

PLAN CHANGE 1 – MINOR IMPROVEMENTS - NON-HERITAGE TOPICS

SECTION 42A REPORT

25 July 2025

APPENDIX C.2 3 WATERS EVIDENCE

BEFORE THE PLAN CHANGE 1 HEARING PANEL

IN THE MATTER

of the Resource Management
Act 1991

AND

Plan Change 1 to the Second
Generation Dunedin City District
Plan (2GP)

STATEMENT OF EVIDENCE OF JARED OLIVER FOR DUNEDIN CITY COUNCIL
Dated 23rd May 2025

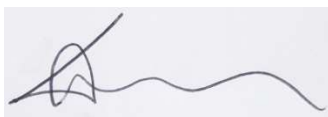
QUALIFICATIONS AND EXPERIENCE

1. My name is Jared Oliver.
2. I am employed by the Dunedin City Council ("the Council") as the Planning Manager, 3 Waters. In this role my key areas of responsibility include strategic and investment planning, risk management, reviewing levels of service, monitoring asset condition and performance, regulatory compliance, policy development and strategic external engagement.
3. I hold a Bachelor of Technology Degree majoring in Chemical Technology and a Masters of Technology majoring in Energy Management, both from Massey University. I am a member of the Engineering New Zealand (ENZ) and have been a Chartered Professional Engineer (CPEng) since 2011. I am a member of the New Zealand Water & Wastes Association (Water NZ) and the Institute of Public Works Engineering Australasia (IPWEA). I have over twenty years' experience in the 3 Water's industry both within New Zealand and abroad in the public and private sectors. My experience has included the design, operation, maintenance and asset management of water and wastewater treatment systems and 3 Waters reticulation networks.
4. I have read the Code of Conduct for Expert Witnesses in the Environment Court Practice Note. This evidence has been prepared in accordance with it and I agree to comply with it. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

SCOPE OF EVIDENCE AND OVERVIEW

5. My evidence is attached to this coversheet.
6. It relates to submissions on 3 waters matters and is within my area of expertise. My role in preparing my evidence has been to guide staff who report to me in preparing evidence and to review and approve the outputs.

DATED this 23rd day of May 2025



Jared Oliver
Planning Manager
3 Waters
Dunedin City Council

BEFORE THE PLAN CHANGE 1 HEARING PANEL

IN THE MATTER

of the Resource Management
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Generation Dunedin City District
Plan (2GP)

STATEMENT OF EVIDENCE OF KATHERINE QUILL FOR DUNEDIN CITY COUNCIL
Dated 23rd MAY 2025

QUALIFICATIONS AND EXPERIENCE

7. My name is Katherine Quill.
8. I am employed by the Dunedin City Council ("the Council") as a Policy Analyst within the 3 Waters Group. In my current role I am responsible for providing advice on the 3 Waters Group's strategic, policy and regulatory planning framework; subdivision and development issues for 3 Waters; connections to 3 Waters services; and district plan provisions.
9. I hold a Bachelor of Regional Planning (Hons) degree from Massey University. I have five years' experience in the Three Waters' Industry – over three years in my current role and 18 months as an Asset Planner focusing on drinking water safety. Prior to this I worked as the Council's 2GP Project Support Officer managing the appeals on the 2GP. My wider experience includes three years as a town planner in both policy planning and resource consents.
10. I have read the Code of Conduct for Expert Witnesses in the Environment Court Practice Note. This evidence has been prepared in accordance with it and I agree to comply with it. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

SCOPE OF EVIDENCE AND OVERVIEW

11. My evidence is attached to this coversheet.
12. It relates to submissions on 3 waters matters concerning Changes PHS1, CP4, Res13, and NU3, and is within my area of expertise.

