Report of the Crown Review Team into Wellington Water Limited and Wellington City Council

On Matters Relating to the Flooding of the Moa Point Wastewater Treatment Plant

August 2026

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Secretariat

Foreword

I am pleased to present the report of the Crown Review Team into matters arising from the Moa Point Wastewater Treatment Plant failure to the Minister of Local Government, Hon Simon Watts.

The failure of the Moa Point Plant on 4 February 2026 was one of the most significant infrastructure incidents experienced in Wellington in recent decades. Its consequences were immediate and far-reaching, affecting environmental outcomes, public confidence, essential service delivery, and the operation of a critical public asset.

The Crown Review Team was appointed to examine the governance, oversight, asset management, funding, contractual arrangements, and operational factors that may have contributed to the event. Our purpose was not to determine legal liability or undertake a technical fault investigation, but to identify the systemic lessons that must inform the future management of wastewater infrastructure across the Wellington region.

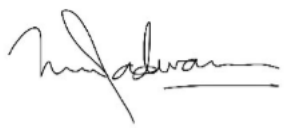
Our review found that the flooding event was not the result of a single decision or isolated failure. Rather, it reflected the cumulative effect of longstanding weaknesses in asset stewardship, risk management, accountability, governance, and infrastructure resilience. While the immediate cause of the flooding has been separately investigated, the broader context in which the failure occurred required careful examination.

We acknowledge the cooperation and assistance provided by the many people, and organisations, who contributed to this review during a period of significant operational and organisational change. At the end of the report there is a list of the major participants.

This report is intended to support learning and improvement. The transition from Wellington Water to Tiaki Wai provides an important opportunity to strengthen governance, asset management, risk management, and accountability arrangements so that the lessons from Moa Point lead to enduring improvements for the communities the wastewater system serves.

While this review is specific to the Moa Point Wastewater Treatment Plant, the Crown Review Team considers that many of the underlying issues identified are not unique to Wellington. The lessons and recommendations contained in this report have broader relevance for councils, water service entities, regulators, and asset owners throughout New Zealand.

As the Local Water Done Well reforms are implemented, these findings provide timely guidance on the importance of clear accountability, informed asset stewardship, robust risk management, sustainable investment, and resilient service delivery.



Raveen Jaduram
Chair, Crown Review Team
August 2026

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EXECUTIVE SUMMARY

In early February 2026, the Moa Point Wastewater Treatment Plant, on the Southern coast of Wellington City, was operating under constrained conditions, with reduced redundancy and ageing assets. One of two ultraviolet (UV) disinfection units was offline for replacement, halving treatment capacity and increasing reliance on the bypass system during high inflows. The plant had never operated in this configuration before. When a major wet weather event on 3 February pushed flows beyond this reduced threshold, significant volumes of wastewater were diverted directly to the long ocean outfall.

The interaction between high bypass flows and restricted treated flows disrupted plant hydraulics in a unique way, forcing water back into the UV system. While similar warning signs had been observed previously, the effects escalated rapidly. Shortly before midnight these flows overtopped the UV channel walls, flooding lower sections of the plant, including critical electrical and control equipment. Although incoming flows were eventually shut down, plant design, lack of adequate instrumentation and controls, off-site staffing decisions and operating procedures all contributed to the resulting significant damage.

The technical cause of the failure has been established separately in a report commissioned by Wellington Water. However, despite the high inflows experienced, the now identified pre-existing hydraulic limitations are unlikely to have resulted in flooding without the added complication of the UV Renewal Project halving treatment capacity.

Wellington Water's planning assumptions for the UV Renewal Project were based on a full bypass capacity of 4,000 l/s, relying on plant design documentation. The project then assumed that the bypass would comfortably take up to 2500 l/s while the rest of the treatment plant was limited to 1500 l/s with one UV channel shut down.

It is now evident that a latent design constraint existed limiting the capacity of the bypass to approximately 1600 l/s, while 1500 l/s was being passed through the secondary treatment plant. This limitation was not discovered until the flooding event and there is no original plant design documentation or hydraulic modelling that would have made Wellington Water aware of such a limitation.

The situation was compounded by the plant's original configuration, built without the redundancy to take a UV channel out of service while maintaining treatment at the design flow rate, resulting in increased reliance on the bypass.

The plant is expected to remain inoperable for many months while components are replaced. In the interim, screened, untreated effluent is discharged via the long ocean outfall, and during rainfall events, capacity limits in the bypass system result in discharges to Short Outfall into Tarakena Bay - adjacent to Lyall Bay.

The conclusions reached by the Crown Review Team (Crown Review) are that the failure is not an isolated event, but rather, the culmination of deeper, long-developing systemic weaknesses across ownership, management, and operation. While the governance model remains sound in principle, in practice it has drifted, creating gaps in stewardship, accountability, and risk management that have compounded over time.

At the level of Wellington City Council (WCC), the issue was not intent, but execution. As asset owner, WCC retained responsibility for stewardship, compliance, and long-term performance, but its role centred on receiving assurance rather than defining expectations and risk tolerances.

The absence of clearly articulated requirements meant governance relied heavily on Wellington Water notifying WCC of issues, or the need for renewals, rather than independently defined owner standards. The situation was further exacerbated by the lack of an asset management plan for the Moa Point Plant, making capital and operational funding decisions difficult. This extended to the inability to make informed decisions on an adequate renewals programme for the plant.

Although governance structures existed, roles and accountabilities were not consistently enforced. This left WCC carrying material risk without consistently exercising informed, forward-looking oversight or stewardship.

The position of Wellington Water was more complex. It was active in responding to incidents, but this came at the expense of its effectiveness as a system steward. Over time it drifted toward a hybrid role, part asset manager, part coordinator, and at times a shadow operator, blurring the separation between asset management and operations. The net result was a reduced focus on long term asset management and weakened accountability, particularly in the oversight of Veolia as plant operator.

The resulting strategic environment saw performance issues being identified but not always rigorously attributed, risks managed but not consistently quantified, and actions not always anchored in clear accountability mechanisms. Strategic intent was not consistently translated into delivery aligned with asset condition and service expectations.

Wellington Water was also operating under sustained pressure, including ageing infrastructure, recurring failures, regulatory scrutiny, and constrained resources. While improvements had been identified, the pace of response did not match the escalation of risk, leaving a persistent gap between known vulnerabilities and action. Over time this allowed non-compliance to become explainable, and essentially business as usual, rather than escalated. At the same time forward-looking asset and risk management became weaker.

The transition to Tiaki Wai presents an opportunity to address these structural issues. A fully integrated model offers clearer accountability in principle, but this must be actively

maintained. Without strong internal discipline, clearly defined responsibilities, and explicit governance of risk, existing weaknesses risk being carried forward.

The effectiveness of the new model will also depend heavily on Tiaki Wai's capability in procurement and as a delivery manager. Even as a single entity, it will continue to rely on contractors and partners. This requires strong contract design, active performance management, and clear attribution of accountability—areas where the previous operating model showed signs of weakness.

Ultimately, the Moa Point plant failure illustrates how misalignment across strategy, funding, and operational practice, as well as a lack of transparency about the condition of assets and the risks being carried can accumulate over time and reach unacceptable levels. While none of these factors directly caused failure, they were features of the wider system that the Crown Review considers contributed to the inevitability of this event occurring.

The formation of Tiaki Wai does not eliminate the risk of similarly catastrophic events occurring; it concentrates it while providing new financial and accountability tools. Its success will depend on whether it can sustain clear accountability, disciplined asset and risk management, and consistent delivery in a way that the previous model, over time, was unable to achieve.

The Crown Review recognises the importance of preserving existing organisational capability, institutional knowledge, operational experience, and historical system understanding as responsibilities transition to Tiaki Wai. Successful remediation of Moa Point and management of ongoing wastewater services will depend substantially on retaining and integrating expertise formerly or currently held within Wellington Water, WCC, Veolia, and other relevant organisations.

The Crown Review has been advised by Wellington Water/Tiaki Wai of the recovery works in progress at the Moa Point Plant designed to ensure the risk of a future flooding event is minimised. However, there is likely to be a residual risk (albeit highly unlikely) of wastewater overflowing from the open UV channels which, without containment, will flow into adjacent rooms.

This risk will remain for as long as substantial inflows to the plant continue to be bypassed when one or more treatment processes are out of service, due to the lack of unit process redundancy.

The Crown Review understands that to address the inflow risks, greater reliance will be placed on instrumentation and alarms, including Closed Circuit Television (CCTV) throughout the plant. This will allow the automatic reduction or even stopping flows from the Influent Pump Station (IPS) to the plant. These changes will be supported by enhanced Standard Operating Procedures (SOPs).

Additionally, the complex hydraulic interaction between air and water downstream of the UV channels, which is reported to be the root cause of the flooding from the UV channels, may prove difficult to resolve given the existing plant configurations. With this in mind, greater reliance is being placed on continuous monitoring of plant water levels and subsequent immediate remedial actions included in SOPs.

These SOPs can be readily simulated and must be tested and proven once the works and control system changes have been completed.

There remains the risk that the Moa Point Plant will breach environmental regulations even beyond the recovery works phase. This is because the conditions of the Long Outfall discharge consent provides a volumetric limit on the discharge and requires secondary and disinfected treatment.

The Crown Review understands that Wellington Water (now Tiaki Wai) applied for resource consents in May 2023 across its entire wastewater treatment plant network to address wet weather overflow discharges from the Western and Moa Point Wastewater Treatment Plants. The Crown Review understands that this application is currently on hold to allow time for Wellington Water to consider amendments to the application following the notification of the change to the planning framework (Plan Change 1 to the Wellington Natural Resources Plan) and the introduction of the Local Water Done Well legislation, including the Local Government (Water Services) Act 2025 (LGWSA 2025).

Recommendations

The Crown Review, in response to the Terms of Reference, have developed six overarching recommendations and two recommendations for the consideration of the Minister of Local Government. These are tabulated below. Each recommendation can also be found at the end of the relevant section of the report.

The central finding driving these recommendations is that preventing a recurrence of the events leading up the flooding event of February 2026 is dependent on establishing and maintaining clear lines of accountability, ensuring full visibility and understanding of risks at all levels of decision-making. At the same time alignment between strategic intent, funding decisions, asset management, plant modifications, and operational delivery must be maintained.

Without these elements working cohesively, vulnerabilities will continue to accumulate over time, increasing the likelihood of future system failures.

The following recommendations should be read within the context of the governance reforms established under the LGWSA 2025 and the commencement of Tiaki Wai on 1 July 2026.

Where recommendations reference WCC, they relate primarily to ongoing shareholder oversight, stewardship, monitoring, and accountability functions rather than direct asset ownership, operational management, or consent-holder responsibilities which transferred to Tiaki Wai on 1 July 2026.

Table 1 Recommendations

<table>
<tr><td colspan="2">Terms of Reference (ToR) Requirement - Examine Wellington City Council's governance, oversight, accountability, funding, asset-management and statutory responsibilities in relation to the Moa Point wastewater treatment plant that may have contributed to the failure of the plant on 4 February 2026</td></tr>
<tr><td>Recommendation 1a. Immediate action is required to bring Moa Point Plant into compliance with its resource consents by:

Page 30</td><td>1. Wellington Water/Tiaki Wai urgently,
(a) Committing to a time-bound remediation plan,
(b) Upgrading plant capacity and operations,
(c) Strengthening incident management for peak events,
(d) Considering and seeking, in consultation with Greater Wellington Regional Council, appropriate approvals for Moa Point operations, and
(e) Enforcing clear accountability, monitoring, and reporting.
2. Wellington City Council facilitating Recommendation 1a.1. when exercising its powers and functions under the Local Government (Water Services) Act 2025 as a shareholder of Tiaki Wai.</td></tr>
<tr><td>Recommendation 1b. Public health and environmental risk communication

Page 38</td><td>1. Wellington Water / Tiaki Wai must take Immediate action to improve public risk communication by:
(a) Establishing an anticipatory communication framework to inform communities early about elevated risks, including likelihood, scale, and impacts of untreated discharges.
(b) Embedding public health in all decisions, with clear thresholds</td></tr>
</table>

	for escalation, notification, and intervention. (c) Enhancing data systems for real-time monitoring and transparent, timely public reporting. (d) Shifting to proactive, transparent communication that demonstrates active risk management and builds public trust.
Recommendation 2. Long-term plans, capital investment programmes, and operational realities must be aligned, ensuring that strategic objectives are translated into executable and funded programmes to restore network and wastewater system resilience and reduce the accumulation of asset risk over time. Page **48**	1. **Tiaki Wai should:** (a) Move away from episodic/reactive funding by implementing a long-term programmed pipeline (b) Ensure depreciation funding is used for renewals (c) Treat failure to deliver critical renewals as a realised governance risk
Recommendation 3. There is a need to strengthen the capability of the asset owner to act as an informed and deliberate steward on behalf of its shareholders. Governance should move beyond passive receipt of information toward active challenge, direction, and oversight. Page **48**	1. **When exercising powers and functions under the Local Government (Water Services) Act 2025 and the Commerce Act 1986, Tiaki Wai must clearly articulate the organisation's expectations for:** (a) Asset condition and management, (b) Acceptable levels of risk, (c) Service standards and performance, and (d) Renewal standards. 2. **Tiaki Wai must: provide structured and transparent reporting in respect of the results of Recommendation 3.1. to enable independent judgement of the application of those expectations**

Recommendation 4. A clear and sustained re-establishment of accountability within the system is essential. Governance arrangements should ensure that accountability is not shared in a way that diffuses responsibility, but instead is traceable and actively exercised, with Wellington City Council and its successors demonstrating a more engaged and intervention-ready posture where risk or performance warrants it. To achieve this: Page **53**	1. **Wellington City Council must:** (a) To the extent possible within the regulatory framework, maintain an active oversight and stewardship role in wastewater services, including through the Partners Agreement dated 16 December 2025, and (b) Retain sufficient internal expert technical and asset management capability to provide that oversight and stewardship, and (c) Recognise its ongoing accountability to the community. 2. **Wellington Water / Tiaki Wai must:** (a) Establish clear roles and responsibilities across asset owner, manager, and operator (for decisions, performance, and risk)

ToR Requirement – Undertake a *review of Wellington Water's oversight and management of contractual arrangements, setting of performance expectations, risk monitoring and incident response that may have contributed to the failure of the Moa Point wastewater treatment plant on 4 February 2026, and to identify improvements Wellington Water or Tiaki Wai could take to reduce the likelihood of future failures*.	
Recommendation 5. Asset stewardship and system knowledge must be strengthened and transitioned away from passive, compliance-focused contract management. This will require a commitment to transparency, the removal of practices that dilute or reframe critical information, and the development of more effective, trust-based relationships between organisations.	1. **Wellington Water / Tiaki Wai should urgently address the following contract management areas:** (a) Adopt delivery models that support continuous improvement and active risk management, (b) Clearly define accountability and manage interface risks, (c) Maintain appropriate levels of expertise. (d) Adequately resource contract and asset oversight functions beyond

Page **54**	contractual compliance, including an active role in continuous improvement and risk management, and (e) Hold its contractors accountable for performance in accordance with the relevant contractual framework. 2. **Wellington Water / Tiaki Wai should urgently adopt the following asset management practices:** (a) Implement any mechanisms proposed by the Minister of Local Government for asset management following the Minister's consideration of recommendation 5.3.(a) below, otherwise (b) Adopt international best practice models for the asset management of major infrastructure and the identification of risk. (c) Commission the development of complete, reliable, and continuously updated asset condition data, (d) Establish and maintain responsibility for clear ownership of asset lifecycle, and (e) Improve hydraulic modelling and system understanding, especially under extreme and degraded conditions. 3. **The Minister of Local Government should consider options for the best mechanism to ensure the management of water assets, particularly Wastewater Treatment Plants, to**

	meet international best practice. For example: (a) Mechanisms by which Water Organisations and Water Services Providers may be required to adopt the international asset management standard, ISO 55000.
Recommendation 6. Enterprise and operational risk management must be fundamentally reframed so that risks are explicitly identified, quantified, and forecast, and are directly linked to decision-making, funding, and service levels. Page **57**	1. **Wellington Water / Tiaki Wai should:** (a) Adopt established New Zealand best practice guidance for management of major/high-risk infrastructure projects. (b) Actively manage operational risks and establish a policy (or policies) on asset redundancy (c) Establish processes to define and consciously accept residual risks to develop integrated system-wide risk profiles providing full exposure

Recommendations for the Minister of Local Government

In addition to the recommendations to WCC and Wellington Water about how they could address the issues identified in the Crown Review's Report, the Crown Review has made a series of recommendations for the Minister of Local Government under **s 258(4)(b) and (c)** the Local Government Act 2002.

Recommendation 7. The Moa Point Crown Review recommends that the Minister should take further action in relation to Wellington City Council as follows:

1. Require, under **s 257** of the Local Government Act**,**
   (a) Wellington City Council to provide information on how it will address Recommendation 4.1. of the Crown Review's report.
   (b) Wellington City Council to provide information, jointly with Wellington Water Limited / Tiaki Wai, about how it will address Recommendations 1.1. and 1.2. of the Crown Review's Report and how Wellington City Council will support Tiaki Wai to develop and implement a plan to restore the Moa Point Plant's regulatory compliance, including actions

to reduce or eliminate untreated wastewater discharge risks, with clear timelines, funding commitments, and interim public health safeguards.

(c) Wellington City Council to provide information on how it will address the identified gap between ownership accountability and effective oversight, including in respect of public health responsibilities.

2. Under s 258(4)(c) of the Local Government Act, the Crown Review **does not** recommend that the Minister should appoint any other Ministerial body to the Wellington City Council at this time.

