

**From:** [BDC\\_Lgoima](#)  
**To:** [REDACTED]  
**Subject:** FW: Official Information Request for Expenditure Breakdown - Stormwater Separation Ref: OIA 055/25  
**Date:** Tuesday, 10 June 2025 2:32:24 pm  
**Attachments:** [Westport stormwater wastewater separation options assessment.pdf](#)

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Dear [REDACTED]

Further to our below email, the results from the smoke testing showed 594 cross connections in Westport and 17 in Carters Beach.

Kind regards

LGOIMA Team

Buller District Council | Phone 0800 807 239 | [bullerdc.govt.nz](http://bullerdc.govt.nz)  
PO Box 21 | Westport 7866

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**From:** BDC\_Lgoima <lgoima@bdc.govt.nz>  
**Sent:** Friday, 6 June 2025 1:35 pm  
**To:** [REDACTED]  
**Subject:** RE: Official Information Request for Expenditure Breakdown - Stormwater Separation Ref: OIA 055/25

Dear [REDACTED]

Please find attached the full document which is publicly available as it went to council in March.

We will look to forward you the other information when it is available as a staff member is currently away returning early next week.

Kind regards

LGOIMA Tea

Buller District Council | Phone 0800 807 239 | [bullerdc.govt.nz](http://bullerdc.govt.nz)  
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**From:** [REDACTED]

**Sent:** Tuesday, 3 June 2025 9:36 pm

**To:** BDC\_Lgoima <[lgoima@bdc.govt.nz](mailto:lgoima@bdc.govt.nz)>

**Subject:** Re: Official Information Request for Expenditure Breakdown - Stormwater Separation  
Ref: OIA 055/25

Dear Mr Blom,

The file received seems to have been truncated, I have only received pages 24 to 27, Please forward pages 1 to 23 inclusive.

Furthermore my information request asked for documents which showed the number of properties "in each area", that is the number that failed a smoke test in Westport and the number that failed a smoke test in Carters beach.

With thanks,

[REDACTED]

On 3/06/2025, at 2:32 PM, BDC\_Lgoima <[lgoima@bdc.govt.nz](mailto:lgoima@bdc.govt.nz)> wrote:

Dear [REDACTED]

We refer to your official information request dated 13 May 2025, your request was as follows:

*Please provide the full breakdown of estimates of expenditure to separate stormwater/sewage in both Westport and Carters Beach. Of particular interest are the numbers of affected ratepayers in each area and the methodology behind the proposed expenditure.*

The information you have requested is attached.

You have the right to seek an investigation and review by the Ombudsman of this decision. Information about how to make a complaint is available at [www.ombudsman.parliament.nz](http://www.ombudsman.parliament.nz) or freephone 0800 802 602.

If you wish to discuss this decision with us, please feel free to contact the Buller District Council by return email to [lgoima@bdc.govt.nz](mailto:lgoima@bdc.govt.nz).

Please note that it is our policy to proactively release our responses to official information requests where possible. Our response to your request may be published at <https://bullerdc.govt.nz/district-council/your-council/request-for-official-information/responses-to-lgoima-requests/> with your personal information removed.

Kind regards

Anthony Blom | Group Manager Infrastructure Services  
Email [Anthony.Blom@bdc.govt.nz](mailto:Anthony.Blom@bdc.govt.nz)

Buller District Council | Phone 0800 807 239 | [bullerdc.govt.nz](http://bullerdc.govt.nz)  
PO Box 21 | Westport 7866

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[<image003.jpg>](#)

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<Stormwater Separation Breakdown - OIA Ref O55\_25.pdf>



## **INFRASTRUCTURE SERVICES**

# **WESTPORT STORMWATER / WASTEWATER SEPARATION OPTIONS ASSESSMENT**

21 March 2025

# 1. Executive Summary

The Buller District Council (BDC) is currently in the process of renewing its resource consent for wastewater pump station overflows, which expired in 2023. A new consent was applied for in April 2023, after which the West Coast Regional Council (WCRC) issued a request for additional information. The previous resource consent under condition 50 allowed BDC to overflow 263 hours in any calendar year (3% of the time). This was exceeded ranging from 8 - 10% in the years 2023 and 2024. Any years prior to 2023 had false reporting due to river and tidal inflow and defective floodgates. The primary reason for the exceedances has been identified as non-compliant stormwater cross-connections into the wastewater system. Key stakeholders, including Ngāti Waewae and the WCRC, have emphasized the need to significantly reduce the volume and duration of overflows from the pump stations during the next consent term.

To address this, BDC has made progress in installing new backflow devices to stop river water surcharging into pump stations and separating network cross-connections in the streets, with final completion expected by the end of June 2025. However, the impact of this work is expected to be minimal, as it does not address the 611 private property cross-connections identified during investigations in 2022. Additional sources of inflow, such as low and broken gully traps and faulty laterals, also remain unaddressed.

Achieving a noticeable reduction in overflows will require targeting private property inflow and infiltration of stormwater. This initiative aligns with environmental and cultural priorities, offering significant benefits, including reduced environmental impact, enhanced system efficiency, and compliance with anticipated consent conditions. However, implementation will require substantial financial investment and policy development.

This report presents and analyses four options to address the impact of the private property cross connections on the pump station overflows. Its purpose is to obtain a decision on a preferred option or options to respond to the issues described above for wider consultation with the community. The two options favoured by staff are either a regulatory compliance approach pursuant to the Wastewater Drainage Bylaw or a rates-funded remediation approach.

This report undertakes an option assessment and considers the known views of those who may be affected by each option. Further consideration and consultation will be required, possibly as part of the LTP process.

## 2. Background

### 2.1. Overview of Current Situation

The Buller District Council (**BDC**) operates fourteen pump stations that transport wastewater from its reticulated network to a wastewater treatment plant. The issues this report addresses relate to the causes of overloading of those pump stations and their discharges into the Buller and Orowaiti Rivers.

BDC has a discharge permit (resource consent) to discharge primary treated wastewater into the Buller River at three locations<sup>1</sup> when its pump stations have exceeded their available storage and the pump capacity. These discharges include human effluent in wastewater that has only received

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<sup>1</sup> Rintoul St, Roebuck St and Packington St.

primary treatment (screening). Also included in the discharges but not authorised by the resource consent is stormwater.

The consents include a condition (condition 50) allowing those discharges into the Buller River for no more than 263 hours in any calendar year (3% of the time). This condition has not been complied with. BDC has a reliable dataset from 2023 and 2024 that indicate overflow events exceed the allowable 263 hours per year by up to approximately 600 hours. The range for the two years is around 700 - 876 hours per year or 8% -10% of the time.

Prior to 2023, the pump stations had false reporting due to river and tidal inflow and defective floodgates, but the expectation is that overflow events were at the least equivalent to the range established for 2023 and 2024.

In addition, there are sites adjacent to other pump stations that do not have resource consents where there are discharges into the Buller or Orowaiti Rivers.

Cross-connections are widespread in and around Westport. To date, BDC has made progress in identifying and addressing cross-connections within its own network. Smoke and dye testing conducted in 2022 identified 60 cross-connections in the council-owned system. The majority of these have been remediated over the past 12 months, with the remaining scheduled for completion by the end of June 2025.

On private land, cross-connections remain a significant challenge. Work undertaken in 2022 identified 611 cross-connections on non-council owned infrastructure. These private inflows, alongside other issues such as faulty laterals and low or broken gully traps, continue to contribute significantly to overflow volumes. It is noted that these numbers are not final, and an additional property inspection program will be required to quantify the full extent of the problem.

Additionally, BDC is currently seeking to renew its resource consent for wastewater pump station overflows, which expired in 2023. This application seeks to regularise the situation with the overflows, by obtaining resource consents for all discharges into the Buller River. Further resource consents will need to be sought for discharges into the Orowaiti.

The West Coast Regional Council (WCRC) issued a request for additional information, including a request that BDC outline an infrastructure improvement strategy to reduce the number and volume of pump station overflows.

There is a clear expectation from key stakeholders, including Ngāti Waewae and WCRC (see below), that substantial improvements be made by BDC. Feedback from Ngāti Waewae emphasizes the importance of achieving significant, steady reductions in overflow durations, with the long-term goal of limiting overflows to high-rainfall events only.

## **2.2. Historical Context**

Historically, it was common practice in New Zealand to allow combined stormwater and wastewater systems. In some cases, BDC itself encouraged this approach to maintain sufficient flow volumes for network performance. This approach has led to a widespread and large number of combined discharges into the wastewater network.

However, as environmental and cultural awareness has grown, combined systems are generally no longer acceptable due to their adverse impacts on water quality, ecosystem health and cultural values.



Furthermore, as noted, BDC has been unable to comply with the conditions of its expired resource consent, as overflow durations have been significantly exceeded each year, see section 2.1.

