3 22 20
East Taieri Drainage	17	4.8	- 128 3 84 1
Tokomairiro Drainage	40	7.7	- 110 - 74 19
Total	**4,256**	**43**	218 535 14 369 55

Key

- Length of floodbanks (km)
- Length of drains (km)
- No. of pump stations
- No. of culverts
- No. of bridges

In addition to the assets in the above there are other assets that form part ofORC's infrastructure including:

- The training line that guides the river and sediment in the Shotover River
- Smaller floodways and river groynes that make up the Lower Waitaki River Control Scheme
- Trees and vegetation which is planted and maintained along river channels and margins are a defence asset which reduce erosion to river channels and adjacent floodbanks
- Rock buttress and placed rock within rivers and flood protection schemes, such as Albert Town rock buttress

Some of these assets are not fully captured in the asset management database and work is required over the next three years to ensure all these assets are accurately recorded in the database.

Asset Infrastructure Condition

The assessment of asset condition is an essential part of infrastructure management, where primarily the collection of data is used to support and inform:

- Scheme and asset performance assessments
- Annual maintenance work programmes
- Asset renewals/replacement programmes

Asset condition is determined by undertaking a site visit and visually inspecting each asset, and then grading the physical condition using a 1-5 rating system as detailed in *Table 3*.

Table 3. Asset condition grading scale

Condition Grading	Condition	Description for Floodbank
1	**Very Good**	Only planned maintenance required
2	**Good**	Minor maintenance required plus planned maintenance
3	**Average**	Significant maintenance required
4	**Poor**	Significant renewal/rehabilitation required
5	**Very Poor**	Physically unsound and/or beyond rehabilitation

In 2007 and 2017 an asset condition programme was undertaken across all floodbanks in the Lower Taieri, Lower Clutha, and Alexandra flood protection schemes. Historical and ongoing problems include stock damage, trees and features located in or adjacent to floodbanks, as well as minor erosion around culverts, and slumping on the outside of river bends. Of these, stock damage is considered to be the most common factor affecting condition of floodbanks, along with the quality of the initial construction.

A summary of floodbank condition is presented in Figure 10 below. There were 1288 floodbank inspections, 85% of those were in an Average to Very Good condition.

Asset Condition	No. of Inspections	%	%
1 – Very Good	227	17.7	85
2 – Good	511	39.8	
3 – Average	354	27.5	
4 – Poor	125	9.7	15
5 – Very Poor	68	5.3	
Total	**1288**	**100**	**100**

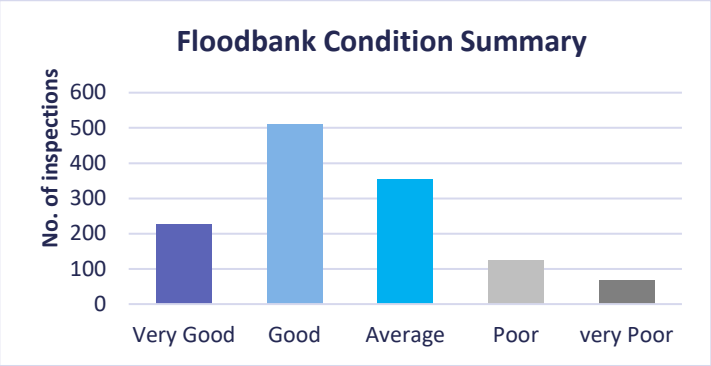


Figure 10 Summary of floodbank condition by grade. Source T+T, 2018. N.b. Inspection frequency varies, average is one inspection every 170 metres of floodbank.

Data Confidence

The foundation of all asset management activities is asset data information. Knowing exactly what assets exist, where they are, and in what physical condition they are in is fundamental to infrastructure planning. Good quality asset data is required to achieve good quality asset management. This in turn provides clarity over the robustness of plans and provides decision-makers with confidence.

ORC's current data reliability has been scored in Table *4* based on data confidence and reliability gradings adapted from the International Infrastructure Management Manual (Table 5).

Table 4. Data confidence and reliability across various asset management criteria in 2021

Data	Unknown	Very Uncertain	Uncertain	Reliable	Highly reliable
Asset Inventory:					
Location				✓	
Quantity				✓	
Value[8]		✓			
Condition:					
Flood protection schemes				✓	
Drainage schemes				✓	
River Assets		✓			
Performance:					
Flood protection schemes				✓	
Drainage schemes				✓	
Criticality:					
Asset Criticality				✓	

Table 5. Data confidence and reliability gradings and descriptions.

Confidence Grade	Description
Highly reliable	Data based on sound records, procedures, investigations and analysis, documented properly and agreed as the best method of assessment. Dataset is complete and estimated to be accurate ± 2%
Reliable	Data based on sound records, procedures, investigations and analysis, documented properly but has minor shortcomings, for example some of the data is old, some documentation is missing and/or reliance is placed on unconfirmed reports or some extrapolation. Dataset is complete and estimated to be accurate ± 10%
Uncertain	Data based on sound records, procedures, investigations and analysis which is incomplete or unsupported, or extrapolated from a limited sample for which grade A or B data are available. Dataset is substantially complete but up to 50% is extrapolated data and accuracy estimated ± 25%
Very Uncertain	Data is based on unconfirmed verbal reports and/or cursory inspections and analysis. Dataset may not be fully complete and most data is estimated or extrapolated. Accuracy ± 40%
Unknown	None or very little data held

In general, Council has a reliable understanding of its flood protection and drainage infrastructure, and regularly undertakes asset condition and performance monitoring, which in combination with modelling and other investigative activities, informs asset maintenance, renewal and replacement.

[8] The ORC uses depreciated value.

ORC is committed to working towards having a "highly reliable" asset management system in the next three years. Council acknowledges that it needs to make better use of asset management information systems and tools for managing its assets and in order to effectively deal with the extent of analysis required to support the size and complexity of its flood protection and drainage network and asset infrastructure. Furthermore, by better utilising information systems and tools, Council can make improvements to the optimised decision-making of asset renewals, maintenance and capital works programmes. As technology continues to advance, Council will need to be agile with changes but also be able to forecast when and how changes may impact on the way flood and drainage services are delivered, or any technology-related effects, positive or negative.

Asset Criticality

Central to managing risks, hazards and resilience is the criticality of assets. Critical assets are identified as those which have a high consequence of failure, such as a more significant financial, environmental and social cost to communities.

With regards to the flood protection and drainage schemes, critical assets are those that protect urban or high value areas or areas critical to effective operations of the schemes. The critical assets as identified in the asset management plans are:

- Floodbanks that protect the towns and industrial areas of Outram, Mosgiel, Balclutha, Alexandra, the Silver Fern Farms Finegand Plant, and the Dunedin International Airport
- The Waipori Pump Station - drains 95% of the West Taieri Drainage Scheme
- In the Leith Flood Protection Scheme, the protection works through the university area (Dundas St to Forth St). Failures to these assets would result in flooding of much of the Dunedin CBD, including State Highway 1
- The Shotover Training Line – critical to the performance of the Shotover Delta Infrastructure. If this did not function correctly then there would be effects on to Lake Wakatipu and therefore flooding to the surrounding townships, including the Queenstown CBD

Levels of Service

Overview

This section details the existing levels of service across Otago's flood protection schemes, drainage schemes, and rivers. The existing levels of service for Flood Protection, Drainage and River assets are defined in Table 6.

Table 6 Flood Protection and River Management Levels of service.

Levels of Service	Performance Measures
Provide the standard of flood protection and control agreed with communities	Major flood protection and control works are maintained, repaired, and renewed to the key standards defined in relevant planning documents
Respond promptly and effectively to damage from natural hazard events	Damage identified, prioritised and a repair programme communicated with affected communities in a timely manner
Maintain channel capacity and stability, while balancing environmental outcomes and recognising mana whenua values in rivers	Percentage of identified and reported issues that have been investigated and appropriate action determined and communicated to affected landholders within 20 working days
	Percentage of planned maintenance actions achieved each year

Council will be looking to develop a strong line of sight from the corporate strategy, into asset management objectives, into level of service statements, into customer performance measures (customer experience based), into technical performance measures (asset based). These performance measures will then inform lifecycle decision making which will encompass capital, operating and maintenance works.

Scheme Performance Issues

ORC currently has the below known issues specific to a particular scheme and/or rivers that need decisions made in order to find a resolution. All of them are a consequence of one or more of the significant issues described in Section 5.1.

Scheme/Location	Issue
Clutha Delta	Flood protection and drainage schemes are in place. Natural Hazards are undertaking a risk assessment of climate change impacts to the Clutha Delta including consequences for levels of service. A Scheme performance review will follow the risk assessment which will assist in future infrastructure requirements of the flood and drainage schemes. This will help us to determine how, and when, to adapt the Lower Clutha Flood Protection and Drainage Scheme.
Dart/Rees Rivers	A collaborative project with QLDC, the current objective is to provide a framework to actively manage the risks associated with natural hazards for the long-term development of the area located at the head of Lake Wakatipu, including Glenorchy and Kinloch. This is in its early stages but will help determine whether and what form infrastructure is part of the adaptation options.
Roxburgh	Adequacy of the existing limited infrastructure on Reservoir Creek.
Lindsay Creek	Sections of the Lindsay Creek still have insufficient channel capacity to convey flood flows. A higher and more uniform standard of flood protection for these areas, to provide a standard of flood protection that is consistent with comparable urban areas across New Zealand, will need to be considered, again. The renewal of existing assets is necessary regardless of any enhanced standard of protection.
Water of Leith/Leith Flood Protection Scheme	Renewal of pre-existing assets (e.g. concrete-lined channel), completion of enhancement works downstream of Forth Street. Investigate options to increase the amenity value of the area downstream of Forth Street to the harbour.
Taieri Plains	Flood protection and drainage schemes are in place. Undertaking a risk assessment of climate change impacts to the Taieri Plain including consequences for levels of service and future infrastructure requirements of the flood and drainage schemes. The expansion of Mosgiel and Wingatui within the boundaries of the Taieri Scheme will result in a need to address and manage the stormwater/land drainage interface.
Lower Waitaki River Control Scheme	Repeat floods. Very dynamic river. Managing funding of unplanned works.

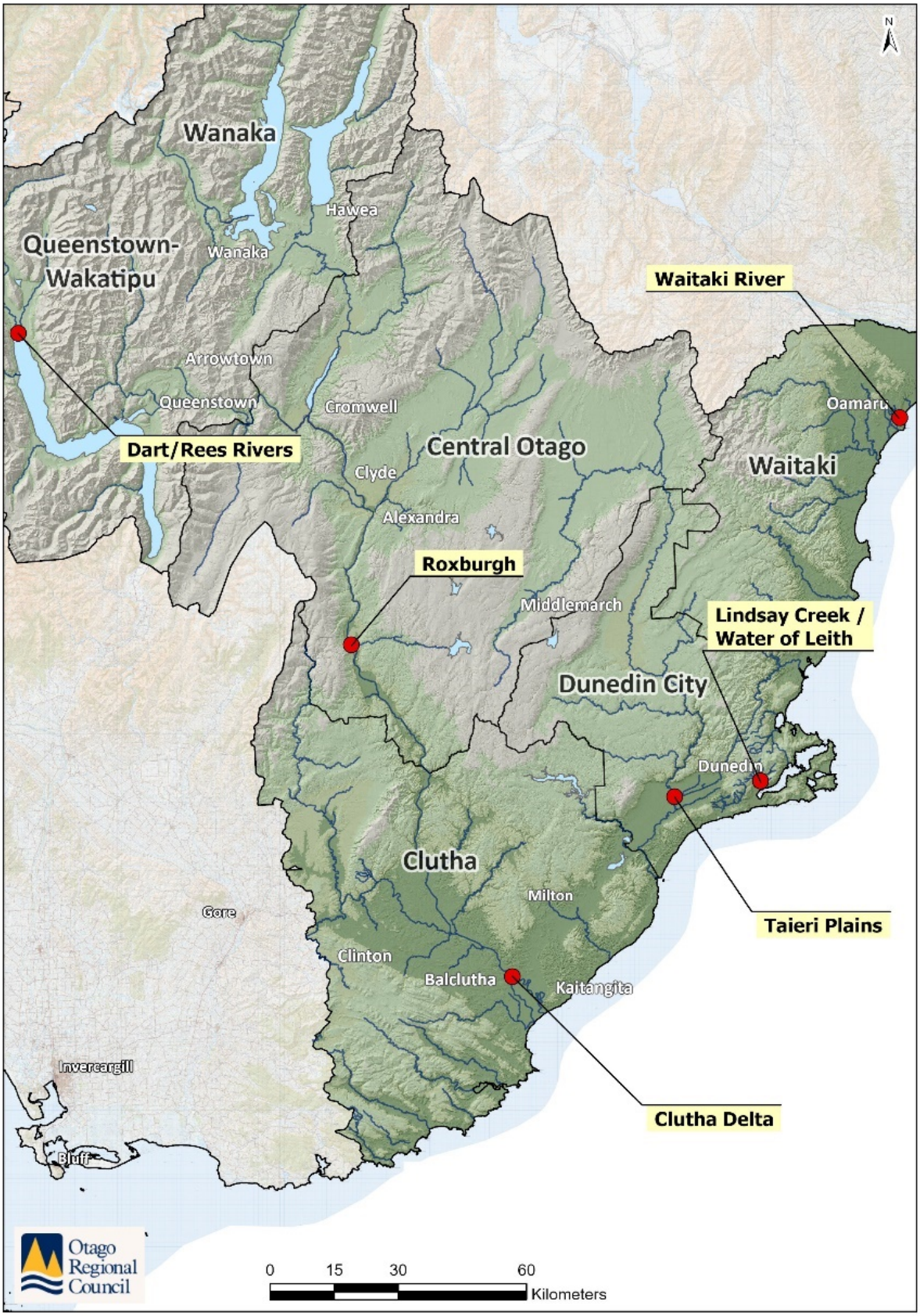


Figure 11 Location of known scheme performance issues

Infrastructure Management Approach

While ORC's purpose, vision and strategic priorities provide an overarching framework to ensure Council are working on the things that matter, the following principles form how ORC manage infrastructural assets:

- Decisions are aligned with ORC's strategic direction and priorities
- Partnership with Iwi
- Improving asset inventory data and information
- Maintaining existing and fit-for-purpose infrastructure
- Optimised decision-making on renewal and replacement of existing infrastructure
- Proactively monitoring the ever-changing physical environment and its consequential effects on levels of service
- Legislative requirements and consents

These principles are applied in conjunction with community engagement and feedback, helping guide the infrastructural decisions, and ensures assets are managed in a consistent manner in alignment with the wider ORC strategic direction.