Recommendation 8.The Moa Point Crown Review recommends that the Minister should take further action in relation to Wellington Water and/or Tiaki Wai as follows:

1. Engage with the Minister of Commerce and Consumer Affairs on the interface between proposed performance requirement regulation on Tiaki Wai (if recommended by the Commerce Commission) and the recommendations set out in the Crown Review's Report.
2. Require, under **s 257** of the Local Government Act,
   (a) Wellington Water / Tiaki Wai to provide information, jointly with Wellington City Council, about how it will address Recommendation 1.1. and 1.2. of the Crown Review's Report and develop and implement a plan to restore the Moa Point Plant's regulatory compliance, including actions to reduce or eliminate untreated wastewater discharge risks, with clear timelines, funding commitments, and interim public health safeguards.
   (b) Wellington Water / Tiaki Wai to provide information on how it will address risk management and operational controls for wastewater discharges, including robust risk identification, assessment, escalation, and mitigation processes.
   (c) Wellington Water / Tiaki Wai to provide information on how it is planning on strengthening public communication through timely, transparent notification and guidance on actual or foreseeable public health risks.
3. Under **s 258(4)(c)** of the Local Government Act, the Crown Review **does not** recommend that the Minister should appoint any other Ministerial body to Wellington Water / Tiaki Wai at this time.

INTRODUCTION

Crown Review Team Overview

On 16 February 2026, the Minister of Local Government Hon Simon Watts announced a Crown Review into the failure of 4 February 2026 at the Moa Point Wastewater Treatment Plant in Wellington.

On 12 March 2026, two similar and overlapping Terms of References were issued (Appendix 1, page **58**) ; one was the appointment of the Crown Review to WCC, and the other to Wellington Water limited. The members appointed to the Crown Review for both by the Minister of Local Government were:

- Raveen Jaduram, as chair
- Helen Atkins,
- Garry Macdonald, and
- Michael Weatherall

The Crown Review commenced its work on 16 March 2026 and has been supported by a dedicated Secretariat supported initially by the Department of Internal Affairs, and latterly by the Ministry for Cities, Environment, Regions and Transport.

The Crown Review, with the support of the Secretariat has undertaken a comprehensive process to perform the duties outlined in the two Terms of References. Given the overlapping and complimentary nature of the Terms of Reference, this report addresses both WCC and Wellington Water findings and recommendations.

The Crown Review conducted a total of 16 interviews with stakeholders, including WCC, Wellington Water, Stantec, Veolia and Filtec (Appendix 2 page **66**). In addition, the Crown Review Team also requested and reviewed over 700 reports, meeting minutes, contracts, policies, and other such documents relevant to the investigation. Written submissions were also received from interview participants.

The Crown Review has relied on both WCC and Wellington Water to provide the bulk of the documentation required by the scope of the review. To manage the challenges associated with undertaking the Moa Point Plant remediation and supporting the Crown Review Team simultaneously, Wellington Water sourced additional resources.

WCC has provided responses through the office of the Chief Executive.

In conducting the review, the Crown Review has taken all reasonable steps to ensure that its work did not diminish the existing organisation capabilities of WCC and Wellington Water. The support provided by these organisations, including WCC's archive team, has been essential to the formulation of this report.

For the key technical aspects of the flooding event this report has relied on the "*Moa Point WWTP assessment of effects of reduced hydraulic capacity"* report developed by Stantec in March 2026 as an explanation of the event and its causation based on hydraulic modelling.

The Crown Review has been precluded from referring to a further, more detailed, causation report commissioned by Wellington Water due to the contents being subject to legal privilege. Wellington Water (and Tiaki Wai), to date, have not waived privilege, although the Crown Review has been provided with a copy of the report on a confidential basis.

Despite requests, key WCC infrastructure leaders were unavailable to meet the Crown Review to inform aspects of the Terms of Reference relating to the role of WCC as the owner of the asset.

WCC provided written submissions in response to direct questions from the Crown Review and offered to answer any other direct questions the team had. In developing this report, the Crown Review has relied on these formal submissions alongside the documentation provided from WCC records and archives.

Wellington Water has provided detailed written submissions and information packages, and these, alongside interview summaries have contributed to the Crown Review report.

This report was predominantly drafted between April and June 2026, prior to Tiaki Wai commencing formal operations and the consequential changes to the roles of both Wellington Water and WCC that came into force on 1 July 2026. As a result, recommendations have been made referencing both Wellington Water and Tiaki Wai as appropriate.

The report is structured with detailed appendices that inform the findings and recommendations found in Part 2 and Part 3 of the report.

PART 1 - WELLINGTON REGION WASTEWATER TREATMENT SYSTEM - OVERVIEW

There are four Wastewater Treatment Plants (WWTPs) in the metropolitan Wellington region:

- Moa Point and Western WWTPs, which both service Wellington City. Both were previously operated by Veolia NZ (since 2004), initially as part of the 25- year design, build and operate (DBO) Clearwater Contract which included the sludge dewatering plant at the Southern Landfill. This contract expired in February 2020.
- Seaview WWTP services Hutt and Upper Hutt cities. Hutt Valley Water Services (Suez/Beca) operated this plant under a 20-year DBO contract that expired in June 2020.
- Porirua WWTP services Porirua City and some northern suburbs of Wellington City. Wellington Water previously operated this plant.

From February 2020, Veolia, under the Regional Wastewater Treatment Plant Services Contract (Veolia Contract), has provided operation and maintenance services to Wellington Water for all four regional WWTPs.

Role of Wellington City Council

WCC is the territorial authority for Wellington City under the Local Government legislative framework. At the time of the Moa Point failure, it was ultimately responsible for the provision of core local infrastructure services, including wastewater (sewerage), drinking water, and stormwater. Until 1 July 2026 when Tiaki Wai took over asset ownership, WCC owned the Moa Point Plant, alongside other wastewater assets (pipes, treatment plants, networks), set policy and service levels, and made funding decisions. Charges for water services were included in council rates.

WCC was one of six council owners of Wellington Water along with Hutt City, Porirua City, Upper Hutt, South Wairarapa District, and Greater Wellington Regional councils, each with equal voting shares. The councils collectively owned and funded Wellington Water as a shared services provider. WCC participated in governance through the Wellington Water Committee, where each shareholder council was represented and provided strategic direction. The Wellington Water Committee appointed and held accountable an independent board of directors that governed Wellington Water.

WCC delivered wastewater services through a delegated operational model, contracting Wellington Water to undertake day-to-day functions under the WCC/WWL Management Services Agreement (WCC/WWL MSA). Even though these activities were delegated, councils retained accountability to residents and central government for ensuring

wastewater services were delivered safely, reliably, and sustainably. WCC's shareholder role was strategic and governance-focused, rather than operational.

This model is often described as a "client–provider" or "asset owner–manager" split, where WCC was the client/owner and set direction, owned assets, funded services, and remained accountable. Wellington Water was the provider/manager and delivered operational and technical services.

These functions were typically formalised through service level agreements or management services contracts between each council and Wellington Water, under the WCC/WWL MSA. The councils collectively directed Wellington Water, but each council, including WCC, retained autonomy over funding decisions and service priorities within its own district.

This model was intended to separate governance and accountability (WCC) from technical delivery (Wellington Water), while maintaining public ownership and regional collaboration. As a territorial authority, WCC had the statutory role of being responsible for ensuring wastewater services were provided as an asset owner, policy-setter, and funder, as well as being accountable to the public and regulators.

The Crown Review acknowledges that WCC exercised its ownership and governance responsibilities within a multi-layered governance framework involving Wellington Water, an independent board of directors, the Wellington Water Committee, and multiple shareholder councils. As the asset owner and consent holder, WCC remained ultimately accountable at the time of the incident. WCC nevertheless maintained to the Crown Review that it did not directly control operational and asset management decisions. Instead, it exercised influence through collective governance arrangements and the contractual mechanisms established under the WCC/WWL MSA.

This governance structure is relevant when considering both the strengths and limitations of WCC's ability to influence decisions affecting Moa Point. Furthermore, it highlights the need to address the challenges of being one of multiple shareholding councils post-1 July 2026.

Role of Wellington Water Limited

Wellington Water was established in 2014 by WCC together with other local authorities in the Wellington region as a council-controlled organisation responsible for the delivery of water services, wholly owned and funded by its shareholder councils.

When the Clearwater Contract ended in 2020, Wellington Water, under a variation to the WCC/WWL MSA, assumed contractual oversight of the Moa Point Plant through the Veolia Contract. The Moa Point Plant itself remained owned by WCC, and Veolia had effectively operated the Plant for approximately 25 years.

Wellington Water was responsible for providing drinking water, wastewater, and stormwater services but did not own the underlying infrastructure, set policy or charges — these remained with WCC and the other councils. Wellington Water was responsible for:

- Planning, asset management advice, and network optimisation;
- Day-to-day operation of wastewater systems (collection, treatment, maintenance); and
- Delivery of capital works programmes within budgets set by councils.

Wellington Water provided services across multiple council boundaries, creating economies of scale and shared expertise with the intent to standardise asset management and planning across the region, efficiencies and cost savings compared with each council operating independently and improved resilience and technical capability in managing complex infrastructure.

Wellington Water identified the operational needs for servicing the requirements set out in its Statement of Intent and provided input to the long-term planning and investment decisions through processes such as Council Long Term Plans (LTPs) and infrastructure strategies developed by individual shareholder councils.

Governance was exercised through shareholder councils, the Wellington Water Committee, and an independent board. The Wellington Water Committee provided coordination and oversight but did not hold responsibility for individual assets.

Wellington Water was disestablished on 30 June 2026 and replaced by Tiaki Wai. The Crown Review has therefore focused on lessons that apply both to the current arrangements and to future water service entities.

Role of Wellington Water Committee

The Wellington Water Committee was a joint committee under the Local Government Act 2002, established collectively by the six Wellington region shareholding councils as a governance-oversight body. It was not an asset owner and not an operational manager of infrastructure.

Under its terms of reference, the Wellington Water Committee provided overall leadership and direction in relation to water service delivery across the region, providing alignment and consistency of service levels across the councils. It also provided a forum for coordinated decision-making by councils and mana whenua.

The role of the Wellington Water Committee was not to make operational decisions relating to repairs or renewals. It also did not approve asset purchases or disposals. These functions remained with the individual councils, as owners, who were then guided by the advice from the board of Wellington Water.

Tiaki Wai Partners Committee

Tiaki Wai was incorporated on 29 October 2025. On 22 December 2025 the Wellington Regional, Hutt City, Porirua City, Upper Hutt City, Wellington City councils, Tiaki Wai Limited, Taranaki Whānui ki Te Upoko o Te Ika, and Te Rūnanga O Toa Rangatira, entered into a Partners Agreement in relation to Tiaki Wai.

This agreement notes that certain water services assets, liabilities and other matters would be transferred to Tiaki Wai on 1 July 2026. The purpose of the agreement is to set out the terms on which each of the council parties will manage the governance of Tiaki Wai and deal with one another in their capacity as shareholders of Tiaki Wai; and those councils, together with Taranaki Whānui ki Te Upoko o Te Ika and Te Rūnanga O Toa Rangatira, will become partners, manage the governance of Tiaki Wai and deal with one another in their capacity as partners of Tiaki Wai.

Tiaki Wai is a party to the agreement to record certain obligations owed to it by, and owed by it to, the Partners. The term of the agreement is essentially indefinite and only changes if substantial change occurs to the parties.

In essence, the Tiaki Wai Partners Committee replaced the Wellington Water Committee as of 1 July 2026.

The Tiaki Wai Partners Committee adopted a Statement of Expectations, prepared by Tiaki Wai, on 18 December 2025. In broad terms the Statement of Expectations describes the collective expectations of the Shareholding Councils and mana whenua partners of Tiaki Wai. It provides direction on the outcomes Tiaki Wai is to seek to achieve when delivering water services for communities, as well as expectations for how Tiaki Wai should conduct itself and its relationships with key stakeholders.

To be successful the Tiaki Wai Partners Committee must ensure that the Statement of Expectations is compiled with.

Tiaki Wai

Tiaki Wai is a new regional public water services organisation for the Wellington metropolitan area, taking over from Wellington Water from 1 July 2026. It is a council-controlled organisation owned by Wellington City, Lower Hutt City, Upper Hutt City, Porirua City, and Greater Wellington Regional councils. Unlike Wellington Water, Tiaki Wai owns the water assets, sets regional tariffs and prices, can borrow for capital expenditure and has control on its renewal and upgrade priorities.

Veolia Water Services (ANZ) Pty Ltd

Veolia is part of the global Veolia Environment group, and in New Zealand, provides contracted three-waters operation and maintenance services to a number of local authorities.

Veolia has a long operational association with the Moa Point Plant beginning in 2004. First, through the company that held the DBO contract and, since 2020, under the Veolia Contract. At the time of writing the role of Veolia is asset management and advice, minor projects, and the operation and maintenance of the plant on Wellington Water's behalf, not plant ownership or overall capital project delivery.

As noted above, Veolia operate a total of four wastewater treatment plants in the Wellington region. This is primarily an operations-and-maintenance role rather than an overarching capital project delivery role.

Veolia was also contracted to provide technical input into the design phase of the UV Renewal Project. This included attendance at risk meetings.

FILTEC Ltd

Filtec is a privately held water and wastewater treatment specialist operating in New Zealand since 1991. Filtec provides treatment solutions across design, supply, installation, commissioning, servicing, and maintenance.

In relation to the Moa Point Plant, Filtec's role is as the specialist contractor for the UV disinfection system upgrade, contracted directly by Wellington Water. The contract includes replacement of the ageing UV system, supply of associated equipment, and management of installation, commissioning, and operator training.

Stantec

Stantec New Zealand is part of a global engineering, architecture, and environmental consulting firm operating in New Zealand since 1978. The company provides multidisciplinary services across infrastructure sectors, including water, transport, energy, and environmental services, supporting public and private sector clients.

Stantec has a long association with Wellington Water. Within the Moa Point UV Renewal Project, Stantec held a central advisory and assurance role, acting as Wellington Water's technical advisor and Engineer to the Contract for the UV Renewal Project within a delivery model where responsibilities for design, construction, and operations were allocated to separate parties.

Stantec was initially engaged by Wellington Water in 2022 to provide technical guidance for the project and was formally appointed in 2023 to deliver project management and advisory services. It subsequently undertook the role of Engineer to the Contract for the UV Renewal

Project under NZS 3916[1], which included contract administration, design review, and technical assurance, while also acting as an independent certifier in contractual matters.

Wellington Water managed the procurement and contracting for the UV Renewal Project directly. The design and construction of the works were undertaken by Filtec under a design and build contract, with Stantec responsible for overseeing design and construction compliance as Engineer to Contract.

Operational control of the treatment plant remained with Veolia, which managed plant operations, shutdowns, and operational risk, matters over which Stantec had no authority.

Stantec also provided specialist engineering analysis, including the hydraulic investigation into the February 2026 flooding event, based on data supplied by Wellington Water.

[1] NZS 3916:2025 is the New Zealand standard form contract for design and construct projects, establishing the contractual framework, responsibilities, risk allocation, payment mechanisms, and dispute resolution procedures where the contractor is responsible for both the design and construction of the works

PART 2- BACKGROUND TO THE FAILURE

Moa Point Wastewater Treatment plant

The current Moa Point Plant is the result of a long and complex series of planning, consenting, procurement and design decisions extending from the 1980s through to commissioning in 1998. **Table 2** provides an overview of key events with more details of the plant included in Appendix 3 (page **68**) and Appendix 4 (page **71)**

Beginning in the early 1980's WCC planned to replace the historic "Short Outfall" arrangement with a new wastewater treatment plant and long marine outfall discharging to Cook Strait. In 1991, WCC obtained the required discharge authorisation for a plant capable of discharging up to 4,000 L/s through a submarine outfall, with a relatively high effluent standard for that period.

While early concept designs incorporated four parallel process trains with internal bypasses to provide the level of flexibility and redundancy typically expected of such facilities, subsequent cost pressures led to a scaled-down, two stage approach being adopted by WCC.

The project proceeded with this two-stage configuration under a 25-year DBO contract awarded to the Anglian Water Consortium in 1995, with construction completed and the plant becoming operational in 1998.

Under Stage 1, the plant was constructed with an ultimate hydraulic capacity of 4,000 l/s, but with full secondary treatment provided only up to approximately 3,000 l/s. A future Stage 2 upgrade was envisaged to provide redundancy and extend full treatment across the entire design flow.

Stage 2 was an explicitly costed and included in the contract for consideration prior to 2020. However, this expansion was never undertaken. For further information see Page **73**.

As a result, the as-built facility reflects a partial implementation of the originally intended capacity and resilience. While hydraulically capable of conveying the full consented flow, the plant lacks the treatment capacity that would have been provided by the complete multi-train configuration. This has left limited operational flexibility when key downstream treatment components are out of service for maintenance or repair, with a corresponding reduction in achievable treatment performance under such conditions.

The Crown Review notes the resource consent for the Moa Point Plant requires full secondary treatment and disinfection of all flows up to 3,000 L/s, with only flows above this threshold permitted to bypass full treatment following screening and degritting. However, when treatment units are taken offline, the volume receiving full treatment is significantly

reduced. For example, if a clarifier is offline, up to 2,000 L/s may bypass full treatment; if a UV channel is offline, this bypass can increase to 2,500 L/s.

Under the DBO contract Veolia and its predecessors operated the facility for almost all of its 25-year term. Throughout this period, compliance with discharge consents was inconsistent, with enforcement action occurring in the early 2000s and bypasses during high-flow events remaining an inherent and ongoing feature of the plant's operation.

