

REPORTS

SOUTH DUNEDIN FUTURE - 3 PROPOSED ADAPTATION FUTURES

Department: Climate and City Growth

EXECUTIVE SUMMARY

- 1 The purpose of this paper is to provide an outline and update on the South Dunedin Future (SDF) programme, present the latest technical reports relating to the three Proposed Adaptation Futures for South Dunedin, and seek approval of Councils to engage with affected communities and other stakeholders. At this stage, Councils have committed to completing the SDF programme only, with any future decisions on land use, infrastructure, and implementation subject to further consideration by Councils through long-term planning and financial processes.
- 2 The SDF programme is a joint initiative between the Dunedin City Council (DCC) and Otago Regional Council (ORC) to develop a climate change adaptation masterplan for South Dunedin. The Council-approved programme strategy is guided by the vision of “a safer and better South Dunedin, where sustainable urban regeneration leads to improved community resilience and wellbeing”. The SDF programme is on schedule to deliver the final climate adaptation masterplan in the first half of 2027 and to transition to implementation from 1 July 2027.
- 3 Creating a safer and better future for South Dunedin will require balancing a range of trade-offs, including choices about the scale and rate of change, the affordability of different options, and the level of ongoing risk that may be considered acceptable now and in the future. The SDF programme was designed as a vehicle for facilitating related analysis, discussions, and decisions.
- 4 Building on previous work and community feedback, the current stage of the SDF programme has undertaken further technical and economic analysis to develop a shortlist of three Proposed Adaptation Futures for South Dunedin. These include:
 - Future 3 – Protect (Keep the land dry – raise land and pump water)
 - Future 4 – Restore (Make space for water – waterways and wetlands)
 - Future 5 – Reshape (Move out of harm’s way – raised land and green spaces)
- 5 Each future outlines a potential approach and proposed set of actions that could be taken over time to reduce flood risk and adapt South Dunedin to the anticipated impacts of climate change. The futures also illustrate the likely consequences of inaction. Findings are presented across four technical reports: on stormwater, groundwater, and economics, and an overview report describing the three proposed adaptation futures.
- 6 Encouragingly, this work indicates that it is technically feasible to significantly reduce flood risk in South Dunedin over the next 50–100 years, despite the anticipated increase in climate-related hazards. However, achieving this would require extensive and ongoing investment, disruption, and change over that period (and likely beyond). Reducing flood risk would involve a mix of new and upgraded infrastructure, land raising and redevelopment, and the creation of parks,

wetlands, and waterways in some areas of South Dunedin. Implementing these public works would require councils to change planning rules and acquire private property in some areas.

- 7 The futures combine different adaptation actions across the short term (2025–2050), medium term (2050–2075), and long term (2075–2125). The futures are broadly similar in the short term, focusing on investment in stormwater and groundwater infrastructure and preparing for potential land-use change through planning measures and property acquisition. In the medium term, more substantive changes would be introduced, including land raising, new development patterns, and the creation of parks, wetlands, and waterways, alongside coastal protection and continued infrastructure upgrades. In the long term, major capital works would taper off, while new housing in lower-risk areas would provide additional development capacity.
- 8 The proposed actions and changes outlined in the three futures are significant, reflecting the scale and nature of the challenges facing South Dunedin. It is therefore important that councillors and the community consider these proposals in their wider context, including the expected benefits of being proactive and taking decisive action, as well as the likely consequences of delay and inaction. While there is acknowledged community frustration regarding the perceived lack of action on flooding since 2015, it has taken time to build a comprehensive understanding of the underlying problems and to identify workable long-term solutions. This analysis confirms there are no quick or simple fixes and that system-scale responses are required.
- 9 The economic assessment shows that maintaining the status quo in South Dunedin has an estimated cost of \$1.45 billion in net present value (NPV) over a 100-year period and likely more than \$2 billion once wider factors are considered. All three proposed futures deliver significantly better outcomes, with costs ranging from \$1.63 billion to \$2.45 billion NPV over a 100-year period. Net costs range from approximately \$280 million to \$1.112 billion NPV, reflecting the benefits of adaptation action, including avoiding anticipated flood damages and associated disruption over time. While the futures all involve substantial upfront costs, benefits grow over time, and the anticipated costs of inaction are even higher. The cost of implementing the cheapest future (Future 4) is roughly 8 per cent of DCC’s annual capital budget of around \$200 million, noting South Dunedin comprises around 10 per cent of the city’s population.
- 10 Achieving meaningful flood-risk reduction in South Dunedin over the next 50–100 years will require system-wide interventions and consequential intergenerational decisions. The scale and duration of investment needed may commit future generations to specific adaptation pathways, long-lived infrastructure, and escalating operating costs. Even with decisive action, residual risks associated with sea-level rise and climate change will persist. Decisions made today will therefore shape not only near-term outcomes, but also the choices, obligations, and risks inherited by future communities.
- 11 Subject to approval by Councils, the next step in the SDF programme is to engage with affected communities and other stakeholders on the proposed futures. Feedback will inform further technical and economic analysis to identify a single preferred future and finalise a climate adaptation masterplan for South Dunedin. However, technical work is now sufficiently advanced for implementation of ‘no and low regrets’ actions to proceed in parallel to this final stage. This includes DCC continuing delivery of the three stormwater projects already approved by Council, alongside consideration of 10 new initiatives recommended over the next 25 years that are common across all three futures, which could be implemented regardless of which future is eventually selected as preferred. Work to scope, phase, and cost these initiatives could begin immediately, with funding and approval considered through the Long Term Plan (2027–37) process, potentially enabling implementation to commence from 1 July 2027.