ORC Strategic Direction

ORC's Vision for Otago sets the direction for improving the social, economic, environmental and cultural wellbeing for the Otago communities now and into the future, through six community outcomes:

- Communities that connect with, and care for, Otago's environment
- An environment that supports healthy people and ecosystems
- Communities that are resilient in the face of natural hazards and climate change and other risks
- A sustainable way of life for everyone in Otago
- Te Ao Māori and Mātauranga Kāi Tahu are embedded in Otago communities
- Sustainable, safe and inclusive transport

Council seeks to meet the needs of the community and support the delivery of the flood protection, drainage and river services set out in ORC's Long-Term Plan. ORC will ensure that infrastructural services are managed in alignment with Council's strategic direction.

Iwi Partnership

Part of ORC's vision is that Otago mana whenua have a strong voice in shaping Otago. ORC acknowledge the special position of tangata whenua within the region. Te Rūnanga o Ngāi Tahu is the tribal representative body for the entire area of the Otago Region. There are four Papatipu Rūnanga; Te Rūnanga o Moeraki; Kati Huirapa Rūnanga ki Puketeraki; Te Rūnanga o Ōtākou; and Hokonui Rūnaka. Otago's environment holds many values for Aukaha and Kāi Tahu, ranging from the spiritual to the practical. Its placenames are a record of the history, traditions, and customs. The region's coast is still a major source of food, livelihood, and recreation for many.

A 'Memorandum of Understanding and Protocol' is in place between Otago Regional Council and local iwi - Kāi Tahu and Aukaha. ORC are committed to the continuing process of consultation with Māori in the region, to try to achieve mutual understanding and agreement on those issues that concern us all.

Data and Information

Knowing exactly what assets exist, where they are, and in what physical condition they are in is fundamental to all asset management activities, and sound decisions are dependent upon the ongoing collection and management of appropriate information. Asset information will be improved across all schemes through field-based data collection and office-based data analysis and processing. Council places high importance on regular river surveys, condition and performance assessments and modelling investigations to inform work programmes and associated activities. This also enables us to identify and ensure appropriate management of the most critical assets. Continuously improving the quality and accuracy of data is an ongoing activity Council is committed to.

Maintaining Infrastructure

The existing flood protection and land drainage infrastructure has largely been developed over the last century and has contributed to regional economic growth and community wellbeing since 1870. This infrastructure underpins the regional economy by providing a level of protection from natural events. The operations and maintenance of infrastructure will continue throughout the lifetime of this Strategy.

The age of the floodbanks means that in some areas there is some uncertainty associated with the risk posed by the construction methods that may have been employed at the time, the materials used, and the quality and availability of the documentation provided. This highlights the need for an ongoing improvement of ORC's data and information management capabilities, as well as continuous monitoring, maintenance and potential upgrade of this infrastructure as knowledge improves.

Renewal of Infrastructure

Some assets will require renewal during the 30-year duration of this Strategy. These assets include:

- Pump stations, including ancillary plant and equipment
- Gravity gates and locks
- Culverts
- Bridges
- Concrete flood walls and retaining walls

Operating these assets beyond the end of their useful lives can result in a reduction in performance of the asset or overall scheme, and increased risk of failure, and/or increased maintenance requirements. Undertaking asset renewals is an appropriate way to extend an asset's working life, and these are planned to deliver the most efficient use of expenditure. Improvements in the data is managed and information pertaining to these assets will also improve the way ORC plan and budget for this expenditure over time.

Changing Physical Environment

Managing infrastructure within an ever-changing physical environment will continue to pose challenges and opportunities throughout the lifetime of this Strategy. ORC will proactively monitor the physical environment in order to adapt to the challenges and opportunities posed by:

- The dynamic geomorphology of the Otago region that contributes to the behaviour of the river catchments and ultimately how the flood and drainage schemes perform
- The changing climate in Otago and the variable impact of climate change across the region, such as sea level rise, and more frequent and higher intensity rainfall events

These changes and their consequences have the potential to compromise levels of service and will need to be understood and actively managed. The forward work programmes will therefore include monitoring and analysis to understand the impacts of the ever-changing physical environment on the infrastructure, including ongoing surveys to monitor channel morphology and participation in sea level rise studies to understand regional estimates and impacts. ORC will also continue the development of well-informed communication and adopt a consultative approach with the community as to the areas of natural risk and the measures in place to manage these risks.

Figure 12 Flood Protection asset, Waitepeka Floodbank during the February 2020 flood event

Significant Issues and Directions

This section summarises the significant issues facing the flood protection, river assets and drainage activities for the Otago Regional Council and the corresponding actions that are in place over the next 30 years and beyond. These issues are presented diagrammatically in Figure 13. All significant issues are inextricably linked to one another, with one common denominator being 'Scheme Performance'.

The following pages in this section provide detail on why each issue has been identified, Council's preferred approach to managing the issue and the alternative scenarios identified. While Council has a preferred approach to managing the issues, the alternative scenarios are sometimes dependent on external factors outside of Council's control. Factors in the environment or economy can have unforeseen effects, such as COVID-19. However, the decision between the preferred approach and alternative scenarios often depends on the strategic direction Otago Regional Council is heading. Council needs to respond to some significant challenges: the status quo will not deliver the future the Otago region and communities are striving towards.

Figure 13 Significant issues and associated links

Significant Issue No.1: Infrastructure Condition

Why is it an issue?

ORC's infrastructure assets were constructed over a period of 150 years. As infrastructure ages the condition can degrade (floodbanks), need replacement or the technology used become redundant. This signals a bow wave of asset renewals/repair/upgrade that will require investment, and funding of such, within the next 30 years.

Continuing to maintain assets beyond their intended life increases the risk of failure and will also increase the frequency and cost of operations and maintenance activities. Factors such as installation, operational environment and manufacturing defects can also reduce the useful lives of assets.

Council has good institutional knowledge of its assets, however, does rely on asset management systems and processes that are in some cases dated. This may reduce confidence in the data that informs operational and maintenance decisions, and the timing of renewal.

The age of an asset is only one indication of an asset's renewals and maintenance needs. Key to smart asset management is a sound understanding of asset condition, with regular and structured condition assessments of all assets. This allows asset renewals to be driven by the condition of the asset, not only its age.

It is imperative that Council has the confidence in its infrastructure to perform as designed. Allowing assets to decline would lead to reduced levels of service and increase the risk associated with their functioning as required.

Council's preferred approach to manage this issue

The preferred approach is to **adopt a risk management approach to prioritise and schedule asset renewals to proactively manage this programme of renewals and investment over the lifetime of this Strategy**.

It is understood that improved asset management systems and processes, as well as undertaking effective planning to avoid/mitigate the effects of natural hazards, are necessary to understand risk and increase confidence in the decisions that are made in relation to operations, maintenance and renewal.

The implications of taking this approach are:

- Deferred renewals/maintenance
- Decision making can be based on both asset condition and age
- Critical assets are maintained
- Reduced level of service in low criticality areas
- Short-term affordability

The following option was considered as an alternative to the preferred approach identified above.

Renew assets at point of failure
Assets would be renewed before the end of their useful life. The implications of this option are: • Reduction of risk associated with continuing to operate assets beyond the end of their useful life • Level of service maintained • Increased capital costs as bow wave of asset renewals is struck within the period covered by this strategy

Significant Issue No.2: Funding

Why is it an issue?
The Otago region's economic conditions have an impact on the ability of communities to pay for the services provided. There are increasing pressures on the current level of funding to deliver more. Furthermore, the affordability of levels of service are already being impacted by a number of the significant issues discussed earlier, such as changes to and effects of climate change, growth (or decline) of populations and development in surrounding floodplains, and increasing regulatory performance requiring higher operational and maintenance costs. Alternative funding mechanisms will need to be considered otherwise trade-offs in levels of service and risk will be necessary, the consequential effects of such being increased risk and reduced economic prosperity. The flood protection and drainage infrastructure is fundamental to the continuing economic prosperity of the Otago region as it provides protection to a significant number of residential, commercial, and agricultural assets, including lifeline utilities, the Dunedin International Airport and state highways. Significant investment is needed to maintain infrastructure networks with consideration for the other significant issues raised previously.
Council's preferred approach to manage this issue
The preferred approach is to **maintain current practice while continuing to review and improve funding strategies**. Council will continue to engage through the Regional Council infrastructure sector to source Central Government funding. The implications of this approach are: • Risk that funding strategies do not come to fruition and there is a reduction in maintenance and decrease in level of service over time • Impact on property valuations • Increase in insurance costs

The following option was considered as an alternative to the preferred approach identified above.

Reduced maintenance and decreased levels of service
Maintenance would be reduced and there would be a corresponding decrease in the level of service achieved by Council's flood and drainage infrastructure. The implications of this option are: • Reduced level of service • Increased risk and damage costs • Reduced short-term costs • Poor reputation

Significant Issue No.3: Climate Change

Why is it an issue?

If current and improved levels of service are to be delivered, significant investment is required to address climate change impacts on scheme infrastructure.

In October 2019, ORC commissioned NIWA to undertake a review of climate change projections for the Otago region over the 21st Century. The study concluded that changes to Otago's future climate are likely to be significant with increases in rainfall across the region, with subsequent increases in the scale of annual floods, means:

- The changes challenge the ability to achieve Levels of Service over time
- Changing climate in Otago
- Sea level rise in Otago
- Clutha shoreline retreat

The effects of climate change will impact the environment regionally and nationally. There will be changes in sea level rise, wind and weather patterns, higher water tables, and the frequency of extreme weather events. These climatic changes will put increased pressure on the schemes and challenge the Levels of service provided. Furthermore, climate change is likely to impact on the health and distribution of species, and pests will spread to new areas, habitats will change, and indigenous species may need to migrate.

Council's preferred approach to manage this issue

The preferred approach is to **adopt a more planned and integrated approach** by:

- Making provision for the efficient installation of increased flood capacity
- Incorporating resilience into future designs of new infrastructure or renewals
- Invest in improved understanding of future climate change effects

How Council responds operationally and strategically to climate change will continue to evolve in parallel with climate science and policy. Climate change is currently being factored into the design of schemes through scheme reviews and design decisions. The actual costs related to climate change will be subject to decisions made by individual communities when considering their appetite for risk, costs of risk mitigation, and the timing of interventions as risks increase gradually over time.

The implications of taking this approach are:

- More planned and substantial provision for climate change, and reduction in risk as a result
- Improved understanding of climate change in Otago
- Opportunity for environmental enhancement
- Improved reputation

The following options were also considered as an alternative to the preferred approach identified above.

Maintain current design flow (flood) standards	Increase design standards
Maintain scheme levels of service to original design standards. The implications of this option are: • Avoiding increased costs in the short-term • Accumulation of infrastructure debt • Increased risks and costs to future generations • Increased frequency of flood response and recovery	Incrementally increase the capacity of floodbanks and pump stations to meet current climate change projections. The implications of this option are: • Reduced risks with some residual risks • Increased costs and debt • Land purchase may be required

Significant Issue No.4: Legislation/Regulatory

Why is it an issue?

The flood protection and drainage schemes were designed and built at various times over the past 150 years and reflect the values, knowledge and understanding of that time. The majority of these schemes were developed and constructed in an era when economic growth and development were the primary focus of the time. Flood protection and land clearance for drainage enabled farmland and agricultural initiatives to develop and prosper.

Community values and Central Government expectations in relation to environmental outcomes have changed and continue to change at a significant rate. The following are examples of such changes that will impact the schemes:

- Freshwater improvement programme
- Fish passage requirements
- Biodiversity opportunities
- Tracks and trails on/around assets
- Co-benefits

Public perceptions now seek multiple values in addition to the original purpose from the time most schemes were established: flood protection/drainage. Flood protection infrastructure is often located in areas of high environmental, recreational or conservational value and these values may be impacted by, or maintenance of, that infrastructure.

Council's preferred approach to manage this issue

The preferred approach is to seek **improved environmental performance & integrate asset diversification** by achieving multiple outcomes wherever possible. Adopting a more natural and adaptable approach by integrating environmental enhancement wherever possible. This will be progressed by continuing to actively manage scheme effects and working with local landowners, to achieve full regulatory outcomes across a range of outcomes, including those associated with biodiversity and recreational opportunities.

There are a wide range of management options available for environmental enhancement. These include riparian planting, fish passage, and giving rivers and the ocean more room to behave naturally. ORC will continue to endorse increased community and iwi engagement in improvement initiatives, as well as other stakeholder collaboration and partnership funding opportunities, wherever possible. There will inevitably be trade-offs between costs, risks and environmental performance.

The implications of taking this approach are:

- Sustainable long-term outcomes
- Enhanced environment
- Increased costs to meet standards
- Improved reputation

The following option was considered as an alternative to the preferred approach identified above.

Maintain current practice

Maintain current practice through the operation and maintenance of existing infrastructure while continuing to mitigate any adverse environmental effects of this infrastructure. There would be little to no improvement in environmental performance and outcomes.

The implications of this option are:

- Failure to meet public expectations
- Declining environmental outcomes
- Risk to reputation

Significant Issue No.5: Natural Hazards

Why is it an issue?

The Otago region comprises a diverse landscape ranging from flat coastal lowlands and intensively used alluvial floodplains, to large sparsely populated and steep mountainous areas. Otago is exposed to a broad range of natural hazards such as:

- Flooding
- Landslides
- Seismic activity
- Coastal erosion
- Tsunami
- Storm surge

These all present major hazards to flood protection and drainage infrastructure. For example, major earthquakes could result in cracking, slumping and/or settlement of floodbanks.

The potential effect of a natural disaster (including flood events) on ORC's financial position is dependent upon the scale, duration and location of the event. Recovery/response reserves are being built up over time and (self) insurance cover is in place to fund up to 40% of qualifying expenditure in the event of a natural disaster/event, noting that the remaining 60% of funding is provided by the National Emergency management Agency (NEMA). Current LTP has no allowance for repairs to scheme assets resulting from flood events/natural disaster forecast in expenditure.

Council's preferred approach to manage this issue

The preferred approach is to **maintain and improve current practice around hazard readiness, response and recovery** throughout the lifetime of this Strategy as Council continues to learn from past events across the region and New Zealand. This will include increased efforts to raise awareness and educate communities around natural hazards they may be at risk from. Council will continue to undertake investigations to help understand and plan for risks related to natural hazards.

Council aims to minimise damage to flood protection and drainage infrastructure and will continue to develop plans and processes that will:

- Take a risk management approach
- Incorporate climate change impacts into asset management
- Seek to reduce the damage potential on the flood and drainage infrastructure
- Develop strategies to enable timely response following a natural disaster
- Ensure funding policies are robust and appropriate
- Integrate with Civil Defence and Emergency Management (CDEM) readiness and response planning

The following options were considered in relation to this significant issue. It is noted that Council's preferred approach is to adopt a combination of these options.

Maintain current practice	Build resilient infrastructure
Maintain current practice by undertaking natural hazards investigations and carrying out effective planning to avoid/mitigate effects of natural hazards on flood and drainage infrastructure. The implications of this option are: • Localised damage and disruption • Pressure on flood response plans to be effective • Multi-agency collaboration • Reserve funding reliance	Design and upgrade infrastructure to be more resilient to natural hazards. This may include strengthening infrastructure, or in some cases designing for failure at suitable locations to mitigate the impact of the event on critical infrastructure. The implications of this option are: • Decreased risk • Increased costs

Significant Issue No.6: Growth and Development

Why is it an issue?