The construction of the Westport Wastewater Treatment Plant (**WWTP**) in 2007 marked a significant step forward in improving wastewater management. However, the WWTP project did not address the historical practice of allowing stormwater inflows into the reticulated network.

## 2.3. Stakeholder Expectations

Key stakeholders have set clear expectations for the consent renewal process that apply generally to the operation of the reticulated network:

- **Ngāti Waewae:** Seeks a firm commitment to reducing the environmental and cultural impacts of wastewater overflows on local waterways.
- **WCRC:** Expects practical measures to achieve a steady reduction in overflow volumes and durations over the next consent term.

It is the view of officers that without a clear commitment to reducing pump station overflow volumes and durations that Ngāti Waewae will not support the granting of future consents and WCRC will either, decline applications for new consents or impose conditions requiring works that may or may not be acceptable (and achievable) for BDC, exposing BDC to a high risk of non-compliance with its regulatory obligations.

Given the identification of the combined discharges as the primary reason for consent condition non-compliance, the stakeholder expectations underscore the need for a comprehensive approach to addressing private property inflows, as network improvements alone are unlikely to meet stakeholder and consent requirements.

It is worth noting the Westport community as a key stakeholder whose views will need to be understood and considered as part of the Council's decision-making process. The requirements of the Local Government Act 2002, including the Significance and Engagement Policy, will govern how this will happen and the extent to which consultation with that and the wider Buller community will be required.

## 2.4. Current Challenges

This report has identified the following current challenges in relation to Westport overflow discharges:

- The high number of private property cross-connections contributes to significant stormwater inflows into the wastewater system, exacerbating overflows during rainfall events.
- Additional sources of inflow, such as broken gully traps and faulty laterals, remain unaddressed.
- Achieving meaningful reductions in overflow volumes will require significant financial investment and a clear, enforceable framework for implementation.
- The Council has applied for a new resource consent to authorise discharges to the Buller River and a new consent for discharges into the Orowaiti. The conditions of those consents are not yet settled, so there is some uncertainty as to the medium-term regulatory setting.

## 2.5. Legal and Compliance Requirements

Operating without an updated resource consent can pose significant risks to BDC, including legal challenges and regulatory penalties.

At this time the overflows at the three consented sites are allowed pursuant to s 124 RMA because the application was made over 6 months before the expiry of the previous consent. This authorisation is in place until the application for a new resource consent is determined.

The balance of the discharges into the Buller and Orowaiti Rivers are not authorised by resource consents.

The expired consent has already highlighted areas of non-compliance, such as the frequency and duration of pump station overflows exceeding allowable thresholds. It is unlawful to operate the pump stations in a way that does not comply with the conditions of the resource consent.

While the conditions of future consents are not known at this time, WCRC has made it clear that future consent conditions will require BDC to demonstrate measurable reductions in overflow volumes and durations. It is recommended any decisions do not see this as a constraint and presume that any future consents will require combined discharges into the reticulation system to be minimised to reduce instances of overflow into waterways.

It is an offence to discharge contaminants (including wastewater and stormwater) into water (i.e. the Buller River) except in accordance with a resource consent (s 15 RMA). This is relevant for both the non-compliances from the existing consent and the unauthorised discharges.

A regional council has several enforcement options available to it to require immediate action to achieve compliance (i.e. abatement notices and enforcement orders). It may also commence a prosecution that, along with reputational damage, can result in significant fines (up to \$600,000 per offence, plus the potential for daily fines for continuing offences of up to \$10,000 per day).

There is therefore present and future risks BDC is legally required to address. It is recommended that a comprehensive approach to addressing inflow and infiltration, particularly on private properties, will be essential to secure compliance and a renewed and new consents.

## **2.6. Environmental and Cultural Impact**

While there has been limited evidence to date of direct environmental degradation from overflows, addressing stormwater and wastewater separation is essential to prevent potential future impacts on local waterways, such as the Buller and Orowaiti Rivers. If left unchecked, the continued discharge of combined wastewater and stormwater could lead to contamination that could affect water quality, aquatic habitats, and overall ecosystem health.

For Ngāti Waewae, the health of local waterways holds significant cultural and spiritual value. Even in the absence of clear evidence of environmental harm to date, iwi have expressed concerns over the long-term effects of wastewater overflows and measurable (in a scientific sense) environmental harm is not always required to demonstrate harm to cultural values.

Thus, reducing these discharges is not only crucial for maintaining water quality but also for preserving the cultural values associated with water, as emphasized by Ngāti Waewae. A commitment to reducing overflows aligns with BDC's broader goals of environmental stewardship and respect for iwi concerns.



## 2.7. System Efficiency and Resilience

Separating wastewater and stormwater systems will improve the overall efficiency and resilience of BDC's infrastructure.

Current inflows from private properties and other sources strain the capacity of the wastewater network, leading to frequent overflows and higher operational costs. By reducing these inflows:

- Pumping and treatment costs can be reduced.
- The capacity of the wastewater treatment plant can be optimized, reducing the likelihood of overflows during storm events.
- The network will become more resilient to extreme weather, mitigating risks associated with climate change and increasing rainfall intensity.
- The likelihood of combined stormwater and wastewater overflows on private properties will be reduced and operational challenges be limited (customers can't flush toilets during heavy rain).

## 3. Westport wastewater improvement programme

To improve the Westport wastewater network and gain a new resource consent for overflow discharges to the Buller River, staff have prepared a Wastewater Improvement programme (including the separation of stormwater and wastewater). The programme aims to achieve the following objectives:

<b><u>Objective name</u></b>	<b><u>Objective description</u></b>
<b>Inflow and infiltration reduction</b>	Markedly reduce the frequency, duration, and volume of overflow discharges to the Buller River
<b>Consent conditions and partner aspirations meet</b>	Reduce the impact of the overflows on the receiving environment and its ecological and cultural values.

In addition to these objectives, the beneficiaries of the wastewater/stormwater separation would be the residents of Westport and Carters beach along with any other residents in the wastewater catchment area. The benefits that would be included are:

- Cleaner water through limited overflows in future years,
- Consent is renewed avoiding Council prosecutions through the RMA, and
- Reversal of historic requirements to combine wastewater/stormwater systems highlighted by the lack of networks in areas of Westport to bring Westport up to new building consent and RMA obligations.

These objectives have guided the options identified and assessed in this report.

Council may wish to adopt these objectives as outcomes that it is looking to achieve when identifying and assessing the options presented to it in this report

## 4. Significance and Engagement Policy

Significance of a decision is assessed in accordance with BDC's Significance and Engagement Policy. The policy sets out the council's general approach to determining the significance of

proposals and decisions, and any criteria or procedures it will use. This decision has been assessed against the significance and engagement policy with the following criteria being triggered:

The matters addressed above show the steps Council take to address the issue have a high level of significance under the Significance and Engagement Policy. The need for Council to undertake activities lawfully, to run its infrastructure in a sustainable fashion and have productive relationship with Ngati Waewae, including as a Te Tiriti o Waitangi/Treaty of Waitangi partner, contribute to the significance of the decision.

The potential cost to ratepayers is also a factor contributing to that significance.

The potential to increase rates alone, is a reason to deem the matter significant under the Policy. Furthermore, other criteria in the policy are triggered given the potential impact on affected individuals (ratepayers and property owners), the impact on iwi cultural values and their relationship to water and the ability to generate a high degree of interest or controversy in terms of the number of people potentially affected.

Therefore, it is considered that the ultimate decision on which options to take will be significant and justify further community engagement. It is considered the decision sought by this report is appropriate in the circumstances because it acknowledges that significance and requests consultation with the community in line with the assessment of the Policy.

## **5. Consideration of views of those who are or may be affected & consultation**

The views and preferences of persons likely to be affected by, or to have an interest in, a decision must be considered by Council. This requires identification of who will be likely to be affected or interested in the matter and gather information about their views. This can be done through formal consultation, including the special consultative procedure in the LGA, or another process (including as set out in the Significance and Engagement Policy).

The principles of consultation in the LGA include:

- persons who will or may be affected by, or have an interest in, the local authority's decision should be encouraged by the local authority to present their views to the local authority.
- persons who are invited or encouraged to present their views to the local authority should be given clear information by the local authority concerning the purpose of the consultation and the scope of the decisions to be taken following consideration of views presented.
- persons who wish to have their views on the decision or matter considered by the local authority should be provided by the authority with a reasonable opportunity to present those views to it in a manner and format that is appropriate.

To assist with consideration of the views and preferences of persons likely to be affected by, or to have an interest in, the matter, the known views of persons affected by this proposal (to consult) include those set out in section 2.3 above.

It is noted that there will be a broad group of people who may or will be affected by the ultimate action taken on this issue, as any decision taken by Council to take action will directly impact a large number of Westport residents with cross connections on their properties and could also lead to a direct cost to Westport or Buller residents through increases to rates.