RECOMMENDATIONS

That the Council:

South Dunedin Future Technical Reports

- a) **Notes** the background of the South Dunedin Future programme, including the Council-approved programme plan and strategy, and the work undertaken since the previous report to Council in September 2025.
- b) **Notes** the contents of the attached South Dunedin Future technical reports, including:
 - i) *Three proposed adaptation futures for South Dunedin*, which provides an overview of the futures including the key features, actions, and associated costs and benefits;
 - ii) *South Dunedin Stormwater Modelling Report*, which describes technical assessments of feasibility of a range of potential stormwater-related interventions intended to mitigate flood and other risks affecting South Dunedin;
 - iii) *South Dunedin Groundwater Modelling Report*, which describes early-stage technical assessments to determine the feasibility of groundwater drainage systems aimed at managing risks from shallow and rising groundwater across South Dunedin; and
 - iv) *Economic Assessment of the three proposed adaptation futures for South Dunedin*, which evaluates the economic performance of each of the futures against a status quo scenario.
- c) **Notes** these four reports have undergone external technical peer review, and where technical issues remain outstanding, these are acknowledged in the reports or will be addressed in subsequent stages of the SDF programme.
- d) **Notes** that additional reports have also been completed on the health and equity implications of the three proposed adaptation futures, the potential property implications of various adaptation actions, and on initial due diligence on potential future development in Ocean Beach Domain. Summaries of these reports are included in this paper and the full reports will be available on the South Dunedin Future webpage.
- e) **Endorses** the attached South Dunedin Future technical reports for the purposes of community engagement, noting any future decisions on land use, infrastructure, and project implementation would be subject to further consideration by Councils through long-term planning and financial processes.

Community Engagement

- f) **Approves** progressing to the next step of the SDF programme, which involves staff engaging with partners, stakeholders and affected communities to seek feedback on the three proposed adaptation futures for South Dunedin and a status quo option.

- g) **Notes** the proposed communications and engagement activities, including range of media and public communications, and mix of public and targeted stakeholder engagements planned for early-July to mid-August 2026.

Final stage of the SDF programme

- h) **Notes** that following completion of community engagement in August 2026, feedback will be analysed, and key findings reported to Councils in September 2026.
- i) **Notes** that community feedback will also inform a multi-criteria assessment of the three proposed adaptation futures against a decision-making framework previously approved by Councils, and that results of this assessment will be reported to Councils in September 2026.
- j) **Notes** the final stage of the SDF programme will involve identifying a preferred adaptation future as the basis for finalising a climate adaptation masterplan for South Dunedin for Councils' consideration and approval by 30 June 2027.
- k) **Notes** staff will seek to align the final stage of the SDF programme with Council's Long-Term Plan (2027-36), Infrastructure Strategy, and Water Services Strategy processes, to promote coherence and support efficient transition to implementation of the masterplan and related activities from 1 July 2027.

Other Options

- l) **Notes** other options explored in this paper, which include:
 - i) One or both Councils requesting further technical, economic, or other work on the climate and natural hazard-related risks affecting South Dunedin and potential responses, including those outlined in the proposed adaptation futures, before seeking approval of Councils to undertake planned engagement with partners, stakeholders, and affected communities; and
 - ii) One or both Councils directing an alternative course of action from those described in previous options above.

BACKGROUND

- 12 The South Dunedin Future (SDF) programme is a joint initiative between the Dunedin City Council (DCC) and Otago Regional Council (ORC) to develop a climate change adaptation masterplan for South Dunedin. A programme plan, which outlined the high-level approach for delivering the SDF programme was approved by DCC and ORC Council Committees in July 2022 (refer Part A Item 9, Planning & Environment Committee, 6 July 2022).
- 13 The SDF programme vision is *"a safer and better South Dunedin, where sustainable urban regeneration leads to improved community resilience and wellbeing"*. The purpose of the programme is to enable South Dunedin to prepare for, and adapt to, the impacts of climate change, while also realising the opportunities that come with change. A programme strategy was approved by Councils in November 2023, which focusses on just transition, community safety, environmental and cultural restoration, social and economic resilience, and sustainable urban development (refer Item 10, DCC Council Meeting, 28 November 2023).

- 14 The SDF programme has been broken into five phases, five workstreams, and a number of programme actions. The workstreams include: (i) natural hazards; (ii) strategy and programme management; (iii) communications and community engagement; (iv) risk assessment; and (v) adaptation planning. This breakdown has been explained more fully in previous Council papers and workshops, but is also illustrated in the A3 SDF Programme Overview (Attachment A).

External technical assistance

- 15 The multidisciplinary nature of climate adaptation often requires specialised technical skills and experience, which may need to be sourced externally, where the capability or capacity is not available internally. External technical assistance has been used to support delivery of the SDF programme. In July 2023, following an open tender process, DCC contracted a consultant group comprising engineering, planning, and environmental services firms WSP, BECA and Tonkin & Taylor (collectively known as 'Kia Rōpine'), to support delivery of the SDF programme over the three years (2023/24 to 2025/26). The total value of this contract is presently \$2.622 million.
- 16 In August 2023, DCC also contracted a second consultant group comprising engineering, planning and environmental services firms Jacobs New Zealand Ltd, Royal HaskoningDHV and Bell Adapt Ltd, to undertake technical peer review of the risk assessment and adaptation planning workstreams. The total value of this contract is presently \$222,114.
- 17 External technical assistance has also been sourced to provide specialist advice on specific topics such as natural hazard assessment (ESNZ, \$29,050), property analysis and market implications (PWC, \$100,000), health and equity assessments (University of Otago, \$42,134), physical site assessments (Stantec, \$28,972), and mana whenua partnership (Aukaha, \$69,560).

SDF programme timeline and key activities

- 18 The following paras provide a summary of the SDF programme timeline and key activities undertaken to get to the current stage:
- a) Identifying risks and possible responses (2023/24)
Using existing natural hazard, asset, and place-based information, an initial risk-screening process was undertaken to identify areas of exposure, vulnerability, and potential risk in South Dunedin requiring further analysis. In parallel, best-practice approaches from comparable international programmes, alongside ideas generated through community and stakeholder engagement, were used to develop an initial list of 16 generic adaptation approaches. Reports on risk identification and these generic approaches were presented to Councils in December 2023 and consulted on in early 2024, with feedback informing subsequent stages of the programme.
 - b) Risk assessment and development of Potential Adaptation Futures (2024/25)
A detailed risk assessment was then undertaken to identify, classify, and prioritise risks across South Dunedin by assessing hazard exposure, vulnerability, likelihood, and consequences. Responding to this assessment, seven Potential Adaptation Futures were developed, each representing a distinct way of managing and mitigating the identified risks, and outlining the associated characteristics, costs, benefits, and trade-offs. Reports on the risk assessment and seven Futures were presented to Councils in March 2025, consulted on in April–May 2025, and feedback was reported back to Councils in July 2025 and used to inform further analysis.
 - c) Shortlisting from seven to three Futures (2025)

In mid-2025, a multi-criteria assessment (MCA) was undertaken to shortlist the seven Futures to three, which would then undergo further development. This process involved technical and economic assessments by Council staff, Aukaha, and consultant specialists, drawing on community feedback and applying the programme strategy and decision-making framework previously approved by Councils. The MCA findings, together with additional contextual considerations, informed the shortlisting of Futures 3, 4 and 5, which was reported to Councils in September 2025. Positive community feedback about short-term infrastructure investment in Future 2 was also accommodated by integrating this as design principle for the three shortlisted futures.

d) Developing the three Proposed Adaptation Futures (2025/26)

The current phase of the SDF programme has focused on further technical and economic analysis to develop three Proposed Adaptation Futures. Detailed modelling and economic assessments have been used to identify adaptation actions to manage flood and climate-related risks in South Dunedin, along with indicative locations and timeframes for implementation. This work is documented in four reports: technical reports on stormwater, groundwater, and economics, and an overview report describing the three Proposed Futures. This work is described more fully below.