DATED this 23rd day of May 2025



Katherine Quill
Policy Analyst
3 Waters
Dunedin City Council

BEFORE THE PLAN CHANGE 1 HEARING PANEL

IN THE MATTER

of the Resource Management
Act 1991

AND

Plan Change 1 to the Second
Generation Dunedin City District
Plan (2GP)

STATEMENT OF EVIDENCE OF BRUCE SAUNDERS FOR DUNEDIN CITY COUNCIL
Dated 23rd May 2025

QUALIFICATIONS AND EXPERIENCE

13. My name is Bruce Saunders.
14. I am employed by the Dunedin City Council ("the Council") as a Strategic Planning Engineer within the 3 Waters group. In this role I provide high-level strategic optioneering, conceptual and feasibility studies that support investment in 3 Waters infrastructure, through long-term strategy development, capital prioritisation and programming.
15. I hold a Bachelor of Engineering Degree majoring in Mechanical Engineering, from Nottingham Trent University, in the United Kingdom. I am a member of Engineering New Zealand (ENZ). I have over nine years of experience within the 3 water's industry - with over three years in my current role, having worked in the United Kingdom and New Zealand, mainly within the private sector. My experience has included the design of water and wastewater treatment systems and pump stations.
16. I have read the Code of Conduct for Expert Witnesses in the Environment Court Practice Note. This evidence has been prepared in accordance with it and I agree to comply with it. I have not omitted to consider material facts known to me that might alter or detract from the opinions expressed.

SCOPE OF EVIDENCE AND OVERVIEW

1. My evidence is attached to this coversheet.
2. It relates to submissions on 3 Waters matters concerning changes, CZ1, part of CP4, Res20 and NU2, and is within my area of expertise.

DATED this 23rd day of May 2025



Bruce Saunders
Strategic Planning Engineer
3 Waters Group
Dunedin City Council

CHANGE CZ1: ZONING OF 9 AND 11 HARVEY STREET, WAITATI

CZ1 change is a proposal to rezone the locations of 9 and 11 Harvey Street to Waitati from Township and Settlement to Rural Centre Zone.

As indicated in our previous evidence DCC 3 Waters do not service Waitati for Stormwater.

11 Harvey Street comprises the Local Fire Brigade. It is noted that a shed is situated on 9 Harvey Street that is part of the Fire Brigade. Consequently, half of 9 Harvey Street is already being utilised by the Fire Brigade. 11 Harvey Street has a drainage point outside, though its capacity is unknown. The location of this is on the boundary of 11 and 9 Harvey Street.



Figure 1: Shows location of 9 and 11 Harvey Street, Waitati. 9 Harvey Street is highlighted in green.

Submitter S266.001 raised concerns regarding water run-off, seepage, drainage, lack of stormwater infrastructure, and previous flooding. The rezoning would act as a zoning adjustment to align with existing use, including the local Fire Brigade being part of the rural centre. The rezoning is unlikely to result in significant changes to surface water run-off, due to the area already being developed and is unlikely to change significantly.

3 Waters supports the rezoning of 9 and 11 Harvey Street from Township and settlement to Rural Centre.

CHANGE PHS1: AMEND RULE 9.3.3 FIREFIGHTING

DCC's 3 Waters understands that one aspect of the original reason to change to Rule 9.3.3 was to make the firefighting rule requirements applicable only when development was proposed on a site, rather than at the subdivision stage (i.e., when land is still undeveloped so there is no development at risk of fire). 3 Waters supported this original change.

There are three submissions on Change PHS1 each with differing perspectives in relation to amending the firefighting rule further.

Submitter S188.003's request to amend rule 9.3.3.2 is twofold – firstly to only apply the rule to multi-unit, commercial and industrial development and to exempt smaller residential developments from complying with firefighting supply and access requirements; and secondly reference is made to Dunedin city's water pressure as being inadequate in some areas.

3 Waters' view is that all residential development carries a fire risk regardless of its size, so it is necessary to provide firefighting capability on all residential development. Therefore, 3 Waters does

not support the exemption of smaller residential developments from adhering to the firefighting rules. 3 Waters does, however, acknowledge there are water pressure issues in some areas of Dunedin and although 3 Waters cannot commit to a timeframe to upgrade these, there is a long-term goal of remedying the issue and 3 Waters are progressively working towards this.

Fire and Emergency New Zealand's (FENZ) submission is concerned with widening rule 9.3.3 so that it is applicable to all new buildings including commercial and industrial development in all zones, not just new residential development. 3 Waters supports FENZ's concern to include all buildings in all zones, however, it must be noted that 3 Waters only has scope to comment on this where there is a reticulated water network. It must be noted that the inclusion of all zones means 3 Waters cannot comment on the rural zone, given much of this area is unreticulated and therefore outside of our service area so this leaves the responsibility entirely with the private owner for providing firefighting capability. While not of immediate concern to us as a network provider, it is suggested that the pros and cons of applying this to all buildings in the rural zone and not just dwellings is considered.