It is considered that the decision sought by this paper, that the Council seek community views on the appropriate way to address the non-compliances with current and, likely, future resource consents, will assist Council to better and more fully understand the views and preferences of those likely to be affected or to have an interest in the matter, as required by the LGA.

However, this may have the effect of constraining the matters the Council obtains views on i.e. through the option selection put out to consultation. This should be carefully considered by the Council before determining which, if any, options are consulted on. An option is to consult on all options. Council could, in those circumstances, identify preferred options without constraining the consideration of all practicable options as set out in this report.

Thus, given the broad impacts of a decision to take action or not take action, should Council accept the recommendations in this report that it seek the views of the community on the options presented in this report, it is recommended Council consider using the special consultative procedure.

## 6. Options for achieving Stormwater and Wastewater Separation

The Local Government Act 2002 requires Council to identify and assess reasonably practical options, including in terms of their advantages and disadvantages. The extent to which Council is required to identify and assess the options is determined largely in proportion to the significance of the matters affected by the decision.

To assist with an options assessment that identifies methods available to complete stormwater and wastewater separation, the following factors have been considered; political, economic, social, technological, legal, environmental, and operational. These factors will influence the feasibility, acceptance, and long-term success of the chosen implementation approach.

A holistic review was carried out, and the implications of the works are summarized below.

### Resourcing

- **Workforce Limitations:** Westport has a limited number of registered plumbers (approximately five), with an estimated capacity of 60 separation works per year. This constrains project timelines unless additional resources are utilised or work is packaged to engage a broader workforce to efficiently complete works.
- **Increased Workload:** The project will significantly increase the workload of individual teams. Additional internal capacity will be required to ensure successful delivery while maintaining business-as-usual activities.
- **Administrative and Technical Needs:** Additional resources may be needed for property inspections and compliance enforcement (if a supporting regulatory regime is established e.g. via a bylaw). Both the regulatory and infrastructure teams are likely to face significant impacts depending on the chosen approach.

### Economic Considerations

- **Financial Burden on Ratepayers:** Managing costs is critical, particularly given the median household income of \$52,000 per annum in the area.

- **Compliance Risks:** Non-compliance with consent conditions risks Environmental Court action and penalties, potentially affecting rates and budgets.
- **Housing Market Impact:** The stable to buoyant housing market offers some economic resilience.
- **Rating District Implications:** Approximately 30% of properties discharge stormwater into the wastewater network, with secondary inflow streams like broken gully traps expected to significantly exceed this figure. Targeting individual properties versus using a district-wide approach needs careful consideration.

#### Social Impacts

- **Demographics:** The high median age and prevalence of retirees in the area may create challenges in meeting financial obligations related to separation works.
- **Social Deprivation:** Financial strain in some areas increases the risk of resistance.
- **Cultural Concerns:** Issues raised by Ngāti Waewae and recreational users emphasize the need to address public health risks from overflows.
- **Community Awareness:** Shifting attitudes toward environmental awareness could support the initiative, though financial burdens may shift focus to affordability.
- **Iwi Relationships:** Failure to address concerns raised by Ngāti Waewae risks damaging essential relationships, with potential negative implications for future projects.
- **Reputational Risks:** Both inaction and controversial measures carry reputational risks that could affect standing with councils, government agencies, and the community.

#### Technological Challenges

- **Infrastructure Issues:** Approximately 611 homes have known stormwater cross-connections, requiring extensive work to resolve.
- **Inspection Gaps:** In 2022 property inspections using smoke tests were completed, however this predominately focused on compliance. Further details on the specific property actions to resolve the uncompliant sites is still required.
- **Innovative Solutions:** Options for groundwater soakage and stormwater detention must be explored to reduce network reliance.
- **Operational Concerns:** High inflow of stormwater disrupts Wastewater Treatment Plant (WWTP) performance. Increasing WWTP inflow is not viable due to potential operational disruptions and design capacity limitations of the existing plant.
- **Monitoring and Reporting:** Robust mechanisms are needed to measure outflow improvements and track project success.

#### Legal Framework that require further investigation

- **Wastewater Bylaw:** BDC's Wastewater Drainage Bylaw (NZS 9201: Part 22:1999), last reviewed by Council is 2020 mandates the separation of stormwater from wastewater systems to maintain network efficiency and meet compliance goals.
  - Clause 1.6.5 mandates separation.
  - Clause 2.13.2.1 regulates gully trap conditions to ensure drainage standards.
- **Local Government Act:**
  - Section 459 (LGA 1974): Empowers councils to mandate property drainage modifications.
  - Section 181 (LGA 2002): Authorizes councils to construct and maintain drainage works on private property.
  - Section 186 (LGA 2002): Grants authority to acquire land for public infrastructure projects.
- **Regulatory Alignment:** Evolving national water regulations under "Local Water Done Well" and new wastewater enforcement regimes may significantly impact the project.
- **Property Damage and Reinstatement:** Clear processes must be established to manage property damage and ensure reinstatement, mitigating resistance and maintaining trust.

- **Resource Management Act (RMA):** Non-compliance with WCRC resource consent conditions risks enforcement actions and penalties. Compliance with existing resource consent conditions requires reduction of stormwater flows in reticulated system. It is expected future resource consents will also incorporate consistent or more stringent conditions requiring reduction of stormwater flows in reticulated system.

#### Operational

- Operational matters widely vary depending on the option selected, so these matters are addressed under each of the option assessments.

#### Environmental Impacts

- **Compliance with Consent Conditions:** Meeting WCRC resource consent conditions is crucial to mitigate environmental risks.
- **Public Health Risks:** Risks to recreational users require further investigation.
- **Ecological Challenges:** Pollution from upstream sources like farming complicates efforts to isolate wastewater overflow impacts. Extensive data collection may be cost-prohibitive but is necessary for effective mitigation.

## 7. Options to Implement Separation

To implement the separation of wastewater and stormwater on private properties, BDC has identified three potential approaches plus a 'do nothing' option.

Each approach offers different benefits and challenges, which are evaluated against the political, economic, social, technological, legal, and environmental factors outlined in Chapter 4.

### 7.1. Option 1 – Do nothing

Under this approach, BDC would not take any steps to reduce cross-connections and the inflow of stormwater into the reticulated wastewater system. It is expected this would result in overflows at least to the same level currently occurring.

This option would mean BDC continue to operate its wastewater system without complying with its resource consent (and likely future resource consents). As set out above, it is an offence under the RMA to operate a system with discharges to water (i.e. the Buller and Orowaiti Rivers) except in accordance with a resource consent, which includes its conditions. The West Coast Regional Council would then have the option to take enforcement action or to prosecute BDC.

Enforcement proceedings could result in orders from the Environment Court requiring works to be completed within a certain timeframe. This would mean BDC would lose control of timing for the works and may mean the opportunity for an orderly and planned approach to the issue is lost.

A successful prosecution would result in a conviction for BDC and is likely to result in a fine. A prosecution would not remove the obligation to comply with the resource consent conditions or to stop discharging and would likely result in court orders requiring compliance within a timeframe, which results in the same issues as set out in the previous paragraph.

Additionally, the Wastewater Drainage Bylaw's requirement for separation of wastewater and stormwater would, with Council's knowledge, continued to be breached by individual property owners. While it is understood Council has some discretion as to how it enforces matters it has regulatory responsibility for, generally it should take steps to ensure there is compliance with relevant laws (although what that can look like can depend on circumstances and does not always require legal processes – see below).

## Conclusion

This approach would mean Council would be acting unlawfully and therefore carries with it significant risks. It also would likely compromise obtaining future resource consents on acceptable terms and the relationship with Ngati Waewae.

## 7.2. Option 2 – Do minimum (Voluntary Compliance)

Under this approach, BDC would ask homeowners to voluntarily separate their stormwater from the wastewater network. This would involve providing homeowners with guidance on how to comply with separation standards, including technical recommendations for modifications to their properties.

Voluntary compliance would require some level of monitoring and enforcement to ensure the quality of works undertaken by property owners. Poor-quality repairs or incomplete work could result in risks such as property flooding, reintroduction of stormwater inflow, or homeowners reconnecting stormwater systems to the wastewater network after separation inspection.

Officer experience from similar inflow and infiltration (I&I) programs elsewhere indicates that voluntary compliance often leads to suboptimal results. Poor-quality work may fail to meet necessary drainage standards, potentially undermining the program's goals and leading to frustration in the community if works have to be redone.

This approach must also address affordability concerns, as some homeowners may lack the financial means or willingness to carry out the required work. Without sufficient incentives or enforcement measures, the risk of non-compliance remains significant.