DISCUSSION

- 19 There are four key outputs from this stage of the SDF programme, including: (i) an overview of the three proposed adaptation futures for South Dunedin (Attachment B); (ii) South Dunedin stormwater modelling report (Attachments C, D, E and F); (iii) South Dunedin groundwater assessment report (Attachment G); and (iv) and economic assessment of the proposed futures (Attachment H). The key components and findings of these reports are summarised below.

Overview of proposed adaptation futures for South Dunedin

- 20 This report provides a technical but plain-language overview of three Proposed Adaptation Futures for South Dunedin. It outlines the key features, staging, performance, costs, and benefits of each future, supported by visualisations showing preliminary locations and how South Dunedin could evolve in the short, medium, and long term. The futures draw together findings from the stormwater, groundwater, and economic assessments. The three futures are:
- Future 3 – Protect (Keep the land dry – raise land and pump water)
 - Future 4 – Restore (Make space for water – waterways and wetlands)
 - Future 5 – Reshape (Move out of harm’s way – raised land and green spaces)
- 21 The report indicates that it is technically feasible to significantly reduce flood risk in South Dunedin over the next 50–100 years, despite the anticipated increase in climate-related hazards. However, achieving these risk reductions would require extensive and sustained investment, as well as significant change over that period and likely beyond. Flood risk is expected to increase over time due to rising sea levels, rising groundwater, and more intense rainfall, compounded by ageing infrastructure, increasing impermeable surfaces, and ongoing urban development. These factors interact in complex ways. While infrastructure upgrades are necessary to manage near-term risks, long-term resilience depends on system-scale interventions that change how land, water, and urban form work together.
- 22 Each future sets out a coherent approach and suite of actions that could be implemented over time to reduce flood risk and realise a range of opportunities that could accompany adaptation. Guided by design principles developed through technical analysis and community feedback in

earlier stages, the futures combine different adaptation actions across the short term (2025–2050), medium term (2050–2075), and long term (2075–2125). The futures are broadly similar in the short term, focusing on investment in stormwater and groundwater infrastructure and preparing for potential land-use change through planning measures and property acquisition. In the medium term, more substantive changes would be introduced, including land raising, new development patterns, and the creation of parks, wetlands, and waterways, alongside coastal protection and continued infrastructure upgrades. In the long term, major capital works would taper off, while new housing in lower-risk areas would provide additional development capacity.

- 23 Across all three futures, investment is front-loaded in the short term, while the benefits accrue mainly in the medium and long term through avoided flood damage compared with a status quo future. As a result, flood risk is substantially reduced under all three futures, falling below present-day levels despite the impacts of climate change. For example, the proportion of buildings exposed to flooding above floor level is currently estimated at 23 per cent and is projected to rise to 47 per cent by 2100 under the status quo. Under the three futures, this reduces to around 5–7 per cent by 2100. Average annual damages from flooding and other climate impacts are also projected to fall significantly, from an estimated \$11m–\$212m per annum under the status quo to \$0.6m–\$3.3m per annum across the futures.
- 24 While the futures are effective in reducing flood risk, they involve substantial costs and trade-offs. Estimated implementation costs are approximately \$2.1 billion for Future 3, \$1.63 billion for Future 4, and \$2.45 billion for Future 5. Achieving flood risk reduction outcomes would involve extensive construction activity, major changes in land use, and significant adjustment for communities. Over time, South Dunedin would look, feel, and function very differently than today. Measures could include large-scale upgrades to underground infrastructure, land raising and redevelopment, and the creation of parks, wetlands, and waterways in some locations. Delivery of these interventions may require the acquisition of up to 1,750 private properties across South Dunedin. While this is assessed as necessary to achieve material reductions in risk, it would have a high level of impact on affected communities. Areas that may be subject to acquisition are shown in the report visualisations, noting that final locations would be confirmed later following detailed project design.
- 25 The futures are grounded in detailed technical analysis of stormwater, groundwater, and economic impacts, while also incorporating mana whenua values, earlier risk assessments, and community feedback. The commentary on each future includes a preliminary assessment against Kāi Tahu Rūnaka values co-developed with Aukaha Ltd and key themes from community feedback in previous stages of the SDF programme. The futures are intended to be pragmatic and to strike a balance between technical feasibility, affordability, and community aspirations. Collectively, the futures are designed to support elected members and the public to better understand the scale of the challenge facing South Dunedin, explore different response pathways, and weigh the costs, benefits, and trade-offs associated with each option, including the consequences of taking limited or no action.
- 26 The actions set out in the futures reflect the scale of the challenges facing South Dunedin. The report situates these proposals within a wider context that highlights the benefits of early and decisive action, as well as the risks of delay. While there is acknowledged frustration within the community about the time taken to respond to flooding since 2015, the complexity of the issues has required sustained technical work to develop robust, system-wide solutions. The analysis confirms that there are no quick or simple fixes, whole-of-network responses are required.
- 27 Overall, the report shows that an effective response will require significant and sustained intervention to address current hazards while proactively reducing future risk. However, even

under the proposed adaptation futures, residual flood and groundwater risk remains, particularly under extreme or compound events. Councils therefore retain discretion over the level of risk considered acceptable, the degree of intervention required, and the balance between public investment, private responsibility, and ongoing exposure.

- 28 Acting now would allow decision-makers and stakeholders to actively shape a safer and more resilient future for South Dunedin. By contrast, a delayed or insufficient response would see flooding become more frequent and severe over time, leading to increasing damage to infrastructure and property, compounding negative social and economic impacts, and leading to long-term decline across the area. In this scenario, water ultimately determines South Dunedin's future, with poor outcomes for communities, the environment, and the city as a whole. Other pathways are possible, such as lower levels of investment or change, but these would likely result in higher ongoing flood risk. The overview report presents a summary of the technical analysis to support informed discussion and decision-making about risks, options, and trade-offs.