In April 2017 changes were made to the RMA (Section 6) highlighting the increasing level of natural hazard risk and the need to ensure growth and development does not increase these risks and associated costs. While household projections for Dunedin City are estimated to decelerate, some growth is proposed in areas of high or increasing natural risk, and there is a need for information to be available to assist in decision-making and managing community expectations. For example, intensification of urban development along the right bank of the Silver Stream and some sections of the Owhiro Stream are likely to affect the runoff to, and consequently design capacity of East Taieri and Lower Taieri Schemes. Furthermore, this rising urban development is changing the public's expectations on the levels of service that should be provided.

Over the longer term there is potential to see some acceleration of land use change outside of urban areas, placing additional pressures on the flood protection and drainage services to provide protection. A better understanding is needed of the likely distribution of this growth and what additional demands this will likely place on flood management services.

Council's preferred approach to manage this issue

The preferred approach is to **maintain current practice but consider innovative approaches to addressing population growth/decline and manage demand through land use controls**. Collaboration with territorial authorities will need to continue to effectively mitigate the impact of increased runoff through land use change and development. This will include identifying areas of potential risk and may also include opportunities for innovative approaches to managing the impacts of development. There is an ongoing need to ensure sufficient information is available to assist in informing where there may be risks associated with development. Subject to further discussion and agreement with the relevant territorial authorities, Council aspires to take an integrated, multi-agency approach to land use planning.

In addition to this ORC will look to better understand what impact a failure of its assets and levels of service will have on other key infrastructure in the immediate and wider region. While ORC understands what other infrastructure surrounds its own assets, work is required to develop a sound understanding of the strategic importance that these hold socially and economically and how the performance of ORC schemes/assets may directly or indirectly affect their function.

The following options were considered in relation to this significant issue. It is noted that Council's preferred approach is to adopt a combination of these options.

Maintain current practice	Reactive response to demand as a result of development	Integrated multi-agency approach
Utilise existing planning controls to mitigate impact of development. Growth and development trends are monitored and forecasts incorporated into forward work programmes. The implications of this option are: • Similar levels of expenditure • Some reduced risks	Levels of service will be increased to the current 100-year design level of protection (or standard otherwise agreed with the community). Climate change will not be allowed for. The implications of this option are: • Increased capital/operational costs. • Difficult to forecast costs • Increased risks	Work with territorial authorities to take an integrated and multi-agency approach to land use planning and District Plan review. The implications of this option are: • Multi-agency collaboration • Financial sustainability for schemes

Significant Issue No.7: Scheme Performance

Why is it an issue?

Scheme performance is at the centre of all other significant issues. Each issue will ultimately have a flow on effect to the overall scheme performance parameters.

Levels of service are currently based on the existing design standards for each scheme. These design standards are most commonly based on an historical flood event. For example, the design standard for the Lower Taieri scheme is based on the 100-year flood (1% Annual Exceedance Probability) event as determined in 1980, with a set flow rate (measured in cumecs) and drainage moduli (measured in mm/day) being used to define the level of service provided by the infrastructure (pump stations, floodbanks and spillways) that makes up the scheme.

Over time several factors may affect the ability of a scheme to meet the standards that it was designed to, including:

- Changes in the climate that impact on the intensity of rainfall events and their duration
- Changes in community tolerance and vulnerability
- Changes in the geomorphology of the landscape within river catchments that prompts changes in river behaviour, such as increased build-up of sediment in the lower lying reaches of the schemes, that in turn leads to a reduction in capacity of a flood protection scheme during a flood event
- Improved hydrological analyses and understanding of the behaviour of the natural environment in response to the environmental and geomorphological changes outlined above

Council's preferred approach to manage this issue

The preferred approach is to **maintain levels of service to current standards whilst noting there will be instances where intervention will be required, and standards will need to be increased**. There are a number of options for improvement to levels of service and consideration will need to be given to other significant issues that are inextricably linked to the issue of scheme performance.

Scheme performance reviews of the Lower Taieri and Lower Clutha, which will include consultation with benefiting communities, landowners and other affected stakeholders, are due to commence within the first five years of this strategy. Options will look at increasing the level of service whilst providing allowance for climate change either now or in the future. Increasing levels of service, with or without climate change adaption, will result in increased costs for the beneficiaries and wider communities.

The following options were considered in relation to this significant issue. It is noted that Council's preferred approach is to adopt a combination of these options.

Maintain current scheme performance	**Increase scheme performance (no climate change allowance)**	**Increase scheme performance (with climate change allowance)**
Schemes will be maintained to current design standards / performance. The implications of this option are: • Reduced expected levels of service • Similar levels of current expenditure • Increased risk from flood events	Scheme performance increased to provide a greater level of protection (Climate change will not be allowed for. The implications of this option are: • Increased cost to implement • Meet expected levels of service • Reduced risks • Reduced level of service over time	Scheme performance increased to provide a greater level of protection (Climate change will not be allowed for. The implications of this option are: • Increased cost to implemented • Meet expected levels of service • Greater reduction in risk

Infrastructure Investment Programme

Key projects and programmes are presented including the significant issues that will be addressed, accompanied by estimated expenditure over the next 30 years to deliver these programmes and how they relate to significant issues and drivers for change.

While the major projects and programmes identified in this 30-year investment programme reflect current assumptions and uncertainties, there is a higher degree of certainty about the investment forecast for the first 10 years. Projects and programmes identified in the subsequent two decades (years 11-30) are likely to change in response to new information, change in demand, and future needs.A summary of the key projects and programmes that address some of the specific significant issues addressed in this Strategy is provided in Figure 14.

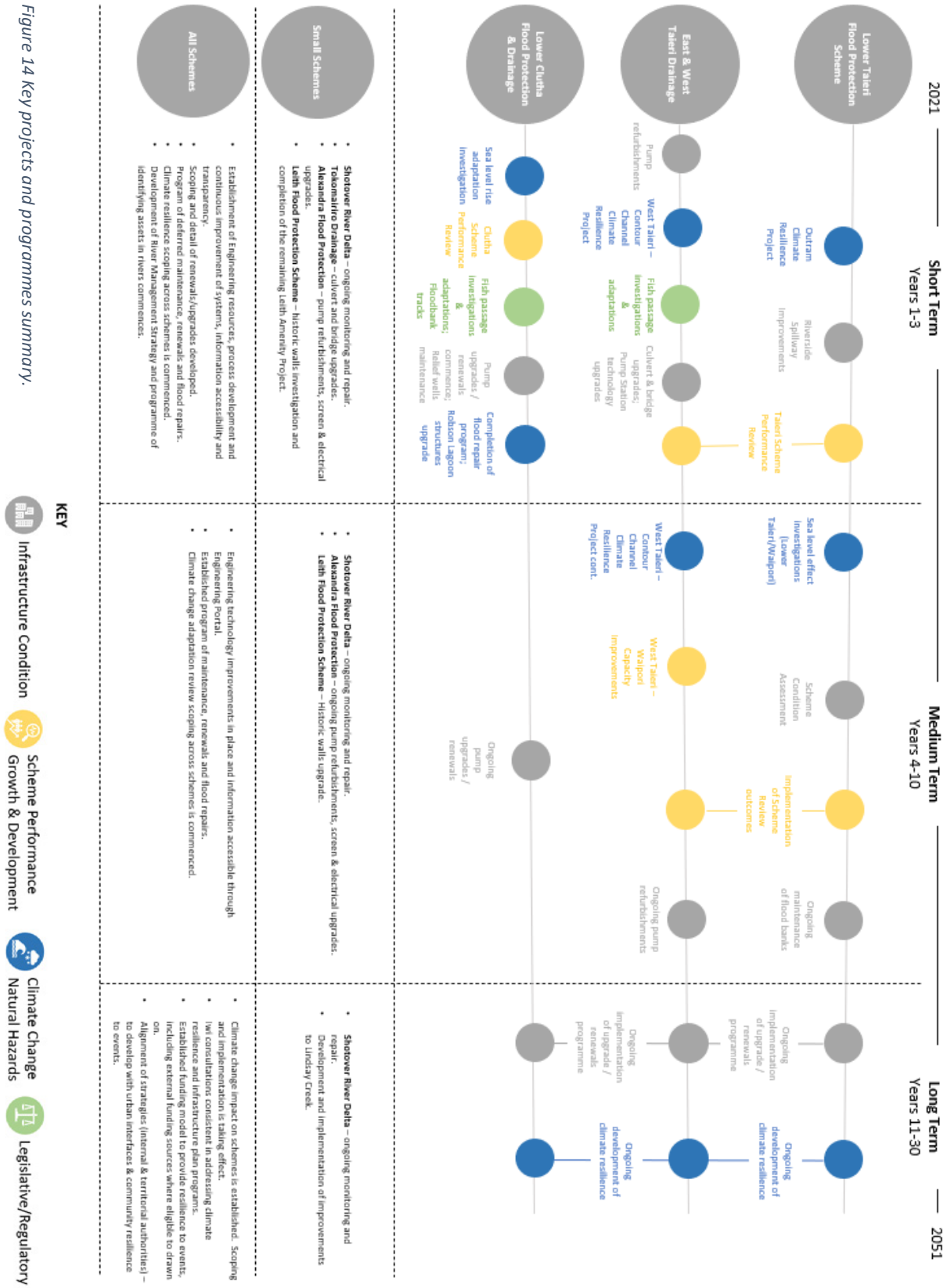


Figure 14 Key projects and programmes summary.

Planning asset renewals

Council carries out routinely through its operations and maintenance programme, cyclic inspections of all above ground assets, annually and as otherwise required. These inspections are required to ensure the resilience and performance of these assets are confirmed and not compromised with the assigned remaining life of the asset (asset lives are recorded in the management plans and in Council's information system, Conquest).

In addition to visual inspections, Council has commenced a programme of structural audits. Those completed are summarised below:

- Structures on Water of Leith and Lindsay Creek, 2019
- Structures on Kaikorai Stream, 2020
- Rutherford Locks, 2019
- Alexandra Pump Stations, 2019
- Contour Channel Bridges, West Taieri, 2018
- Clutha and Taieri Floodbanks, 2018

These structural audits provide the Council with a detailed condition assessment of the above ground assets and contribute to setting asset renewals and risk management.

Infrastructure expenditure assumptions and uncertainty

The Council's Infrastructure expenditure programme is based on the following key assumptions and basis of assumption:

Infrastructure Category/Timeline	Key Assumption	Basis of Assumption
General	• Asset valuation is based on a combination of depreciation value, and subject to impairment losses as well in some cases. The Financial Strategy will detail this. • Structures, and bridges are depreciated. • Floodbanks, drains and culverts are not depreciated. • Legislation changes may have an impact on the level of service, where changes in rules and requirements have an impact on planned expenditure programme. • Insured assets are limited to pump station infrastructure only. • Council does not self-insure all other above ground assets. • No allowance has been made in expenditure for repairs to scheme assets resulting from flood events or other natural disasters. • Responding to major weather events or other natural disasters is funded through insurance (where insurable) and scheme reserves in response to events. • Increased renewals or maintenance due to natural disasters will be funded through scheme reserves and Council's ability to raise debt. • Information contained in this Infrastructure Strategy is based on current known information which has been used to determine issues and understand the asset management requirement for a 30-year horizon. • Asset lifecycle costs are based on useful remaining lives, condition assessments and replacement values as at	• **Existing schemes remain economic at current level of service** • **Management, systems, and processes are fit for purpose** • **Flood protection schemes have been designed and constructed to provide a level of protection accepted by communities which is supported by relevant funding models** • **There is a possibility that new schemes may need to be developed in areas where currently no flood protection or drainage services are provided. This demand may be triggered by a flood event or an increase in activity in a flood prone area. Council may undertake investigations to determine the feasibility during the 30-year period, if there is a demand.**

Infrastructure Category/Timeline	Key Assumption	Basis of Assumption
	31st December 2020, which has been drawn from known information[9] in Council's current systems. • All capital renewal expenditure is based on current levels of service. • Global crisis or pandemic, the Council has systems and procedures in please for staff to work remotely. Council may be required to drop many of its BAU activities to focus resources on essential services and any major civil defence response across the region.	
Years 1 to 10	• There is not expected to be an increase in demand that will significantly change the current level of design and service, as the overall projected population growth is not expected to exceed the scheme functionality. • There are no planned increases or changes to level of service in Years 1 through to 10.[10] • The continued development of robust asset management systems including forecasting and modelling tools in Years 1 to 3 will provide Council an improved basis of determining capital renewals costs. • No new schemes are provisioned for in Years 1 through to 10. • Demand and vulnerability to managed through District Plan. • Known asset performance deficiencies are addressed to provide scheme resilience. • All future projects have been investigated, scoped and programmed into future LTPs (where projects exceed $100,000 of renewal or replacement). • All asset gradings of 'very unreliable' are transitioned into 'reliable' grading. • Any health and safety deficiencies with operating infrastructure are identified by and addressed. • Scheme Performance reviews for Taieri and Lower Clutha have been completed, investigated, scoped and programmed into proceeding LTPs. • River channel assets are identified and updated on asset management system. • Completion of flood repair program of works and climate resilience (MBIE funded) programme of works.	• **No significant new schemes, investigations, scoping only** • **Major upgrades only if affordable and agreed with communities** • **Resilience restored in flood protection schemes through flood repair programs and climate resilience programmes**
Years 10 - 20	• Years 11 onwards show an indicative increase in levels of service required (land drainage New East Taieri Pump Station) and new works (Lindsay Creek). • There is an anticipation for an increase on our flood protection and drainage scheme assets due to the	• **Climate change impacts will become increasingly important over the 20-30-year period.**

[9] "known information" is drawn from Councils databases which record; inventory of assets, assessments, inspections, reports pertaining to assets. Council uses a computerised maintenance management system, Conquest along with other databases of source information relating to the operation and maintenance of schemes.

[10] The Scheme Performance reviews completed in Years 1 to 3 will provide an indication of any changes to levels of service which may be identified as a future requirement. This has been indicated in forecast expenditure in Years 4 to 10 as potential 'increased levels of service' resulting from scheme modifications, improvements and/or capacity increase.