### Option Assessment

The voluntary compliance approach is evaluated against the major considerations from Chapter 3, incorporating risks and opportunities:

Criteria	Discussion
<b>Situational</b>	This approach is less politically contentious as it relies on homeowner initiative, but its weaker outcomes may undermine public and stakeholder trust in BDC's ability to meet consent conditions. The lack of strong outcomes could also impact relationships with iwi and community stakeholders. While there is an upfront saving in lower rates and costs for the Council, this could lead to increased compliance and legal costs if consent conditions are not met. In addition, the option of potential prosecutions by the Council for historic work that previous Council policy's allowed could be perceived poorly among ratepayers.
<b>Economic</b>	Voluntary compliance minimizes costs for BDC but shifts the burden to homeowners, potentially leading to affordability challenges and inequities. While cheaper for ratepayers in the short term, it risks future costs associated with poor-quality repairs or incomplete work should penalties be applied for consent condition breaches.
<b>Social</b>	While it minimizes upfront conflicts, voluntary compliance risks social inequities if some homeowners cannot afford or complete quality work,



	potentially exacerbating resistance in certain demographics. This could lead to community frustration and reputational harm for BDC.
<b>Technological</b>	Without centralized oversight, there is limited scope for integrating advanced solutions such as groundwater soakage or detention systems. Poor-quality work could also introduce long-term inefficiencies in the system. Additionally, significant longer delivery timeframes are expected, as progress relies on homeowner motivation to carry out the works.
<b>Legal</b>	This approach avoids direct legal challenges to enforcement but could create downstream risks if low-quality work results in system inefficiencies or reintroduced inflows. Property owners are also less likely to challenge Council's authority in this scenario. The option of potential prosecutions by the Council for historic work that previous Council policy's allowed could be challenged in the first prosecutions by lawyers.
<b>Environmental</b>	Experience in other districts suggests the approach is unlikely to achieve significant reductions in stormwater inflow, leaving key environmental goals unmet. Consent monitoring may not show measurable improvements, which could lead to compliance challenges.
<b>Operational</b>	<p><b>Voluntary Compliance Approach</b></p> <p>This approach would focus on public engagement, proactive communication, and notifications.</p>

## Conclusion

Voluntary compliance provides a softer approach that avoids immediate dissatisfaction among homeowners and ratepayers while offering lower upfront costs for BDC. However, it carries significant risks such as low participation, poor-quality repairs, and insufficient success rates, making it less effective for achieving long-term compliance and environmental goals. These challenges may result in increased future costs from legal or regulatory non-compliance.

### 7.3. Option 3 - Regulatory Compliance

The Wastewater Drainage Bylaw (**Bylaw**) prohibits stormwater entering the wastewater drainage system (see cl 1.6.5). The Bylaw provides the power for BDC to issue notices requiring any breaches of the bylaw to be remedied and, in the case of failure to comply with a notice, to undertake remedial works.

Under this option, BDC would issue notices to property owners to fix cross-connections in their private wastewater systems in reliance on the Bylaw. This process will require upfront inspections to assess the current state of properties in Westport and gather evidence of non-compliance, but these costs may be recoverable by Council under the Bylaw. Non-compliant properties will be issued notices requiring them to fix their systems by preventing any further stormwater entry into the wastewater system within a specified timeframe of, say, two years. After this period, if homeowners have not complied, BDC would take steps to undertake the remedial works itself.

The approach would be led by the regulatory team under the building compliance department, with support from the Infrastructure Team.

If homeowners fail to comply with the issued notices, BDC may have legal options to enforce compliance with the Bylaw under Section 181 of the Local Government Act 2002, as well as Section 459 of the Local Government Act 1974 and (as set out above) directly the Bylaw, to undertake the required works on private properties on behalf of property owners and recover the associated costs. Section 459 empowers councils to require property owners to modify private drains to ensure compliance, while the bylaw provides enforceable standards for stormwater and wastewater separation.

One risk with this option is further legal review is required to determine the correct process for Council to follow to execute this option. It is understood the individual circumstances of each property will need to be considered in order to determine if the costs of any remedial work can be recovered. This may be particularly material given Council has historically encouraged properties to connect stormwater to the wastewater system and arguments of fairness may arise.

Grey District have adopted a similar process for the Greymouth Wastewater Scheme where homeowners were given time to complete work themselves. Voluntary separation has resulted in a limited uptake. The Council has since decided to enforce a regulatory compliance approach, and this will start from July of this year. A rates funded response was not adopted, with the exception that the Council funded the cost of the building consents for each property. Similar populations are affected with one difference being all new sewer pipes and laterals were provided to each property, with the existing original combined stormwater-wastewater pipes becoming stormwater only.

## Option Assessment

The regulatory compliance approach is evaluated holistically, incorporating risks and opportunities:

Criteria	Discussion
<b>Situational</b>	This approach ensures structured enforcement and demonstrates a strong commitment dealing with one cause of the current breaches. However, it may negatively impact public relationships if individuals do not understand the drivers behind enforcement. Resistance and legal challenges are likely, particularly if property owners perceive enforcement as overly burdensome.
<b>Economic</b>	Higher upfront costs are expected for inspections, enforcement, and cost recovery, along with increased staffing requirements, particularly for enforcement and debt collection. Legal costs may also arise if property owners challenge notices.
<b>Social</b>	While ensuring consistent outcomes, enforcement may cause dissatisfaction among homeowners, especially those struggling financially. Additionally, the cost burden on individual homeowners may be high, with lower socio-economic areas likely to be disproportionately affected due to older infrastructure requiring more extensive repairs. This could exacerbate inequality within the community and lead to dissatisfaction.

	However, it minimizes long-term risks of system inefficiencies and overflow events.
<b>Technological</b>	Work is completed to clear building consent standards, ensuring consistency and quality. However, the limited availability of registered plumbers may slow progress.
<b>Legal</b>	BDC may have powers under Section 181 of the Local Government Act 2002, Section 459 of the Local Government Act 1974, and the Wastewater Drainage Bylaw NZS 9201: Part 22:1999. These frameworks empower councils to require property owners to construct, repair, or modify private drainage systems in some circumstances. Section 181 allows councils to undertake works on private properties when property owners fail to comply with notices, while Section 459 specifically empowers councils to enforce modifications to private drains. The bylaw establishes enforceable standards for stormwater and wastewater separation, ensuring consistency and legal backing. While this framework supports compliance, it also introduces potential risks of delays, disputes, and additional legal costs arising from a legal review to determine which options are available in this situation and for enforcement actions if required.
<b>Environmental</b>	Regulatory compliance is effective in reducing stormwater inflow, contributing significantly to achieving environmental goals by improving water quality and reducing overflow durations. It will also result in a reduction of overflows and subsequent environmental impacts.
<b>Operational</b>	<p>The first two years will focus on community engagement through a newly created enforcement officer role, supported by the Infrastructure Services (IS) BAU team. This team will issue letters and notices to homeowners, informing them of the separation requirements.</p> <p>Homeowners will have the opportunity to complete the work themselves through a registered plumber, comply and complete the required work within the first two years of the project. To encourage participation, BDC will offset building consent costs for compliant homeowners.</p> <p>If no significant improvements are observed after the initial two years, BDC will step in and carry out the necessary separation work on behalf of non-compliant property owners. At this stage, the role of compliance officer will transition to the Infrastructure Operations Lead, who will oversee contractors and ensure work is carried out efficiently.</p> <p>This approach aims to recover the costs of physical works from each individual property. Significant support from the finance team will be required beyond year two when BDC will need to initiate debt collection from individual property owners who remain non-compliant.</p>

## Conclusion

Regulatory compliance provides a clear and enforceable pathway to achieving separation and meeting future commitments, contributing to satisfying iwi expectations, and complying with WCRC resource consent conditions. However, this approach is likely to cause significant dissatisfaction in parts of the community. Resistance and legal challenges are expected, adding to the workload for the regulatory compliance department and requiring increased staffing resources for enforcement and debt collection. Despite these challenges, this approach ensures consistent and higher-quality outcomes compared to voluntary compliance, balancing immediate action with long-term environmental and regulatory benefits.

## 7.4. Option 4 - Rates-Funded Response

Under the rates-funded approach, BDC would assume full responsibility for the separation of stormwater and wastewater systems on private properties, including identifying non-compliance (including those shown in Appendix A), negotiating remediation and access with landowners and undertaking the remedial works.

This option would be funded through a proposed increase in targeted wastewater rates. The intent is to ensure equitable cost distribution across all properties within the Westport/Carters Beach rating district.

By centralizing the process, BDC can ensure consistency, quality, and timely execution of the works. This approach aligns with similar programs implemented by other councils in New Zealand, such as Gisborne District Council's DrainWise program and Wairoa's inflow and infiltration (I&I) initiative, both developed in conjunction with new resource consents to minimize wastewater pump station overflows.

This approach would involve engaging contractors or in-house teams to carry out the required separation works, minimizing the burden on property owners.

The Council's oversight would also provide confidence that all works meet building consent standards and align with environmental and compliance goals.