Governance arrangements were also fragmented, with the Clearwater Contract retained by WCC and sitting outside the management services framework later used by Wellington Water for most other water infrastructure.

At the time of the transition to the Veolia Contract in 2018–2020, condition assessments showed that while the plant remained functional, it exhibited signs of deferred maintenance and broader asset deterioration.

Although Wellington Water assumed a principal role under the new contract, the transition was constrained in practice by the continued reliance on Veolia as the incumbent operator, particularly for institutional knowledge, asset condition information and operational data.

WCC, as asset owner, had very little participation in the end of the Clearwater Contract despite having been the principal in the contract since inception. The Crown Review was informed that at the time (2018) no internal council mechanism, process, or policy for asset transfer management existed.

From 2018 onward, the implications of the plant's limited redundancy and incomplete build-out became increasingly apparent as key assets aged and bypass events occurred. Independent reviews in 2021 and 2024 identified deficiencies in asset condition, process control, contract management and compliance performance.

These underlying weaknesses were exacerbated when Clarifier 3 was unavailable for an extended period between 2022 and 2023, reducing effective treatment capacity, and again during replacement of the ageing UV system, which required operation at greatly reduced capacity. The overflow incident of 15 January 2026 and the flooding event of 3–4 February 2026 occurred against this backdrop of constrained treatment capacity, ageing infrastructure and longstanding contractual and governance complexities.

Table 2 Moa Point Wastewater Plant Chronology

Period	Event
Pre-1989	Wellington wastewater was discharged through the Moa Point Short Outfall without treatment.
1989	Milliscreening began at Moa Point, and the site was formalised as the preferred wastewater treatment solution.

Period	Event
1991–1992	Consents were issued and the modern plant concept was developed: trickling filter / solids contact treatment, UV disinfection, and a Long Outfall.
1995	WCC awarded the 25-year Clearwater DBO contract covering Moa Point and related wastewater assets to Anglian Water International Ltd.
1997–1998	The Moa Point Plant was commissioned and became fully operational. The original Trojan UV3000 system was installed in 1998.
2000–2004	Operational compliance issues became visible through abatement notices, prosecution, and concern about continuing consent breaches.
2004	United Water International Pty Ltd acquired ownership of Anglian Water International Ltd. Anglian Water International (NZ) Limited changed its name to United Water International (Wellington) Ltd.
2005–2009	A new suite of resource consents are granted, generally running through to 2034.
2013	United Water International Pty Ltd changed its name to Veolia Water Services (ANZ) Pty Limited (**Veolia**)
2013–2014	Governance arrangements shifted to Capacity Infrastructure Services/Wellington Water, but the legacy Clearwater Contract remained formally outside Wellington Water's original management services agreement.
2018–2020	Pre-handover condition assessments identified deferred maintenance. Wellington Water entered a new regional WWTP services contract with Veolia, with new contract starting in February 2020.
2021	Wellington Water notified that the current Trojan UV3000 system was being discontinued by the manufacturer. This sharpened the risk that UV failure could compromise disinfection and create public health risk.
2022	Formal planning for UV Renewal Project commenced: Veolia proposed delivery, and Wellington Waters 3 Waters Decision Making Committee approved the one-channel-offline approach, and a project brief and technical support from Stantec were developed.
2023–2024	Veolia advised Wellington Water that it lacked capacity to deliver the UV project directly. Wellington Water's Major Projects team took over delivery. Wellington Water considered the project technically complex but not of a scale requiring a separate major project business case.
2025	FILTEC progressed toward site works. WCC was informed works would begin with the plant at reduced capacity, increasing the likelihood of unconsented wet-weather discharges. Wellington Water also intensified performance monitoring of Veolia.

Period	Event
Jan–Feb 2026	An overflow incident occurred during the UV works on 15 January 2026 and again on during the afternoon of 3 February 2026, followed by major flooding on 3–4 February 2026 when final effluent and bypassed screened flow combined and backed up into the UV channels.

Statutory and Resource Consent Risk

Resource Consents

Wastewater treatment plants operate under resource consents issued under the Resource Management Act 1991 (RMA) that define both routine discharge conditions and, to a limited extent, responses to wet weather and abnormal events. However, emergency situations can arise in which fully compliant treatment cannot be maintained, requiring a plant to discharge partially treated effluent to protect the integrity of the system.

At the Moa Point Plant, this challenge has been amplified by the condition and configuration of the plant itself, which has progressively aged, lacks full redundancy, and requires individual treatment streams to be taken offline to enable essential maintenance and renewal work.

The Moa Point Plant operates under several resource consents issued by the Greater Wellington Regional Council (GWRC) and now held by Tiaki Wai. The table on page **84** provides a listing of these consents. While these consents provide for normal operations and some wet weather bypass conditions via the Long Outfall, the plant has exhibited a persistent pattern of non-compliance, particularly in relation to coastal discharge requirements.

Between 2021 and 2025, compliance monitoring reports consistently assessed performance as ‘Poor’, reflecting repeated exceedances, management shortcomings, and environmental effects greater than those anticipated at the time of consenting. This pattern is closely linked to the plant’s constrained treatment capacity and limited operational flexibility when key assets are unavailable.

These limitations were brought into sharper focus during the UV Upgrade Project, which required sections of the treatment process to be reconfigured with predictable periods during which full treatment capability would not be available. As a result, inflows exceeding the now halved treatment capacity increased the likelihood of bypasses and the discharge of partially treated or untreated wastewater, particularly during wet weather events when flows are elevated.

Advice provided by Wellington Water to WCC in October 2024 explicitly identified these risks, noting that the staging of the upgrade works would materially increase the likelihood of treatment bypasses and non-compliant discharges. These risks were not sudden or

unforeseen, but rather inherent in undertaking major renewal works within an already constrained and partially built system.

The Crown Review understands that discussions about the UV Renewal Project with GWRC had been ongoing since 2022, including how the project aligned with the existing resource consent. The Crown Review understands that GWRC advised Wellington Water that regularising the UV upgrade project through a consent process would be an authorised way to manage elevated risks associated with any potential non-compliance that could arise.

The Crown Review understands that Wellington Water decided not to seek a maintenance resource consent for the UV Renewal Project as it was concerned that this would have significantly delayed the project and not affect environmental outcomes. The Crown Review is further informed that this approach was agreed by the Wellington Water Senior Leadership Team, advised to WCC and discussed with the regulator, Taranaki Whānui, Ngāti Toa and Te Whatu Ora.

Wellington Water noted that the intent during the UV Renewal Project was to only bypass screened and de-gritted effluent to the Long Outfall. Based on the perceived capacity of the bypass arrangement to the Long Outfall (and design documentation), use of the Short Outfall was not intended. Therefore, discharge to a nearshore environment was not intended or anticipated.

The Crown Review understand that GWRC advised Wellington Water that it would reserve the right to enforce in the event any such non-compliant discharges were subsequently to occur.

Both Wellington Water and WCC have informed the Crown Review that no reliance was placed on the emergency provisions of the RMA. The Crown Review understands these provisions are intended for genuinely unforeseen and urgent situations and are not designed to accommodate known and planned risks associated with infrastructure upgrades.

The Crown Review does not make any findings about whether a new or amended consent was required in the circumstances. It notes, however, that no amendments to the existing resource consents were sought to authorise or appropriately manage these altered operating conditions.

This meant the increased risk profile, including potential reliance on alternative discharge pathways, was not formally assessed within a consenting framework.

Regarding Recommendation 1a (Page **30**) the Crown Review notes that Tiaki Wai currently holds resource consent WGN0202453. This consent authorises the occupation of the coastal marine area by the Short Outfall structure but not the discharge of wastewater from the Short Outfall. The Crown Review understands that Wellington Water did apply for resource consent in 2023 to authorise wet weather overflows from the Wellington Wastewater Network, including discharges from both the Short and Long Outfall.

The processing of this application is currently on hold as there are implications arising from Plan Change 1 to the Wellington Natural Resources Plan and the Local Water Done Well legislative changes.

The implications for public and environmental risk are significant. Discharges of partially treated or untreated wastewater, particularly to nearshore environments, increase the potential for public health impacts through exposure to pathogens in recreational waters. They also undermine public confidence and raise broader concerns regarding governance, regulatory oversight, and accountability. The absence of a clearly consented framework for managing these known high-risk operating conditions reduces transparency and limits effective oversight.

Overall, the experience of the Moa Point Plant demonstrates the difficulty of maintaining compliance in an ageing treatment plant that was not built out to its originally envisaged capacity and lacks the redundancy required to accommodate both failures and planned renewal works.

The UV Renewal Project exposed these underlying constraints, highlighting a misalignment between operational decision-making, infrastructure capability, and statutory obligations, and reinforcing the systemic nature of the plant's longstanding compliance and risk management challenges.

Table 3 Table of Key Findings - Consents

Area	Finding
Compliance	Persistent non-compliance with coastal discharge consents, rated 'Poor' (2021–2025).
Consenting	No consent changes made to address UV Renewal Project risks identified in Wellington Water's advice.
Operational Risk	Reduced treatment capacity and bypass risks not adequately managed.
Short Outfall	Use not assessed or authorised through a consent pathway.
Public Risk	Exposure to health risks and erosion of public confidence.
Governance	Lack of proactive, integrated consenting and risk management.
Systemic Issues	Ongoing weaknesses in compliance and alignment with statutory obligations.

Recommendation 1a - Statutory, Consenting and Public Risk

Immediate action is required to bring Moa Point Plant into compliance with its resource consents by:

1. **Wellington Water/Tiaki Wai urgentl**y,
   - (a) Committing to a time-bound remediation plan,
   - (b) Upgrading plant capacity and operations,
   - (c) Strengthening incident management for peak events,
   - (d) Considering and seeking, in consultation with Greater Wellington Regional Council, appropriate approvals for Moa Point operations, and
   - (e) Enforcing clear accountability, monitoring, and reporting.
2. **Wellington City Council facilitating Recommendation 1a.1. when exercising its powers and functions under the *Local Government (Water Services) Act 2025 as a shareholder of Tiaki Wai*.**

Recommendation 1 1

Replacement of the Ultra-violet Disinfection Unit

The Moa Point UV Renewal Project addressed the replacement of a critical disinfection system that had been in service since 1998 and had reached the end of its operational life, with the manufacturer no longer supporting key components or consumables. In the absence of a functioning UV system, the plant would be unable to meet its discharge consent requirements.

Planning for the project to replace the UV system began in 2022 with Veolia initially taking the lead. By mid-2023 Wellington Water had taken over planning due to a lack of capability within Veolia. The project was subsequently managed by Stantec on behalf of Wellington Water and delivered by Filtec as the major contractor. A detailed assessment of the projects management and governance is provided in Appendix 5. Further detail on the roles and responsibilities for the parties involved in the project can be found in Table 11 **(**page **78).**

With funding confirmed by WCC in 2024 work commenced in late 2025. The plan adopted by Wellington Water was a staged replacement of the two UV trains, taking them offline sequentially to maintain some level of treatment continuity.

This approach, while necessary, imposed a significant constraint on an already capacity-limited and ageing facility. With each UV train removed from service, overall treatment capacity was effectively reduced to half the consented flow, increasing reliance on bypass arrangements and further limiting the plant's ability to consistently meet consented standards.

The works were deliberately scheduled for the summer period to minimise exposure to higher wet weather flows typically experienced in winter. However, this seasonal optimisation did not eliminate the inherent risk associated with operating a plant with reduced treatment capability and limited redundancy, nor did it recognise historical precedents of storms in the summer months and resulting peak flows.

Although described by Wellington Water as a Business as Usual (BAU) project, the UV Renewal Project temporarily placed the plant into a materially different operating regime for extended lengths of time. Treatment capacity was effectively reduced from approximately 3,000 l/s to around 1,500 l/s during critical stages of construction, in a facility that was not originally built out to its full intended capacity and lacked the redundancy to absorb such reductions.

This constrained configuration altered the hydraulic behaviour of the plant and increased the likelihood of bypass events under elevated flow conditions.

The performance of the bypass system and associated infrastructure under these constrained conditions was not fully understood in advance. Operational planning continued to rely heavily on assumptions and historical experience under the original configuration, rather than being supported by updated analysis reflecting the reduced-capacity state.

The Crown Review notes concerns raised by Veolia, and recorded as part of project planning, during 2025 and early 2026 regarding bypass capacity, surcharging, and operational strategy. From the documentation reviewed, these were not clearly resolved through structured processes for ownership, escalation, and closure. These risks appear to have persisted without definitive mitigation or decision-making.

Specifically, Veolia informed the Crown Review that bypass hydraulic risks were raised based on events when Clarifier 3 was offline for over a year and a similar “back flow” occurred, even though the plant was not flooded. The Crown Review understands that Wellington Water is not aware of this having been raised by the operator and that none of the parties involved in the UV Renewal Project, including Veolia, took into account any such bypass hydraulic risks in planning for the project.

The Crown Review notes that operating under these conditions required a level of procedural control and risk management commensurate with a degraded mode of operation. However, there is limited evidence that operating frameworks were substantively adapted to reflect this change:

- standard operating procedures remained largely unchanged,
- there were no clearly defined flow-based escalation triggers,
- contingency planning for scenarios such as internal flooding from reversed hydraulic gradients was not formalised, and

- Moa Point Plant operator staffing was not altered.

Veolia stated to the Crown Review that they were not instructed to increase monitoring or staffing in response to the altered hydraulic regime put in place to facilitate the UV Renewal Project.

In summary, the plant was effectively operating with reduced treatment capacity and without the level of operational safeguards typically expected for a critical asset undergoing staged renewal. This situation reflects the broader constraint of an ageing facility that was not constructed to its full originally intended capacity and lacks the redundancy necessary to maintain compliance while accommodating essential maintenance and renewal activities.

While the plant capacity remains in its current configuration, this "risk" will re-occur whenever a unit process is offline and reduces the plant capacity by 33 or 50 per cent with resultant high bypass volumes.

The Flooding Event - February 3 and 4 - 2026

During the afternoon and evening of 3 February 2026, a significant rainfall event across Wellington generated sustained high inflows to the Moa Point Plant, with flows peaking at approximately 3,400 L/s late in the evening.

During the afternoon of 3 February, the UV Renewal Project was shut down due to an overflow of the UV channel (flooding) event at 3:00pm with site works ceasing at 4:00pm. The Plant operator took no additional actions based on this event. As noted, above, the plant was operating in a unique, constrained, configuration due to the UV Renewal Project works, with only one UV train available and effective treatment capacity reduced to around 1,500 L/s.

As inflows exceeded this limit, a substantial proportion of wastewater - approximately 1,900 L/s, or more than half of the total flow - was diverted through the bypass system.

Table 4 provides a chronology of key events and the Infographic on page **40** illustrates the event.

During these conditions, the plant experienced a rapid and ultimately catastrophic loss of hydraulic control. Instrumentation began indicating abnormal behaviour shortly after 11:00 pm, including out-of-range readings in the UV system consistent with elevated and unstable water levels. Within a short period, this escalated to overtopping within the UV channels and rapid, widespread flooding across the plant, followed by progressive loss of treatment functionality, control systems, and monitoring capability.

The technical cause of the failure has been established separately by Stantec on behalf of Wellington Water. Without the UV Renewal Project underway, it is considered unlikely that

the high inflows to the plant would have contributed to flooding of the extent experienced on February 3 and 4. As such storm flows through the plant with the bypass in operation had occurred many times previously when the secondary plant was fully operable.

In summary, the initiating mechanism for the flooding was a hydraulic failure associated with the high volume of bypass flows. These flows are understood to have caused air entrainment and subsequent air locking within the final effluent pipeline, creating a hydraulic restriction. This restriction led to wastewater backing up into the UV system, ultimately resulting in overtopping of the channels and inundation of the facility.

The magnitude of bypass flow at the time of the event was notably higher, relative to treated flow, than has been observed in previous high-flow events, and appears to have exceeded the hydraulic and pneumatic tolerance of the system.

Earlier events, which the Crown Review understands Wellington Water was not aware of being raised by the operator, including one in July 2025, exhibited similar warning indicators. These indicators included anomalous UV system signals, suggesting that this vulnerability was not new but had not been fully understood or resolved.

In this case the result was that the plant was exposed to conditions under which its hydraulic performance limits were exceeded, leading to a failure of containment and the subsequent flooding event.

Table 4 Flooding Event Chronology[2]

Date / Time	Event	Comments
3 Feb 2026, 12:00 pm – 4:00 pm	High-flow alarm in UV channel triggered at 12:00. Overflow event at 3:00pm site works ceased at 4:00pm	High-flow alarm **NOT linked to Supervisory control and data acquisition control system (SCADA)** – audible alert only. No change to operational response.
3 Feb 2026, 2:17 pm – 4:36 pm	Repeated alarms for 6 IPS pumps running.	Indicates sustained high wet-weather loading during the afternoon.
3 Feb 2026, 2:29 pm	Alarm for 7 IPS pumps running.	Confirms elevated inflow conditions earlier in the day. **Note: 7 pumps were running on multiple occasions during the afternoon of 3 February, not just at 02:29 PM.**
3 Feb 2026, 10:18 pm – 10:47 pm	Duty Manager was responding to discharge / overflow events at Seaview and Western WWTPs.	Shows that the Moa Point Plant escalation occurred during broader network pressure.