South Dunedin stormwater modelling report

- 29 This report summarises the hydraulic modelling undertaken to design and test the performance of the three Proposed Adaptation Futures, which aim to manage and mitigate flood risk in South Dunedin. The modelling was used to identify systemwide changes required to effectively reduce current and future flood risk, including by determining preliminary infrastructure configurations, sizing, and costing. This work also assessed how each future performs across short- (2025), medium- (2060), and long-term (2100) time horizons, considering climate change, sea level rise, and different approaches to infrastructure and land use change. The modelling used a conservative climate change scenario Representative Concentration Pathway (RCP 8.5), which corresponds to very high greenhouse gas emissions, and is a common standard for designing and stress-testing infrastructure design. Though best practice recommends using a range of scenarios, to account for inherent uncertainty, so the modelling also uses a moderate climate change scenario RCP 4.5 for sensitivity testing. The model builds on an updated Integrated Catchment Model (ICM) completed in 2024 as part of the 3 Waters Integrated System Plan (ISP), which forms the baseline "status quo" scenario and includes the three 'no regrets' stormwater projects approved by DCC Council in 2025.
- 30 The three futures modelled represent distinct strategic approaches aligned to the three futures shortlisted during previous stages of the SDF programme. Future 3 relies primarily on upgraded pipes, pump stations, and storage facilities; Future 4 shifts toward open waterways and wetlands supported by storage areas, pump and pipe upgrades; and Future 5 combines open waterways with land raising and designated floodable areas, alongside new pipe and pump infrastructure. Reflecting community feedback received in previous stages, all futures include substantial infrastructure upgrades in the short term, sized to manage increased rainfall intensities and duration. This is complemented by green infrastructure (open channels, storage basins, infiltration, and run-off areas) to help deal with higher sea levels, rising groundwater, and more frequent and severe storm events that are expected over time.
- 31 In the short term, the modelling applies a common package of infrastructure upgrades across all three futures, which is designed to remain in place and complement each of the three Futures over subsequent stages. Medium- and long-term upgrades then diverge as the futures progressively introduce additional infrastructure and land use changes aligned with each design approach. The modelling applied levels of service that reflect community feedback, including allowance for limited road flooding during heavy rainfall events, and balanced flood risk

reduction objectives with technical feasibility, infrastructure scale, implementation challenges, and anticipated costs.

- 32 The modelling identifies several critical infrastructure measures that drive flood risk reduction across the futures. In addition to short-term upgrades to pumps and pipes, all options include new storage basins at Forbury Park, Tonga Park, and Bathgate Park to temporarily hold stormwater during peak events, with Culling Park added in Futures 4 (Restore) and 5 (Reshape). New and upgraded pump stations are required to manage increased flows and rising sea levels, particularly at key outfalls. Futures 4 and 5 also incorporate open channels where the existing pipe network is shallow and more adaptable, while Future 3 relies more heavily on pipe upgrades.
- 33 Overall, the modelling shows that all futures substantially reduce flood hazard compared with the existing network, particularly for 10- and 50-year rainfall events, and sensitivity testing indicates the results are robust across different storm durations and climate change scenarios. There are significant reductions in property flooding for both moderate and severe storm events, with fewer than 8 per cent of properties experiencing above-floor flooding in events with a 1% chance of occurring each year. The modelling outputs have been used to inform cost estimates and residual risk assessments and provide confidence that, while no option eliminates risk entirely, each future can materially improve flood outcomes for South Dunedin over the long term.
- 34 Finally, the stormwater modelling report notes 10 key initiatives recommended over the next 25 years that are common across all three futures and therefore could be implemented regardless of which future is eventually selected as the preferred. This essentially means that technical work is now sufficiently well advanced to consider implementation of 'no and low regrets' actions – which could proceed as part and in parallel to the final stage of the SDF programme. This includes DCC continuing delivery of the three stormwater projects previously approved by Council (refer Item 14, DCC Council, 28 January 2025), alongside potentially scoping, phasing, and costing the 10 key initiatives recommended in Attachment 3 with a view to presenting project and funding options for Council consideration as part of the Long Term Plan (2027–37) process. This could enable implementation to commence as early as 1 July 2027.

South Dunedin groundwater assessment report

- 35 This report presents early-stage technical assessments of groundwater drainage options to manage risks associated with shallow and rising groundwater across South Dunedin. Building on earlier numerical groundwater models developed by Otago Regional Council and subsequently updated by Earth Science New Zealand (formerly GNS), the report assesses how proposed groundwater management options could control groundwater levels compared with drainage currently provided by the existing, leaky stormwater and wastewater networks. The modelling outputs are visualised through maps and cross-sections and include estimates of groundwater inflows to stormwater and groundwater management infrastructure to inform pumping requirements. The findings support initial assessments of technical feasibility, indicative infrastructure configurations, sizing, and order-of-magnitude costing to inform further analysis.
- 36 The modelling explores the feasibility of introducing a pumped groundwater management system for South Dunedin. Rising sea levels will progressively reduce the effectiveness of gravity-based drainage, necessitating a transition to pumped systems over time. Although the current stormwater and wastewater networks provide some incidental groundwater drainage through leakage and pumped outfalls, South Dunedin already experiences high groundwater levels, which are expected to worsen as sea levels rise. The modelling therefore considers both

short-term measures to address existing issues and longer-term solutions assessed under up to 1.1 metres of sea level rise over approximately the next 100 years. A key conclusion is that an active, pumped groundwater drainage system is fundamental to the long-term habitability of South Dunedin; without intervention, widespread periodic and, in some areas, permanent surface ponding is likely later this century.