3 Waters aligns with FENZ in the interest of public safety across all zones and recommends that due consideration is given to FENZ's proposal with regard to meeting the Public Health and Safety Objective 9.2.2. We support this proposed change.

The third submission regarding this change proposes amending Rule 9.3.3.2 with an additional provision to allow alternative firefighting "bespoke solutions" that are FENZ approved. 3 Waters are open to this suggestion, however felt concerned it would possibly increase FENZ's workload so 3 Waters has contacted FENZ to see if they would be open to this suggestion. FENZ responded saying the proposal is considered reasonable and is supported.

To achieve this, FENZ stated they would be comfortable with the restricted discretionary matter referenced under 9.5.3(5) to become a performance standard criterion under 9.3.3.(2).

FENZ suggested the new criterion could reflect the following wording: The application is accompanied by written advice from Fire and Emergency New Zealand that the alternative water supply for firefighting is suitable to manage effects on health and safety.

This would provide an alternative means for applicants to deliver a compliant firefighting water supply solution (and to potentially avoid the need to seek consent as a restricted discretionary activity where all other development matters are compliant).

Given FENZ's support of this proposal, 3 Waters would also be comfortable in supporting bespoke solutions as an alternative firefighting option if they are FENZ's approved.

CHANGE CP4: ADD LINKS FROM ZONE PROVISIONS TO MATTERS OF DISCRETION IN RULES 9.5.3.8 & 9.6.2.2

3 Waters understands that some of the changes made during Variation 2 to the matters of discretion for assessing subdivision/development in the 2GP's Chapter 9 Public Health and Safety were not carried over to all relevant sections that link to that chapter for assessment, and as a result the provisions are slightly inconsistent in different chapters of the Plan. It is our understanding that Change CP4 is making all outstanding relevant assessment rules that link to Chapter 9 Public Health and Safety consistent with the changes made during Variation 2. This is a new change that 3 Waters have not commented on before.

The changes include the following:

For restricted discretionary contravention of maximum building site coverage and impermeable surfaces rules, amend the following assessment rule to add (stormwater) after the existing matter of

discretion for effects on efficiency and affordability of infrastructure – this includes adding matters of discretion to:

- Rule 28.8.4.6 (Moana Pool Zone) – in Matters of Discretion add (stormwater) after a. effects on efficiency and affordability of infrastructure
- Rule 31.9.4.6 (Schools Zone) – in Matters of Discretion add (stormwater) after a. effects on efficiency and affordability of infrastructure
- Rule 34.9.4.9 (Campus Zone) - in Matters of Discretion add (stormwater) after a. effects on efficiency and affordability of infrastructure PLUS adding d. Effects of stormwater from future development.
- Rule 35.8.4.6 (Wakari Hospital) - in Matters of Discretion add (stormwater) after a. effects on efficiency and affordability of infrastructure

For restricted discretionary subdivision, amend the following rules to add a new matter of discretion for “effects of stormwater on future development” to rules:

- Rules 17.10.4.1 (Rural Residential Zone)
- Rule 19.10.5.1 (Industrial Zone)
- Rule 34.10.5.1 (Campus Zone)

Given the complexities of stormwater and the importance of providing for stormwater management to protect people and property in all zones across the city, 3 Waters supports this change as it will add consistency to stormwater management throughout the Plan.

Submitter S117.006, as a second part to CP4, is requesting to amend Rule 9.9.3.7. The submitter is seeking amendments on 4 provisions:

Each provision and 3 Waters response to these are set out in the table below.