[2] Wellington Water Limited

Date / Time	Event	Comments
3 Feb 2026, 11:02 pm	The Moa Point Plant inflow peaked at approximately 3,400 L/s; UV channel flow briefly reached 1,530 L/s.	Marks the first recorded late-night peak immediately preceding the flood sequence.
3 Feb 2026, 11:12 pm	Second inflow peak of approximately 3,400 L/s; UV flow meter rapidly exceeded 2,050 L/s before going out of range.	Indicates onset of abnormal hydraulic behaviour in the UV outlet system.
3 Feb 2026, 11:17 pm	UV channel flow meter went out of range.	First clear indication of abnormally high-water levels in the operating UV channel.
3 Feb 2026, 11:33 pm	Critical high-level alarm at Sludge Transport Pump Drain.	Indicates flooding had reached lower levels of the plant. **This is NOT a Pager Alarm.**
3 Feb 2026, 11:38 pm – 11:45 pm	H2S alarms in sludge gallery and UV low-intensity alarms triggered.	Suggests wastewater disturbance and likely impacts on plant equipment / controls. **This is NOT a Pager Alarm.**
4 Feb 2026, 12:04 am	Multiple lamp failure alarms on live UV Bank 2B.	Confirms flooding was affecting the live operating UV plant.
4 Feb 2026, 12:19 am – 12:40 am	PLC UPS alarms and multiple PLC / SCADA communications failures occurred.	Indicates escalating loss of plant automation, control, and monitoring. **Some Alarms NOT Paged**
4 Feb 2026, 12:38 am	Smoke and heat detector alarm triggered; Fire and Emergency New Zealand (FENZ) dispatched.	Commenced external emergency response.
4 Feb 2026, 12:48 am – 12:50 am	FENZ arrived on site.	Emergency responders attended during the period of escalating failure.
4 Feb 2026, 12:56 am	Final major PLC communications failure recorded; no further SCADA alarms until 5 February afternoon.	Plant monitoring capability was effectively lost. **This IS a Pager Alarm – DID NOT SEND**
4 Feb 2026, 1:02 am	FENZ reported lower building inaccessible due to excessive flooding.	Provides direct confirmation of severe inundation in lower plant areas.
4 Feb 2026, 1:34 am	Veolia Duty Manager arrived on site.	Commenced direct site-based operational response.
4 Feb 2026, 1:39 am	Duty Manager (Veolia) contacts Regional Manager Lead (Veolia) from site and gives situational report.	Escalation of site response #1
4 Feb 2026, 1:41am	Regional Lead (Veolia) contacts Head of Operations (Veolia).	Escalation of site response #2
4 Feb 2026, 1:44am	Regional Lead (Veolia) contacts Head of Wastewater Contracts (Wellington Water).	Escalation of site response #3
4 Feb 2026, 1:44am	Head of Operations (Veolia) contacts Networks General Manager (Wellington Water).	Escalation of site response #4
4 Feb 2026, 1:54am	Regional Manager Lead (Veolia) arrives at Moa Point WWTP.	Escalation of site response #5
4 Feb 2026, 1:59 am	Duty Manager (Veolia) **commences** Inlet pump station shut down.	Critical intervention to stop further inflow to the flooded plant.

Date / Time	Event	Comments
4 Feb 2026, 2:33 am – 3:13 am	Wellington Water notified of Short Outfall discharge; community discharge notification issued.	Formal escalation and public notification actions were completed.
4 Feb 2026, 3:40 am – 4:02 am	Generator and transformers isolated.	Electrical safety measures implemented in response to flooding.
4 Feb 2026, 4:23 am – 6:00 am	Site status updates continued; restricted access remained in some flooded areas; traffic and site access controls were established.	Early stabilisation and incident management arrangements were put in place.
4 Feb 2026, 11:00 am – 2:20 pm	Site inspection and photo log completed; pumping of scrubber room commenced.	Transition from emergency response to early recovery activities.
Post-event	Flows were diverted through the bypass to the main outfall while reduced operating scenarios were assessed.	Reflects the immediate recovery operating strategy.
Technical interpretation	Stantec identified high bypass flow, air entrainment, two-phase flow, and air trapping at the bypass junction as the most likely hydraulic explanation.	Provides the principal technical interpretation of the flood initiation mechanism.

Staffing and Response Notes

Standard Operating Procedures (SOPs):

The plant operated as a highly automated system with no SOPs requiring escalation based solely on high flow conditions.

No specific procedures existed for internal flooding scenarios caused by complex hydraulic interactions. Emergency plans were resultingly generic and not tailored to plant-wide flooding situations.

Veolia advised the Crown Review that shutting down the IPS in the event of flooding was not part of the established SOPs for plant operators as it would lead to unconsented discharge, which constitutes a regulatory breach and therefore could not be a unilateral decision made by Veolia.

Wellington Water/Tiaki Wai have since confirmed that their position is that *"…in a genuine emergency, Veolia as a contracted wastewater treatment plant operator is expected to act immediately and reasonably within their authority to protect people, the environment, and the asset. If there is time to seek instruction, Veolia should generally do so. If there is not, Veolia is expected to act and notify the owner as soon as possible afterward."*[3]

Veolia stated in submissions to the Crown Review that "*…it is responsible for operating the Moa Point Plant compliant with resource consents. Without direction from Wellington*

[3] Tiaki Wai email to Veolia August 2026

Water, Veolia cannot, without cause, take actions which are contrary to this, and received no instruction from Wellington Water to do so."[4]

Based on the information provided to the Crown Review by both Veolia and Wellington Water this expectation was not acted on.

Plant Staffing

Staffing on the night of the flooding was limited to one on-call Duty Operator and one Duty Manager.

Additional staffing during severe weather was at the discretion of Veolia and not required by any SOP. Veolia advised the Crown Review that no additional staff were deployed by the plant operator on the night as conditions were considered typical. Notification was by pager and messaging.

Response Times

After the alarm received at 00:19, the Duty Manager arrived on site at 01:34. Approximately 54 minutes elapsed before pumps were isolated.

Remote shutdown was not possible due to system overrides requiring physical intervention and requirement for direction from Wellington Water to take that action. The Crown Review has been advised that the flooding was already irretrievable before intervention.

Controls, Monitoring and CCTV

Monitoring relied on SCADA alarms without real-time visual systems such as CCTV. This limited situational awareness. Subsequent recommendations identify the need for enhanced monitoring including CCTV and early warning systems.

The SCADA system is available remotely, and IPS can also be started, stopped and reset remotely, however, using this functionality in the event of flooding was not supported by SOPs and was not implemented into the control system by Veolia.

Concluding Remarks

Taken together, the findings of the Stantec report, Crown Review interviews, submissions and an assessment of the original plant design, indicate that the 3 February 2026 flood event was not simply the result of individual operational decisions made on the night, but

[4] Veolia interview submission to the Crown Review Team May 2026

rather the culmination of longstanding and interrelated constraints within the Moa Point Plant.

The contributing weaknesses identified by the Crown Review, particularly in monitoring, escalation, and timely use of available controls reflect not only immediate operational gaps, but also the absence of clearly defined operating limits and risk responses appropriate for a constrained plant. In this context, critical decisions were made without the benefit of robust system visibility or a fully articulated framework for managing deteriorating conditions.

More fundamentally, the event underscores the consequences of operating the facility that was not constructed to its intended ultimate capacity and has remained in that state for decades.

The lack of redundancy has meant that any loss of treatment units, whether through failure or planned works, directly reduces treatment capacity and increases reliance on bypassing, exposing the plant to heightened risk during peak flow events.

The failure therefore represents a system-level outcome, where ageing infrastructure, incomplete build-out, constrained operations, inappropriate project structure and gaps in strategic and operational risk management combined under stress conditions to exceed the plant's effective hydraulic and operational limits.

The Crown Review notes that the scope of this report has, in accordance with the Terms of Reference, primarily focused on governance, oversight, accountability, funding and asset management factors contributing to the event.

A full assessment of individual operational decisions made during the night of 3–4 February 2026, including operator responses to alarms, staffing arrangements, escalation decisions, and site attendance timeframes, may be relevant to understanding opportunities to mitigate the consequences of future incidents.

The Crown Review understands Wellington Water commenced, and Tiaki Wai continues, to consider these via separate internal reviews.

Wellington Water's Response after the Moa Pt Failure

As noted in the timeline, from the morning of February 4 onwards, Wellington Water responded to the flooding of the Moa Point Plant by rapidly transitioning from emergency response to system stabilisation and recovery.

Immediate actions focused on halting further inflow to the flooded plant, isolating damaged electrical systems, and coordinating emergency services and public communication regarding untreated discharges.

Working with Veolia, Wellington Water implemented an alternative operating strategy by diverting untreated wastewater flows through the bypass system to the main ocean outfall.

Wellington Water also mobilised technical assessments, including expert input to understand the hydraulic causes of the failure and to inform recovery planning. Efforts were directed toward restoring critical functionality, prioritising the replacement of damaged components, and managing ongoing wastewater flows under reduced system capability.

Alongside operational measures, Wellington Water undertook monitoring, reporting, and stakeholder engagement, including notification of affected communities and regulators.

The response reflects the broader limitations, as the Moa Point Plant remains inoperable for an extended period, requiring continued reliance on untreated discharges during both normal and wet-weather conditions.

Overall, the response by Wellington Water was active and operationally focused, demonstrating capability in incident management and short-term adaptation, but occurring within the constraints of an already stressed and low-resilience system.

The Crown Review further acknowledges that WCC and the Mayor's Office played an active role in supporting public communications, stakeholder engagement, remediation planning, and governance oversight following the failure. While Wellington Water led the operational recovery response, the broader recovery effort involved significant contribution from multiple organisations.

Public health and environmental risk communication

Based on the information provided to the Crown Review, Wellington Water's response to the Moa Point failure was timely from an operational perspective, particularly once the severity of the incident was recognised.

Public notification of discharges and stakeholder engagement occurred promptly after the situation reached crisis point. However, this timeliness should be considered in context. Earlier warning signs, including abnormal level readings and previous incidents, indicated an emerging risk, but the response to these precursor signals was not sufficiently initiative-taking. As a result, while the immediate emergency response was rapid, the broader system response to risk was delayed.

In terms of adequacy, the actions by Wellington Water were consistent with what would be expected during a major infrastructure failure. The organisation transitioned quickly to recovery mode, implemented alternative discharge arrangements, and mobilised technical expertise to understand and address the failure. It also maintained communication with WCC, regulators and the public regarding ongoing untreated discharges. The failure did highlight that there was insufficient resilience or pre-planned mitigation measures to manage such an event without significant public health and environmental consequences.

While Wellington Water did undertake essential notification and informing communities about discharges and potential impacts, the effectiveness of this communication depends not only on timeliness but also on clarity, completeness, and the framing of risk. The risk communication was more reactive than anticipatory.

There was limited prior signalling to the public about the heightened risks associated with operating the plant in a degraded state during the UV Renewal Project period. In a system where untreated wastewater discharges were foreseeable under certain conditions, there is a strong expectation that potential public health impacts—such as contamination risks to coastal waters—should have been communicated more explicitly and in advance, with clear guidance on protective actions. The communications and engagement plan for the UV Renewal Project did not reference the risk of untreated wastewater through the Short Outfall as this risk was not identified or anticipated.

The Crown Review has concluded that the approach to public health risk appears to have been operationally managed rather than explicitly governed. There is less evidence that public health risk was consistently framed as a decision-making driver in relation to the increased likelihood of non-compliant discharges. This is consistent with the wider finding that risks were often understood but not fully quantified, escalated, or communicated at a level that would drive stronger preventative action.

Recommendation 1b - Public health and environmental risk communication

2. **Wellington Water / Tiaki Wai must take Immediate action to improve public risk communication by:**
    - (e) Establishing an anticipatory communication framework to inform communities early about elevated risks, including likelihood, scale, and impacts of untreated discharges.
    - (f) Embedding public health in all decisions, with clear thresholds for escalation, notification, and intervention.
    - (g) Enhancing data systems for real-time monitoring and transparent, timely public reporting.
    - (a) Shifting to proactive, transparent communication that demonstrates active risk management and builds public trust.

Recommendation 1b 1

Moa Point Wastewater Treatment Plant flood incident: Independent review

The Moa Point wastewater treatment plant has two channels that contain ultraviolet (UV) equipment for wastewater disinfection.

Since October 2025 one UV channel had been offline to enable the replacement of old, obsolete UV equipment. This reduces the treatment plant hydraulic capacity and requires more wastewater flow to be directed to the Long Outfall via a bypass pipe.

Technical factors that contributed to the flooding incident have been summarised in the accompanying diagram. These include aspects of the original design of the treatment plant carried out in the 1990s.

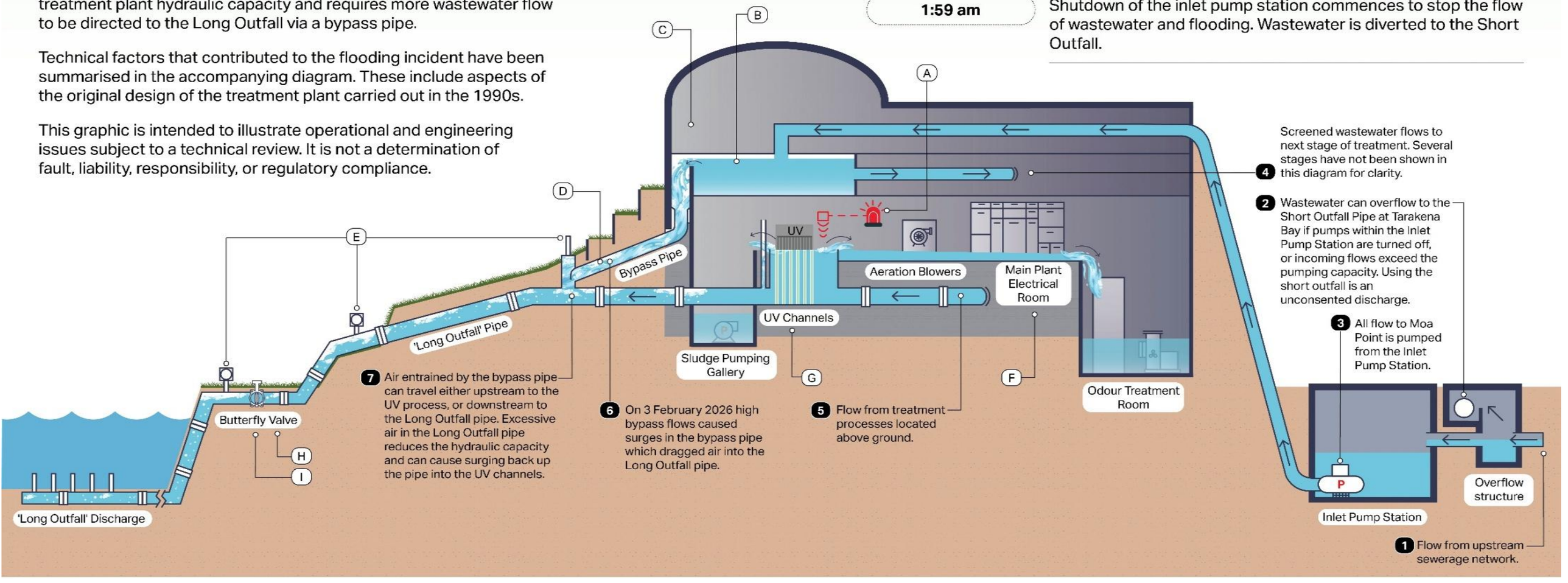
This graphic is intended to illustrate operational and engineering issues subject to a technical review. It is not a determination of fault, liability, responsibility, or regulatory compliance.

Incident Timeline (3 and 4 February 2026)

11:15 pm — Wastewater flow to the treatment plant reaches 3,400 litres per second. Surges in flow down the bypass pipe dragged air into the Long Outfall pipe causing a restriction in capacity.

11:17 - 11:33 pm — The operating UV channel overflows, flooding of structures located underground begins.

1:59 am — Shutdown of the inlet pump station commences to stop the flow of wastewater and flooding. Wastewater is diverted to the Short Outfall.



Observations

(A) Design documentation reviewed from the original 1990s design did not include or **infer** any need for level sensors with high level alarms to alert staff to high water levels in the UV room, or **to** stop flow from the Inlet Pump Station.

(B) Design documentation reviewed from the original 1990s design indicates the treatment process was designed for 3,000 litres per second of flow, the Inlet Pump Station was designed for 4,000 litres per second of flow, the bypass pipe is intended to handle 4,000 litres per second of flow and the Long Outfall pipe was designed to handle 4,500 litres per second of flow. During the flooding incident the bypass flow did not exceed 2,300 litres per second.

(C) Design documentation reviewed from the original 1990s design did not identify the risk of surges and/or air entrainment in the bypass pipe. Air entrainment is a process where air is mixed with a liquid (e.g., wastewater). It occupies pipe volume and can restrict the flow of wastewater in a pipe.

(D) The original 1990s design implies that the bypass pipe is intended to handle 4,000 litres per second of flow. Hydraulic calculations reviewed from the original 1990s design do not appear to consider the combined, bypass pipe, Long Outfall and wastewater treatment plant system. They also do not appear to test the scenario where 4,000 litres per second is directed through the bypass pipe.

(E) Air relief valves and vents along the Long Outfall pipe, while **consistent** with the original design, may not be of an appropriate size or type and may not have released air fast enough. This is currently under investigation. The purpose of the air relief values is to release air from the Long Outfall pipe, so the air does not restrict the flow of the wastewater.

(F) The original design and construction in the 1990s placed critical infrastructure (such as the main plant electrical room), below ground and within overflow pathways without flood protection barriers, suggesting that the risk of flooding to lower levels of the plant was considered to be low during the design process or due to the physical constraints of the site.