Infrastructure Category/Timeline	Key Assumption	Basis of Assumption
	increase of urban development on existing rural locations where the schemes are located. Consequently, a review of rating and development contribution may occur to contribute to the maintenance expenditure, and investigations around capacity of storm drainage impacts on existing land drainage infrastructure. • Climate adaptation programmes developed and consulted with community.	• **Increase in cost and/or risk will become key consultation on resilience of existing schemes and/or new schemes.**
Years 20 -30	• Climate adaptation programmes scoped, designed and implemented per community consultation. • Lindsay Creek upgrades proceed with community approval and appropriate funding.	• **Unqualified estimates have been indicated relating to climate resilience, assuming that the increased risks due to climate adaptation are not accepted and community requires investigation and/or adaption.**

Further details on the key assumptions, associated uncertainty and the potential implications are shown below in Table 7:

Table 7 Infrastructure assumptions and uncertainty

Key Assumption	Risk	Level of uncertainty	Expenditure implication	Reasons and expenditure effect of uncertainty
Growth and Demand				
There is expected to be a marginal increase in demand on the use of the flood protection and drainage scheme assets to convey stormwater drainage from urban development. This is predominately in the Taieri (Mosgiel and Outram) areas where urban development interfaces existing rural locations where the schemes are located.	The increase in demand may significantly change the current level of design and service. The overall projected population growth in the Taieri areas exceeds the projected scheme functionality and capacity.	Low	Low	The scheme performance and capacity of existing flood protection and drainage assets will be assessed in the Taieri Scheme Review during Years 1 to 3. The current special rating districts do not include urban growth areas in the Taieri as rated areas that contribute the flood protection and drainage schemes. Options to provide for urban development and reliance on Council's existing flood protection and drainage assets will be determined during Years 1 to 3 which may result in infrastructural changes to cater for increased capacity. This may result in an increase of special rating districts to cater for an increased level of service and flood protection in the Taieri growth areas of Mosgiel and Outram.
Asset Lifecycle				
Sources of funds for future replacement of critical and significant assets are secure.	Council has insufficient funds to replace significant assets at the end of their useful lives	Low	Low	
Information contained in this Infrastructure Strategy is based on current known information which has been used to determine issues and understand the asset management requirement for a 30-year horizon. The continued development of asset management systems including forecasting and modelling tools will continue through	Council has insufficient known information to support its asset lifecycle costs.	Low	Low	

Key Assumption	Risk	Level of uncertainty	Expenditure implication	Reasons and expenditure effect of uncertainty
Years 1 to 3. It is expected that maturity in asset management systems and consolidation of known information will provide Council an improved basis of determining capital renewals costs. Asset lifecycle costs are based on useful remaining lives, condition assessments and replacement values as at 31st December 2020, which has been drawn from known information in Council's current systems.				
Climate & Hazards				
Increased significant weather events, or other natural hazard emergencies will occur. Infrastructure Strategy assumes there will be an average of (1) significant event[11] per financial year.	Council cannot accurately predict when and where large flood events will occur, or the damage that may result from any flood event. here will be increased frequency of weather events that cause damage to infrastructure assets.	Medium	Medium	The effects of increased weather events that cause damage and potential other natural hazard events, on Council's financial position is dependent on the scale, duration and location of the event. Council will manage the effect through its reserves to repair or replace infrastructural assets that are damaged and/or destroyed. The infrastructure strategy will focus on self-insurance reserves that are built up over time to ensure funding up to 40% of the expenditure is available across the schemes.[12]
Climate change will be consistent with current national and regional projections. Future sea level rise does not exceed that projected by current climate science.	If climate change effects occur more quickly than expected, the adaption and response to climate change will change cost response.	Medium	Medium	Potential climate change impacts are being considered through scheme performance and detailed investigation as prediction and adaptation information becomes available. The infrastructure considers climate change and provides to investigate the impact on the management of flood protection and land drainage scheme assets.

[11] Significant event is defined as flood protection trigger levels are reached in a scheme and the event reaches repair cost threshold in accordance with NEMA guidelines

[12] The Council has access to the National Emergency Management Agency (NEMA) which provides 60% funding of expenditure required to repair assets damage. This is dependent on the Council reaching its threshold which is 0.002% of the Rateable Value of Council infrastructure in the financial year in which the damage occurred.

Key Assumption	Risk	Level of uncertainty	Expenditure implication	Reasons and expenditure effect of uncertainty
Legislation/Regulatory				
Resource Consents	The necessary resource consents for infrastructural activities, including capital renewals/repairs, operations and maintenance will be obtained (and granted) as they are due or required.	Medium	Medium	
Land acquisition – land can be purchased when and where needed.	If land cannot be purchased as and when planned, projects would need to be deferred until land could be acquired. This may result in additional expenditure from damage prior to land acquisition.	Medium	Medium	
Legislative changes will change marginally, however current forecast allows for adaptation.	There will be no major changes to key legislation that effects ORC's strategy or has funding implications. Key legislation under this Infrastructure Strategy includes; Local Government Act 2002, Resource Management Act, and Soil Conservation and River Control Act 1941.	High	High	There is a high level of uncertainty because legislative change is likely over the next 30 years. The potential effect of any new changes environmental or resource management will be determined on the response required, and the timing to effect such changes. Legislative changes may result in additional required expenditure to comply with new standards.
Cultural & Community Values				
Iwi and Māori expectations	Expectations and management of how infrastructural assets are managed in conjunction with iwi and Māori values may require adjustment and implementation of key projects and programme.	Low	Low	
Community expectations	Level of community engagement and evolving expectations on current levels of service as urban and rural demographic's merge may cause for key projects and	Low – Short term (1 – 5 years)	Low – Short term (1 – 5 years)	Expectations and addressing outcomes into implementation plans, are largely included in the short term. Long term as detailed investigations around scheme performance and climate resilience / adaptions progresses

Key Assumption	Risk	Level of uncertainty	Expenditure implication	Reasons and expenditure effect of uncertainty
	programmes of work to be adjusted.	Medium – Longer term (6 – 20 years)	Medium – Longer term (6 – 20 years)	may result in forecast adjustment to reflect community consultation and request for levels of service.
Level of Service				
All capital renewal expenditure is based on current levels of service.[13] No new schemes are provisioned for in Years 1 through to 5.[14] Years 11 onwards indicate an increase in levels of service (land drainage) and new a scheme (Lindsay Creek).	Levels of service are not adequate	Low	Low	
Weather events and Natural disasters				
No allowance has been made in expenditure for repairs to scheme assets resulting from flood events or other natural disasters.	Multiple weather event and natural disasters occur and exceeds forecast expenditure.	Medium	Low	Responding to major weather events or other natural disasters is funded through insurance (where insurable) and scheme reserves in response to events. Increased renewals or maintenance due to natural disasters will be funded through reserves. Council also has the ability to raise funding for the cost of unexpected works in response to weather events and natural disasters such as floods or earthquakes.

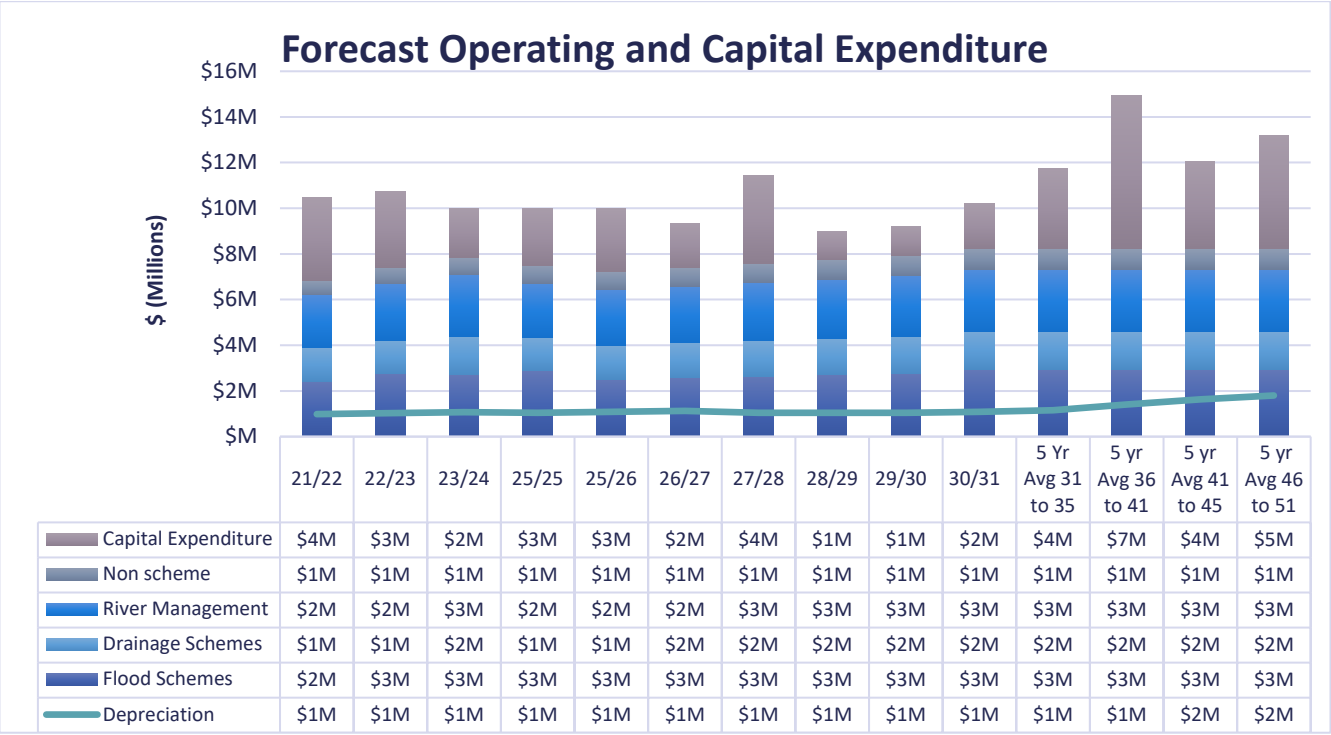
[13] Current levels of service are based on agreed flood management and land drainage infrastructure that has been developed and agreed to specifically with local communities when constructed (>50 years ago) as a defence. These levels of service remain relevant.
[14] Additional new schemes will likely to be identified over the next 30 years, they will be developed and included in revisions of this strategy.

Total expenditure

Over the next 30-year period Council has forecast to spend a total of $392 million. $281 million will be invested in ongoing maintenance and operations of schemes, including an asset depreciation allowance. Capital investment will be $111 million, this expenditure will enable periodic replacement of existing assets and provide asset upgrades or additions to address significant issues. Forecast expenditure by scheme/area is shown in Table 8. This is depicted graphically in Figure 15.

Table 8 Capital and operational expenditure by scheme area for the 30-year period 2021 – 2051

Scheme/Area	Capital Expenditure	Operational Expenditure	Total Expenditure
F 1 Alexandra Flood Protection Scheme	$5M	$9M	$14M
F 2 Leith Flood Protection Scheme	$33M	$23M	$53M
F 3 Lower Clutha Flood Protection and Drainage Scheme	$17M	$46M	$62M
F 4 Lower Taieri Flood Protection Scheme	$18M	$29M	$45M
F 5 West Taieri Drainage Scheme	$33M	$31M	$62M
F 6 East Taieri Drainage Scheme	$5M	$25M	$29M
F 7 Tokomairiro Drainage Scheme	$1M	$5M	$6M
F 8 Shotover River SRA	-		-
F 9 Scheme Oversight & Bylaws	-	$26M	$26M
M 1 River Management - Dunedin	-	$14M	$14M
M 2 River Management - Clutha	-	$15M	$15M
M 3 River Management - Central	-	$14M	$14M
M 4 River Management - Wakatipu	-	$13M	$13M
M 5 River Management - Wanaka	$0.105M	$11M	$11M
M 6 River Management - Waitaki	-	$13M	$13M
M 7 Lower Waitaki Flood Protection Scheme	-	$7M	$7M
M 8 Non Scheme Management	-	$1M	$1M
Total	**$111M**	**$281M**	**$392M**



	21/22	22/23	23/24	25/25	25/26	26/27	27/28	28/29	29/30	30/31	5 Yr Avg 31 to 35	5 yr Avg 36 to 41	5 yr Avg 41 to 45	5 yr Avg 46 to 51
Capital Expenditure	$4M	$3M	$2M	$3M	$3M	$2M	$4M	$1M	$1M	$2M	$4M	$7M	$4M	$5M
Non scheme	$1M	$1M	$1M	$1M	$1M	$1M	$1M	$1M	$1M	$1M	$1M	$1M	$1M	$1M
River Management	$2M	$2M	$3M	$2M	$2M	$2M	$3M	$3M	$3M	$3M	$3M	$3M	$3M	$3M
Drainage Schemes	$1M	$1M	$2M	$1M	$1M	$2M	$2M	$2M	$2M	$2M	$2M	$2M	$2M	$2M
Flood Schemes	$2M	$3M	$3M	$3M	$3M	$3M	$3M	$3M	$3M	$3M	$3M	$3M	$3M	$3M
Depreciation	$1M	$1M	$1M	$1M	$1M	$1M	$1M	$1M	$1M	$1M	$1M	$1M	$2M	$2M

Figure 15 Forecasted operational and capital expenditure 30-year period 2021 – 2051. N.b units in table are rounded to the nearest million dollars

Capital expenditure

The most significant driver of capital expenditure is the infrastructure renewals and replacement.

The four key drivers for making capital investment across the flood and drainage schemes are:

- The need to renew/replace existing assets
- The need to adapt to changing environment to maintain (as a minimum) the level of service that the schemes currently provide
- The need to increase a level of service that the schemes currently provide in the areas required
- The requirement to meet a new need or demand for flood or drainage scheme protection

There will be an on-going requirement to make decisions including through consultation on renewals expenditure on a cyclical basis as part of the processes associated with the Council's LTP and Annual Plan processes.

Figure 16 shows the forecast renewal expenditure profile for the infrastructure assets associated with flood protection and land drainage. The expenditure forecast has been developed in line with the assumptions detailed in section 6.2.

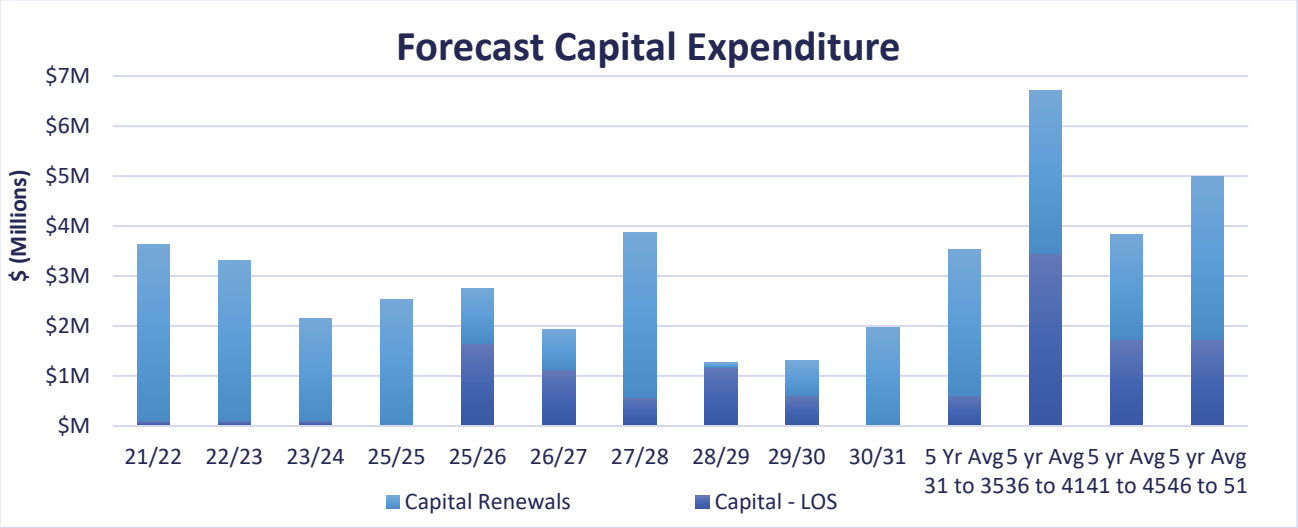


Figure 16 Forecast capital expenditure 2021 – 2051

Operational expenditure

Operation expenditure provides for the maintenance and operations works associated with each scheme and includes depreciations and other running costs.