	Submitters' Proposal	3 Waters Response
Provision 1	The proposed adjustment at 9.9.3.7.a is intended to improve the interpretation of the stormwater evaluation provisions by removing the reference to “management”. Management is a tool that will occur as a consequence of the evaluation, during implementation of the stormwater solution. At the time that rule 9.9.3.7.a is applied, the better terminology is “assessment”, as the submitter has proposed. This will reduce the current level of interpretation issues that the land development profession finds commonly associated with terms such as “stormwater management”, “stormwater management plan” and “stormwater assessment”.	3 Waters acknowledge that at times stormwater management guidance can be unclear, however further information and guidance is coming. Currently in the 2GP Rule 9.9.3.7 states that outside a New Development Mapped area (NDMA) a stormwater “proposal” is required. 3 Waters believe there is a distinction between what is being asked for under the provisions. i.e. one is asking for an integrated stormwater management plan (SWMP) and the other is asking for a stormwater proposal. For any size development (large or small) there are core stormwater management principles (e.g., SW run-off peak flow analysis, secondary flow path design and stormwater quality considerations) that both SWMP and a stormwater proposal should address. The wording of “assessment” while it may imply that stormwater impacts will be considered, it does not imply that stormwater impacts

		will be managed. Having an assessment detracts from what is required by means of stormwater management. Additionally, as outlined in 9.9.3.7.a.iii, relevant guidelines and templates are provided to external parties. This includes, as stated in 9.9.3A, the use of NZS 4404:2010 for land development and subdivision infrastructure, the Dunedin City Council Code of Subdivision 2010, and the New Zealand Building Code Clause E1 Surface Water standards. These guidelines, templates, and standards detail the information required to meet DCC's stormwater proposals and management plans, including Rule 9.9.3 of the 2GP. While 3 Waters acknowledge that at times stormwater management guidance can be unclear, further information and guidance is in development. 3 Waters does not support the amendment proposed by the submitter.
Provision 2	The proposed adjustment to Rule 9.9.3.7.a.ii aims to improve guidance for users regarding stormwater issues made publicly available. The reason for this is to emphasize the importance of understanding stormwater issues and ensuring that relevant information is accessible to applicants and land development professionals. If no issues are clearly published, applicants and professionals should be able to assume that there are no stormwater issues or concerns. The second part of the proposed change to Rule 9.9.3.7.a.ii is intended to localise the assessment to a reasonable catchment for assessment purposes. Consideration to catchment and capacity constraints that affect the site or infrastructure within a 1km distance downstream of the site is proposed. There needs to be a clear and sensible understanding of where the geographical limits of a stormwater assessment are applied.	Stormwater information and related issues can be complex and prone to misinterpretation. For instance, different maps depicting various storm events may show that while some areas are not directly at risk, they can still contribute to risks in other areas. If specific information is unavailable, it's crucial to conduct a comprehensive stormwater assessment to address potential issues through design, which is a key aspect of stormwater management. Applicants and land developers should not assume there are no issues if there is no published information. They are encouraged to engage with the DCC early in the development and design process to understand the issues and ensure effective stormwater management. For the second part of the proposal. Given the complicated nature of stormwater management and its vital role in safeguarding properties and residents across various city zones, it's crucial to consider cumulative impacts. These impacts, along with any infrastructure

		limitations, must be thoroughly understood since site conditions differ throughout the city and require individual evaluation. If a site is discharging to a catchment with constraints downstream, it will exacerbate the constraint and needs to be considered. Consequently, enforcing distance requirements would hinder the comprehensive review needed for effective stormwater management. The behaviour of downstream watercourses varies considerably and is a function of topography, land use and the spatial distribution of rainfall among many other factors. Applying a blanket downstream distance would not take into account the variable nature of behaviours of downstream watercourses, where negative impacts may occur beyond 1km downstream from the development site. 3 Waters requires to account for the broader effects and the concerns of the Dunedin community, not only at the specific location but within the larger catchment and downstream areas because changes to rainfall run-off, due to development, can have negative impacts at distances greater than 1km downstream of the development site. It is possible for developers, by addressing the core stormwater management principles (e.g., SW run-off peak flow analysis, secondary flow path design and stormwater quality considerations) to avoid detailed assessments of downstream effects, if post-development peak flows from the development site are kept at or below pre-development peak flows. 3 Waters does not support the amendment proposed by the submitter.
Provision 3	The proposed additional provisions at Rule 9.9.3.7.a.iv and Rule 9.9.3.7.a.v are to ensure assessment identifies the appropriate information by determining whether on-site stormwater detention is necessary or not, and if necessary, the overall volume of stormwater detention storage required and the design maximum stormwater discharge rate for the overall site whilst providing a suitable method e.g., a set of consent	The stormwater management proposal for the site should encompass considerations on the optimal methods for managing stormwater. This should also address whether stormwater detention is necessary. The proposal should present the best strategies for stormwater management, including all relevant options and considerations.