(G) Early design concepts for the wastewater treatment plant included four UV channels. Between these early concepts and the 1994-96 design, the number of UV channels was reduced two. Documentation reviewed from the 1994-96 design indicates that the intent was to increase the capacity of the UV process by making structural changes to the two UV channels and modifications to UV equipment, when required in the future. However, the documentation does not describe how this was to occur without a reduction in UV hydraulic capacity, which would lead to increased flows being directed to the bypass pipe. This meant a redundant UV channel was not available to maintain hydraulic and treatment capacity during the eventual replacement of UV equipment in 2026.

(H) Potential downstream obstructions may have contributed to the flooding incident. These are currently under investigation.

PART 3 - GOVERNANCE, OVERSIGHT AND ACCOUNTABILITY

The Terms of Reference (Appendix 1 **Page58)** for the Crown Review ask the review to:

> "*…examine WCC's governance, oversight, accountability, funding, asset management and statutory responsibilities in relation to the Moa Point wastewater treatment plant that may have contributed to the failure of the plant*"

Additionally, the Crown Review is to consider

> *"…WWL's oversight and management of contractual arrangements, setting of performance expectations, risk monitoring and incident response that may have contributed to the failure of the Moa Point wastewater treatment plant"*

and

> *"Lessons must be identified and available to inform the establishment of Tiaki Wai Limited (Tiaki Wai), the new metropolitan Wellington region water services provider commencing 1 July 2026"*

To provide an assessment of these requirements the Crown Review has acknowledged the interrelated nature of the existing governance relationships with a focus on the roles of WCC as the owner of the Moa Point Plant, responsible for capital funding of the asset, Wellington Water as contracted management of the asset and Veolia as the contracted operator.

Governance processes, behaviours, systems and their alignment with best practice were examined with a whole of system perspective.

Failure of the System - a Summary

The evidence provided to the Crown Review by WCC and Wellington Water points to a consistent pattern of governance weaknesses – these weaknesses compound when a 'whole of system' lens is applied, aligning with recognised indicators of systemic failure in infrastructure and utility systems.

Fragmented accountability and misaligned authority

The governance model separated the roles of asset owner (WCC), asset manager (Wellington Water), and operator (Veolia), but did not align responsibility with decision-

making authority. While Wellington Water carried system-wide operational risk, key levers—funding, investment prioritisation, consent compliance and borrowing—remained with WCC.

This separation of responsibility from control is a recognised driver of weak risk management and degraded system performance.

Limited risk visibility

Governance-level visibility of risk appears to have been constrained. Reporting to WCC was largely high-level, with limited insight into residual risk, control effectiveness, or overall system exposure. Wellington Water similarly does not appear to have consistently received integrated risk profiles from the plant operator.

As a result, decision-makers in both organisations may not have had a full understanding of the risks associated with operating a critical wastewater system, particularly during periods of reduced capacity.

Structural underinvestment

The material reviewed indicates a pattern of structural underinvestment, driven by affordability constraints and underspending in capital programmes. Funding needs appear to have exceeded approved levels, with renewals delayed or scaled back. This reflects a well-established pathway to infrastructure failure, with risk accumulating as assets deteriorate faster than they are renewed.

Weak asset stewardship

Asset stewardship was diluted across organisational boundaries. WCC relied on Wellington Water for asset condition information and did not maintain an independent, detailed view. Over time ongoing improvements to asset data have underlined the extent of the incomplete system knowledge held by WCC as asset owner. This incomplete system significantly weakened lifecycle planning and risk management.

Information flows between organisations were indirect and, at times, filtered. Wellington Water describes engagement as being consistently limited, a position confirmed in a 2020 report commissioned by WCC.[5] This limited the ability of governance bodies, including WCC, to respond appropriately.

[5] Richard Tanner, *Independent Assessment of Levels of Engagement Between the Wellington City Council and Wellington Water Ltd* (14 April 2020).

Cultural normalisation of risk

The evidence suggests the emergence of adverse organisational dynamics, including a degree of “learned helplessness” within Wellington Water and a strained relationship with WCC. These conditions appear to have reduced collaboration and contributed to the normalisation of elevated risk.

This is reflected in the long-term underfunding of key infrastructure renewals and non-compliance with resource consent conditions being effectively treated as ‘business as usual’.

Contractor complexity

Long term reliance on Veolia added operational complexity. While providing continuity of plant operations, the model depended on effective oversight from Wellington Water, which was constrained by broader governance and funding settings. Variability in contractor capability further required strong governance.

Limited resilience

The system had limited redundancy, with major upgrades undertaken in a live environment under reduced capacity. There is little evidence of comprehensive system-level risk assessment or clear governance reporting of residual risk under these conditions, increasing vulnerability.

Conclusion

The circumstances leading up to the 3-4 February 2026 Moa Point Plant incident reflect interacting elements of systemic governance failure, including fragmented accountability and misaligned authority; separation of responsibility from control; limited risk visibility; structural underinvestment; weak asset stewardship; distorted governance interfaces; cultural normalisation of risk; complex contractor dependency; and limited system resilience.

These interdependent factors created an environment in which risk accumulated over time and become ‘acceptable’ without effective intervention.

Governance, Asset Management and Contracting

Wellington City Council – Role of the Asset Owner

The relationship between Wellington Water and WCC is characterised very differently by each party. WCC appears to have received and acknowledged reports (compliance

dashboards, incident updates), accepted the narrative explanations of potential and actual failures (aging assets, backlog, renewals) and then relied heavily on Wellington Water's framing of issues and subsequent actions to address them.

There was little evidence of WCC seeking or requesting quantified risk exposure, explicit residual risk statements, or forward-looking consent breach probabilities. WCC relied on Wellington Water to raise risks and provide visibility, with its oversight focused mainly at a portfolio level rather than on detailed asset or project risks.

In its discussions with the Crown Review WCC described a model in which Wellington Water was responsible for assessing asset condition, identifying risks, and advising on investment, while WCC retained funding and strategic decision-making. This was known as a "trusted advisor" model although WCC advised that this description was not its invention.

Over time, this approach shifted as increasing funding requests, weak asset data, and concerns about asset condition reduced confidence in the advice being provided. WCC began requiring stronger evidence and scrutiny but continued to depend on Wellington Water to identify key risks. Wellington Water noted that they actively attempted to discharge the trusted-advisor role but struggled to secure engagement with WCC.

The previously noted WCC commissioned report[6] found that, at that time, "*The relationship lacked trust*", a situation the Crown Review has seen reflected in submissions and interviews with both WCC and Wellington Water as still existing.

As a result, while oversight strengthened in some ways, underlying issues—particularly limited risk visibility and misalignment between information, control, and accountability—remained.

The Crown Review accepts that WCC made repeated efforts over a number of years to improve the quality of information it received from Wellington Water regarding asset condition, risk reporting, and investment planning. Evidence reviewed by the Crown Review indicates that WCC sought improvements in risk reporting frameworks, requested asset management information, supported additional asset condition assessments, and raised concerns regarding reporting quality through both officer and governance channels.

However, the existence of those efforts does not alter the conclusion that the information available to decision-makers remained insufficient to support a fully informed ownership role.

To further develop an understanding of these matters the Crown Review have adapted Nadler's five board models, described in Building Better Boards (Harvard Business Review,

[6] Richard Tanner, Independent Assessment of Levels of Engagement Between the Wellington City Council and Wellington Water Ltd (14 April 2020).

May 2004), as an appropriate basis for assessing the effectiveness of WCCs governance, oversight and role as asset owner of the Moa Point Plant. In this review, the term "Operating" has been expressed as "Too operational" to emphasise governance overreach into management functions.

The following categories were applied:

- **Passive:** receives information, little challenge, no clear expectations;
- **Certifying:** receives reports, notes them, relies on operator assurance, limited challenge;
- **Engaged:** sets clear expectations, tests risk, requires forward-looking insight;
- **Intervening**: steps in when performance or risk is unacceptable; and
- **Too operational:** oversteps and directs delivery detail.

WCC's performance aligns most closely with: "certifying, with elements of passive". It was not engaged or intervening enough to match the risk profile of the assets and statutory obligations it ultimately carries.

There is limited evidence of engaged governance, which would have been demonstrated by WCC stating what its expectations were in relation to asset condition reporting, risks to its consents and prioritisation of renewals of an aging infrastructure.

Further, when provided with reports and dashboards by Wellington Water, there is no evidence of the explicit visibility of risks and consequences of funding gaps by WCC. There was repeated resource consent non-compliance linked to the Moa Point Plant, and awareness of degraded asset condition components, the need to operate outside of consents due to lack of redundancy and capacity, and numerous reviews and reports.

Despite these, there was little evidence that WCC had sought alternative strategies or escalated to stronger oversight and direction.

It is important to be clear that WCC had not overreached into operations; instead, it remained at "strategic" level. The issue was not over-governance, it was under-governance. This is particularly crucial because WCC was not just the asset owner, it was also the shareholder, the holder of resource consents under which the wastewater plants discharge treated effluents, the long-term funder and publicly accountable. Ultimately, WCC was exposed to significantly regulatory and reputational consequences.

Risk was being created operationally but not being governed at ownership level. The critical distinction was that while Wellington Water was becoming increasingly transparent operationally, WCC did not meet the commonly accepted requirements of a deliberately

informed, risk-aware asset owner.[7] Instead, it behaved as a recipient of information rather than a setter of expectations.

The Crown Review also recognises that responsibility for the quality, completeness, and timeliness of much of the asset condition and risk information sat contractually with Wellington Water. Accordingly, the findings relating to WCC should not be interpreted as suggesting that deficiencies in information quality were the responsibility of WCC alone.

Rather, they reflect a broader system failure in which the expectations, generation, communication, testing, and escalation of risk information were not functioning effectively across multiple organisations

Table 5 Governance Dimensions

Dimension	Classification
Governance posture	Certifying
Risk awareness	Moderate but reactive
Challenge & direction	Limited
Information shaping	Weak
Overall effectiveness	Below what is required for asset owner accountability

WCC did not fail through interference, it underperformed through insufficient engagement.

Wellington City Council Funding Approach for Wellington Water Limited

The ability of Wellington Water to operate, maintain, renew and improve the Moa Point Plant depended on funding decisions made by WCC, the asset owner, through council annual plans, long-term plans and occasional out-of-cycle approvals.

The Crown Review acknowledges that funding for some specific capital works at the Moa Point Plant was approved by WCC, including the UV upgrade and other targeted projects. However, the evidence provided by both Wellington Water and WCC does not demonstrate that there was a sufficiently funded, sustained, and proactive renewals programme for the plant as a whole. The Moa Point Plant was an ageing, system-critical asset with known condition, resilience, and compliance risks. In the Crown Review's view, those risks were not matched by a level of investment sufficient to address deterioration over time.

The Crown Review considers that underinvestment in renewals reduced the resilience of the plant. Material provide by Wellington Water describes deferred maintenance and a growing backlog of critical renewal work, limited provision for reactive renewals, and increasing reliance on future funding decisions to progress necessary works. Wellington

[7] A deliberately informed, risk-aware asset owner understands the condition, performance, lifecycle costs, and risks of infrastructure assets and applies governance processes that support evidence-based, long-term decision-making (Institute of Asset Management, 2015; ISO, 2024; Alegre et al., 2016).

Water also said that early asset condition information provided under the Veolia Contract was overly optimistic, contributing to an underestimation of the scale and urgency of renewal needs during the 2021–2031 long-term plan period.

By the time additional funding was secured through the 2024–2034 long-term plan, remediation and upgrade works were underway. However, the effects of earlier deferred investment had still not been addressed.

The Crown Review also considers that the operating model under which Wellington Water relied on periodic approvals from the asset owner for both capital and operational expenditure constrained its ability to plan and act strategically.

That model reduced Wellington Water's ability to respond proactively to known risks at the Moa Point Plant and to progress critical works at the pace required for an asset of this significance.

There remains disagreement between Wellington Water and WCC as to the extent to which WCC understood the severity of the risks at the Moa Point Plant. For the purposes of this review, it is sufficient to record that the evidence supports a conclusion that the renewals environment was materially underfunded and that the governance arrangements did not support timely mitigation of escalating asset risk. It is notable that the lack of an asset management plan for the plant resulted in an inability to create a funding plan and consequently there were insufficient funding requests made by Wellington Water to WCC. As result there was no agreed sustainable investment renewal plan for the Moa Point Plant.

Overall, the evidence shows that, while the February incident cannot be attributed to funding decisions alone, the long-term funding and governance arrangements applying to Wellington Water were a material contextual factor and contributed to the conditions in which the incident occurred.

The Crown Review concludes that historical underinvestment, together with the prevailing governance and funding model, materially reduced the resilience of the Moa Point Plant. Those matters were not the sole cause of the February incident, but they formed an important part of the wider context in which the incident occurred and increased the plant's vulnerability at the time of flooding event.

Recommendation 2 - Align strategy, funding, and delivery to eliminate structural underinvestment

Long-term plans, capital investment programmes, and operational realities must be aligned, ensuring that strategic objectives are translated into executable and funded programmes to restore network and wastewater system resilience and reduce the accumulation of asset risk over time

1. **Tiaki Wai should:**
    (a) Move away from episodic/reactive funding by implementing a long-term programmed pipeline
    (b) Ensure depreciation funding is used for renewals
    (c) Treat failure to deliver critical renewals as a realised governance risk

Recommendation 2 1

Recommendation 3 - Asset owner capability & Shareholder engagement

There is a need to strengthen the capability of the asset owner to act as an informed and deliberate steward on behalf of its shareholders. Governance should move beyond passive receipt of information toward active challenge, direction, and oversight.

1. **When exercising powers and functions under the Local Government (Water Services) Act 2025 and the Commerce Act 1986, Tiaki Wai must clearly articulate the *organisation's* expectations for:**
    (a) Asset condition and management,
    (b) Acceptable levels of risk,
    (c) Service standards and performance, and
    (d) Renewal standards.
2. **Tiaki Wai must: provide structured and transparent reporting in respect of the results of Recommendation 3.1. to enable independent judgement of the application of those expectations.**

Recommendation 3 1

Asset Management (Contractual Oversight)

The Crown Review has identified systemic weaknesses in contractual design, implementation, and oversight that adversely affected asset management outcomes at the Moa Point Plant. These issues developed over successive contractual arrangements and materially reduced asset resilience, including in the lead-up to the February 2026 flooding event.

The Crown Review also recognises that the contractual arrangements placed significant responsibility on Wellington Water to undertake asset management functions on behalf of WCC. This included advising on asset condition, preparing asset management plans, identifying risks, and informing investment decisions.

Consequently, any assessment of asset stewardship must consider not only the decisions and limited capability of WCC as asset owner but also the effectiveness with which those responsibilities were discharged by its contracted asset manager.

However, it is apparent that these asset management responsibilities were not effectively carried out in relation to the Moa Point Plant dating back to the Clearwater Contract (to which Wellington Water was not a party, and which was not covered by the WCC/WWL MSA) and through to the Veolia Contract (under which Wellington Water was principal and was not covered by the WCC/WWL MSA).

In summary, the key contracts relating to Moa Point Plant faced significant performance challenges and the contractual arrangements increasingly distanced the asset owner from operational knowledge and decision-making, weakened accountability, and limited the effectiveness of asset management practices. Appendix 7 on page **91** provides more detail.

The Crown Review finds that, across successive contractual arrangements, responsibility for the Moa Point Plant became increasingly fragmented. This resulted in reduced owner oversight, diminished internal capability, and growing reliance on contractors for operational knowledge and asset management.

The long-term DBO model established under the Clearwater Contract contributed to a progressive loss of visibility and influence by WCC. These issues were not adequately addressed in subsequent arrangements and persisted under the Veolia Contract.

The introduction of additional contractual layers, including the involvement of Wellington Water, further reduced clarity of roles and weakened accountability. The use of separate project contracts introduced additional interface risks, which were not fully recognised or managed. In addition, risk management practices were generally narrow in scope and did not adequately consider whole-of-system impacts. Limitations in monitoring and data integration further reduced visibility of emerging issues.

From the material provided to the Crown Review this situation evolved and worsened over the course of the Clearwater Contract and on to the present time. The capacity and expertise of WCC as asset owner diminished with each change in the structure of the wider water system and key staff transferred to Capacity Infrastructure Services and later Wellington Water.

Comments received by the Crown Review indicate that as early as 2012, WCC documentation was incomplete and institutional knowledge was fragile, with effectively no established contract management capability or history associated with the DBO contracts. There also appeared to be limited internal WCC processes for managing major asset hand backs at the end of the DBO contract. Very little information was able to be provided to the Crown Review by WCC relating to the later stages of the Clearwater Contract, supporting the views expressed to the Crown Review that the role and capability of WCC had diminished significantly.

The 2020 report "*Independent assessment of levels of engagement between the Wellington City Council and Wellington Water Ltd*" (Tanner, 2020), commissioned by the then WCC Chief Executive clearly outlines the issues existing at the time and makes a range of findings and recommendations for WCC. Of interest to the Crown Review and relating directly to asset management, the 'trusted advisor' model and its functionality, the report found:

> *"FINDING NO.1: The current relationship between WWL and the Wellington City Council is transactional, focused on detail, and has little strategic engagement. The relationship lacks trust"*
>
> *"FINDING NO. 2: The relationship lead for Wellington City Council with WWL is currently being managed at fourth tier level in the Council. It should desirably be the active responsibility of a second tier leadership role (i.e. that participates on the Council's senior leadership team)."*
>
> and
>
> *"FINDING No 6: There is an apparent lack of agreement or understanding on an infrastructure asset management plan, resulting in what appears to Council staff to be an overweighting on 'reactive works' compared to 'planned works'. When an urgent situation or emergency occurs, there is a need for greater role clarity about who is responsible for what level of decision making"*

The Crown Review notes that WCC acted on recommendations in the report, with the role of Chief Infrastructure Officer subsequently established, along with senior roles focused on water services. However, the information presented to the Crown Review by both WCC and Wellington Water is that the relationship did not materially improve and strategic engagement remained limited and the relationship remained in the hands of less senior staff. The Crown Review was not able to interview the WCC Chief Infrastructure Officer or their specialist advisors.