It is noted however, that access onto properties and the consent of landowners for the works would still be required. Alternatively, Council would need to rely on legal powers discussed above to undertake then works (i.e. notwithstanding it is at Council's cost).

## Option Assessment

The rates-funded response approach is evaluated holistically, incorporating risks and opportunities:

Criteria	Discussion
<b>Situational</b>	This approach demonstrates proactive leadership by BDC and ensures compliance with RMA and stakeholder expectations. However, it may face resistance from ratepayers who perceive the increased costs as unfair, especially if they have already invested in compliance. The increase in rates will likely be unpopular among parts of the community, causing dissatisfaction. However, backlash over the duration of the project is expected to be lower than the enforcement method, leading to quicker measurable outcomes satisfying iwi and WCRC.

<b>Economic</b>	While this approach incurs higher overall costs for the Council, it spreads the financial burden equitably across all ratepayers in the district. High capital costs are expected, and ratepayers may feel they are subsidizing the compliance of others, particularly if their properties are already compliant. Additionally, centralized management reduces long-term costs by ensuring efficient and standardized works.
<b>Social</b>	This method reduces the financial and logistical burden on individual property owners, ensuring consistency in outcomes. However, rate increases could disproportionately affect low-income households and retirees, leading to dissatisfaction in parts of the community. Community perception of fairness will be critical.
<b>Technological</b>	Centralized control allows BDC to integrate advanced solutions, such as groundwater soakage and stormwater detention systems, ensuring reliable and practical outcomes that meet building standards. The centralized approach strengthens BDC's position to negotiate better rates and contracts by bundling all work into a single procurement process, enabling cost efficiencies. This method also enhances BDC's ability to engage with the market effectively and secure better rates than individual property owners could achieve. Additionally, this approach ensures integration with broader stormwater management strategies, promoting synergistic effects and a reduction in stormwater inflow into the wastewater network. Progress tracking and measuring success are simplified through centralized oversight, ensuring transparency and accountability.
<b>Legal</b>	<p>This approach aligns with BDC's legal authority to manage public infrastructure and ensures compliance with consent conditions. It also minimizes the risk of legal disputes over enforcement, as works are carried out by the Council.</p> <p>Any increase in rates would be subject to the usual legal process under the LGA when setting rates.</p>
<b>Environmental</b>	The rates-funded approach guarantees significant reductions in stormwater inflow by addressing all identified cross-connections, contributing to improved water quality and reduced overflow durations. Council oversight ensures works are performed to high standards, achieving long-term environmental goals.

<b>Operational</b>	<p>Work will be carried out under the Infrastructure Services (IS) team, with the work program structured as a project. An in-house project lead will oversee operations, in case a full-time employee (FTE) cannot be employed, project management will need to be conducted by a contractor.</p> <p>At the start of the project a comprehensive communication strategy will be developed to inform the public about the project.</p> <p>Physical work on private properties to separate stormwater and wastewater will be carried out by contractors (plumbers) under BDC's instruction. The BDC project lead will manage property owner communication and disputes to support the plumbing contractor. This process could be supported by the 3 Waters Support Officer to reduce project lead time requirements.</p> <p>As BDC is directly carrying out the work, building consent requirements and related costs must be considered as internal costs. The need for building consent and associated cost implications should be reviewed and factored into the project budget accordingly. This option will require less support from finances, but will still increase administrative affords and is factored in as 0.2 of an FTE for Finance to support IS.</p>
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## Conclusion

The rates-funded response provides a centralized and equitable solution to achieving stormwater and wastewater separation. While it minimizes the burden on individual homeowners and ensures high-quality results, it places a further financial burden on all ratepayers within the wastewater rating district. Proactive communication and transparent management of costs would be essential to gaining public support.

It is believed this approach provides the fastest pathway to comply with resource consent conditions by achieving stormwater and wastewater separation by working with the community. Despite the higher costs, this method offers the greatest certainty of compliance and environmental improvements, aligning with long-term community and regulatory goals.

## 8. Rate impacts options

For options that include a cost to ratepayers, there are two options for consideration; targeted rate and general rates. Annual costs have been estimated at 4.87% interest over a 30 year loan period to give an indication of rate impacts.

### 8.1. Targeted rates

Targeted rates are billed to each household for certain services or facilities that are available to the household. These include sewerage, waste collection and water supply.

### 8.2. General rates

General rates not recovered through the Uniform annual general charge are set by dividing the remaining general rates required by the land value of the district's properties. Each property will



pay its share based on its land value and the differential that applies to the property based on where it is located and the activity or use of the land.

## **9. Costs**

### **9.1. Cost Considerations for all Options**

To evaluate the financial implications of each approach, indicative costings and resource requirements were considered based on insights from similar programs, such as Gisborne District Council's DrainWise initiative.

Costs have been broken into operating and capital, with capital being defined as work that has a benefit to the community that is longer than 12 months.

### **9.2. Option 1 – Do nothing**

The do-nothing approach involves no immediate direct cost for BDC but carries with it a potential contingency cost on account of regulatory/non-compliance risk.

Legal advice is that it is not possible to directly quantify that potential contingency cost, as any legal costs from enforcement action and fines that may eventuate are highly variable. However, it can be said that those costs are likely to be significant and that costs of taking steps to comply with current or future resource consent conditions would still arise. Thus, any saving is likely to be temporary.

Furthermore, if, for instance, iwi support is not secured then any new consents could require significant improvements in, for example, the treatment of the wastewater, which could require a significant infrastructure upgrade project and cost.

### **9.3. Option 2 – Do minimum, Voluntary Compliance Costs**

The voluntary compliance approach involves minimal direct costs for BDC, as homeowners are responsible for funding and completing the required works. However, some costs are expected for:

- Providing technical guidance and standards to homeowners.
- Basic monitoring and occasional inspections to assess progress.
- Addressing public inquiries and disputes related to compliance.

Staffing for voluntary compliance is estimated at 0.5 FTE for the first two years and 1 FTE thereafter to manage monitoring, inspections, and homeowner communications. It can be expected that staffing costs will be prolonged as delivery timeframes are likely to be significantly longer.

This approach may result in inconsistent repair costs for homeowners, with affordability challenges for some, and may generate additional costs for remedial works if poor-quality repairs lead to non-compliance.

### **9.4. Option 3 - Regulatory Compliance Costs**

For the regulatory compliance approach, costs are primarily associated with inspections, issuing notices, and enforcement actions. Staff time will be required for:

- Conducting initial property inspections to identify non-compliance, with an upfront detailed inspection scheme budgeted at an estimated \$50,000.
- Issuing notices and monitoring compliance within the two-year timeframe.
- Managing disputes and coordinating enforcement actions for non-compliant properties.

Staffing for this approach is estimated at 0.5 FTE for the first two years and 1 FTE thereafter to manage the ongoing enforcement process, quality assurance, and reporting requirements.

While property repair costs will be borne by homeowners, Council may need to budget for legal costs and cost recovery mechanisms if it undertakes works on behalf of non-compliant property owners.

Costs related to non-compliance with resource consent conditions, such as legal fees and penalties, are not included in this section and cannot be reliably quoted at this stage.

## 9.5. Option 4 - Rates-Funded Costs

Under the rates-funded approach, indicative costs are based on Gisborne District Council's allocation of \$5,000 per property with stormwater issues. With 611 known cross-connections, this would total a minimum capital cost of \$3,055,000 (\$5,000 x 611 properties). The \$5,000 per property costs is averaged out over the years, as some properties required higher costs due to complexity, while others required less extensive work. The GDC budget included gully trap repairs, but did not include costs for other repairs or upgrades due to the unknown magnitude of work required.

In addition to property repair costs, staffing requirements must be accounted for. Over the term of a 10-year program, addressing 60 properties per year, it is estimated that 0.5 Full-Time Equivalent (FTE) staffing will be required. This staff member would oversee:

- Procurement processes.
- Property inspections.
- Communication with property owners, including resolving disputes between contractors and homeowners.
- Financial reporting.
- Progress reporting to WCRC and iwi stakeholders.

This combination of property repair costs and staffing ensures the program is managed effectively and delivers measurable progress towards compliance with resource consent conditions.

Costs related to disputes arising, for instance over access onto properties or Council's right undertake the repairs are difficult to estimate at this stage.

## 9.6. Summary of Cost Implications and Recommendation

High level costings have been summarized in the table below. A detailed breakdown is shown in Appendix 1.

For the high level costings worst case scenarios have been considered and costs for internal and external personal, legal fees, capital investment and legal penalties assessed as best as we are able at this time, with the exception of option 1.