	conditions, for implementation of any necessary stormwater solutions.	The proposal should ensure all parties understand the existing and proposed conditions, including any risks. In principle, the proposed addition of iv. is supported, provided that the wording is altered to make clear that any development site should attempt to achieved hydraulic neutrality between pre and post development peak flowrates. To support stormwater management, a set of consent conditions, if required, are currently employed to facilitate implementation and maintenance of the stormwater infrastructure. The addition of v. would make this more clear and reflect what is already being done. 3 Waters supports in principle the amendments provided by the submitter for iv. and v. if wording of these clauses is refined.
Provision 4	The proposed adjustment to Rule 9.9.3.7.b seeks to adjust the size at which an integrated stormwater management plan may be required by Council. An integrated stormwater management plan is a more detailed understood to be significantly larger evaluation than a stormwater assessment, and the Submitter agrees that there are times that this is an appropriate requirement. However, applying this to small site of six lots is not acceptable. Six lots should be adjusted to twenty lots, which would bring an improved level of consistency and reasonable ness to this provision.	3 Waters believe, developments with 20 lots are generally likely to pose a significant potential risk of adverse effects to only require a stormwater proposal. The 2GP accommodates zoned of various densities for residential land. For instance, land zoned as Large Lot Residential 2 has a minimum site area per residential unit (Rule 15.5.2) of 3,500m², meaning only 2 lots are possible per hectare. General Residential 2 Zone has a minimum site area per residential site of 300m² (Rule 15.7.4), meaning potentially as many as 33 lots are possible per hectare. The current provision is designed to account for the various minimum site areas per unit across the range of residential zones such that the provision can be applied as appropriate within it's current bounds relative to the potential risk that stormwater from the development may pose and to prevent large sections of land from having fragmented/piecemeal stormwater management. It should be noted that this clause is not a mandatory requirement, but is "where requested by Council".

		3 Waters does not support the amendment proposed by the submitter.
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The DCC are in the process of providing more information on stormwater management including guidance for requirements for stormwater proposals and additional published mapping. However, DCC are not in a position to finalise this information at present.

3 Waters supports the proposed addition of iv. and v. in principle however wording of these clauses needs to be refined.

3 Waters does not support any of the other amendments proposed by the submitter. Refer to the above table for the necessary responses.

CHANGE RES20: ALLOWING 3 WATERS AGREEMENTS FOR RTZ TRANSITION

Change Res20 amends the release criteria for RTZ. Submitter Peter Enright (S131.002) has sought an additional release path for RTZ allowing the release of small parcels of land which 'have no material impact on infrastructure matters'.

Res20 - Part 1 of the submitter's request is dealt with under section Res 13. Title: 1. Setback distances from open watercourses. (Refer to the Res 13 section)

Res20 - Part 2 of the submitter's provision is requesting the addition to allow the release of small parcels of land within an RTZ which "have no material impact on infrastructure matters".

3 Waters has a concern over the definition of "small" within the submitters request. "Small" is a relative term as the size may vary from site to site. As such a fixed size used to define "small" would not be appropriate.

Residential Transition Zones (RTZs) are significant areas and feature constrained infrastructure. It is the view of 3 Waters that there are no small areas within RTZs that have no material impact on infrastructure. If small areas within a RTZ weren't constrained they wouldn't have been included within the RTZ, that is the reason they are within a RTZ.

The DCC would prefer RTZs to be developed as a whole or in larger sections, and while partial uplift of an RTZ can occur, Rule 12.3.1 still needs to be satisfied. This means that the required infrastructure upgrades must be either planned or already implemented. Carving off very small sections of a RTZ risks piecemeal development and a non-integrated development approach.

Even if small pieces of land use for residential development are released this can have an impact on infrastructure by way of cumulative effects. 3 Waters do not want to have lots of small parcels of land released, thus setting a precedent, as the cumulative effects from other similar subdivision proposals, could create adverse conditions in the receiving environment / downstream network. Furthermore, assessing whether small parcels of land could be released from RTZs would create additional workload for DCC staff.