In years 1 to 4 a number of scheme reviews will be undertaken, otherwise operational expenditure remains relatively consistent with some increases for inflation accounted for. It is not anticipated that scheme reviews would have a significant impact on future operational costs/needs.

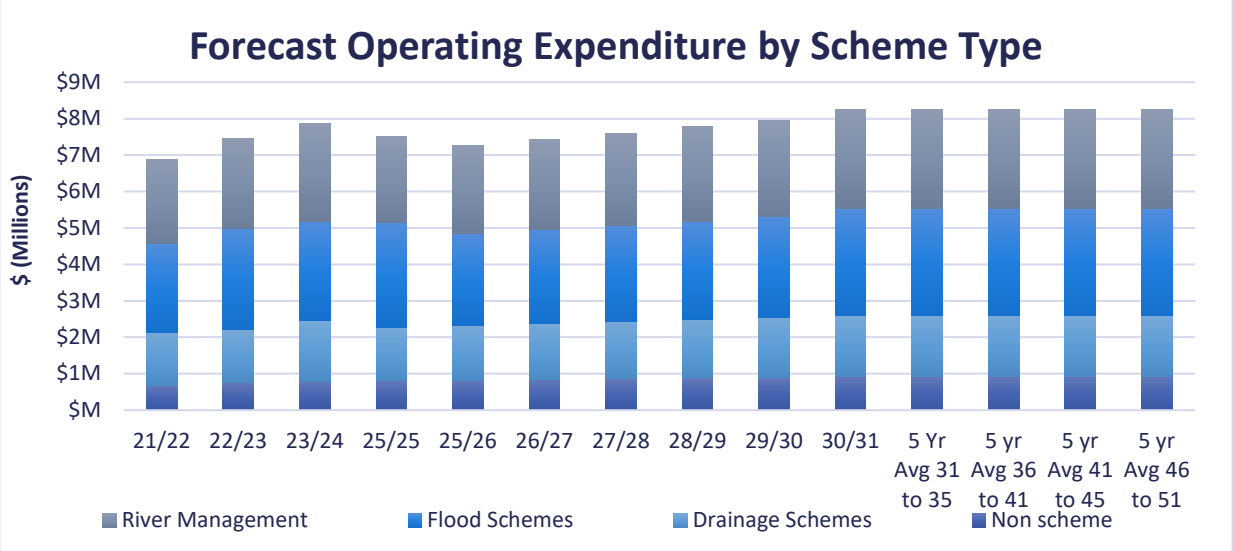


Figure 17 Forecast operating expenditure split by scheme

Key projects and programmes

A summary of the key projects and programmes that are planned over the next 3 years are presented in Table 9 below. A description for each is provided including the significant issues that will be addressed, the estimated expenditure required, and the timing for delivery. Key projects are defined where the project or programme of works exceeds $100,000 in a financial year cycle.

The key used to represent the significant issues in this section is depicted below:

Table 9 Key projects and programmes for flood protection and drainage services 2021 – 2051

Project/ Programme	Description	Addresses Significant Issue(s)			Timing
Taieri Scheme Performance Review	Assessment of performance and engineering options considered for scheme	✓			2021 -2024
Clutha Scheme Performance Review	Assessment of performance and engineering options considered for scheme	✓			2021 - 2022
Climate Change Adaptation investigation	Engineering options and resilience options developed	✓			2021 - 2023
Drainage Capacity investigations	Detailed assessment of drainage capacity, pump stations and drains	✓			2021 - 2022
Storm drainage assessment and principles	Development of storm drainage principles and effect of urban approach on rural land drainage assets	✓	✓		2021 - 2022
Fish Passage adaptation investigations	Research and development for implementation of fit for purpose fish passage across pumping/outflow structures	✓			2021 - 2024
Asset Management improvements	System and technology assessment and implementation to coordinate critical assets data	✓	✓		2021 - 2024
Investigation of use of ORC assets for trails	Investigation and development of design and standards to be constructed on ORC floodbanks	✓			2021 - 2022
Weed management of pump station inlets	Research and development of techniques to manage and remove weed blockages at pump stations	✓			2021 – 2023
Leith Historic Wall investigation	Detailed design and option for replacement program of historic channel walls	✓			2022 - 2024

The following key projects (Table 10) are detailed in the long-term plan and reflect continued programs of work and projects resulting from key programmes of investigation and detailed design set out in this infrastructure strategy. The projects reflect the focus on on-going repairs to critical assets and the development of infrastructural renewals or upgrades because of identified issues for detailed design for solutions. Projects will be subject to community consultation and funding models where significant expenditure is signalled.

Table 10 Key projects, including capital renewals/repairs 2021 - 2051

Project/ Programme	Description	Addresses Significant Issue(s)			Timing
Flood Repair programs: February 2020 event and January 2021 event	Completion of flood damage repair programs				2021 onwards
Climate Resilience Program: Outram	Ministry (64%) funded resilience renewal of flood protection assets				2021 - 2023
Climate Resilience Program: Contour Channel	Ministry (64%) funded resilience renewal of flood protection assets				2021 -2024
Climate Resilience Program: Riverbank Road	Ministry (64%) funded resilience renewal of flood protection assets				2021 - 2022
Climate Resilience Program: Robson Lagoon	Ministry (64%) funded resilience renewal of flood protection assets				2021 - 2023
Leith Amenity Project	Completion of the remaining Leith Amenity Project				2021 - 2022
Construction of a Shared Use Path (SUP) on Lower Clutha Foodbank	Construction of a SUP on ORC asset to provide an amenity use for community				2022 - 2024
Gordon Road and Silver Stream improvements	Channel improvements in Silver Stream				2022 - 2024
Riverside Spillway improvement	Spillway upgrade / improvement				2021 - 2022
Pump Station Technology improvements	Implementation of SCADA and link to asset management data portals				2022 - 2025
Asset Management improvements through technology system improvements	System implementation of data and metric monitoring of critical assets				2022 - 2025
Stoney Creek Debris Flow development of options	Upgrade of Stoney Creek to provide debris flow				2022 - 2025
Installation of increased monitoring for flows and levels across schemes and coastal mouths	Installation of monitors and link to asset management				2022 - 2025
Pump stations infrastructure upgrade	To meet safety, compliance and fit for purpose standards, including fish passage considerations and weed management				2023 - 2026

There are only three significant projects that are signalled in the Long-term Plan that are categorised as new capital expenditure.

These projects are signalled to support investigations in preceding years that address climate adaptation, levels of service and growth and development. Additional projects may result as the definition of the renewals are developed over the next 30 years.

These will be developed and included during respective infrastructure strategy and long-term plan revisions and other relevant planning documents.

Table 11 Key renewals/repairs 2021 - 2051

Project/ Programme[1]	Description	Addresses Significant Issue(s)			Timing
Lindsay Creek	Development, consultation and implementation[15] of the Lindsay Creek Scheme				2031 onwards
Climate Adaptation infrastructure transition Lower Clutha	Development and preparation of infrastructure options for climate adaption analysis				2025 onwards
Climate Adaptation infrastructure transition Lower Clutha	Development and preparation of infrastructure options for climate adaption analysis				2025 onwards

[1] These projects and expenditure assume community support through consultation and adoption of a funding policy to enable them to proceed.

Expenditure Forecasts

It is expected that with each review of the; Infrastructure Strategy (every 3 years), Asset Management, Long Term Plan, and Annual Plans, the cost estimates will be updated, particularly at the three-year review of the Infrastructure Strategy and Long-term Plan. This will enable the forecast to be updated to reflect more detailed design and understanding of costs associated with key projects and programmes of work along with community consultation and expectation.

[15] The viability of the Lindsay Creek Scheme will be determinate on Council and Community consultation.

GROUP ACTIVITY – REGIONAL LEADERSHIP				
Significant Activity – Governance and Community Engagement				
Activity	**Description**	**Distribution of benefits and Exacerbator Considerations**	**When do benefits occur?**	**Current funding sources**
Governance and Democracy	Run Council's democratic functions including holding triannual elections Partnering with mana whenua Contribute funding to activities that benefit the entire Otago community	The whole of the community benefits from these activities	The benefits are ongoing	**Governance and democracy:** • 100% general rates regional. • Elections costs may be rated evenly over each 3-year election period **Partnership with mana whenua:** • 100% general rates regional **Financial contributions:** • 100% general rates regional
Public Awareness, Communication and Engagement	Provide community information and advice through customer services, media, website, public events, brochures etc. Provide regional coordinator role for Enviroschools in Otago	The whole of the community benefits from these activities Those requesting specific information from Council benefit from receiving that information	The benefits are ongoing	**Information requests that require more than ½ hour response time**: • 100% fees and charges **Communication and engagement:** • 100% general rates regional

Significant Activity – Regional Planning and Strategy				
Activity	**Description**	**Distribution of benefits and Exacerbator Considerations**	**When do benefits occur?**	**Current funding sources**
Regional Planning and Strategy	Development, adoption, appeals, review and audit of ORC's regional policies, plans, and strategies	The wider community benefits as these plans and strategies are developed to provide for the needs of the region as a whole No individual or group benefits directly from this activity	Benefits are ongoing over the life of the plans	**Regional Land Transport Plan:** Receipt of NZTA grants. Remaining costs: • 100% general rates regional **Plans, policies and strategies:** • 100% general rates regional
	Respond to issues such as national policy and legislative proposals, and city and district plans	The whole of the community benefits from work aimed to help protect the regions resources	The benefits are ongoing	**Response to external proposals:** • 100% general rates regional
Private Plan Changes	Request of third parties to make a change to a Council plan, policy etc	Individuals and groups requesting a plan change benefit from this work	Benefits are ongoing over the life of the plans	**Private plan changes:** • 100% fees and charges

Significant Activity – Regulatory				
Activity	**Description**	**Distribution of benefits and Exacerbator Considerations**	**When do benefits occur?**	**Current funding sources**
Consent Processing, Reviews and Appeals	Process consent applications (RMA and Building Act) and hold hearings, Issue certificates, permits and transfers	The applicant is the primary beneficiary	The benefits are ongoing	**Processing consent applications:** • 100% fees and charges
	Appeals	This is determined by the courts		**Appeals:** Recoveries will be awarded by the courts **Other costs:** • 100% general rates regional
	Administration	The community benefits from the database of information		**Information requests that require more than ½ hour response time**: • 100% fees and charges **Administration:** • 100% general rates regional
	Review of consents, e.g. variation to consent - consent holder-initiated, or Council may initiate, e.g. on introduction of a minimum flow	Consent holder benefits from processing requested review of consent Wider community benefits from Council initiated review of consent		**Consent holder-initiated review of consent:** • 100% fees and charges **Council initiated review:** • 100% general rates regional

Activity	Description	Distribution of benefits and Exacerbator Considerations	When do benefits occur?	Current funding sources
Compliance Monitoring	Process performance monitoring returns from consent holders	Consent holders benefit from their ability to exercise consents Work arises from activities undertaken by identifiable consent holders Public benefits arise from environmental protection gained through compliance	The benefits are ongoing.	**Performance monitoring:** • 75% fees and charges from consent holders • 25% general rates regional
	Undertake audits and compliance reviews to ensure compliance with consent conditions			**Audits and compliance reviews:** • 100% fees and charges from consent holders
	Administration	The community benefits from environmental protection gained through compliance		**Information requests that require more than ½ hour response time**: • 100% fees and charges **Administration:** • 100% general rates regional
	Develop and maintain a centralised contaminated sites database and assist with applications for funding remedial works	The wider community benefits from improvement to the environment. Landowners will benefit from remedial and clean-up work.		**Remedial works**: • 100% fees and charges where possible **All other contaminated sites work:** • 100% general rates regional
	Dairy inspections	Council work arises from activities undertaken by identifiable landholders		**Dairy inspections:** 100% targeted rate on each dairy activity

Activity	Description	Distribution of benefits and Exacerbator Considerations	When do benefits occur?	Current funding sources
Harbour Management	Promote navigation and safety in harbours and waterways.	Those using the harbour and waterways benefit directly, but it is not possible to identify them Note that QLDC administers its own bylaws under transfer of responsibility agreements	The benefits are immediate and ongoing	**Safety:** • 100% general rate sub-regional from Clutha, Dunedin, Waitaki and Central Otago districts
	Administer bylaws, the primary focus being safety on our waterways	The actions of individuals on our waterways may cause the need for enforcement of our bylaws		**Enforcement:** • 100% fees and charges from those causing the incident. • 100% general rates from Clutha, Dunedin, Waitaki and Central Otago for remaining costs
	Be ready to and respond to oil spills	Those creating the oil spill cause the need for this activity		**Responding to incidents:** • Grants from Maritime NZ • 100% general rates regional for remaining costs **Enforcement action:** • 100% fees and charges where possible, from those causing the incidents • 100% general rates regional for remaining costs

Activity	Description	Distribution of benefits and Exacerbator Considerations	When do benefits occur?	Current funding sources
Incident Response	Respond to pollution incidents and resource management complaints	The wider community benefits from clean up and protection.	The benefits are immediate, at the time of responding to the incident	**Responding to incidents:** • Grants from central government agencies as available • 100% general rates regional for remaining costs
	Undertake enforcement action as appropriate	The actions of those creating pollution incidents, breaching resource consent conditions etc., cause the need for this activity		**Enforcement action:** • 100% fees and charges where possible, from those causing the incidents • 100% general rates regional for remaining costs

GROUP ACTIVITY – ENVIRONMENT				
Significant Activity – Land and Water (including Coast)				
Activity	**Description**	**Distribution of benefits and Exacerbator Considerations**	**When do benefits occur?**	**Current funding sources**
Land and Water Planning and Strategy	Development, adoption, appeals, review and audit of ORC's Land and Water (including Coast) regional policies, plans, and strategies	The wider community benefits as these plans and strategies are developed to provide for the needs of the region as a whole No individual or group benefits directly from this activity	Benefits are ongoing over the life of the plans	**Plans, policies and strategies:** • 100% general rates regional
Land and Water Monitoring and Reporting	Monitor quality and quantity of surface and groundwater Monitor quality of coastal and estuarine water EMaR / LAWA Trend forecasting for future changes to our environment Social, economic and environmental effects of low flows	The wider community benefits from understanding the state of the Otago environment	The benefits are ongoing	**Monitoring and reporting:** • 100% general rates regional **EMaR / LAWA:** • Receipt of fees and grants from national office and other regional councils • 100% general rates regional for remaining costs