Summary over 10 years	Option 1	Option 2	Option 3	Option 4
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Operational total	\$5,000,000.00	\$ 4,101,600.00	\$ 1,295,800.00	\$ 527,466.67
Loan funded		\$ -	\$ 5,306,900.00	\$ 5,245,700.00
Cost recovery		\$ 1,230,000.00	\$ 5,266,900.00	\$ -
<b>Sub total</b>	<b>\$5,000,000.00</b>	<b>\$ 2,871,600.00</b>	<b>\$ 1,335,800.00</b>	<b>\$ 5,773,166.67</b>
<b>Targeted rates impact</b>	12.2%	7.0%	3.32%	14.13%
<b>General rates impact</b>	2.53%	1.46%	.68%	2.92%

1. **Do nothing:** As the above table there are no operational and capital upfront costs, however there are likely contingency amounts that are likely to crystallise as a result of enforcement action due to resource consent breaches. Other risks arise from the consenting process being undertaken for the Buller River discharges and the upcoming process required for the Orowaiti River discharges. At this time a nominal amount/placeholder of \$5m has been used for the costs assessment.
2. **Do minimum, voluntary compliance:** Minimal Council expenditure, with 0.5 FTE for the first two years and 1 FTE thereafter but risks poor-quality outcomes and potential long-term costs for remedial works. Costs for non-compliance with RC and subsequent legal fees are not included and cannot be reliably quoted. Voluntary compliance is not considered a viable option due to its inherent risks and low likelihood of success, which would ultimately lead to the need for regulatory compliance.
3. **Regulatory compliance:** Moderate cost for inspections, enforcement, and legal recovery mechanisms, with 0.5 FTE for the first two years and 1 FTE thereafter. An additional upfront cost of \$50,000 for a detailed property inspection scheme is required. Property repair costs are shifted to homeowners. While regulatory compliance provides a structured approach, it carries higher risks of resistance, legal challenges, and delays, making it less effective for timely delivery.
4. **Rates-funded response:** High upfront cost for Council, averaging \$5,000 per property, plus 0.5 FTE staffing costs for program management. This approach offers faster delivery timeframes, fewer interruptions to business-as-usual activities, lower legal costs, and reduced risk of subsequent penalties. By centralizing the process, the Council can ensure higher-quality outcomes and meet compliance requirements efficiently.

## 10. Overall summary

The three options have been assessed against their ability to meet the objectives of the wastewater improvements programme along with the addition of affordability for Westport ratepayers. Red does not meet the objectives, yellow somewhat meets the objectives, green fully meets the objectives.

Objective	Option 1 – Do nothing	Option 2 – Do minimum Voluntary Compliance	Option 3 - Regulatory Compliance	Option 4 - Rates-Funded Response

Inflow and infiltration reduction				
Consent conditions and partner aspirations meet				
Beneficial for the Westport ratepayers				
Impact on Westport rates				

## 11. Conclusion & recommendation

In any decision regarding stormwater and wastewater separation, compliance with resource consent conditions should be prioritised. The preferred option should establish a clear, measurable pathway that allows for a realistic and achievable commitment over the next ten years to achieve compliance. While options 2 - 4 aim for the same outcome, history has shown that voluntary, ratepayer participation does not lead to the desired results. This leaves only two feasible options: regulatory compliance and a BDC-funded approach.

It is recommended that BDC proceed with the rates-funded approach. While the upfront costs are higher, this method minimizes risks associated with resistance, delays, and non-compliance. Given that stormwater and wastewater separation is the main reason for failure to comply with consent conditions, and it can be confidently predicted that any future consents will have similar or identical requirements, the rates-funded approach offers the most effective and efficient pathway to achieve compliance, faster delivery, and improved relationships with stakeholders, including iwi and WCRC.

### 11.1. Ongoing integration with other programmes

The rates-funded approach provides a valuable opportunity to integrate with other key workstreams, particularly those related to stormwater management strategies.

By aligning this program with broader initiatives, such as flood mitigation projects, overland flow path upgrades, and groundwater management, BDC can enhance system-wide synergies and maximize resource efficiency. This integration would also help address long-standing stormwater inflow challenges, leading to improved network resilience and more comprehensive infrastructure solutions. Coordination across workstreams ensures that progress in wastewater and stormwater separation contributes to wider community and environmental goals.

### 11.2. Recommendation:

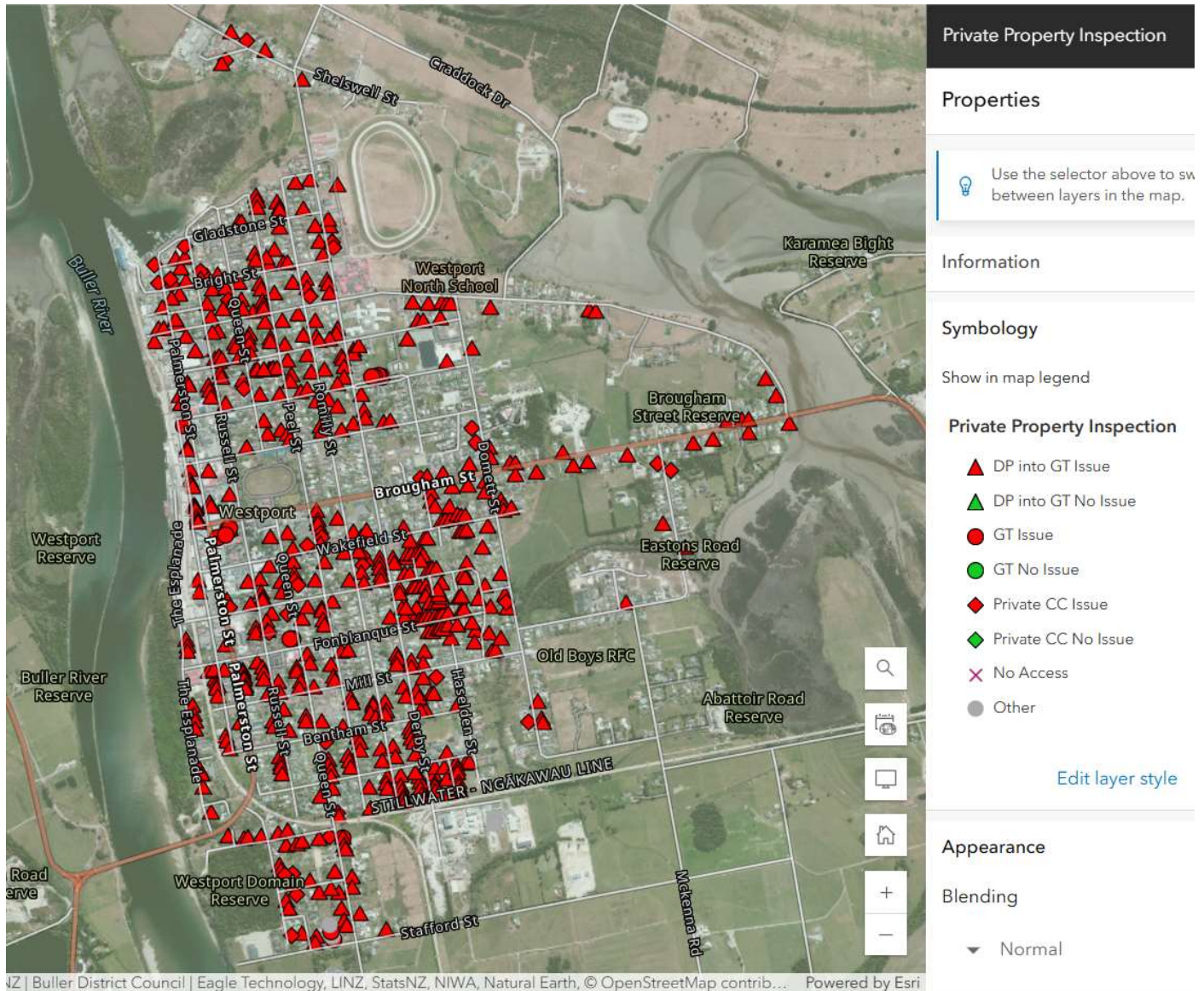
It is recommended that BDC proceed with consultation on options 3 (regulatory compliance) and 4 (rates-funded approach) and either targeted rates similar to other sewerage rate schemes or general rates through the Long-Term Plan consultation. While the upfront costs are higher, this method minimizes risks associated with resistance, delays, and non-compliance. Given that stormwater and wastewater separation is non-negotiable, the rates-funded approach offers the

most effective and efficient pathway to achieve compliance, faster delivery, and improved relationships with stakeholders, including iwi and WCRC.