- 37 The modelling assumes an integrated approach to stormwater and groundwater management. It tests whether an upgraded dual-purpose pipe network located within existing road and transport corridors would be sufficient to lower groundwater levels to target levels. Extending a tighter pipe network beneath private property was found to introduce significant additional complexity and cost. Results indicate that a network contained largely within transport corridors would be effective across most of South Dunedin, although challenges remain in the lowest-lying areas of Musselburgh, where groundwater levels are already very shallow.
- 38 Stormwater flows during major rainfall events are many orders of magnitude greater than groundwater flows, meaning groundwater volumes have only a minor influence on overall stormwater system sizing. The proposed approach centres on a large storage basin at Forbury Park, which would act as the primary collection point for both stormwater and drained groundwater. From there, water would be pumped to sea using high-capacity pumps during storm events, supported by lower-capacity pumps operating continuously to manage groundwater baseflows and maintain drainage capacity across the system.
- 39 Groundwater drainage would be continuous, with higher inflows following major storm events that gradually reduce over time. To minimise the risk of land settlement, modest groundwater lowering is proposed, reflecting the presence of compressible soils beneath South Dunedin. The assessed groundwater drawdown is generally less than 0.8 metres, with limited areas up to 1.5 metres, and is expected to result in less than 50 millimetres of land settlement. Further site-specific investigations would be required to confirm these effects as options progress to more detailed design.
- 40 In the short term, the report recommends undertaking a pilot groundwater drainage trial to test a small-scale pumped system and improve understanding of groundwater behaviour, system performance, and design requirements. Further work is also recommended to assess the ecological and infrastructure implications of saline or brackish water in basins and canals, confirm land-settlement assumptions, and address corrosion risks to underground services. Overall, the findings confirm that future stormwater and groundwater management in South Dunedin will rely on pumped systems with increasing operational and maintenance demands over time, reinforcing the need for integrated design and a robust cost–benefit analysis as climate change impacts intensify.

Economic assessment of the three proposed adaptation futures

- 41 This report evaluates the economic performance of each of the three proposed adaptation futures for South Dunedin. It also considers overall value by comparing these to a status quo scenario that continues existing practices such as reactive maintenance, incremental upgrades and privately-led responses, without coordinated system-scale intervention.
- 42 A standard cost-benefit assessment framework is utilised following generally accepted best practices outlined by The Treasury, the Commerce Commission, and New Zealand Institute of Economic Research. The primary metric used throughout the economic evaluation is Annual Average Damage (AAD). AAD is the annualised expected cost of pluvial flood and coastal inundation damage across heavy rainfall or storm events that have a 10%, 2%, and 1%

probability of occurring each year, weighted by their likelihood. Put simply, it represents what an insurer would pay each year, on average, if the community was fully insured against all storm events at their expected frequency and severity.

- 43 The primary economic benefit of each future is avoided AAD – the reduction in expected annual pluvial flood and coastal inundation losses relative to the status quo. The calculation is straightforward in concept: avoided damage equals the difference between what flood events would cost with adaptation (three futures) and what they would cost without it (status quo).
- 44 Over the full 100-year assessment period, the present value cost of the status quo scenario is assessed as \$1.45 billion. This includes anticipated property damage, fatality and injury costs, emergency services, trauma, income loss from displacement, and environmental costs. It excludes infrastructure repair, loss of activity or productivity, event clean-up costs, private property interventions (both proactive and reactive), and the economic consequences of insurance withdrawal. Including these would likely raise the cost above \$2 billion.
- 45 The estimated total implementation costs of the three futures range from \$1.63 billion to \$2.45 billion over the same period to 2125. Future 4 (Restore) has the lowest total cost, reflecting a greater reliance on green infrastructure, waterway restoration, and natural flood storage, which are generally less capital-intensive than the large-scale land raising and pumping components that characterise Futures 3 and 5. The cost of implementing the cheapest future (Future 4) equates to roughly 8 per cent of DCC’s annual capital budget of around \$200 million, noting South Dunedin comprises around 10 per cent of the city’s population. All three futures generate substantial economic benefits through avoided flooding and related losses, estimated at \$1.34–\$1.35 billion.
- 46 The report also assesses the relationship between benefits and costs using a benefit–cost ratio (BCR). The BCR is based on the most directly evidenced impacts, including avoided property damage, avoided injuries and fatalities, reduced emergency and recovery costs, avoided trauma, avoided income loss from displacement, and avoided environmental damage. Broader benefits – such as increased property values, regeneration and redevelopment uplift, ecosystem service gains, reduced network disruption, and the value of maintaining insurability – are not included at this stage. This approach is deliberate and conservative, ensuring the core case is based on the most defensible evidence, with additional benefits transparently identified as potential upside. Benefits, costs, and BCRs are summarised in Table 1 below.

Scenario	Gross Costs (\$B)	Benefits (\$B)	Net Costs (\$B)	BCR (mid)	BCR range (+/- 15%)	Rank
Status quo	\$1.45-\$2.0	-	\$1.45-\$2.0	-	-	4
Future 3 - Protect	\$2.098	\$1.335	\$0.763	0.64	0.54 - 0.75	2
Future 4 - Restore	\$1.629	\$1.351	\$0.278	0.83	0.71 – 0.98	1
Future 5 - Reshape	\$2.448	\$1.336	\$1.112	0.55	0.46 – 0.64	3

Table 1: Benefits, costs, and BCRs of Status quo and three futures

- 47 While the initial whole-of-life BCRs for the three futures are below 1 at this early stage, this is typical of long-lived climate adaptation investments, which involve substantial upfront capital costs, while benefits increase over time as climate risks intensify. This pattern is consistent with other major public infrastructure investments in New Zealand, including transport projects, which often proceed with lower early-stage BCRs where wider resilience, equity, and long-term benefits are recognised. The current results are also based on more commercially weighted assumptions; applying more socially weighted approaches that emphasise broader societal benefits would materially improve the BCRs. Accordingly, these results should be interpreted as

a conservative lower bound on economic performance, rather than a definitive assessment of long-term value.

- 48 The key finding of the economic assessment is that investing in adaptation delivers significantly better outcomes than maintaining the status quo, even under conservative assumptions. The cost of inaction in South Dunedin under a status quo scenario are estimated at \$1.45 billion in net present value (NPV) and likely more than \$2 billion once non-quantified factors are accounted for, as noted above. Future 4 (Restore) presents the strongest economic case, with an estimated net cost to the community of \$280 million NPV over the next 100 years, compared to \$763 million NPV for Future 3 (Protect) and \$1.112 billion for Future 5 (Reshape). All these net costs are materially lower than the estimated \$1.45-\$2.0 billion cost of the status quo, providing a strong, clear-cut case for adaptation investment irrespective of the headline BCR.
- 49 While the futures all involve substantial upfront costs, benefits grow over time, and are comparable to other major public infrastructure investments at this early stage of development. Long-term modelling and sensitivity testing show that economic performance strengthens over time and that the relative ranking of the futures remains stable under alternative assumptions. The analysis is intentionally conservative, excluding several categories of potential upside benefits, including regeneration and redevelopment uplift, ecosystem services, avoided heritage losses, and the value of maintaining insurability. As the programme progresses toward identifying a preferred pathway and the analysis is refined, the overall economic case for adaptation is expected to further strengthen. Table 2 below illustrates a high-level cost breakdown for the status quo and three futures.