Activity	Description	Distribution of benefits and Exacerbator Considerations	When do benefits occur?	Current funding sources
Land and Water Implementation	Awareness of provisions and understanding of responsibilities through education and promotion	The activities / practices of farmers, forestry and other rural landholders are the main contributors to degraded rural water quality The wider community benefits from having good water quality	The benefits of improved water quality are ongoing	**Rural liaison and catchment groups:** • 75% targeted rate on all rural land use properties (all sizes), and lifestyle blocks 2 ha or greater • 25% general rates regional **All other awareness and education:** • 100% general rates regional
	Water quality remediation and improvement initiatives	Communities within each district benefit from work completed in their areas Activities of those in the local area are likely to have contributed to the degraded water quality		**All remediation and improvement activity:** • 100% targeted rates (from local river and waterway management rates for each district)
	Integrated catchment management	The wider community benefits from having good water quality		**Integrated catchment management:** • 100% general rates regional

Significant Activity – Air				
Activity	**Description**	**Distribution of benefits and Exacerbator Considerations**	**When do benefits occur?**	**Current funding sources**
Air Quality Monitoring and Reporting	Monitor and report on air quality in Otago	The wider community benefits from understanding the state of the Otago environment	The benefits are ongoing	**Monitoring and reporting:** • 100% general rates regional
Air Strategy Implementation	Promote and assist addressing air quality issues and improving air quality around the Otago region	The whole community benefits from clean air	The benefits of clean air are ongoing	**Localised air programmes:** • 100% targeted rate on local area **Regional air initiatives:** • 100% general rates regional
	Advancing the use of cleaner heating technologies through the provision of subsidies for the replacement of non-compliant burners in Air Zone 1 and Milton	There is benefit to those living in areas where clean heating appliances are being installed		**Clean heat, clean air:** • 100% targeted rates from Air Zone 1 and Milton

Significant Activity – Biodiversity and Biosecurity				
Activity	**Description**	**Distribution of benefits and Exacerbator Considerations**	**When do benefits occur?**	**Current funding sources**
Biodiversity Monitoring and Reporting	Monitor and report on biodiversity in Otago	The wider community benefits from understanding the state of the Otago environment	The benefits are ongoing	**Monitoring and reporting:** • 100% general rates regional
Biodiversity Strategy Implementation	Promote and support the protection of indigenous species and areas of biodiversity in Otago	All of Otago benefits from protecting indigenous species and areas of biodiversity and enhancing the region	The benefits are ongoing	**Biodiversity strategy implementation:** • 100% general rates regional
	Administer a regional sustainability and environmental enhancement fund on agreed projects	All of Otago benefits from protection areas of biodiversity and environmentally enhancing the region.	The benefits are ongoing	**ECO Fund:** • 100% reserves
	Promote and support the protection of areas of biodiversity in local communities	Local communities benefit from protecting and enhancing biodiversity in their area	The benefits are ongoing	**Predator Free Dunedin:** • 100% general rates sub regional
Wilding Trees	Actively support wilding conifer groups in Otago to control and reduce the spread of wilding conifers	All of Otago benefits from the control of wilding trees in Otago	The benefits of the work are immediate and ongoing when continued control is undertaken	**Supporting groups:** • 100% uniform targeted rates across the region
	Administer the funding from MPI for the control of wilding trees			**Administering MPI funding:** • 100% grant funding from MPI

Activity	Description	Distribution of benefits and Exacerbator Considerations	When do benefits occur?	Current funding sources
Pest Management Plan Implementation	Manage pest plants and animals through inspections, education and promotion of landowner led initiatives Undertaking control works for specified pests including rooks and wallabies	The wider community benefits from the control of pest plants and animals Rural landowners receive a higher benefit than urban landowners	The benefits are ongoing	**Pest management plan implementation:** • 100% targeted rates regional
	Undertake enforcement action as required	Landowner's inaction has resulted in the need to undertake the activity		**Enforcement:** • Where possible, 100% fees and charges, remaining costs from general rates
	Research and development for new biocontrol agents for pest control, monitoring and applying	All of Otago will benefit from new pest control tools	The benefits are ongoing	**Biocontrol of pests:** • 100% general rates regional
Pest Contracting	Undertake rabbit contract work for third parties	Landowners benefit directly from contract work undertaken on their private properties	The benefits are ongoing	**Pest contracting:** • 100% fees and charges

GROUP ACTIVITY – SAFETY AND RESILIENCE				
Significant Activity – Flood Protection and Drainage Schemes				
Activity	**Description**	**Distribution of benefits and Exacerbator Considerations**	**When do benefits occur?**	**Current funding sources**
Alexandra Flood Protection	Maintenance of flood protection scheme	Those living within the flood protection area receive a direct benefit Power generation has contributed to the need for having a flood protection scheme in this area	The benefits are ongoing	• 2% general rates from the Central Otago District • 98% fees and charges from dam owners
Leith Flood Protection	Construction and maintenance of the flood protection scheme	Those living within flood protection area receive a direct benefit The local community benefits from continued access to these areas There is a regional benefit where continued access to regional services, e.g. hospital and CBD etc.		• 5% general rates regional • 2% general rates Dunedin City • 46.5% targeted rates Indirect Benefit Zone • 46.5% targeted rates Direct Benefit Zone
Lower Clutha Flood and Drainage	Maintenance of flood protection scheme	Those living within the flood protection area receive a direct benefit The local community benefits from continued access to the area The wider community benefits from continued access to regional services		After receipt of rental income and contribution from Kuriwao reserve: • 4% general rates from the Clutha District • 12% general rates regional • 84% targeted rates on the scheme area
	Maintain the productive capability of land within each scheme area	The landowners within the drainage scheme area receive a private benefit The local community benefits from continued access to the area		After receipt of rental income and contribution from Kuriwao reserve: • 6% general rate Clutha District • 94% targeted rates

Activity	**Description**	**Distribution of benefits and Exacerbator Considerations**	**When do benefits occur?**	**Current funding sources**
West & East Taieri Drainage	Maintain the productive capability of land within each scheme area	Landowners within the drainage scheme area receive a private benefit	The benefits are ongoing	After receipt of rental income: • 8% general rate Dunedin • 92% targeted rates

		The local community benefits from continued access to the area		
Tokomairiro Drainage	Maintain the productive capability of land within each scheme area	Landowners within the scheme area receive a private benefit		• 100% targeted rates
Lower Taieri Flood	Maintenance of the flood protection scheme	Landowners within the scheme on area receive a direct benefit The local community benefits from continued access to the area The wider community benefits from continued access to regional services, e.g. airport		After receipt of rental income: • 4% general rates regional • 13% general rates Dunedin City • 83% targeted rates on scheme area
Shotover Delta	Construction of the flood protection scheme	Landowners within the scheme on area receive a direct benefit The wider community benefits from continued access to regional services, e.g. airport		• 2% general rates regional • 98% targeted rate on scheme area
Scheme Oversight and Bylaws	General management and planning for all schemes including regional infrastructure strategy and designations	Benefits arise to each scheme and therefore indirectly to the landowners and communities who benefit from each scheme		**Scheme oversight:** • 100% internal allocation to flood and drainage schemes
	Processing applications for works under bylaws	Those applying to do works are the primary beneficiary		• **Bylaw processing:** 100% fees & charges

Significant Activity – Rivers and Waterway Management				
Activity	**Description**	**Distribution of benefits and Exacerbator Considerations**	**When do benefits occur?**	**Current funding sources**
River Management: • **Central Otago** • **Clutha** • **Dunedin** • **Waitaki** • **Wakatipu** • **Wanaka**	Routine monitoring and maintenance to ensure adequate fairway width, enhancement work to improve access etc Monitor stability and alignment of rivers, through river cross section surveys, gravel surveys etc	Communities within each district benefit from work completed in their areas	The benefits are ongoing	• 100% targeted rates (district river and waterway management rates – Queenstown Lakes District has two rating areas, Wanaka and Wakatipu)
	Contribute to cost of river erosion work on private properties where wider benefit generated	Landholders benefit from work done on properties. Some benefit to wider community		• 100% general rates regional. Maximum contribution in place of $25,000 per landowner within a 5-year period
	Monitor and inspect effects of Contact Energy consent	Contact Energy consenting activities cause need for monitoring the effects of the consent		• 100% fees and charges from Contact Energy in accordance with consent conditions • Remainder general rates regional
Lower Waitaki River Scheme	Contribute funding to river management works undertaken by Environment Canterbury	Local community benefits from work undertaken by ECan on the Lower Waitaki River The wider community benefits from continued access to regional services, e.g. roads		• 10% general rates regional • 90% targeted rates on the scheme
Non Scheme Waterways	Investigating /maintain where appropriate, assets not belonging to flood and drainage schemes around the region – minor works	Communities within each district benefit from work completed in their areas		• 100% general rates regional

Significant Activity – Emergency Management				
Activity	**Description**	**Distribution of benefits and Exacerbator Considerations**	**When do benefits occur?**	**Current funding sources**
Emergency Management	Administer the Otago Civil Defence Emergency Management Group	The whole community benefits from Council's readiness to deal with a Civil Defence emergency If an event occurs, those affected will benefit directly from any assistance provided	The benefits are immediate at the time of an event occurring	**Readiness** • 100% uniform targeted rates **Response:** • For costs occurred in dealing with an event, recovery will be considered on a case-by-case basis
Significant Activity – Natural Hazards and Climate Change				
Natural Hazards	Investigate and provide information on the potential impacts of natural hazards and their mitigation	Investigations of identifying and understanding hazards benefits the wider community Investigation works for specific districts such as flood risk strategies will directly benefit those districts	The benefits are ongoing	**Studies for districts:** • 100% general rates sub regional **All other work:** • 100% general rates regional
	Purchase of LiDAR information to assist assessment of hazards	Whole community benefits from investigations of natural hazards		**LiDAR:** - 100% reserves
Low Flow and Flood Risk Management	Respond to flood events, issue flood warnings and take action to reduce effects of flooding	The whole community benefits from Council's readiness to respond to high and low flow situations	The benefits are at the time of the event	**Flood risk management:** - 100% general rates regional
	Provide information on actual and expected rainfall, river flows and lake levels for low flow situations			**Low flow management:** • 100% general rates regional
Climate Change Adaptation	Provide understanding of the effects of climate change to enable communities to make informed decisions about being prepared and adapting to those effects	The whole community benefits from being informed about the effects of climate change Investigation works for specific districts will directly benefit those districts	The benefits are ongoing	**South Dunedin Future:** • 100% general rate Dunedin City **Shoreline retreat Clutha Delta:** • 100% Kuriwao Reserve **Climate change other:** • 100% general rates regional

GROUP ACTIVITY – TRANSPORT				
Significant Activity – Transport				
Activity	**Description**	**Distribution of benefits and Exacerbator Considerations**	**When do benefits occur?**	**Current funding sources**
Public Passenger Transport	Provide public passenger transport services in Dunedin and Queenstown, including associated infrastructure	Those living in the areas where transport services are provided receive a direct benefit	The benefits are immediate and ongoing	**Public passenger transport services:** Receipt of fares and NZTA grants. • Remaining costs: 100% targeted rates in areas where services are provided
	Public transport planning	Those living in the areas where transport services are provided receive a direct benefit		**Planning:** • 100% targeted rates in areas where services are provided
	Administer the Total Mobility Scheme	Total mobility users benefit from this; however the scheme is to provide more affordable transport for those who cannot use public transport because of a disability		**Total mobility:** • 100% general rates regional
	Functions of regional councils in relation to registration of commercial public transport services as per part 5 of the Land Transport Management Act 2003	Service providers benefit from being able to legally operate Wider community benefits from information held		**Registering services:** - 50% fees and charges from service providers - 50% general rates regional

Group Activity	Description	Distribution of benefits and Exacerbator Considerations	When do benefits occur?	Current funding sources
Stock Truck Effluent Disposal	Investigation and planning of a regional stock truck effluent disposal network	The wider community benefits from ensuring a region wide network is planned Those living in areas where new sites are proposed benefit from the planning and installation of those sites	The benefits are immediate and ongoing	**Planning and investigation, regional network:** • 100% general rates regional **Planning and investigation, districts:** • 100% general rates sub regional
	Maintain stock truck effluent disposal sites in Central Otago	The Central Otago district benefits from this work		**Maintenance:** 100% general rates on Central Otago District

General rates are charged on a capital value basis.
General rates regional are charged on a differential basis based on where a property is situated, i.e., which district or city it is located in.

Finance Policy

Financing the Purchase of Fixed Assets (Excluding Infrastructural Assets)

Council finances its purchases of fixed assets from its Asset Replacement Reserve. Such assets include motor vehicles, plant and equipment and computers.

Depreciation on Council fixed assets is funded and this income is placed in the Asset Replacement Reserve, along with any proceeds from the sale of assets. This reserve also attracts interest income on the balance of the reserve. This reserve is used for the purpose of financing the purchase of fixed assets.