## 12. Appendix 1 – Map Cross connections

### 12.1. Private Cross connections Westport





## 13. Appendix 2 – cost workings

### 13.1. Option 1 – do nothing

	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	34/35	Total
<b>Option 1 - Do nothing</b>											
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
<b>Operational funds</b>	-	-	-	-	-	-	-	-	-	-	-
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
Infrastructure ops lead	-	-	-	-	-	-	-	-	-	-	
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
Compliance officer	-	-	-	-	-	-	-	-	-	-	
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
Legal/ prosecution cost	-	-	-	-	-	-	-	-	-	-	
BDC building consent contribution	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
	-	-	-	-	-	-	-	-	-	-	
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
Finance (.3 FTE)	-	-	-	-	-	-	-	-	-	-	
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
Communications (.3 FTE)	-	-	-	-	-	-	-	-	-	-	
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
<b>Loan funded</b>	-	-	-	-	-	-	-	-	-	-	-
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
Drainlayer	-	-	-	-	-	-	-	-	-	-	
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
<b>Cost recovery</b>	-	-	-	-	-	-	-	-	-	-	-
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
<b>Cost to homeowner</b>	-	-	-	-	-	-	-	-	-	-	
<b>Cost risk to BDC</b>										\$ 5,000,000.00	

### 13.2. Option 2 – do minimum – voluntary compliance

Option 2 - Do minimum, voluntary compliance	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	34/35	Total
	<i>Early voluntary compliance</i>		<i>Early enforcement phase</i>			<i>Legal enforcement phase</i>		<i>Compliance mentality shift</i>			
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
<b>Operational funds</b>	<b>155,000.00</b>	<b>115,000.00</b>	<b>270,400.00</b>	<b>270,400.00</b>	<b>155,200.00</b>	<b>1,375,200.00</b>	<b>1,317,600.00</b>	<b>147,600.00</b>	<b>147,600.00</b>	<b>147,600.00</b>	<b>4,101,600.00</b>
Infrastructure ops	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
lead	20,000.00	20,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
Compliance officer	-	-	230,400.00	230,400.00	115,200.00	115,200.00	57,600.00	57,600.00	57,600.00	57,600.00	
Legal/ prosecution	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
cost	20,000.00	5,000.00	30,000.00	30,000.00	30,000.00	1,200,000.00	1,200,000.00	30,000.00	30,000.00	30,000.00	
BDC building consent	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
contribution	85,000.00	85,000.00	-	-	-	-	-	-	-	-	
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
Finance (.3 FTE)	-	-	-	-	-	50,000.00	50,000.00	50,000.00	50,000.00	50,000.00	
Communications (.3 FTE)	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
	30,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
<b>Loan funded</b>	-	-	-	-	-	-	-	-	-	-	-
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
Drainlayer	-	-	-	-	-	-	-	-	-	-	
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
<b>Cost recovery</b>	-	-	-	-	-	-	<b>600,000.00</b>	<b>600,000.00</b>	<b>15,000.00</b>	<b>15,000.00</b>	<b>1,230,000.00</b>
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
<b>Cost to homeowner</b>	<b>5,000.00</b>	<b>5,000.00</b>	<b>6,700.00</b>	<b>6,700.00</b>	<b>6,700.00</b>	<b>6,700.00</b>	<b>6,700.00</b>	<b>6,700.00</b>	<b>6,700.00</b>	<b>6,700.00</b>	

### 13.3. Option 3 – regulatory compliance

Option 3 - Regulatory Compliance	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	34/35	Total
	<i>Early enforcement phase</i>					<i>BDC to carry out work on behalf</i>					
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
<b>Operational funds</b>	<b>355,400.00</b>	<b>340,400.00</b>	<b>75,000.00</b>	<b>75,000.00</b>	<b>75,000.00</b>	<b>75,000.00</b>	<b>75,000.00</b>	<b>75,000.00</b>	<b>75,000.00</b>	<b>75,000.00</b>	<b>1,295,800.00</b>
	\$	\$				\$	\$			\$	
Compliance officer	230,400.00	230,400.00	\$ -	\$ -	\$ -	-	-	\$ -	\$ -	-	
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
Legal/ prosecution cost	20,000.00	20,000.00	20,000.00	20,000.00	20,000.00	20,000.00	20,000.00	20,000.00	20,000.00	20,000.00	
BDC building consent contribution	\$	\$				\$	\$			\$	
	85,000.00	85,000.00	\$ -	\$ -	\$ -	-	-	\$ -	\$ -	-	
	\$		\$	\$	\$	\$	\$	\$	\$	\$	
Finance (.3 FTE)	-	\$ -	50,000.00	50,000.00	50,000.00	50,000.00	50,000.00	50,000.00	50,000.00	50,000.00	
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
Communications	20,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
<b>Loan funded</b>	<b>20,000.00</b>	<b>20,000.00</b>	<b>658,362.50</b>	<b>658,362.50</b>	<b>658,362.50</b>	<b>658,362.50</b>	<b>658,362.50</b>	<b>658,362.50</b>	<b>658,362.50</b>	<b>658,362.50</b>	<b>5,306,900.00</b>
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
Infrastructure ops lead	20,000.00	20,000.00	230,400.00	230,400.00	230,400.00	230,400.00	230,400.00	230,400.00	230,400.00	230,400.00	
	\$		\$	\$	\$	\$	\$	\$	\$	\$	
Drainlayer	-	\$ -	319,375.00	319,375.00	319,375.00	319,375.00	319,375.00	319,375.00	319,375.00	319,375.00	
	\$		\$	\$	\$	\$	\$	\$	\$	\$	
Building consent cost	-	\$ -	108,587.50	108,587.50	108,587.50	108,587.50	108,587.50	108,587.50	108,587.50	108,587.50	
	\$		\$	\$	\$	\$	\$	\$	\$	\$	\$
<b>Cost recovery</b>	<b>-</b>	<b>\$ -</b>	<b>658,362.50</b>	<b>658,362.50</b>	<b>658,362.50</b>	<b>658,362.50</b>	<b>658,362.50</b>	<b>658,362.50</b>	<b>658,362.50</b>	<b>658,362.50</b>	<b>5,266,900.00</b>
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
<b>Cost to homeowner</b>	<b>5,000.00</b>	<b>5,000.00</b>	<b>6,700.00</b>	<b>6,700.00</b>	<b>6,700.00</b>	<b>6,700.00</b>	<b>6,700.00</b>	<b>6,700.00</b>	<b>6,700.00</b>	<b>6,700.00</b>	

### 13.4. Option 4 – rates funded

Option 4 - Rates funded	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	34/35	Total
	<i>Early voluntary compliance</i>		<i>Early enforcement phase</i>			<i>Legal enforcement phase</i>		<i>Compliance mentality shift</i>			
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
<b>Operational funds</b>	<b>70,400.00</b>	<b>70,400.00</b>	<b>48,333.33</b>	<b>48,333.33</b>	<b>48,333.33</b>	<b>48,333.33</b>	<b>48,333.33</b>	<b>48,333.33</b>	<b>48,333.33</b>	<b>48,333.33</b>	527,466.67
	\$					\$	\$			\$	
Compliance officer	-	\$ -	\$ -	\$ -	\$ -	-	-	\$ -	\$ -	-	
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
Legal/ prosecution cost	17,066.67	17,066.67	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	
BDC building consent contribution	\$					\$	\$			\$	
	-	\$ -	\$ -	\$ -	\$ -	-	-	\$ -	\$ -	-	
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
Finance (.2 FTE)	33,333.33	33,333.33	33,333.33	33,333.33	33,333.33	33,333.33	33,333.33	33,333.33	33,333.33	33,333.33	
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
Communications	20,000.00	20,000.00	10,000.00	10,000.00	10,000.00	10,000.00	10,000.00	10,000.00	10,000.00	10,000.00	
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
<b>Loan funded</b>	<b>329,600.00</b>	<b>329,600.00</b>	<b>644,570.00</b>	<b>644,570.00</b>	<b>644,570.00</b>	<b>554,510.00</b>	<b>524,570.00</b>	<b>524,570.00</b>	<b>524,570.00</b>	<b>524,570.00</b>	5,245,700.00
Infrastructure ops lead	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
(0.5 FTE)	115,200.00	115,200.00	115,200.00	115,200.00	115,200.00	115,200.00	115,200.00	115,200.00	115,200.00	115,200.00	
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
Drainlayer	160,000.00	160,000.00	405,500.00	405,500.00	405,500.00	305,500.00	305,500.00	305,500.00	305,500.00	305,500.00	
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
Building consent cost	54,400.00	54,400.00	123,870.00	123,870.00	123,870.00	133,810.00	103,870.00	103,870.00	103,870.00	103,870.00	
	\$					\$	\$			\$	
<b>Cost recovery</b>	-	\$ -	\$ -	\$ -	\$ -	-	-	\$ -	\$ -	-	\$ -
	\$					\$	\$			\$	
<b>Cost to homeowner</b>	-	\$ -	\$ -	\$ -	\$ -	-	-	\$ -	\$ -	-	