Cost items	Costs over 100-year timeframe in NPV (\$m)			
	Status Quo	Future 3	Future 4	Future 5
Infrastructure CAPEX (Stormwater and groundwater network; pump stations; outfalls; land raising; open waterways; wetlands, storage, coastal protection)	290	1,220	724	1,287
Property and land acquisition (Property purchase; ~25% uplift)	4	433	447	545
Repurpose land activities (Building demolition; utility removal; site reinstatement)	72	343	338	519
Capital maintenance (35% of CAPEX every 25yrs; once asset it built)	15	33	39	31
OPEX (1.5% of CAPEX per year; builds cumulatively).	31	70	81	66
Total	411	2,098	1,629	2,448

Table 2 – High level cost breakdown for status quo and three futures

Technical peer review

- 50 The four primary technical reports developed by the Kia Rōpine consultant team have undergone several rounds of review, including from staff across DCC and ORC, and by an external independent technical peer review team led by Jacobs NZ Ltd (supported by Royal HaskoningDHV, and Bell Adapt Ltd). The peer review process has been robust, extensive, and has led to many refinements to the reports. However, not all outstanding technical issues have been resolved, and remaining issues are: (i) acknowledged as data gaps, assumptions, limitations, or with disclaimers; (ii) matters that can be addressed in subsequent stages of the

technical work; or (iii) subject to difference of professional opinion (i.e. the experts have agreed to disagree).

Additional technical reports

- 51 In addition to the four primary technical reports developed by the Kia Rōpine consultant team, additional reports have also been commissioned on specific topics of relevance to climate adaptation in South Dunedin – including health and equity, property implications, and potential development of Ocean Beach Domain. The reports are not included as attachments, but are summarised below, and will be available on the South Dunedin Future website.

Health and equity assessment

- 52 A team of researchers led by the University of Otago, and comprising staff from Te Whatu Ora, Victoria University of Wellington, Urban Intelligence, Yasmine El Orfi, and Te Pūnaha Matatini Centre for Research into Complex Systems, was commissioned to undertake a review of the three futures through a health and equity lens. This review followed feedback from earlier stages of the SDF programme which identified an overemphasis on technical and economic factors, and limitations in consideration of social factors.
- 53 The health and equity assessment found that all three shortlisted futures would result in better outcomes than a status quo approach, which would lead to significant and widening harms. These harms are expected to arise primarily through declining housing quality, mental health impacts, and reduced access to the social, economic, and cultural foundations of wellbeing. Across all futures, improved access to public mental health and social support services would be essential, and health equity would need to be central to design and implementation to minimise risks and maximise co-benefits, particularly for groups likely to be disproportionately affected, including disabled communities.
- 54 As residual flood risk remains under all futures, due to the potential for extreme events, infrastructure failure, and accelerating climate change, some status-quo health risks would persist. Existing inequities by income, ethnicity and disability strongly shape health outcomes, particularly through the housing system, making stronger housing governance and protections for tenants critical. Pathways involving land elevation or new development also carry equity risks unless land value uplift is captured publicly and reinvested to reduce inequities. Tiriti-based approaches and Kāi Tahu values would need to be intentionally embedded in decision-making, and while all futures offer opportunities to reduce emissions, sustained climate mitigation remains the strongest long-term protection for health and wellbeing.

Property analysis and implications

- 55 PWC was engaged to provide high-level commercial property insights across the three shortlisted futures, focusing on feasibility, sequencing, market response, value creation, and the funding and financing implications of early adaptation interventions, including land raising and redevelopment opportunities. The scope also included provisional analysis of land value uplift, advice on potential delivery and partnership models, and a light-touch review of property and development assumptions used in the cost–benefit analysis to ensure alignment with realistic market conditions.
- 56 In the report, PWC concludes that all three futures require significant early public investment in infrastructure and property acquisition before private-sector redevelopment can occur, and that most short-term actions (to around 2050) are common and largely “no-regrets”. From a commercial perspective, Future 4 (Restore) is assessed as the most straightforward option due

to its lower overall cost, reduced land repurposing, higher benefit–cost ratio, and avoidance of large-scale land raising, which PWC identifies as the most commercially challenging intervention.

- 57 The report highlights property acquisition as the single largest near-term cost and a critical enabler across all Futures, noting that delivery at scale is unlikely to be achievable without central government co-investment. Victoria Road (Ocean Beach Domain) sites are identified as the most strategically important early development opportunity, with potential to support relocation, deliver housing supply, and offset programme costs through value creation on council-owned land. Conversely, extensive land raising (particularly at Forbury Corner under Futures 3 and 5) is considered high-cost, long-lead-time and unlikely to be value-positive. Successful delivery would require a clear acquisition funding strategy, early planning certainty, active engagement with development and finance markets, and the establishment of a dedicated delivery entity (such as a CCO or Council–Crown vehicle) with the mandate and capability to manage long-term property acquisition and redevelopment.