3 Waters do not support the proposal from the submitter.

CHANGE RES13: STORMWATER OPEN WATERCOURSE SETBACKS

1. Setback distances from open watercourses

There are several submissions regarding setback distances from open watercourses, all different in what is proposed. Each proposal and 3 Waters response to these are set out in the table below.

Submitters' Proposal	3 Waters Response
Increase the residential setback from 5m to 10m (S77.001)	3 Waters believes 10m is a very wide setback distance from open watercourses for residentially zoned properties given the compact nature of most residential zones and is considered too restrictive on what people can do within their properties. Although 5 metres is the minimum setback proposed, landowners can always choose to increase the setback to a wider distance on their own private land if it suits their circumstances. However, overall, 3 Waters is comfortable with a standard 5m setback for all residential properties from stormwater open watercourses.
Decrease setback distances in non-rural zones (example S117)	The purpose of stormwater open watercourse setbacks is to protect people and their property, as well as keeping the access to the stormwater watercourse free from obstruction so it can be easily maintained and repaired. Any reduction in the setback size would compromise both these factors so 3 Waters believes the residential setback distance at 5m should remain.
Change setback distances according to size of the watercourse (e.g. S107.002 and S145.001 and S49.001)	3 Waters understands this proposal as a concept, however, 3 Waters believes this would be a difficult concept to administer in practice because watercourses vary greatly in size, depth and scale. Some watercourses only run when it rains, others run continually, and generally watercourses are not static, they change size, course and depth over time. Given this, and the complexity of measuring each watercourse along its entire length 3 Waters believes this it would be a labour intensive and difficult way to manage watercourse setbacks and not practicable. 3 Waters does not support changing setback distances based on watercourse size.
Use guiding principles regarding obstructions or alteration in flow then a resource consent is required	3 Waters' considers an approach of using guiding principles in relation to stormwater setback distances would be resource intensive in relation to staff time and not an efficient management tool for watercourses. 3 Waters does not support this approach.
Lifestyle properties that are under 20-30 hectares in the rural zones have a 5m setback rather than 20m	3 Waters believes "Lifestyle" properties are difficult to define even with a size limitation included. Different types of farming or land uses

	in the rural zone is not something that 3 Waters would take into account when considering stormwater setbacks, given the purpose of setbacks is to protect people and property from flooding. Whether the land is used as a lifestyle property or a working farm, a 5m setback is too narrow for safety purposes in rural zones. 3 Waters would not support this proposal.
Reduce setbacks in rural areas from 20m to 7m; reduce all other zones from 5m to 2.5m	One submitter refers to the Otago Regional Council's setback standards that apply to their drainage channel network which is 7m. 3 Waters believes that there is some merit in aligning with the Otago Regional Council and being consistent with them in relation to watercourse setbacks. Given this, 3 Waters would be open to considering reducing the rural setbacks for stormwater open watercourses to 7m.

In summary, 3 Waters is comfortable with the residential setback remaining at 5m for all stormwater open watercourses; and with regard to the rural zone 3 Waters supports reducing the setbacks from 20m to 7m to align with the Otago Regional Council's setback standards that apply to the drainage channel network.

2. Watercourses by property boundary

Several submitters proposed where open watercourse features exist close to a property boundary, that the setback rules should not apply to the adjoining property (i.e. on the other side of the boundary).

3 Waters' concern regarding this proposal is that during a rain event, the watercourse and any potential flooding would not respect a property boundary. The risk of flooding on the property that does not contain the watercourse is still as relevant, and at risk, as the property that does contain the watercourse.

The reasons for having watercourse setback rules is to protect people and their property, to keep clear access for maintenance of the infrastructure, and to not obstruct the flow of water in a flood event. Given this, 3 Waters would not support this proposal as the boundary line is ineffectual in preventing flooding from an open stormwater watercourse and the risk to the adjoining property remains with or without a boundary.

3. Watercourses on greenfield land.

One submitter proposes exemption for all the open watercourses mapped areas features from the Planning Maps where these features relate to large properties of undeveloped land to residential zones, potentially any block larger than 1 hectare.

3 Waters believes the provisions are suitable for their intended purpose, to protect people and their property, to keep clear access for maintenance of the infrastructure, and to not obstruct the flow of water in a flood event. The risks associated with the above still apply to large properties of undeveloped land. Understanding the risks in these areas and their impacts, including downstream effects, catchment assessment, topography review, and watercourses, is crucial for managing stormwater during development. Identifying these factors on a map

will help to ensure that developers and landowners consider these risks and determine the most effective stormwater management strategies.