Financing Capital Expenditure on Infrastructural Assets

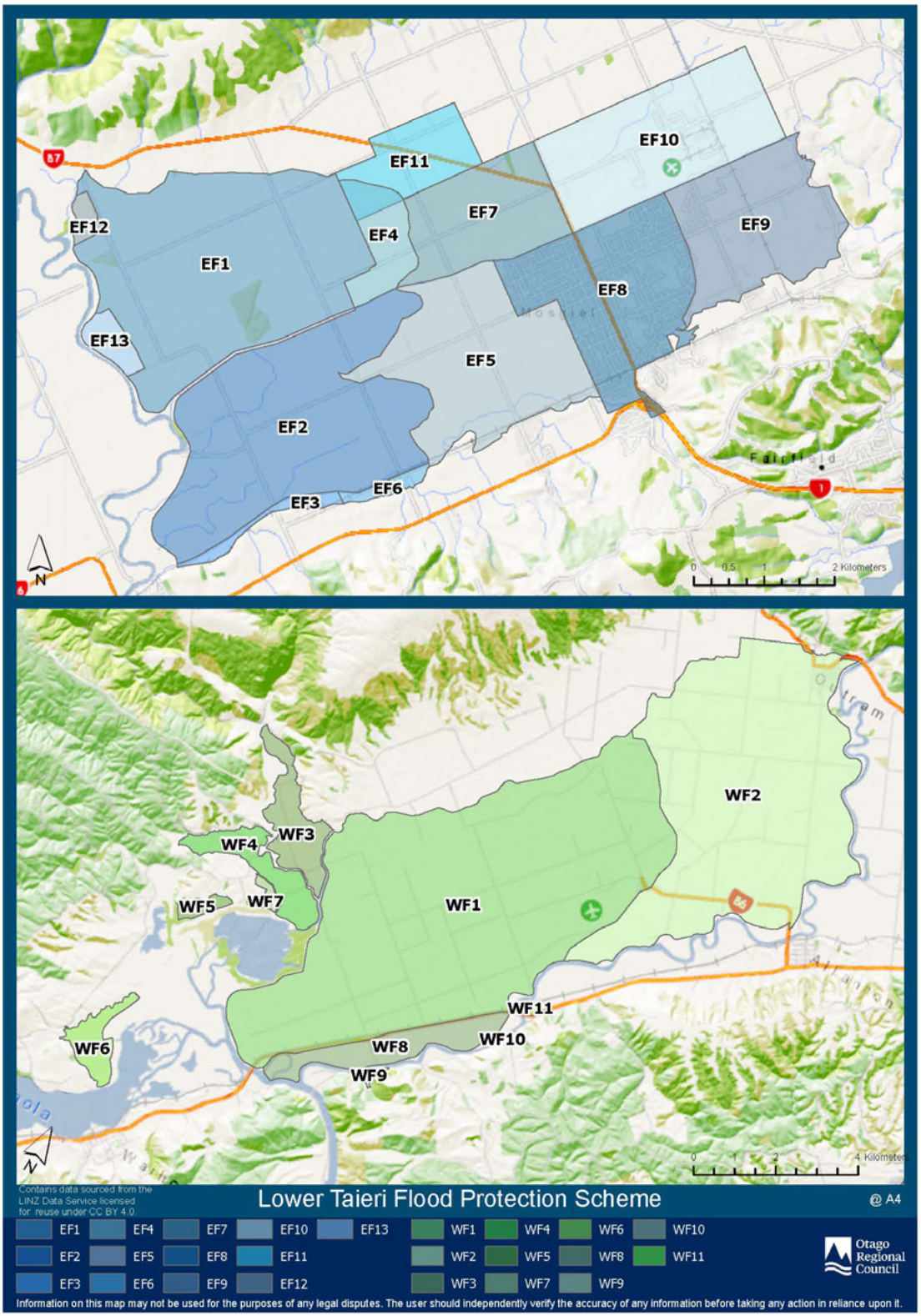
Most infrastructural assets (such as floodbanks, pumping stations and drains) are assigned to specific special rating districts. Ratepayers within these districts fund the depreciation on these assets. Each special rating district has a "Funded Depreciation Reserve" set up which represents the balance of the amount of depreciation revenue rates for, and any interest earned on reserve balances. The purpose of this reserve is the funding of capital expenditure and the cost of renewals on the infrastructural assets being depreciated.

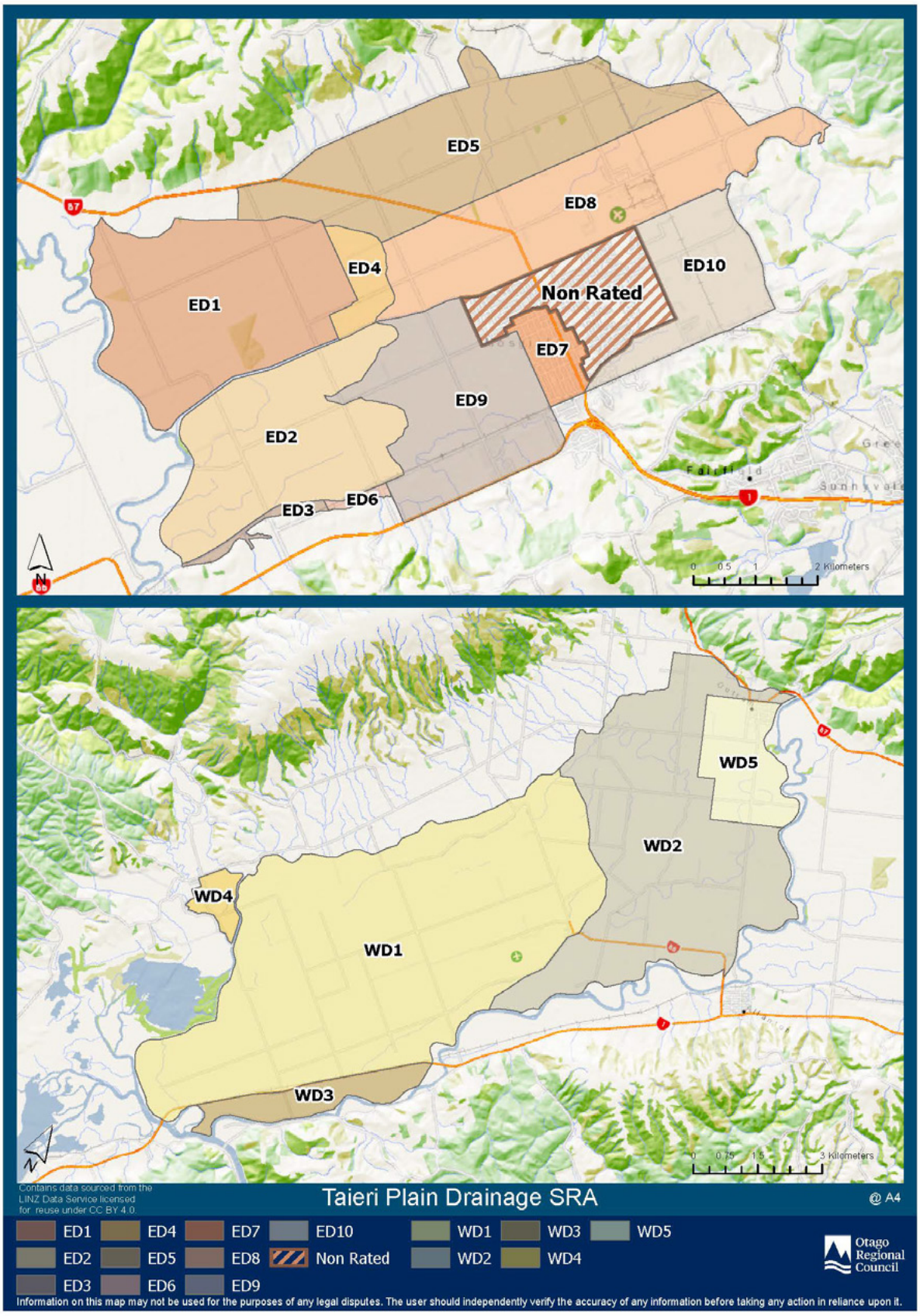
It is Council's policy that infrastructural assets be financed by the "Funded Depreciation Reserves", and if there are insufficient funds available in these reserves, borrowing (either internal or external) will be used.

Financing Major Projects

Tools to fund major capital projects will be considered on a case-by-case basis. Where necessary or appropriate, Council may borrow either internally or externally to fund a major project. Such projects (including the repayment of any associated borrowing) may be funded by any of the funding tools available to Council such as rating, dividend income, reserves, fees and charges and cash balances held by Council. In determining the appropriate funding tools, consideration will be given to matters such as the benefits arising from the project, the project costs, and the impacts and consequences of the project.

The following maps shows the geographic incidence of targeted rating




ED5
ED8
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Non Rated
ED1
ED7
ED9
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ED3
ED6
0 0.5 1 2 Kilometers
WD5
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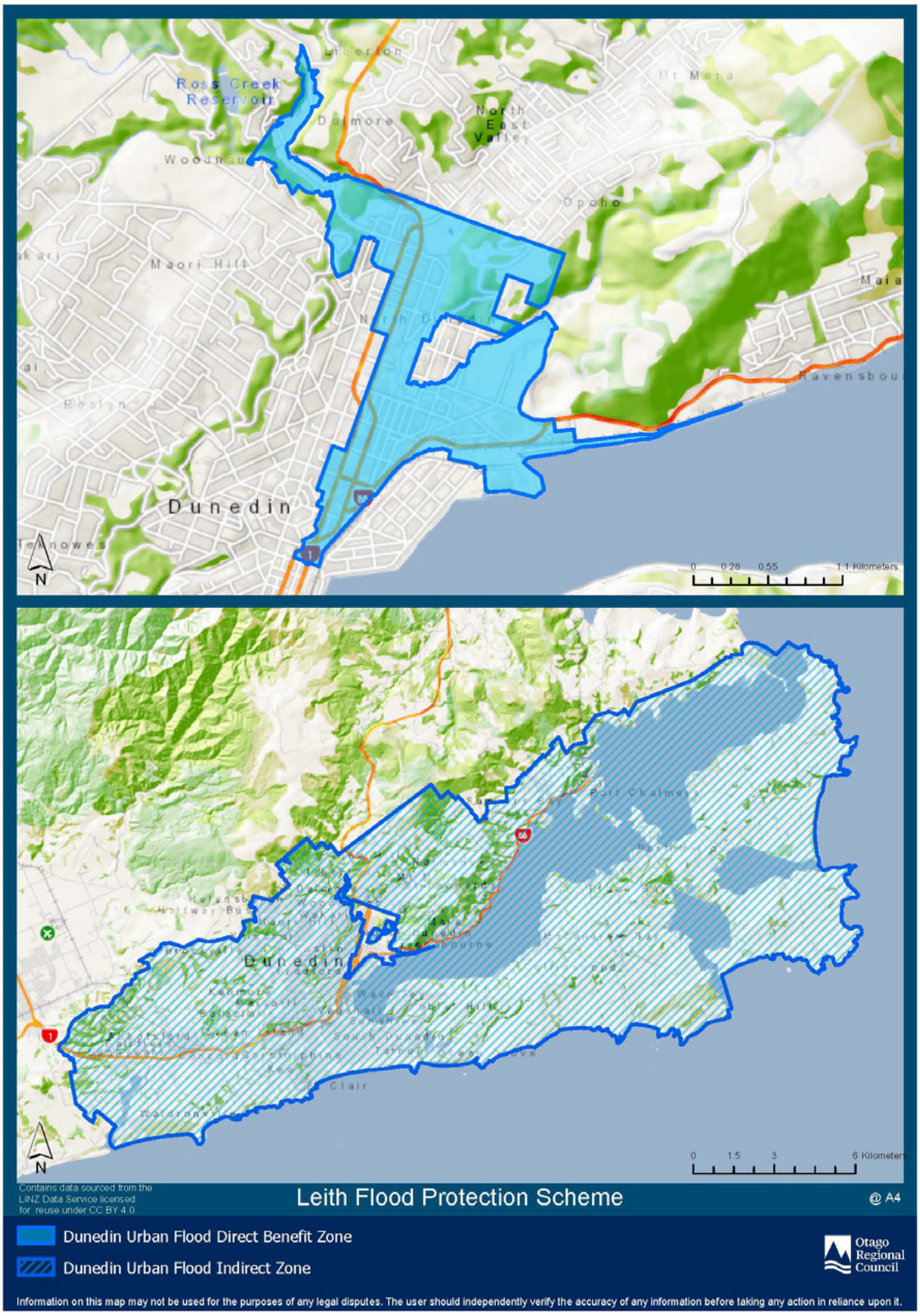
WD4
WD1
WD3
0 0.75 1.5 3 Kilometers
Contains data sourced from the LINZ Data Service licensed for reuse under CC BY 4.0.
Taieri Plain Drainage SRA
@ A4
ED1 ED4 ED7 ED10 WD1 WD3 WD5
ED2 ED5 ED8 Non Rated WD2 WD4
ED3 ED6 ED9
Otago Regional Council
Information on this map may not be used for the purposes of any legal disputes. The user should independently verify the accuracy of any information before taking any action in reliance upon it.