When coupled with WCC's stated reliance on the 'trusted advisor' relationship with Wellington Water, this narrow view of asset risk management, along with the reduced institutional knowledge and capability, and ongoing relationship issues, resulted in WCC not actively fulfilling its obligation as the owner of a critical infrastructure asset.

The failure was not simply that the trusted advisor did or did not provide advice. The deeper issue was that the governance system relied too heavily on a trusted-advisor relationship without sufficient independent assurance, monitoring capability, or clearly aligned accountability and control.

Wellington Water Limited Operational Oversight – Veolia

Applying the same assessment model previously applied to Wellington Water and WCC above, it is clear that in its oversight of Veolia as plant operator, Wellington Water appeared to be operationally engaged but lacking in contractual and strategic control.

In this case the relationship falls between "engaged" and "too operational" at the plant level but lacking "engaged/principal-level control" where it matters most in managing risk, contract performance - particularly in relation to long term asset management, and accountability.

There was evidence provided that demonstrated that Wellington Water was actively involved and working alongside Veolia prior to and following the Plant Failure, providing technical input and coordination by involving engineering specialists and participating in governance/working groups. It also provided coordination with regulators, GWRC, and in respect of public health. Wellington Water maintained visibility of plant performance and provided detailed reporting of compliance breaches, plant outages, and its operational challenges. Appendix 7 on page **91** provides more detail.

This is important for transparent separation of asset-driven failures, which are ultimately the responsibility of the asset owner, WCC, and operator-driven failures which are for Veolia to address.

There also was no clear line of accountability for consent breaches. From a governance perspective, when consents were breached, was that because of the asset, the operator, or how the operator managed the asset? That clarity is not evident. For a high-risk plant like Moa Point, Wellington Water should have been managing Veolia through explicit risk-sharing arrangements with defined performance thresholds under degraded capacity and with agreed operational strategies during renewals.

Instead, there was operational improvisation during reduced capacity, with limited evidence that scenarios were defined contractually, overall risks were allocated deliberately, and WCC exposure was escalated early.

In short, the operating environment was defined by contract workarounds, with Wellington Water drifting into "shadow operator" behaviour. Because risks are high and the assets are degraded, Wellington Water appears to have been stepping in heavily during incidents, coordinating responses, and influencing operational decisions. The net result is Wellington Water facing the risk of becoming partially accountable for operations without full contractual control over them.

The Crown Review notes that multiple independent reviews undertaken between 2021 and 2025 identified concerns regarding aspects of Wellington Water's organisational capability, asset management maturity, reporting systems, planning processes, and contract management practices. These reviews also identified significant issues with contractor performance.

While these reviews varied in scope and emphasis, collectively they point to persistent organisational and relationship challenges that pre-dated the Moa Point failure and are relevant when considering the broader context in which governance, risk management, and operational decisions were made.

Wellington Water was acting like an engineer/operator when it needed to act like a principal/asset steward. Tables 6 and 7 identify the resulting gaps between the operational model in place and what would be reasonably expected.

There are implications for WCC as result of this gap as risk flows upward:

Veolia operates → Wellington Water manages → Council owns the consequence

Table 6 Status - Operational Governance

Area	What's happening	What should happen
Incident response	Highly engaged	Appropriate
Technical input	Strong	Appropriate
Operator accountability	Weak	Needs strengthening
Risk allocation	Blurred	Must be explicit
Contract leverage	Underused	Must be central

Table 7 Dimensions Operational Governance

Dimension	Classification
Day-to-day engagement	Engaged
Operational involvement	Bordering on too operational
Contractual control of Veolia	Below engaged (weak)
Risk governance to shareholder	Certifying / incomplete

In this assessment, Wellington Water was not fully controlling operator performance, and WCC was not fully controlling Wellington Water's risk framing. Consequently, there was diffused accountability and, ultimately, concentrated liability on WCC, as the asset owner, the shareholder and the responsible territorial authority.

Wellington Water was operationally engaged with Veolia. However, it did not exercise strong enough principal-level control over operator performance, long term asset management, risk allocation, and accountability. This in turn created an environment where contractor non-performance was effectively allowed to perpetuate.

Recommendation 4 - Re-establish clear accountability and governance discipline

A clear and sustained re-establishment of accountability within the system is essential.

Governance arrangements should ensure that accountability is not shared in a way that diffuses responsibility, but instead is traceable and actively exercised, with WCC and its successors demonstrating a more engaged and intervention-ready posture where risk or performance warrants it. To achieve this:

1. **Wellington City Council must:**
    (a) To the extent possible within the regulatory framework, maintain an active oversight and stewardship role in wastewater services, including ***through the Partners Agreement dated 16 December 2025***, and
    (b) Retain sufficient internal expert technical and asset management capability to provide that oversight and stewardship, and
    (c) Recognise its ongoing accountability to the community.

2. **Wellington Water / Tiaki Wai must:**
    (a) Establish clear roles and responsibilities across asset owner, manager, and operator (for decisions, performance, and risk)

Recommendation 4 1

Recommendation 5 - Strengthening asset stewardship and system knowledge

Asset stewardship and system knowledge must be strengthened and transitioned away from passive, compliance-focused contract management.

This will require a commitment to transparency, the removal of practices that dilute or reframe critical information, and the development of more effective, trust-based relationships between organisations:

1. **Wellington Water / Tiaki Wai should urgently address the following contract management areas:**
    (a) Adopt delivery models that support continuous improvement and active risk management,
    (b) Clearly define accountability and manage interface risks,
    (c) Maintain appropriate levels of expertise.
    (d) Adequately resource contract and asset oversight functions beyond contractual compliance, including an active role in continuous improvement and risk management, and
    (e) Hold its contractors accountable for performance in accordance with the relevant contractual framework.

2. **Wellington Water / Tiaki Wai should urgently adopt the following asset management practices:**

   (a) Implement any mechanisms proposed by the Minister of Local Government for asset management following the Minister's consideration of recommendation 5.3.(a) below, otherwise

   (b) Adopt international best practice models for the asset management of major infrastructure and the identification of risk.

   (c) Commission the development of complete, reliable, and continuously updated asset condition data,

   (d) Establish and maintain responsibility for clear ownership of asset lifecycle, and

   (e) Improve hydraulic modelling and system understanding, especially under extreme and degraded conditions.

3. **The Minister of Local Government should consider options for the best mechanism to ensure the management of water assets, particularly Wastewater Treatment Plants, to meet international best practice. For example:**

   (a) Mechanisms by which Water Organisations and Water Services Providers may be required to adopt the international asset management standard, ISO 55000.

Recommendation 5 1

Wellington Water Limited - Major and High-Risk Project Governance

Aligned to the wider discussion of systemic governance deficiencies above, there are associated best-practice findings that can be drawn from a consideration of the governance and management of contracts and projects by Wellington Water. The governance and management of the Moa Point UV Renewal Project, when assessed against current advice published by Te Waihanga and the Treasury, clearly demonstrates several departures from recognised New Zealand best practice for infrastructure project delivery. (Appendix 5 at page **77** provides a more detailed assessment).

As described elsewhere in this report the Moa Point UV Renewal Project involved replacement of a critical final disinfection system at the wastewater treatment plant. Installed in 1998, the system had reached the end of its expected life, commonly around 25 years. The renewal programme covered the UV disinfection systems at Moa Point, Seaview,

and Western Plants. Planning occurred during the 2021–2031 LTP cycle with funding uncertain until confirmation in the 2024–2034 LTP.

Based on the information provided to the Crown Review the project was framed, planned and operated as a BAU renewal based on its cost profile. However, it introduced a temporary, but materially altered, operating regime within a live critical asset with full treatment capacity at the Moa Point Plant reduced by 50 per cent and significantly altered plant hydraulic behaviour.

The change in operating regime alone should have increased the projects significance to meet the threshold of a major project[8] based on the associated risk and the criticality of the Moa Point Plant. This did not occur and was not enabled or required by Wellington Water's own guidance for capital projects.

The result was project governance arrangements not matched to the consequence profile of the project. Compounding this, accountability was fragmented across Wellington Water, Veolia, Stantec, and Filtec, with Veolia and Stantec holding more than one role in the project structure, Table 8 below, illustrates the operational roles.

No single party or individual appears to have held responsibility for integrated system performance i.e. there was no Senior Responsible Officer who was both responsible and accountable for project, while the delegated authority for project was held by the Wellington Water CEO who was not part of the immediate project structure. Figure 1, page **80** illustrates these roles.

In practice the structure adopted was not sufficiently robust or controlled such that it could manage associated risks. As a critical example, in submissions to the Crown Review, Veolia noted that critical hydraulic system risks were identified early in the planning process, but there is insufficient evidence that these were clearly owned, fully analysed, closed, or independently assured before implementation proceeded. Wellington Water has since confirmed that they were not advised of these risks through the project team.

Table 8 UV Renewals Project - Roles and Responsibilities

Company	**Role**
Wellington Water Limited	Asset Owner/Principal
Veolia **a**.	Plant Operator
Veolia **b. (project risk advisory subcontract for UV Renewals)**	Project Technical Advisory
Stantec **a.(Advice to Wellington Water and Project Manager)**	Principals Engineer

[8] Major Infrastructure Project: A project involving the development, acquisition, renewal, upgrade or replacement of infrastructure assets with a total cost of ownership exceeding NZ$50 million, or a project of lower value that is assessed as having significant strategic importance, delivery complexity, stakeholder impact, risk exposure, public interest, or service criticality.

Company	Role
Stantec **b.**	Project Manager
FILTEC (delivery)	Lead Contractor

The material provided to the Crown Review confirm the project was administered through contractual accountabilities, but without a clearly identified whole-of-system owner, sufficiently explicit interface authorities, validated operating assumptions, robust contingency arrangements for the reduced-capacity operating mode, or escalation processes that ensured the closure of persistent risks.

The principal weakness when compared to New Zealand best practice are therefore systemic rather than solely technical.

Relevant guidance from Te Waihanga and Treasury indicates that high-risk or system-critical infrastructure projects should have a clearly identified senior accountable owner; governance and assurance that is scaled to risk and consequence; clear delegations and escalation pathways; integrated oversight of cross-organisational interfaces; formal assurance of critical assumptions; and continuing attention to operational readiness, residual risk, and outcomes. These elements were either not present or not sufficiently empowered for the UV Renewal Project (Figure 1 on page **80)**.

Assessed against current guidance, the UV Renewal Project demonstrates material departures from best practice major project management. In particular, the available evidence points to fragmented accountability, insufficient closure of critical system risks, weak interface governance, incomplete validation of temporary operating assumptions, and inadequate preparation for operating the plant in a degraded but materially different configuration. In summary, the findings are:

> Finding 1: Governance arrangements fell materially short of the standard required
> Governance and oversight were insufficient for a high-risk, live system change, with the project incorrectly treated as a routine renewal despite materially altering a critical asset.
>
> Finding 2: No single accountable owner exercised whole-of-system stewardship
> End-to-end accountability was absent, resulting in fragmented responsibilities across parties and a lack of integrated system oversight.
>
> Finding 3: Critical risks were identified but not brought to closure
> Key risks associated with reduced capacity and altered system behaviour were recognised but not fully resolved, tested, or escalated prior to implementation.
>
> Finding 4: Governance and assurance were not proportionate to consequence
> The level of governance, assurance, and interface management did not match the project's risk profile or provide confidence in safe operation under changed conditions.

Finding 5: Contingency planning and operating controls were not adequate

Operating limits, procedures, escalation triggers, and contingency plans were insufficiently defined for the heightened risk environment.

Finding 6: The failure was systemic in character

The event arose from longstanding systemic weaknesses in accountability, assurance, and risk management, with the project not governed as a high-risk live intervention.

Overall conclusion/finding

The UV Renewal Project was governed largely through contractual demarcation rather than integrated system stewardship. On the available evidence, that approach was not adequate to manage the operational and hydraulic risks that arose once the plant moved away from its long-established operating state.

Overall, the governance framework applied to this, or any similar project, by Wellington Water would be considered insufficient to provide the degree of accountability, assurance, risk ownership, and operational control required given the material changes to the plant's operation as a result of the project.

Recommendation 6 - Embed rigorous, quantified risk management

Enterprise and operational risk management must be fundamentally reframed so that risks are explicitly identified, quantified, and forecast, and are directly linked to decision-making, funding, and service levels.

1. **Wellington Water / Tiaki Wai should:**
    - (a) Adopt established New Zealand best practice guidance for management of major/high-risk infrastructure projects.
    - (b) Actively manage operational risks and establish a policy (or policies) on asset redundancy
    - (c) Establish processes to define and consciously accept residual risks to develop integrated system-wide risk profiles providing full exposure

Recommendation 6 1

Appendix 1 – Terms of Reference

Appointment of Crown Review Team to Wellington City Council[9]

Overview

Pursuant to sections 255(3) and 258 of the Local Government Act 2002 ("Act"), the Minister of Local Government gives notice of his appointment of:

Raveen Jaduram as chair, and
Helen Atkins,
Garry Macdonald, and
Michael Weatherall

as members to the Crown Review Teams to the Wellington City Council (WCC) and Wellington Water Limited (WWL). The term for the Crown Review Team starts on 16 March 2026 and will conclude on 31 August 2026.

Background

1. A major failure at the Moa Point Wastewater Treatment Plant on 4 February 2026 caused catastrophic flooding, the complete shutdown of the plant, and discharge of millions of litres per day of untreated wastewater in the surrounding harbour, creating significant environmental and public health impacts across the Wellington South Coast.

2. A Crown Review Team may be appointed at the request of Wellington City Council, a local authority under Part 10 of the Local Government Act 2002.

3. Lessons must be identified and available to inform the establishment of Tiaki Wai Limited (Tiaki Wai), the new metropolitan Wellington region water services provider commencing 1 July 2026.

Purpose

4. The purpose of the Crown Review Team is to examine WCC's governance, oversight, accountability, funding, asset-management and statutory responsibilities in relation to the Moa Point wastewater treatment plant that may have contributed to the failure of the plant on 4 February 2026, and to identify improvements WCC could take to reduce the likelihood of future failures.

5. A Crown Review Team, comprising the same members, is also being appointed to examine issues at Wellington Water Limited. There is a separate, complementary terms of reference for that appointment.

6. The Crown Review Team will also:

- Establish a high-level sequence of events, operation and identify immediate and long-term opportunities for improvement in WCC's stewardship of wastewater services based on the information available during the ongoing emergency;
- Identify lessons learned and recommend actions to reduce likelihood of recurrence;
- Provide advice to the Minister of Local Government on whether further intervention is warranted.

Scope of Crown Review Team

[9] Appointment of Crown Review Team to Wellington City Council - 2026-go1237 | New Zealand Gazette

7. Pursuant to section 258(4) of the Local Government Act 2002, the Crown Review Team must, to the extent authorised by its terms of reference:

a. investigate and report on the nature and extent of the problem; and

b. make recommendations to WCC and the Minister on how WCC could address the problem; and

c. make recommendations to the Minister on whether the Minister should take further action in relation to WCC, including whether the Minister should appoint any other Ministerial body to WCC; and

d. ensure, as far as practicable, that the existing organisational capability of WCC is not diminished.

8. The Crown Review Team for WCC will undertake a review, based on the information available to WCC and subject to the practical constraints arising from the ongoing incident. The Crown Review Team is not expected to determine the mechanical or technical cause of the wastewater plant's failure.

9. The following are in scope of the review:

- Technical documentation held by the WCC relating to the design, commissioning, construction, maintenance and modification, systems and operations of the Moa Point wastewater treatment plant;
- WCC's response to information it received from WWL prior to the failure, including risk signals, performance concerns, or relevant status updates;
- WCC's governance, contract management, accountability, oversight responsibilities and capability for wastewater infrastructure at Moa Point, including the regulatory and legislative context that may have influenced events leading up to the failure on 4 February 2026;
- WCC's shareholder oversight of WWL, including service delivery expectations, funding and investment decisions, monitoring frameworks, risk management processes, performance reporting, and escalation pathways;
- WCC's funding, budgeting, and investment decisions relating to the renewal, maintenance, and resilience of the broader wastewater network;
- WCC's asset management obligations, including whether its policies, plans, and investment signals supported the effective operation and resilience of the plant; and
- Immediate lessons and long-term improvement opportunities for the transition to Tiaki Wai.

Out of Scope

10. The Review will not:

- Make findings as to criminal, civil or disciplinary liability;
- Where possible, make findings that ascribe particular actions or inactions in relation to the Moa Point incident to identifiable individuals;
- Form any views in relation to any internal business practices of third-party contractors or any individual contractors; or
- Undertake or make findings on any regulatory investigations or any related compliance and enforcement activity under the Resource Management Act 1991 or other relevant legislation.