3 Waters do not support the exemption for the removal of the Stormwater open watercourses from the planning map for large properties of undeveloped land in residential zones.

4. Exemption for recently consented properties

One submitter proposes to amend the open watercourse setback provisions to include an exemption from setback requirements for properties that are subject to recently consented and/or approved developments where anticipated land use activities have not yet been fully implemented.

3 Waters understands the circumstances that the submitter is referring to, and for properties that have already been given consent under rules where the setback requirements are different to what is being proposed, and development hasn't yet commenced, 3 Waters agree that there should be an exemption for these situations. It is 3 Waters assumption there would be a fairly low number of these cases, along with a limited timeframe where this is applicable, so are comfortable with supporting this.

5. Exemption for network utilities and drain works

It is proposed by one submitter that rule 10.3.3 Setback from Coast and Water Bodies be amended with an exemption to 'network utility structures – small scale' in driveways and consented roads so that, for example, consenting costs for the installation of fibre can be avoided. Further, the submitter proposes to exempt the 'operation, repair, minor upgrading and maintenance of existing drains' as well.

In relation to the exemption regarding network utility structure – small scale in driveways and consented roads, 3 Waters believes in a practical sense there would not be any significant problem with exempting fibre cabling etc. in driveways that are near water bodies from the setback rules, as generally these utilities are underground and therefore there would be a low risk of damage if flooding was to occur.

The second exemption regarding existing drains, 3 Waters questions what 'minor upgrading' means and how that would work in practice, and is not comfortable with the proposed wording given there is not a definition. As an alternative, 3 Waters would support the word 'renewal' which means replacing like for like (size, depth and alignment, not necessarily materials), in place of 'minor upgrading'. 3 Waters would support the following wording for an exemption instead: 'the operation, repair, maintenance and renewal of existing drains'.

6. Exemption for small – medium structures

One submitter has proposed to amend Rule 10.3.3.Y.b Setback from Coast and Water Bodies by having an exemption for structures with a maximum footprint of 20m², instead of 2m², in the setback from a stormwater open watercourse mapped area, or otherwise requests that tunnel houses and glasshouses are an exception.

The setback rules are designed to protect people and property, as well as providing ample space either side of a watercourse for maintenance and repair and the flow of water in a flood event. Structures that are located close by to a watercourse are at risk of damage from flooding as well as potentially having an impact on the function of the watercourse by blocking stormwater flow when in flood. Ultimately 3 Waters would not want anything of high value to be built within the setback area though it is understood that both tunnel

houses and glass houses are temporary buildings. Both however, have the potential to obstruct stormwater flow and to suffer from damage if flooding occurred.

With regard to allowing structures with a maximum footprint of 20m² within the setback area, 3 Waters believes this size would be too big, and has the potential to allow habitable structures to be built in the setback area. Given the reasons stated above for not allowing any structures within the setback area (i.e. the protection of people and property, access for maintenance and to keep the area free of obstructions during times of flooding) 3 Waters does not support changing the maximum footprint of structures allowed in this setback area, nor do 3 Waters support allowing glasshouses or tunnel houses in the setback area either.

CHANGE NU2: EARTHWORKS SETBACKS FROM NETWORK UTILITIES

The purpose of Change NU2 is to review the appropriateness of the 2GP setback rule for earthworks near network utilities (Rule 5.6.2).

Two submitters seek to amend Rule 5.6.2 (Earthworks setbacks from network utilities) to include an exemption that allows earthworks to be undertaken at, or behind, a boundary line where the boundary line exists within the setback distance.

The reasons for having setback rules are to protect underground utility structures from damage, to have space for maintenance of the infrastructure, to not obstruct any accessways and avoid any associated adverse effects on health and safety.

Allowing a boundary line to effectively become a setback does provide adequate protection to ensure that all the above can still be achieved. It risks damage to underground utility structures a potential inability to access and maintain infrastructure and increases health and safety risks for those carrying out works behind the boundary line. 3 Waters do not support the submitters proposal.