Ocean Beach Domain due diligence

- 58 This stage of the SDF programme technical work considered options for making the best use of available land in South Dunedin, including exploring the possibility of changing land uses, for example of council-owned land such as Ocean Beach Domain. This area is already elevated and has a materially lower risk profile compared to the ‘Flat’, presenting an opportunity to utilise land more efficiently, potentially reducing or avoiding the more complex and costly process of land raising. Any loss of green space at Ocean Beach Domain could be balanced by proposed creation of new parks, waterways, and wetlands elsewhere in South Dunedin, likely resulting in a net gain in public green space. Developing Ocean Beach Domain would also respond to previous community feedback expressing a desire to stay in the local area (in the event they are required to move). As such, preliminary investigations were undertaken to test development potential of Ocean Beach Domain, including a desktop analysis of natural hazards, geotechnical conditions, and contaminated land. A preliminary legal review of title was also undertaken.
- 59 The desktop hazards and geotechnical assessment identified a range of physical constraints relevant to any future consideration of medium- to high-density residential development. Much of the site is underlain by loose coastal sands with very shallow groundwater, making some areas susceptible to liquefaction and sensitive to sea-level rise and flooding. Parts of the site, particularly in the western area, sit below the current minimum floor level requirement, meaning any development would require elevated floor levels and specifically engineered foundations to manage natural hazard risk. The assessment also identified contaminated land risks linked to historical land uses, including uncontrolled landfill activities associated with the former Chisholm Park Landfill and past recreational uses. While these issues do not necessarily preclude future development, they would require further detailed investigation, remediation or long-term land management, and may have a material influence on development feasibility.
- 60 Most of the Ocean Beach Domain land is held by Dunedin City Council under specific statutory regimes, primarily as recreation and local purpose reserves under the Reserves Act 1977. These reserves were originally transferred from the Crown, meaning that revoking reserve status would result in the land reverting to Crown ownership. At that point, the Crown would be required to comply with the right of first refusal provisions for Ngāi Tahu under the Ngāi Tahu Claims Settlement Act. The reserve land is also subject to numerous existing leases with sporting and recreational organisations. Other parts of the domain are subject to separate legal constraints. Tahuna Park, while not subject to the Reserves Act, is considered a public park under the Local Government Act 2002, meaning any sale or long-term lease that restricts public access would trigger formal public consultation. Overall, the title review highlights that land status,

Treaty settlement obligations, and existing leasehold interests are considerations that could materially affect the feasibility, process, and timing of any future redevelopment.

Communications and community engagement

- 61 The proposed actions and changes outlined in the three futures are significant, reflecting the scale and nature of the challenges facing South Dunedin. It is therefore important that stakeholders consider these proposals in their wider context, including the expected benefits of being proactive and taking decisive action, as well as the likely consequences of delay and inaction. While there is acknowledged community frustration regarding the perceived lack of action on flooding since 2015, considerable time has been required to build a comprehensive understanding of the underlying problems and to identify workable long-term solutions. This analysis confirms there are no quick or simple fixes, rather, that system-wide interventions are required. This means the proposed solutions are complex and are likely to be confronting, hard to process, and potentially unwelcome for many stakeholders.
- 62 The health and equity assessment highlights that how the proposed futures are communicated and engaged on will directly influence community wellbeing. In particular, clear, transparent, and participatory approaches can help avoid unintended impacts on mental wellbeing in a community already experiencing heightened stress and uncertainty. Building on engagement undertaken during earlier stages of the SDF programme, a comprehensive communications and community engagement approach has been developed for the current stage. The aim is to support partners, stakeholders, and decision-makers to access the latest technical work, understand the potential consequences, and provide informed feedback.
- 63 A range of communications activities are planned to support the public release of the proposed adaptation futures for South Dunedin. These include media releases and briefings, web and social media content, short videos, a flyer summarising key elements of the futures, and online access to all technical reports. Given the additional detail included in this stage of technical work, it is also proposed that councils provide specific information relating to the potential need for property acquisition to enable a wide range of flood risk reduction actions. Previous engagement has demonstrated high public interest in managed retreat and any associated property acquisition processes. It is therefore critical that councils are clear, transparent, and consistent in communications with affected stakeholders. Specific details on the underlying rationale for property acquisition, the potential implications, and intended process are included in planned communications and collateral.
- 64 While extensive efforts have been made, and continue to be made, to communicate the key elements of the proposed futures, the complexity and sensitivity of the issues mean they cannot be fully addressed through written communications alone. Experience from earlier stages of the SDF programme indicates that many stakeholders will want and need direct discussions with council staff to better understand what is proposed, reflect on how they may be affected, and provide feedback. Following the public release of the futures, a six-week public engagement process is planned for early-July to mid-August 2026. This would include targeted stakeholder sessions, alongside public workshops and drop-in sessions, supported by online resources and surveys to gather feedback from as many affected stakeholders as possible. To support these discussions, an analysis has been undertaken of the potential impacts of each of the three futures on individual properties across South Dunedin, enabling more tailored and informed engagement with affected stakeholders.

OPTIONS

- 65 The SDF Programme Plan provides for various decision points at the conclusion of each stage of technical work, where the approval of Councils is sought to proceed to community engagement. Three options are outlined below which involve proceeding with the SDF programme as scheduled, deferring the programme to undertake additional work as may be directed by Councils, or taking an alternative course of action as directed by Councils. The respective advantages and disadvantages of each option are described.

Option One – Recommended Option

- 66 This option includes proceeding as outlined in the SDF programme plan and according to the high-level schedule in Attachment A. It would involve Councils noting the four technical reports included as attachments to this paper, endorsing the reports for the purpose of community engagement, and providing approval to commence planned communications and community engagement activities with partners, stakeholders, and affected communities.

Advantages

- Enables SDF programme to maintain current scope, schedule, and budget.
- Aligns with operational objectives of SDF Programme, including making well-informed decisions, being community-centred, and mainstreaming climate adaptation by running a robust, transparent, and inclusive process.
- Enables councils to actively facilitate a dialogue with partners, stakeholders, and affected communities on the risks facing the area, potential responses, and to collect feedback.
- Enables staff and consultant teams to direct primary efforts to completing the final stage of the SDF programme, which involves finalising a climate adaptation masterplan for South Dunedin for Councils consideration and approval by 30 June 2027.
- Supports alignment between the final stage of the SDF programme and council's Long-Term Plan (2027-36), Infrastructure Strategy, and Water Services Strategy processes, promoting coherence and a more efficient transition to implementation of the masterplan and related projects from 1 July 2027.

Disadvantages

- Although grounded in extensive analysis and community engagement, the futures rely on assumptions and simplified representations of complex social, economic, and environmental systems over a 100-year period. Adaptation planning can help manage this uncertainty, but not eliminate it. This option therefore requires proceeding with imperfect information and despite a range of information gaps, assumptions, and uncertainties, each of which carries a degree of risk.

Option Two – Defer and undertake additional technical work

- 67 This option would involve one or both Councils requesting further technical, economic, or other work on the climate and natural hazard-related risks affecting South Dunedin and potential responses, including those outlined in the proposed adaptation futures, before seeking approval

of Councils to undertake planned engagement with partners, stakeholders, and affected communities.

Advantages

- Undertaking additional technical work could enable some existing information gaps to be filled and resolve some outstanding technical issues or remaining uncertainties, thereby increasing confidence in key findings and enabling more informed communications, engagement, and decision-making.