Conflicts of Interest and Member Conduct

11. Members must disclose any conflict, potential conflict, or perceived conflict of interest as it arises.

12. Members must exercise their professional judgment and carry out their functions objectively and impartially.

Membership

13. The Crown Review Team comprises the following members:

- Raveen Jaduram – Chair
- Helen Atkins – Member
- Garry Macdonald – Member
- Michael Weatherall – Member

14. These members are considered to hold expertise in:

- technical wastewater engineering;
- organisational governance and funding;
- operational management and delivery; and
- commercial and contractual management.

Approach to Functions Including Handling of Information

15. The activities conducted by the Crown Review Team can include reviewing documents, workshops, engagement with community and commissioning technical, legal, or analytical advice as required to support the review.

16. The work undertaken by the Crown Review Team operates in parallel with, and must not constrain any investigation, or any other compliance and enforcement activity, undertaken under the Resource Management Act 1991 or other legislation.

17. The Crown Review Team must conduct its work in a manner consistent with natural justice.

18. The Crown Review Team must avoid the disclosure of information that may prejudice any criminal or regulatory investigation, legal action, or insurance claim in relation to the Moa Point treatment plant, except in accordance with the Local Government Act 2002 or any other enactment or requirement of law.

Deliverables and Timeframes

19. The Crown Review Team will provide an interim report to the Minister of Local Government by **30 June 2026** and a final report by **31 August 2026**. The report must meet the requirements of section 258U of the Local Government Act 2002, including covering the following:

- Key findings from the review;
- Lessons to avoid a similar failure taking place in the future;
- Recommendations in line with the requirements covered in section 258(4) under Part 10 of the Local Government Act 2002, referenced in the scope section;
- Next steps for the Minister for Local Government and the relevant organisations to consider.

Official Information

20. Subject to sections 258U and 258Z of the Local Government Act 2002, and any other enactment or rule of law to the contrary, the Official Information Act 1982, the Local Government Official Information and Meetings Act 1987, and the Privacy Act 2020, apply to all information held by the Crown Review Team.

Secretariat Support

21. The Department of Internal Affairs (DIA) will provide secretariat support to the Crown Review Team. This will include coordination of meetings, facilitating access to documentation, access to specialist technical advice, legal advice, and analytical services if needed, and project management and coordination as required.

Remuneration

22. Pursuant to section 258V of the Local Government Act 2002, members of the Crown Review Team will receive remuneration in accordance with the Cabinet Fees Framework CO(25)2 at a rate of $1,645 a day for the chair and $1,240 a day for each member. Remuneration will be paid from money belonging to WCC. Members of the Review Team are responsible for ensuring any expenses claimed are reasonable and necessary.

Cost Recovery

23. Pursuant with section 258W(2) of the Local Government Act 2002, expenses incurred by the Crown in relation to the appointment and work of the Crown Review Team – including remuneration, fees, specialist advice, administration, and other costs – may be recovered from WCC.

24. The DIA secretariat will support the Crown Review Team with cost recovery and will consult with affected local authorities before issuing any cost recovery notice.

Dated at Wellington this 9th day of March 2026.

HON SIMON WATTS, Minister of Local Government. 2026-go1237 12-03-2026 10:01

Appointment of Crown Review Team to Wellington Water Limited[10]

Overview

Pursuant to sections 255(3) and 258 of the Local Government Act 2002, the Minister of Local Government gives notice of his appointment of:

Raveen Jaduram as chair, and
Helen Atkins,
Garry Macdonald, and
Michael Weatherall

as members to the Crown Review Teams to the Wellington City Council and Wellington Water Limited (WWL). The term for the Crown Review Team starts on 16 March 2026 and will conclude on 31 August 2026.

Background

1. A major failure at the Moa Point Wastewater Treatment Plant on 4 February 2026 caused catastrophic flooding, the complete shutdown of the plant, and discharge of millions of litres per day of untreated wastewater in the surrounding harbour, creating significant environmental and public health impacts across the Wellington South Coast.

2. A Crown Review Team may be appointed at the request of Wellington Water Limited, a water organisation under Part 10 of the Local Government Act 2002.

3. Lessons must be identified and available to inform the establishment of Tiaki Wai Limited (Tiaki Wai), the new metropolitan Wellington region water services provider commencing 1 July 2026.

Purpose

4. The purpose of the Crown Review Team is to undertake a review of WWL's oversight and management of contractual arrangements, setting of performance expectations, risk monitoring and incident response that may have contributed to the failure of the Moa Point wastewater treatment plant on 4 February 2026, and to identify improvements WWL or Tiaki Wai could take to reduce the likelihood of future failures.

5. A Crown Review Team, comprising the same members, is also being appointed to examine issues at Wellington City Council. There is a separate, complementary terms of reference for that appointment.

6. The Crown Review Team will also:

- Establish a high-level sequence of events and identify immediate and long-term opportunities for improvement in the operation, maintenance, and management of the plant, based on the information available during the ongoing emergency;
- Assess operational and contracting arrangements and management, governance oversight, shareholder responsibilities, funding arrangements, service delivery arrangements, and decision-making across relevant entities;
- Identify lessons learned and recommend actions to reduce likelihood of recurrence;
- Provide advice to the Minister of Local Government on whether further intervention is warranted.

Scope of Crown Review Team

[10] Appointment of Crown Review Team to Wellington Water Limited - 2026-go1238 | New Zealand Gazette

7. Pursuant to section 258(4) of the Local Government Act (2002), the Crown Review Team must, to the extent authorised by its terms of reference:

a. investigate and report on the nature and extent of the problem; and

b. make recommendations to WWL and the Minister on how WWL and Tiaki Wai could address the problem; and

c. make recommendations to the Minister on whether the Minister should take further action in relation to WWL, including whether the Minister should appoint any other Ministerial body to WWL; and

d. ensure, as far as practicable, that the existing organisational capability of WWL is not diminished.

8. The Crown Review Team for WWL will undertake a review, based on the information available, and subject to the practical constraints arising from the ongoing incident. The Crown Review Team is not expected to determine the mechanical or technical cause of the wastewater plant's failure.

9. The Crown Review Team is not expected to undertake a forensic or engineering investigation into the mechanical or technical cause of the Moa Point plant failure. However, the Review Team may consider information provided by WWL regarding the likely or probable causes of the failure, including technical assessments already available, insofar as this informs the Review Team's examination of governance, management, maintenance practices, and organisational decision-making.

10. The following are in scope of the review:

- High-level findings relating to the design, construction, contract management, maintenance, systems, operations, and commissioning of the Moa Point wastewater treatment plant;
- The known sequence of events leading to the plant failure, including any early indicators of risk;
- Governance, management, accountability, oversight systems, funding arrangements, and capability within WWL, including the regulatory and legislative context that may have influenced their management or ability to manage the plant;
- Contractual and operational arrangements relevant to the immediate performance of the plant;
- Public health and environmental risk communication, particularly the timeliness and adequacy of immediate notifications and warnings;
- Systemic or structural issues within WWL that may have contributed to vulnerabilities at Moa Point wastewater treatment plant; and
- Immediate lessons and long-term improvement opportunities for the transition to Tiaki Wai.

Out of Scope

11. The Review will not:

- Make findings as to criminal, civil or disciplinary liability;
- Where possible, make findings that ascribe particular actions or inactions in relation to the Moa Point incident to identifiable individuals;
- Form any views in relation to any internal business practices of third-party contractors or any individual contractors; or

- Undertake or make findings on any regulatory investigations or any related compliance and enforcement activity under the Resource Management Act 1991 or other relevant legislation.

Conflicts of Interest and Member Conduct

12. Members must disclose any conflict, potential conflict, or perceived conflict of interest as it arises.

13. Member must exercise their professional judgment and carry out their functions objectively and impartially.

Membership

14. The Crown Review Team comprises the following members;

- Raveen Jaduram – Chair
- Helen Atkins – Member
- Garry Macdonald – Member
- Michael Weatherall – Member

15. These members are considered to hold expertise in:

- technical wastewater engineering;
- organisational governance and funding;
- operational management and delivery; and
- commercial and contractual management.

Approach to Functions Including Handling of Information

16. The activities conducted by the Crown Review Team can include reviewing documents, workshops, engagement with community and commissioning technical, legal, or analytical advice as required to support the review.

17. The work undertaken by the Crown Review Team operates in parallel with, and must not constrain, any investigation, or any other compliance or enforcement activity undertaken under the Resource Management Act 1991 or other legislation.

18.The Crown Review Team must conduct its work in a manner consistent with natural justice.

19. The Crown Review Team must avoid the disclosure of information that may prejudice any criminal or regulatory investigation, legal action, or insurance claim in relation to the Moa Point treatment plant, except in accordance with the Local Government Act 2002 or any other enactment or requirement of law.

Deliverables and Timeframes

20. The Crown Review Team will provide an interim report to the Minister of Local Government by **30 June 2026** and a final report by **31 August 2026**. The report must meet the requirements of section 258U of the Local Government Act 2002, including covering the following:

- Key findings from the review;
- Lessons to avoid a similar failure occurring in the future;
- Recommendations in line with the requirements covered in section 258(4) under Part 10 of the Local Government Act 2002, referenced in the scope section;
- Next steps for the Minister for Local Government and the relevant organisations to consider.

Official Information

21. Subject to sections 258U and 258Z of the Local Government Act 2002, and any other enactment or rule of law to the contrary, the Official Information Act 1982, the Local Government Official

Information and Meetings Act 1987, and the Privacy Act 2020, apply to all information held by the Crown Review Team.

Secretariat Support

22. The Department of Internal Affairs (DIA) will provide secretariat support to the Crown Review Team. This will include coordination of meetings, facilitating access to documentation, access to specialist technical advice, legal advice, and analytical services if needed, and project management and coordination as required.

Remuneration

23. Pursuant to section 258V of the Local Government Act 2002, members of the Crown Review Team will receive remuneration in accordance with the Cabinet Fees Framework CO(25)2 at a rate of $1,645 a day for the chair and $1,240 a day for each member. Remuneration will be paid from money belonging to WWL. Members of the Review Team are responsible for ensuring any expenses claimed are reasonable and necessary.

Cost Recovery

24. In accordance with section 258W(2) of the Local Government Act 2002, expenses incurred by the Crown in relation to the appointment and work of the Crown Review Team – including remuneration, fees, specialist advice, administration, and other costs – may be recovered from WWL and its shareholding councils.

25. The DIA secretariat will support the Crown Review Team with cost recovery and will consult with affected local authorities before issuing any cost recovery notice.

Dated at Wellington on this 9th day of March 2026.

HON SIMON WATTS, Minister of Local Government. 2026-go1238 12-03-2026 10:01

Appendix 2 – List of interviews

Table 9 Moa Point Crown Review Team - Interviews

Date	Organisation	Persons interviewed
16 April 2026	Filtec	• Steven Rumble, General Manager Projects • Nathan Johnson, Project Manager • Richie Flinn, Partner at Wotton Kearney
16 April 2026	-	• Chris Laidlow, former commissioning/operations manager Moa Point Plant
28 April 2026	Stantec	• Will Jacobson, Principal Civil Engineer, Lead Author Hydraulics Report • Mark Wollina, Project Director Treatment Projects • Michelle Chew, Technical Lead, UV Renewals • Leslie Lyall, Project Manager, UV Renewals • Alan Hockey, Engineer to the Contract, UV Renewals • Sami Maree, Engineer's Representative, UV Renewals • Josie Lewis, Stantec Counsel
6 May 2026	Wellington Water Limited	• Steve Hutchison, Chief Advisor Wastewater • Pat Dougherty, Chief Executive • Charles Barker, Chief Operating Officer • Sarah BridglandHill, Lead, Crown Review Response • Tim Power, Wellington Water General Counsel
8 May 2026	Wellington City Council	• Matt Prosser, Chief Executive • Andrea Reeves, Chief Strategy & Financial Officer • Ben Henderson, Chief of Staff • Bridie McKinnon, External legal counsel
18 May 2026	Wellington Water Committee	• Nigel Corry, Chief Executive of GWRC • Ros Connelly, Boad Chair of the Committee and GWRC Councillor
19 May 2026	Greater Wellington Regional Council	• Christina Schierlitz, Team Lead Consents and Compliance • Dr Fathima Iftikar, Director Strategy Policy and Regulation
22 May 2026	-	• Anthony Wilson, former Chief Asset Officer and City Engineer at WCC
25 May 2026	-	• Chris Callander, former Moa Point Design Lead (Beca)
27 May 2026	-	• Nick Leggett, former Chair of Wellington Water • Tim Power, General Counsel Wellington Water • Sarah Bridgland Hill, Lead, Crown Review Response Wellington Water
27 May 2026	Veolia	• Daniel Spiller, Chief Operating Officer Aus/NZ • Dave Neru – NZ National Manager • Michael Pashke – Commercial Contracts Director
27 May 2026	Tiaki Wai	• Will Peet – Chair of Board • Mike Brewster – Chief Executive
28 July 2026	-	• Tim Brown, Former Wellington City Councillor, Chair Council's Environment and Infrastructure Committee, and member Wellington Water Committee
28 July 2026	Wellington City Council	• Mayor Andrew Little (Crown Review Chair Only)
29 July 2026	Tiaki Wai	• Mike Brewster – Chief Executive • Tim Power, Tiaki Wai General Counsel

Date	Organisation	Persons interviewed
29 July 2026	Wellington City Council	• Matt Prosser, Chief Executive • Andrea Reeves, Chief Strategy & Financial Officer • Ben Henderson, Chief of Staff • Bridie McKinnon, External legal counsel

Appendix 3 – Detailed Moa Point Wastewater Treatment Plant Timeline

Table 10 Moa Point Wastewater Plant Detailed Timeline

Year	Key event
Pre-1989	Wellington City sewage discharged without treatment through the Short Outfall at Moa Point / Tarakena Bay (also called Lavender Bay in Council documents)
1980	Council resolved to proceed with a new Moa Point Plant based on milliscreening and primary treatment, but the proposal did not progress.
1984	Project revived and quickly became controversial.
1986	Local body elections gave a mandate to proceed with a WWTP; options continued to be assessed before Moa Point re-emerged.
1987	WCC began the Wellington Wastewater Project and planning commenced for a treatment plant at Moa Point and replacement of the Short Outfall.
1988	Environmental Impact Statement 1 prepared.
1989	Milliscreening began at Moa Point through the Short Outfall; Moa Point formalised as the preferred treatment / outfall solution.
1990	Environmental Impact Statement 2 prepared and initial consents issued.
1991	Regional consents issued; international review recommended trickling filter / solids contact treatment; process design work began including UV disinfection.
1992	Reference design developed for the new WWTP, including pretreatment, clarifiers, fixed growth reactors, UV channels, and odour control.
1993	Project options were reviewed and Stage 1 / Stage 2 phasing and performance criteria were developed.
1994	Tenders invited for the Clearwater DBO contract; Anglian Water Consortium submitted a bid.
1995	WCC awarded the 25-year Clearwater Contract; outfall design report was issued.
1996	AWI issued a revised design report departing significantly from the original reference design and proposing staged construction up to 4000 L/s.
1997	Moa Point Plant commissioned; only Stage 1 was built.
1998	Plant became fully operational under Anglian Water International NZ Limited, and the original TrojanUV3000 equipment was installed.
2000–2004	GWRC issued abatement notices; AWI was prosecuted over a sludge dewatering incident; ongoing consent breaches were noted.
2003	Investigations were prepared in support of an interim consent application.

Year	Key event
2004	Capacity Infrastructure Services (Capacity) was established to manage three-waters assets for councils.
2005	Veolia / United Water took over the Clearwater Contract after Anglian exited New Zealand.
2006	WCC records noted the Short Outfall was retained only as an emergency overflow and was not consented.
2009	A new suite of consents was granted, generally expiring in 2034.
2013	WCC and Capacity entered the Management Services Agreement, which excluded the legacy Clearwater Contract for the Moa Point Plant.
2014	Wellington Water Limited was established.
2015	Management Services Agreement updated to reflect Wellington Water, but the Moa Point Plant remained excluded from existing contracts managed on WCC's behalf.
2017	Clearwater hand back variation agreement set out methodology for condition assessments ahead of contract expiry.
2018	Wellington Water sought registrations of interest for operating four WWTPs; condition assessments identified deferred maintenance; two bypass events were reported.
2019	Two bypass events were reported; final asset condition assessment completed; Wellington Water entered the new regional WWTP services contract with Veolia.
2020	BAU under the Veolia Contract began on 24 February 2020; four bypass events were reported; Mayoral Taskforce on Three Waters highlighted governance and funding issues.
2021	**10 May**: Trojan assessed the TrojanUV3000 equipment with Filtec and Veolia. **23 August:** Wellington Water was notified that the TrojanUV3000 product line would be discontinued, reinforcing urgency because UV failure would compromise disinfection and create direct public health risk.
2022	**31 May:** Veolia issued a UV Project Proposal on the basis that one channel would be offline and one online.
2023	**April:** after about six months, Veolia advised it did not have capacity to deliver the UV project directly, so Wellington Water Major Projects took over project delivery while Veolia remained Operation and Maintenance (O&M) contractor and manager of operational risk.
2024	**February–April 2024** Wellington Water had further engagement with GWRC on UV project, which reserved the right to enforce in response to non-compliant discharges.
July 2025	**4 July 2026: Bypass event** clarifier out of service and flow to the treatment process was limited. During heavy rain UV flow meters go out of range during event in a way similar to the 3 – 4 February 2026 event. Indicating a potential flooding risk.
2025	**Mid to late 2025:** Filtec had to secure a Veolia-managed Permit to Work before physical works could start, including arrangements to divert flows above 1500 L/s at the step screens.