NU3: PRIVATE INFRASTRUCTURE

Change NU3 reviews the appropriateness of defining infrastructure as a network utility when it is located on privately owned property it exclusively serves.

A submitter seeks to expand the “except where” portion of Rule 5.6.2.1 so that it relates to network utilities that are privately owned (by an individual owner or by a collection of owners) and where:

1. the infrastructure services more than one property, and
2. there is a management regime in place for the infrastructure such as a body corporate arrangement, a formal residents association or a legal instrument such as an easement etc.

It is 3 Waters’ understanding that the original amendment to rule 5.6.2 was so that the rule did not apply to earthworks near network utilities that exclusively serve the privately owned property they are located on.

3 Waters is a public network owner and operator, and is responsible for the public water, wastewater and stormwater networks across Dunedin. Any private infrastructure for water, wastewater or stormwater is the responsibility of the private owner rather than DCC’s 3 Waters team. Given this, 3 Waters does not have an interest in this proposed change.

However, 3 Waters would suggest that it would still be prudent for private owners to leave an access corridor of at least 1.5m either side of any infrastructure (measured from the centreline). This is so current private owners, and also future owners, would have access to maintain the underground infrastructure.

CHANGE CP15: PERMITTED BASELINE RULES

It is 3 Waters' understanding that Change CP15 corrects an error in the 2GP regarding the permitted baseline rules for stormwater. This change will ensure where these rules have been missed, they will be added to the correct notification and assessment rules.

As a network asset owner and operator, 3 Waters is responsible for the public stormwater system that runs throughout Dunedin city. Much of Dunedin's stormwater drainage also occurs through private watercourses on private property. Any upstream development needs to be managed so that it does not adversely affect this privately owned infrastructure as, although not owned by the DCC, it is still an integral part of the overall Dunedin stormwater network.

Both Dunedin's public and private stormwater infrastructure, can be dramatically affected by new and ongoing growth in the city - this development leads to increased impervious surfaces potentially creating more stormwater run-off if not managed well.

The rules in the 2GP regarding impermeable surface requirements and site coverage for new developments are designed to help limit stormwater run-off and thereby support the management of stormwater and any potential flooding. 3 Waters believes it is important that the 2GP is corrected to manage stormwater well and supports this change.

3 Waters would also like to clarify a misconception with regard to the permitted baseline rule for this matter. During the time of development of the 2GP there seemed to be a misconception in the development community that impermeable surface levels were set at limits (in Rule 15.6.10) where it was assumed there was capacity in the stormwater network to accept all stormwater produced if every site developed to these limits – this was not the case at that time, and it is still not the case currently. Areas of the public stormwater system in Dunedin are old and perform below the level of current design performance standards in the Dunedin Code of Subdivision & Development 2010. For much of the private stormwater infrastructure in Dunedin the capacity and performance of this infrastructure is unknown. The problem still exists that if all new development were built to the maximum impermeable surface coverage of the site, during a rain event the stormwater network could not be expected to work adequately or meet current performance standards and would become overwhelmed leading to flooding which places people and property at risk.

The impermeable surface limits were designed to work in tandem with a requirement for stormwater management plans for subdivisions and on-site management of stormwater. 3 Waters position is that even if impermeable surface limits are not contravened this does not mean that consideration of effects and on-site stormwater management are not required where there may be potential downstream effects.

Currently, developers can gain a resource consent for developing a new residential unit on a site that already contains a single dwelling, with the intention of subdividing the site at a later date once development is complete. By subdividing the site after development, they are not breaching Rule 9.9.3.3 so currently they are able to develop and not provide any information regarding stormwater management even if there are downstream issues with run-off causing flooding in the vicinity. In these instances, 3 Waters staff are not required to assess applications so we do not have the ability to consider any effect that this type of development may have on our stormwater network's capacity.

The only way 3 Waters is able to consider the effects of development on our 3 Waters stormwater network is at the time of subdivision (and prior to development). Change CP15 will make it clear how subdivision consents will be assessed with respect to maximum building site coverage and impermeable surfaces and will assist in requiring even small subdivisions to consider, and where necessary address, stormwater management. It will give 3 Waters the opportunity to ensure new developments manage stormwater effectively, which will help Dunedin's public and private stormwater network functioning during rain events and reduce risks to people and property.