Disadvantages

- Undertaking additional, unplanned technical work would likely disrupt the SDF Programme schedule, may require additional budget, and could generate criticism from partners, stakeholders, and affected communities who may prefer release of the latest technical work.
- This option could delay completion of the current and future stages of the SDF programme, which may have negative implications for coherence with Long-Term Plan (2027-36) processes and delay transition to implementation of the masterplan from 1 July 2027.
- Undertaking additional, unplanned technical work could be perceived by partners, stakeholders, and affected communities as bypassing community engagement and moving straight to the final stage of the SDF programme.
- Adaptation planning will always rely on assumptions and simplified representations of complex social, economic, and environmental systems over an extended period. Additional analysis may help further reduce this uncertainty, but not eliminate it. There will always be a need to make decisions with imperfect information and despite a range of information gaps, assumptions, and uncertainties, each of which carries a degree of risk.

Option Three – Alternate course as determined by Councils

- 68 This option would involve an alternative course of action from those described in Options A and B above, as determined by one or both Councils. An analysis of potential impacts could be undertaken once details are known.

NEXT STEPS

- 69 Subject to the decisions of Councils, next steps include:
- 70 Commencing communications and community engagement activities relating to the 3 Proposed Adaptation Futures for South Dunedin, as described above. These activities are planned to commence in early-July and extend through to late-August.
- Designing and commencing the final stage of the SDF programme, including identifying a preferred adaptation future and finalising a climate adaptation masterplan for South Dunedin. This will include:
 - i) analysis of community feedback on the 3 Proposed Futures and status quo option;

- ii) undertaking a multi-criteria assessment (MCA) of the 3 Proposed Futures and status quo option, incorporating community feedback and technical assessments against Council approved objectives and decision-making framework;
- iii) reporting the outcome of community engagement and the MCA process to Councils;
- iv) undertaking more detailed technical and economic work to refine the preferred adaptation future and finalise the adaptation masterplan;
- v) aligning technical analysis with workplan and budget development being undertaken by relevant council teams for the Long-Term Plan (2027-36);
- vi) producing a climate adaptation masterplan for South Dunedin for Councils approval by 30 June 2027.

71 At present, Councils have committed to completing the SDF programme only, including remaining technical work, economic analysis, and community engagement. Councils have not, at this time, committed to supporting any particular course of action that might be recommended by the SDF programme – including those relating to strategic land use planning, property acquisition, or infrastructure investment. Such decisions, and the roles and responsibilities of respective Councils in implementing them, would be subject to further consideration by respective Councils, including in the context of strategic and financial decisions associated with long term plan processes.

Signatories

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Attachments

	Title	Page
A	South Dunedin Future Programme A3 Overview	24
B	Proposed Adaptation Futures for South Dunedin - Overview Report	25
C	South Dunedin Stormwater Modelling Report	63
D	South Dunedin Stormwater Modelling Report - Appendices A-R (Maps)	97
E	South Dunedin Stormwater Modelling Report - Appendix S (Schema Statement)	153
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H	SDF Proposed Adaptation Futures Economic Evaluation Report	201

SUMMARY OF CONSIDERATIONS

Fit with purpose of Local Government

This decision enables democratic local decision making and action by, and on behalf of communities.
This decision promotes the social well-being of communities in the present and for the future.
This decision promotes the economic well-being of communities in the present and for the future.
This decision promotes the environmental well-being of communities in the present and for the future.
This decision promotes the cultural well-being of communities in the present and for the future.

Fit with strategic framework

	Contributes	Detracts	Not applicable
Social Wellbeing Strategy	✓	☐	☐
Economic Development Strategy	✓	☐	☐
Environment Strategy	✓	☐	☐
Arts and Culture Strategy	✓	☐	☐
3 Waters Strategy	✓	☐	☐
Future Development Strategy	✓	☐	☐
Integrated Transport Strategy	✓	☐	☐
Parks and Recreation Strategy	✓	☐	☐
Other strategic projects/policies/plans	✓	☐	☐

The SDF programme is a multi-disciplinary initiative working horizontally across a range of council strategies, groups and budgets and therefore has links to various elements of the strategic framework.

Māori Impact Statement

Accurately reflecting and integrating the principles of the Treaty of Waitangi, and Crown's partnership with Māori, is a central element of the SDF Programme. In relation to the content of this report, this has included incorporating key intents and values from Te Taki Haruru into the SDF programme strategy, reflecting these in the decision-making framework and assessment criteria for shortlisting the three proposed adaptation futures, and incorporating Aukaha-authored narratives into the descriptions of each future.

Sustainability

Sustainability is a central component of the SDF programme as it seeks to develop a climate adaptation master plan for South Dunedin covering the next 100 years. The criteria for developing and assessing each of the proposed adaptation futures includes a range of sustainability-focussed criteria, including carbon emissions and waste.

LTP/Annual Plan / Financial Strategy /Infrastructure Strategy

The SDF programme has dedicated resourcing in the current 9-year plan (2025-2034). Selected activities that result from the SDF programme, including mid-scale and medium-term investments in 3 waters (for example), are also included in the 9YP. It is anticipated that the climate adaptation master plan for South Dunedin, scheduled for completion in June 2027, will inform a range of strategic land use-, finance-, and infrastructure-related decisions for South Dunedin as part of the next Long Term Plan process for 2027-37.

SUMMARY OF CONSIDERATIONS

Financial considerations

The cost of the SDF programme is fully budgeted for within the existing SDF programme budget. No decisions have been made about funding for potential adaptation work that may arise from the SDF programme (outside of those already in the current 9-year plan).

Significance

This topic is considered high in terms of councils Significance and Engagement Policy. Community engagement is and will continue to be a central component of the SDF Programme, and extensive engagement is planned in future stages, in accordance with the approved programme plan.

Engagement – external

Extensive external engagement has been undertaken with a range of partners, stakeholders, and affected communities on the topics covered in this paper. Mana whenua have partnered with SDF throughout the development of the programme, including by contributing to assessments described in this paper. Engagement has included (but is not limited to): central government departments, state owned enterprises, crown research institutes; private sector organisations and industry groups; community groups and affected communities.

Engagement - internal

A large number of internal subject matter experts, teams, and departments across DCC and ORC have been engaged in development of SDF programme work, including the assessments and design work described in this paper.

Risks: Legal / Health and Safety etc.

There are no anticipated legal or health and safety risks associated with this report. Risks relating to the SDF Programme are described in this or previous Council reports.

Conflict of Interest

There are no conflicts of interest identified.

Community Boards

Community Boards have not been directly involved in development of this report.