## 13. Appendix 2 – cost workings

### 13.1. Option 1 – do nothing

	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	34/35	Total
<b>Option 1 - Do nothing</b>											
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
<b>Operational funds</b>	-	-	-	-	-	-	-	-	-	-	-
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
Infrastructure ops lead	-	-	-	-	-	-	-	-	-	-	
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
Compliance officer	-	-	-	-	-	-	-	-	-	-	
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
Legal/ prosecution cost	-	-	-	-	-	-	-	-	-	-	
BDC building consent contribution	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
	-	-	-	-	-	-	-	-	-	-	
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
Finance (.3 FTE)	-	-	-	-	-	-	-	-	-	-	
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
Communications (.3 FTE)	-	-	-	-	-	-	-	-	-	-	
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
<b>Loan funded</b>	-	-	-	-	-	-	-	-	-	-	-
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
Drainlayer	-	-	-	-	-	-	-	-	-	-	
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
<b>Cost recovery</b>	-	-	-	-	-	-	-	-	-	-	-
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
<b>Cost to homeowner</b>	-	-	-	-	-	-	-	-	-	-	
<b>Cost risk to BDC</b>										\$ 5,000,000.00	

### 13.2. Option 2 – do minimum – voluntary compliance

Option 2 - Do minimum, voluntary compliance	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	34/35	Total
	<i>Early voluntary compliance</i>		<i>Early enforcement phase</i>			<i>Legal enforcement phase</i>		<i>Compliance mentality shift</i>			
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
<b>Operational funds</b>	<b>155,000.00</b>	<b>115,000.00</b>	<b>270,400.00</b>	<b>270,400.00</b>	<b>155,200.00</b>	<b>1,375,200.00</b>	<b>1,317,600.00</b>	<b>147,600.00</b>	<b>147,600.00</b>	<b>147,600.00</b>	<b>4,101,600.00</b>
Infrastructure ops	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
lead	20,000.00	20,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
Compliance officer	-	-	230,400.00	230,400.00	115,200.00	115,200.00	57,600.00	57,600.00	57,600.00	57,600.00	
Legal/ prosecution	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
cost	20,000.00	5,000.00	30,000.00	30,000.00	30,000.00	1,200,000.00	1,200,000.00	30,000.00	30,000.00	30,000.00	
BDC building consent	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
contribution	85,000.00	85,000.00	-	-	-	-	-	-	-	-	
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
Finance (.3 FTE)	-	-	-	-	-	50,000.00	50,000.00	50,000.00	50,000.00	50,000.00	
Communications (.3 FTE)	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
	30,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
<b>Loan funded</b>	-	-	-	-	-	-	-	-	-	-	-
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
Drainlayer	-	-	-	-	-	-	-	-	-	-	
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
<b>Cost recovery</b>	-	-	-	-	-	-	<b>600,000.00</b>	<b>600,000.00</b>	<b>15,000.00</b>	<b>15,000.00</b>	<b>1,230,000.00</b>
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
<b>Cost to homeowner</b>	<b>5,000.00</b>	<b>5,000.00</b>	<b>6,700.00</b>	<b>6,700.00</b>	<b>6,700.00</b>	<b>6,700.00</b>	<b>6,700.00</b>	<b>6,700.00</b>	<b>6,700.00</b>	<b>6,700.00</b>	



### 13.3. Option 3 – regulatory compliance

Option 3 - Regulatory Compliance	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	34/35	Total
	<i>Early enforcement phase</i>					<i>BDC to carry out work on behalf</i>					
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
<b>Operational funds</b>	<b>355,400.00</b>	<b>340,400.00</b>	<b>75,000.00</b>	<b>75,000.00</b>	<b>75,000.00</b>	<b>75,000.00</b>	<b>75,000.00</b>	<b>75,000.00</b>	<b>75,000.00</b>	<b>75,000.00</b>	<b>1,295,800.00</b>
	\$	\$				\$	\$			\$	
Compliance officer	230,400.00	230,400.00	\$ -	\$ -	\$ -	-	-	\$ -	\$ -	-	
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
Legal/ prosecution cost	20,000.00	20,000.00	20,000.00	20,000.00	20,000.00	20,000.00	20,000.00	20,000.00	20,000.00	20,000.00	
BDC building consent contribution	\$	\$				\$	\$			\$	
	85,000.00	85,000.00	\$ -	\$ -	\$ -	-	-	\$ -	\$ -	-	
	\$		\$	\$	\$	\$	\$	\$	\$	\$	
Finance (.3 FTE)	-	\$ -	50,000.00	50,000.00	50,000.00	50,000.00	50,000.00	50,000.00	50,000.00	50,000.00	
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
Communications	20,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
<b>Loan funded</b>	<b>20,000.00</b>	<b>20,000.00</b>	<b>658,362.50</b>	<b>658,362.50</b>	<b>658,362.50</b>	<b>658,362.50</b>	<b>658,362.50</b>	<b>658,362.50</b>	<b>658,362.50</b>	<b>658,362.50</b>	<b>5,306,900.00</b>
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
Infrastructure ops lead	20,000.00	20,000.00	230,400.00	230,400.00	230,400.00	230,400.00	230,400.00	230,400.00	230,400.00	230,400.00	
	\$		\$	\$	\$	\$	\$	\$	\$	\$	
Drainlayer	-	\$ -	319,375.00	319,375.00	319,375.00	319,375.00	319,375.00	319,375.00	319,375.00	319,375.00	
	\$		\$	\$	\$	\$	\$	\$	\$	\$	
Building consent cost	-	\$ -	108,587.50	108,587.50	108,587.50	108,587.50	108,587.50	108,587.50	108,587.50	108,587.50	
	\$		\$	\$	\$	\$	\$	\$	\$	\$	\$
<b>Cost recovery</b>	<b>-</b>	<b>\$ -</b>	<b>658,362.50</b>	<b>658,362.50</b>	<b>658,362.50</b>	<b>658,362.50</b>	<b>658,362.50</b>	<b>658,362.50</b>	<b>658,362.50</b>	<b>658,362.50</b>	<b>5,266,900.00</b>
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
<b>Cost to homeowner</b>	<b>5,000.00</b>	<b>5,000.00</b>	<b>6,700.00</b>	<b>6,700.00</b>	<b>6,700.00</b>	<b>6,700.00</b>	<b>6,700.00</b>	<b>6,700.00</b>	<b>6,700.00</b>	<b>6,700.00</b>	

### 13.4. Option 4 – rates funded

Option 4 - Rates funded	25/26	26/27	27/28	28/29	29/30	30/31	31/32	32/33	33/34	34/35	Total
	<i>Early voluntary compliance</i>		<i>Early enforcement phase</i>			<i>Legal enforcement phase</i>		<i>Compliance mentality shift</i>			
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
<b>Operational funds</b>	<b>70,400.00</b>	<b>70,400.00</b>	<b>48,333.33</b>	<b>48,333.33</b>	<b>48,333.33</b>	<b>48,333.33</b>	<b>48,333.33</b>	<b>48,333.33</b>	<b>48,333.33</b>	<b>48,333.33</b>	527,466.67
	\$					\$	\$			\$	
Compliance officer	-	\$ -	\$ -	\$ -	\$ -	-	-	\$ -	\$ -	-	
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
Legal/ prosecution cost	17,066.67	17,066.67	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	5,000.00	
BDC building consent contribution	\$					\$	\$			\$	
	-	\$ -	\$ -	\$ -	\$ -	-	-	\$ -	\$ -	-	
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
Finance (.2 FTE)	33,333.33	33,333.33	33,333.33	33,333.33	33,333.33	33,333.33	33,333.33	33,333.33	33,333.33	33,333.33	
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
Communications	20,000.00	20,000.00	10,000.00	10,000.00	10,000.00	10,000.00	10,000.00	10,000.00	10,000.00	10,000.00	
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
<b>Loan funded</b>	<b>329,600.00</b>	<b>329,600.00</b>	<b>644,570.00</b>	<b>644,570.00</b>	<b>644,570.00</b>	<b>554,510.00</b>	<b>524,570.00</b>	<b>524,570.00</b>	<b>524,570.00</b>	<b>524,570.00</b>	5,245,700.00
Infrastructure ops lead	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
(0.5 FTE)	115,200.00	115,200.00	115,200.00	115,200.00	115,200.00	115,200.00	115,200.00	115,200.00	115,200.00	115,200.00	
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
Drainlayer	160,000.00	160,000.00	405,500.00	405,500.00	405,500.00	305,500.00	305,500.00	305,500.00	305,500.00	305,500.00	
	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	
Building consent cost	54,400.00	54,400.00	123,870.00	123,870.00	123,870.00	133,810.00	103,870.00	103,870.00	103,870.00	103,870.00	
	\$					\$	\$			\$	
<b>Cost recovery</b>	-	\$ -	\$ -	\$ -	\$ -	-	-	\$ -	\$ -	-	\$ -
	\$					\$	\$			\$	
<b>Cost to homeowner</b>	-	\$ -	\$ -	\$ -	\$ -	-	-	\$ -	\$ -	-	