Ross Creek Reservoir
Liberton
Mt Mera
North East Valley
Opoho
Maori Hill
Dunedin
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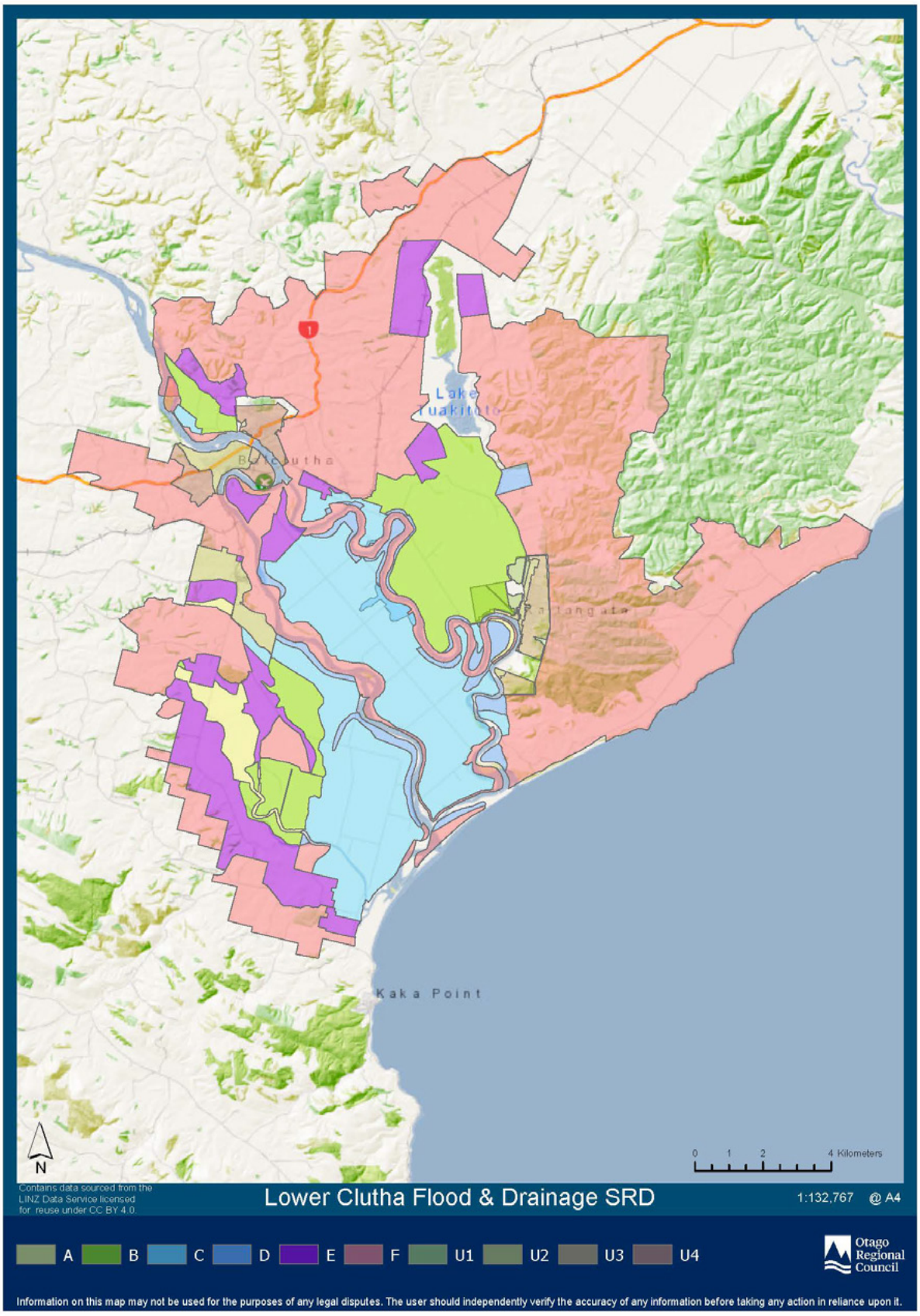
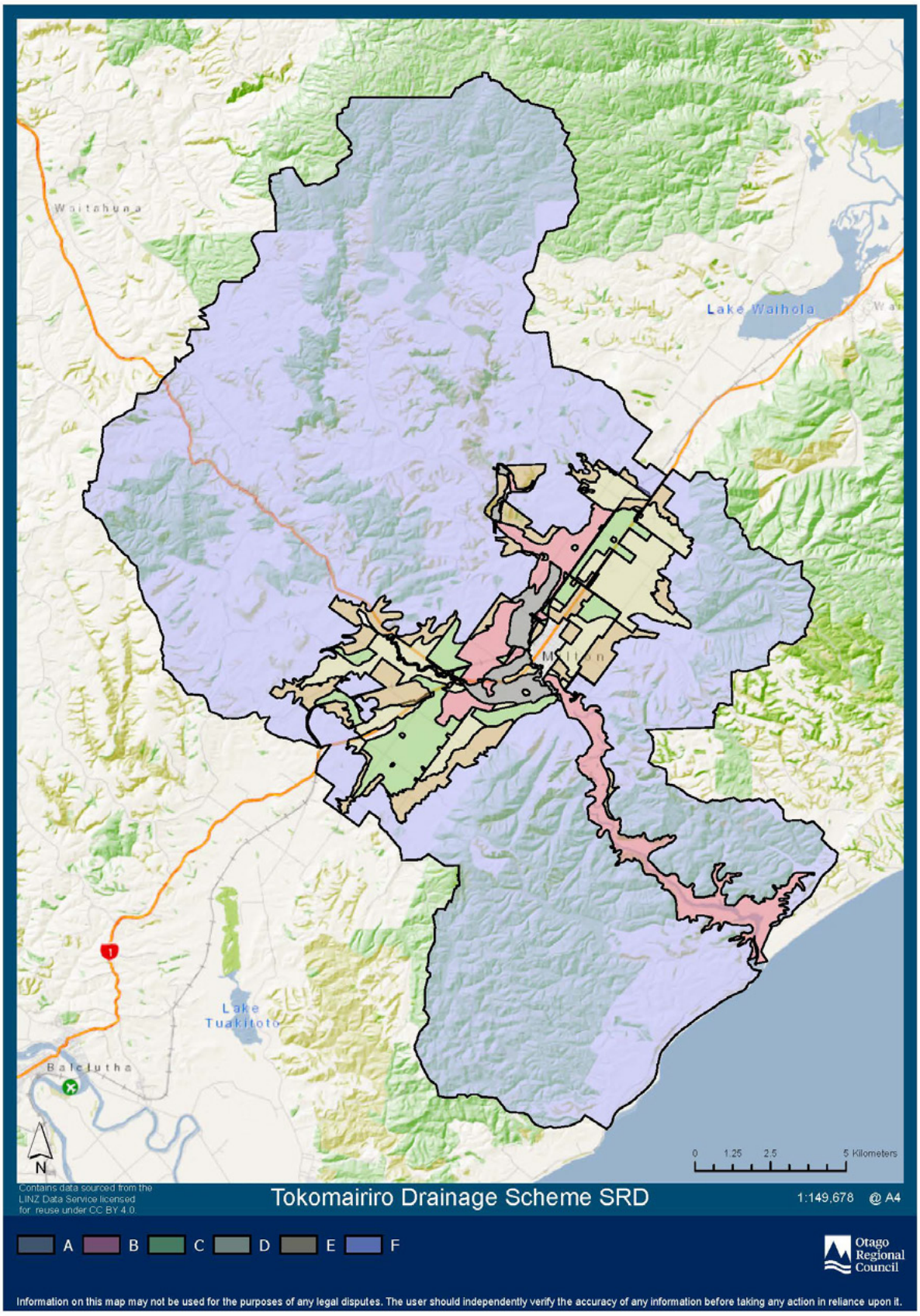
Port Chalmers
Dunedin
Kensington
Waverley
South Dunedin
St Clair
N
0 1.5 3 6 Kilometers
Contains data sourced from the LINZ Data Service licensed for reuse under CC BY 4.0.
Leith Flood Protection Scheme
@ A4
Dunedin Urban Flood Direct Benefit Zone
Dunedin Urban Flood Indirect Zone
Otago Regional Council
Information on this map may not be used for the purposes of any legal disputes. The user should independently verify the accuracy of any information before taking any action in reliance upon it.


Lake Tuakitoto
Kaka Point
N
0 1 2 4 Kilometers
Contains data sourced from the LINZ Data Service licensed for reuse under CC BY 4.0.
Lower Clutha Flood & Drainage SRD
1:132,767 @ A4
A B C D E F U1 U2 U3 U4
Otago Regional Council
Information on this map may not be used for the purposes of any legal disputes. The user should independently verify the accuracy of any information before taking any action in reliance upon it.


Waitahuna
Lake Waihola
Lake Tuakitoto
Balclutha
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0 1.25 2.5 5 Kilometers
Contains data sourced from the LINZ Data Service licensed for reuse under CC BY 4.0.
Tokomairiro Drainage Scheme SRD
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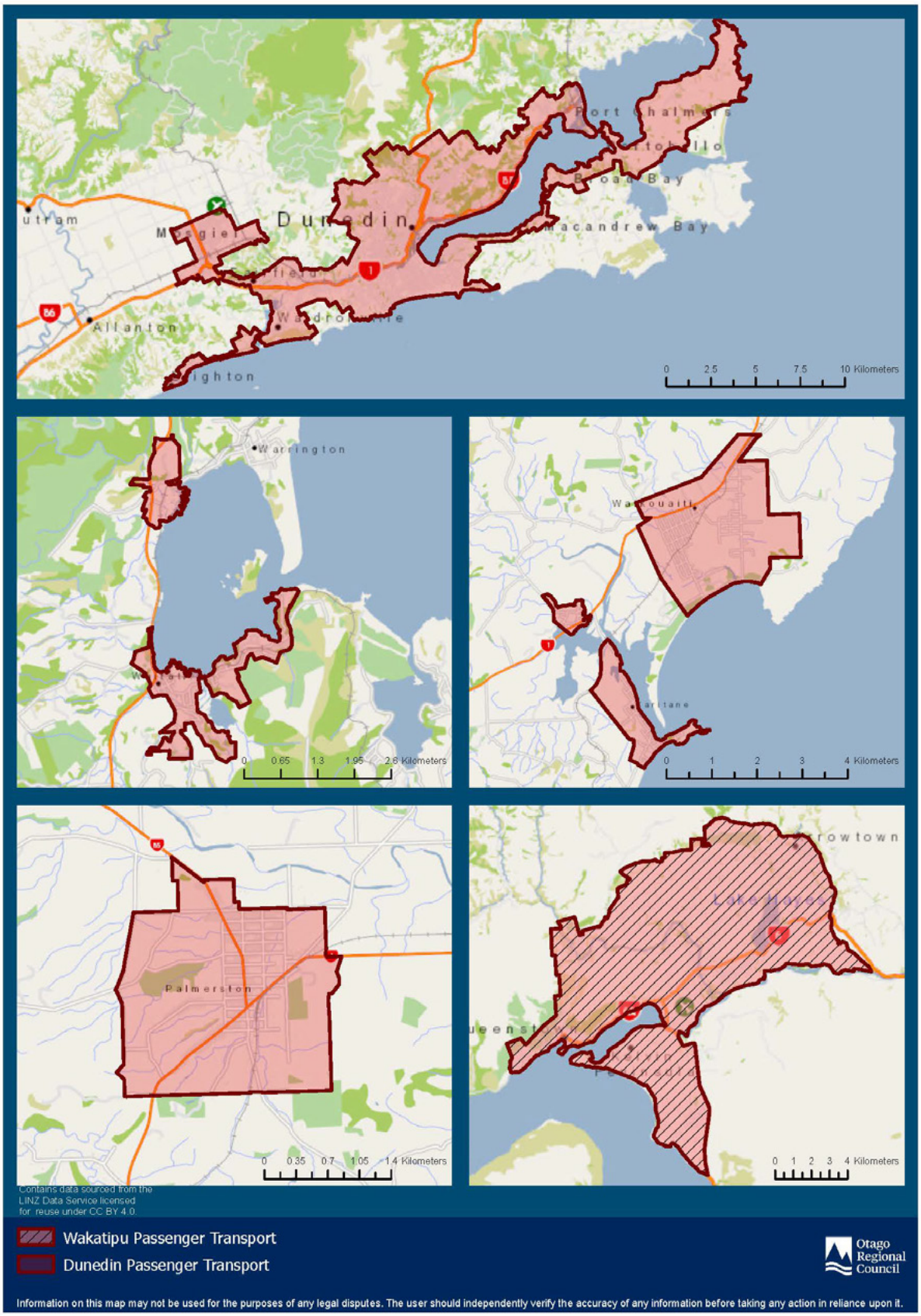
Otago Regional Council
Information on this map may not be used for the purposes of any legal disputes. The user should independently verify the accuracy of any information before taking any action in reliance upon it.


Dunedin
Port Chalmers
Broad Bay
Macandrew Bay
Allanton
0 2.5 5 7.5 10 Kilometers
Warrington
0 0.65 1.3 1.95 2.6 Kilometers
0 1 2 3 4 Kilometers
Palmerston
0 0.35 0.7 1.05 1.4 Kilometers
Lake Hayes
0 1 2 3 4 Kilometers
Contains data sourced from the LINZ Data Service licensed for reuse under CC BY 4.0.
Wakatipu Passenger Transport
Dunedin Passenger Transport
Otago Regional Council
Information on this map may not be used for the purposes of any legal disputes. The user should independently verify the accuracy of any information before taking any action in reliance upon it.

Summary Significance and Engagement Policy

The current and full Policy is available on ORC's website. The completion of a review of this policy is planned for the end of 2021. At the appropriate time an updated version will be posted on the ORC website.

This policy provides guidelines for determining the significance of proposals and decisions in relation to issues, assets or other matters affecting the Otago region, people likely to be affected and Council's capability to perform.

It sets out how Council may engage the Otago community in its decision-making processes and what types of decisions may be involved.

The policy also sets out those assets considered by Council to be strategic assets.

Significance

Assessing significance is essentially a matter of judgement. Council will consider each issue, proposal, decision, or matter, to determine the degree of significance attached to it. The degree of significance will influence our approach to decision-making. As the level of significance increases, the degree of community engagement carried out will also increase.

Degree of significance

When determining the degree of significance, Council will consider:

- the extent of any consequences or impacts on Otago residents and ratepayers, or stakeholders, including the consequences for, or impacts on, future generations. A moderate impact on a large number of residents or ratepayers, and a major impact on a small number of residents or ratepayers, will have higher degrees of significance than when there is a minor impact on any number of residents or ratepayers
- the level of public interest likely to be generated within the region or New Zealand generally
- any likely effect on the ability of Council to perform its role, carry out its existing activities and meet statutory timeframes
- any financial and other costs or implications;
- the impacts on people's ability to use property or essential services
- if the issue, proposal, decision or other matter involves a strategic asset

The level of community engagement and whether any impacts and consequences are of such a degree of importance as to require consultation on the issue, proposal, decision or other matter is a matter or judgement. The assessment will be documented, with reasons for conclusions reached.

To determine whether an issue, proposal, decision or other matter is significant based on its monetary value, its cost should be compared against an appropriate base amount.

The proportion of the community likely to be financially affected by the issue, proposal, decision or other matter will also be considered.

Issues, proposals, decisions or other matters that are part of the normal day to day council operations will not require formal consideration for significance.

Matters that are in Council's Long-term Plan and/or Annual Plan and other policies and plans that have been consulted on as a requirement of legislation, will not usually need further consideration under this policy.

Consultation will be required for any issue, proposal, decision, or matter that is determined to be significant.

Engagement

Engagement through this policy is about how Council will interact with the Otago community, interest groups, and its ratepayers, as part of its decision-making processes and how Council will respond to the community's preferences on issues.

Not all decisions will necessarily require specific engagement. As the level of significance of a decision increases, the degree of community engagement carried out will also increase.

Some engagement is carried out to provide information to the community, including about what Council is doing, and some to get feedback from the community on its preferences in relation to issues. This policy is in respect of the engagement carried out to seek community preferences.

The sorts of tools Council may use to engage with its community include:

- undertaking surveys
- using social media
- meeting with individuals, focus groups, and key stakeholders
- holding public meetings
- undertaking consultation

Consultation is just one tool of engagement. Both the Local Government Act and the Resource Management Act have provisions around consultation.

When choosing which engagement tool to use, the circumstances of the matter will be considered, including:

- who is being affected by the matter, i.e. is it a small, focused group, or region wide and how are they being impacted
- what information does Council already hold on community preferences in relation to the matter
- what is the level of significance of the matter and the level of urgency in making a decision on it

In all cases where engagement has been carried out as part of Council's decision-making processes, community preferences will be considered prior to any decision being made. Reports to Council and Committees prepared by staff will provide details of any engagement carried out including the preferences of the community on the matter being decided.

Consultation with Māori

Council has in place a "Memorandum of Understanding and Protocol between Otago Regional Council, Te Rūnanga o Ngāi Tahu and Kāi Tahu ki Otago for effective consultation and liaison". The memorandum and protocol were first established in 2001 and are reviewed and updated as appropriate.

Council has statutory responsibilities to consult with iwi and Māori on relevant management issues in the region and to consider the principles of the Treaty of Waitangi. These obligations are primarily under the Resource Management Act 1991, the Ngāi Tahu Claims Settlement Act 1998, the Ngāi Tahu Claims Settlement (Resource Management Consent Notification) Regulations 1999, the Biosecurity Act 1993 and the Local Government Act 2002.

Strategic Assets

The assets that Council holds and considers to be strategic are:

- Council shares held in Port Otago Limited
- flood protection and drainage schemes

The flood protection and drainage schemes, managed as a whole, are strategic. However, not all trading decisions made about these assets are regarded as significant, nor do they affect the asset's strategic nature. For example, the Lower Taieri Flood Protection Scheme is strategic, but some bridges within the scheme area may not be and the purchase or sale of such bridges may not amount to a significant decision.

Acquiring or disposing of a component of a strategic asset will not trigger this provision, unless it is considered that the component is an integral part of the strategic asset and that acquiring or disposing of it would substantially affect the operation of the asset.

Otago Regional Council