Year	Key event
January 2026	15 January: overflow incident during UV works.
February 2026	3 February: Afternoon - high-flow alarm in UV channel triggered at 12:00. Overflow event at 3:00pm site works ceased at 4:00pm 3–4 February: evening - major flooding occurred when final effluent and bypassed screened flow combined and backed up into the UV channels.

Appendix 4 – Historical Development of the Moa Point Wastewater Treatment Plant

Overview

The development history of the Moa Point Plant is relevant to the Crown Reviews assessment of the 3–4 February 2026 flood event, particularly in relation to plant configuration, process redundancy, bypass arrangements, and operational resilience.

The Crown Review has prepared a chronology **above**, based on records from WCC and Wellington Water and interviews with relevant parties. This appendix summarises the aspects of that history most relevant to the present review.

Development of the Current Plant Configuration

WCC decided in the late 1980s to replace the existing Short Outfall with a new treatment plant and Long Outfall discharging to Lyall Bay, after considering several alternative sites and discharge options. Milliscreening of the Short Outfall discharge commenced in 1989 as an interim measure. While the Short Outfall remains in place it is described "…as being replaced by the new Long Outfall at the commissioning of the Moa Point Wastewater Treatment Plant in October 1998. It now operates only under emergency conditions via an overflow weir channel located near the Moa Point Pump Station"[11]

In 1991, WCC obtained a water right under the Water and Soil Conservation Act 1967 authorising continuous discharge of disinfected secondary treated effluent through a submarine outfall approximately 1,800 m offshore south of Lyall Bay, at an average rate of 920 L/s and a maximum rate of 4,000 L/s. The consent term was 10 years from commencement of continuous discharge from the treatment plant.

WCC initially pursued a treatment plant based on a trickling filter/solids contact (TF/SC) process. Beca Steven and PWT developed concept designs for a plant capable of meeting the consent standards. The recommended concept was an above-ground TF/SC plant with four process trains and multiple inter-stage bypasses. The proposal was reviewed by an International Review Panel and carried forward as Contract No. 1.

Subsequent cost concerns led WCC to adopt a two-stage development strategy. Under that approach, Stage 1 would retain the ultimate hydraulic capacity of 4,000 L/s, but full treatment performance would only be required up to 3,000 L/s. Stage 2 was expected to provide full secondary treatment and disinfection for all flows up to 4,000 L/s.

[11] (GN020245 [22025])– Coastal Permit to occupy the coastal marine area in respect of the Moa Point sewage outfall structure (Short Outfall) was issued in July 2002, amended in August 2009, and expires in July 2037

The Clearwater Contract was awarded to Anglian Water International (AWI) in 1995. AWI's adopted design used a moving bed biofilm reactor (MBBR) process and provided three process trains comprising primary lamella settlers, MBBR tanks, and secondary clarifiers, discharging through only two UV channels to the Long Outfall. The practical hydraulic and full treatment capacity of these unit processes was 3,000 L/s. AWI proposed that Stage 2 augmentation would add a fourth process train and enlarge the UV system.

The Moa Point Plant was commissioned in January 1998. AWI initially operated the plant, and the Clearwater operating arrangements were later novated to Veolia New Zealand Ltd (Veolia) in 2004. Wellington Water has since stated publicly that Veolia has operated Wellington City's Moa Point and Western WWTPs since 2004.

From 2004 onward, Veolia's role was that of the contracted operator and maintainer of the treatment plant, rather than the asset owner or original designer. In 2019, Wellington Water and Veolia entered into a 10-year contract under which Veolia was to operate and maintain all four metropolitan Wellington WWTPs. Wellington Water described Veolia at that time as already having a long history of operating Moa Point and Western, while also confirming that Wellington Water manages water services on behalf of its council owners.

Veolia's role is therefore relevant to the present review as the long-term operator of Moa Point Plant during the relevant operational period, including at the time of the 3–4 February 2026 flood event. However, it is also necessary to distinguish Veolia's operational responsibilities from the broader ownership, investment, asset planning, and contract-management framework.

The available review material indicates that plant performance reflected not only operator performance, but also the condition of ageing assets, constrained redundancy, and shortcomings in the contractual and management interface between Wellington Water and Veolia. Wellington Water has publicly acknowledged both that Veolia was responsible for running the WWTPs and that the contractual relationship and Wellington Water's own management of that relationship contributed to performance issues.

A related point is that Veolia did not determine the original Stage 1 configuration of the Moa Point Plant, nor the historical decision not to proceed with Stage 2 augmentation. Those matters pre-dated Veolia's involvement and arose from earlier WCC planning and the Clearwater procurement process. Veolia's significance to the present review lies instead in its long-term responsibility for operating and maintaining a facility whose ageing asset base, limited redundancy, and incomplete staged development appear to have imposed material constraints on reliable performance.

Apart from routine maintenance, the principal equipment renewals reported to the Crown Review have been replacement of the UV disinfection equipment and the original electrical, instrumentation, and control systems. These works were underway at the time of the 3–4 February 2026 flood event.

Redundancy, Bypass, and Stage 1 Limitations

A central feature of the Moa Point Plant configuration is that the plant cannot lose a major downstream unit process and still maintain either:

- its consented hydraulic capacity of 4,000 L/s; or
- its intended Stage 1 full secondary treatment capacity of 3,000 L/s.

If one lamella clarifier, one MBBR unit, or one secondary clarifier is out of service, effective capacity reduces to approximately 2,000–2,200 L/s, requiring bypass of approximately 1,800–2,000 L/s at a peak inflow of 4,000 L/s. If one UV channel is out of service, effective UV treatment capacity reduces to approximately 1,500 L/s, requiring bypass of approximately 2,500 L/s. This latter scenario is of particular relevance to the 3–4 February 2026 flood event.

The material reviewed does not indicate that the consequence of large bypass flows during storm events, particularly with key process units out of service, were actively modelled, tested, or fully addressed at commissioning. Nor is there evidence that these hydraulic consequences were adequately addressed as part of the later UV Renewal Project.

The Crown Review has also seen evidence that when bypass flow exceeded approximately 1,500 L/s during high inflow conditions, flow may have backed up in the UV chamber. Even if the precise hydraulic mechanism was not then understood, that possibility should have been more fully reflected in project risk identification, contingency planning, and operational controls.

Stage 2 Augmentation

The original planning basis for the Moa Point Plant envisaged a two-stage development. On the material reviewed by the Crown Review, Stage 1 was intentionally configured as an interim arrangement: it provided the ultimate plant hydraulic capacity of 4,000 L/s, but only 3,000 L/s of full secondary treatment and disinfection capacity. Stage 2 was intended to complete the plant so that all flows up to the design peak of 4,000 L/s would receive full treatment.

Under AWI's adopted configuration, Stage 1 comprised three treatment trains feeding two UV disinfection channels. AWI's tender material envisaged that Stage 2 would be achieved by adding a fourth treatment train, thereby increasing installed secondary treatment capacity and improving redundancy across the main biological and clarification stages. A Stage 2 plant would therefore likely have been materially better able to maintain treatment performance when one process train was unavailable due to maintenance, outage, or renewal works. As part of the development of the DBO contract the advice provided to WCC indicated that Stage 2 Augmentation would be needed prior to 2020.

In practical terms, the addition of a fourth train would have reduced the degree to which the plant depended on bypassing under out-of-service conditions. As presently configured, the

plant cannot sustain a major downstream unit outage while maintaining either its full hydraulic capacity or its intended Stage 1 treatment capacity. The absence of Stage 2 therefore meant that periods of maintenance or equipment unavailability inevitably produced a more constrained operating envelope. That constraint becomes particularly significant during high wet-weather inflows, when the combination of reduced treatment capacity and high hydraulic loading increased reliance on internal bypass arrangements.

Stage 2 would also have reduced operational fragility. With only three treatment trains in Stage 1, the loss of any one train represents a substantial reduction in available treatment capacity. A fourth train would have reduced that proportional loss and provided greater operating headroom during maintenance, refurbishment, renewal, and emergency repair. In that respect, Stage 2 would not simply have increased nominal capacity; it would have made the plant less dependent on all major units being continuously available, less sensitive to the coincidence of outages and high inflows, and less reliant on bypass as a practical contingency during abnormal operating conditions.

The Crown Review considers it important, however, to distinguish between the benefits that Stage 2 would likely have delivered and the limitations that would still have remained. On the information presently available, the principal Stage 2 enhancement identified in the AWI concept was the addition of a fourth process train. The UV disinfection stage, by contrast, would still have comprised only two channels, albeit enlarged and equipped to treat approximately 2,000 L/s per channel.

Accordingly, even with Stage 2 in place, the plant would still have experienced a marked reduction in UV treatment capacity if one channel were out of service. In that sense, Stage 2 would likely have improved resilience across the upstream treatment processes, but it would not necessarily have removed the vulnerability associated with the two-channel UV configuration.

Stage 2, had it been implemented, would likely have:

- improved treatment train redundancy;
- reduced bypass requirements during maintenance of lamella, biological, and clarification stages;
- increased operational flexibility during renewals and repairs;
- reduced the plant's operational fragility by providing greater tolerance to single-train outages; and
- improved the plant's ability to maintain full secondary treatment in the event of a single train being out of service.

However, it would not by itself have resolved the hydraulic and operational risks associated with a single UV channel outage, particularly during periods of peak inflow.

The Crown Review has seen no evidence that either WCC or Wellington Water subsequently progressed, funded, or planned Stage 2 augmentation in a way that materially improved redundancy, bypass flexibility, or wet-weather operational resilience. In that respect, the Moa Point Plant appears to have remained for almost three decades in a configuration originally conceived as a staged and incomplete arrangement, with reduced redundancy and limited flexibility becoming enduring features of plant operation rather than temporary limitations pending future expansion.

Key implications

The relevance of Stage 2 to the present review is not that its absence can be said to have directly caused the 3–4 February 2026 flood event. Rather, its relevance is that the plant appears to have operated long-term in a configuration originally conceived as an interim stage, with the result that constrained redundancy, limited operating headroom, and dependence on bypass under out-of-service conditions became embedded features of plant operation.

For present purposes, the key implications are:

- the Moa Point Plant appears to have been operated for many years as an effectively permanent Stage 1 plant;
- that configuration provided limited tolerance to foreseeable outages of major treatment units;
- the absence of Stage 2 likely increased dependence on bypassing during maintenance, renewals, and peak wet-weather flows;
- the plant's operational resilience therefore appears to have been structurally constrained, rather than only incidentally reduced by particular projects or events; and
- the question arises whether the implications of continuing to operate indefinitely in that incomplete configuration were sufficiently revisited as the plant aged, major renewals were undertaken, and wet-weather hydraulic risks became more evident.

Monitoring and Control Issues

The Crown Review has identified a number of monitoring and control issues relevant to the 3–4 February 2026 flood event.

a. The IPS is configured so that if incoming wet-weather flow exceeds pumping capacity, or if one or more pumps fail to start, excess flow diverts to the old Short Outfall. That emergency measure was not utilised until well after flooding had occurred at the treatment plant.

b. Shutting down the IPS in the event of flooding was not part the established Standard Operating Procedures for plant operators.

c. Although the IPS rising mains are metered and connected to SCADA, the relationship between increasing IPS inflow and abnormal conditions in the UV system was not recognised in sufficient time during the event.

d. The plant did not record the actual water level within the UV channels in a manner that would have provided direct warning of imminent overtopping or flooding. More generally, the available instrumentation appears to have been insufficient to provide reliable warning of developing backflow conditions.

e. A more systematic review of historical wet-weather operating data, particularly during periods when one or more process units were unavailable, may have identified a heightened backflow risk earlier.

f. Although several documents state that the emergency bypass weirs can pass 4,000 L/s, that capacity does not appear to have been formally verified or tested.

g. Moa Point did not have CCTV installed at critical process locations. As a result, no visual record was available to assist either real-time remote monitoring or detailed post-event reconstruction.

Long Outfall Hydraulics

On the information provided to the Crown Review, blockage of the Long Outfall is not considered to have been a causative factor in the flooding of the treatment plant. However, further investigation of the outfall's hydraulic condition and discharge capacity is warranted.

In particular, Wellington Water and WCC should confirm whether the Long Outfall has retained its original design capacity, commonly recorded as 4,500 L/s, and whether it has been pigged at any stage since commissioning. The original Clearwater Contract reportedly required pigging by AWI's subcontractor, Candac Perry, but the Crown Review cannot confirm whether that occurred. The Clearwater Project records identify Candac Perry as the outfall contractor, which is consistent with that requirement.

The Crown Review also supports further assessment of outfall hydraulics, including measurement of outfall head over a range of discharge flows to establish a current Q–H relationship and compare that with the design profile.

Summary Observation

The Moa Point Plant was ultimately delivered as a Stage 1 plant with constrained redundancy, limited bypass flexibility, and no subsequent Stage 2 augmentation. The plant appears to have remained broadly in that configuration for almost three decades, with only limited major equipment renewal. In that context, the 3–4 February 2026 flood event raises significant questions as to whether the hydraulic and operational consequences of out-of-service process conditions, high wet-weather bypass flows, and backflow risk were adequately understood, monitored, and managed over time.

Appendix 5 – Assessment of the Moa Point UV Renewal Project Governance and Management

Introduction

This section assesses the governance arrangements for the Moa Point UV Renewal Project against recognised New Zealand best practice for infrastructure project delivery as published by Te Waihanga and Treasury. It draws on Wellington Water documentation, contractor submissions and interview summaries from Veolia, Filtec, and Stantec to evaluate governance, accountability, risk management, interface management, and whole-of-system integration.

Summary

The Moa Point UV Renewal Project involved replacement of a critical final disinfection system at the Moa Point Plant. Installed in 1998, the system had reached the end of its expected life, commonly around 25 years.

The renewal programme covered the UV disinfection systems at Moa Point, Seaview, and Western plants. Planning occurred during the 2021–2031 LTP cycle, with funding uncertainty until confirmation in the 2024–2034 LTP. The project was approved as a "major project" by the Wellington Water major project board committee and subsequently procured through a closed tender and delivered under a design-and-build contract with Filtec, signed on 30 October 2024 for approximately $10.9 million.

Despite the "major projects board" approval the work was framed by Wellington Water as a BAU renewal project based on the cost profile of the work even though it introduced a temporary, but materially altered, operating regime within a live critical asset. During construction, full treatment capacity at Moa Point reduced from approximately 3,000 L/s to approximately 1,500 L/s, increasing reliance on bypass arrangements and altering plant hydraulic behaviour. Based on the change in operating regime the project would more properly be considered 'high risk' and treated as a major project[12] by Wellington Water.

The evidence indicates that the governance arrangements were not matched to that consequence profile. Accountability was fragmented across Wellington Water, Veolia, Stantec, and Filtec, and no single party appears to have held responsibility for integrated system performance. The table below illustrate the various roles and responsibilities documented for the UV Renewal Project.

[12] Major Infrastructure Project: A project involving the development, acquisition, renewal, upgrade or replacement of infrastructure assets with a total cost of ownership exceeding NZ$50 million, or a project of lower value that is assessed as having significant strategic importance, delivery complexity, stakeholder impact, risk exposure, public interest, or service criticality.

Table 11 UV Renewals Project – Operational Roles and Responsibilities

Company	Role	Responsibility of general site
FILTEC	Lead Contractor	• Control of the work area in the UV room, including parts of the service gallery • Escorting and inducting workers into the FILTEC work area. • Operation of the new UV equipment during commissioning.
Veolia **a.**	Plant Operator	• Control and operation of the entire Moa Point site • Operation and maintenance of the UV equipment (excluding commissioning) • Inducting workers to the general site • Issuing permits to work • Reviewing safety documentation and approving work to commence
Veolia **b.**	Project Technical Advisory	• Attend safety in design & risk workshops • Provide technical input • Provide information on site functionality and operation • Site visits, inductions, isolations etc.
Wellington Water Limited	Asset Owner/Principal	• Project Director (not identified) • Approval of Shutdown plans (if applicable)
Stantec **a.**	Principals Engineer	• Review and approval of technical design aspects, commercial approvals on behalf of Wellington Water
Stantec **b.**	Project Manager	• Contracted by Wellington Water to project manage the UV Renewal Project Works

While critical system risks were identified during planning and construction, there is insufficient evidence that they were clearly owned, fully analysed, closed, or independently assured before implementation proceeded.

The principal weakness was systemic rather than solely technical. The project was administered through contractual accountabilities, but without a clearly identified whole-of-system owner, sufficiently explicit interface authorities, validated operating assumptions, robust contingency arrangements for the reduced-capacity operating mode, or escalation processes that ensured the closure of persistent risks.

Best-Practice Governance Benchmark

Relevant guidance from Te Waihanga and Treasury indicates that high-risk or system-critical infrastructure projects should have a clearly identified senior accountable owner; governance and assurance scaled to risk and consequence; clear delegations and escalation pathways; integrated oversight of cross-organisational interfaces; formal assurance of critical assumptions; and continuing attention to operational readiness, residual risk, and outcomes.

Figure 1 shows the structure adopted for the UV Renewal Project, illustrating the absence of the senior responsible owner.

Assessed against the guidance, the UV Renewal Project demonstrates material departures. In particular, the available evidence points to fragmented accountability, insufficient closure of critical system risks, weak interface governance, incomplete validation of temporary operating assumptions, and inadequate preparation for operating the plant in a degraded but materially different configuration.

Key Findings

1. Fragmented accountability and absence of a whole-of-system owner

The governance model (**Figure 1**) divided responsibilities among Wellington Water as project sponsor/owner and delivery manager, Veolia as operator and advisor, Stantec as Engineer to the Contract and project advisor, and Filtec as design-and-build contractor. However, no party appears to have held end-to-end accountability for integrated system performance across design, construction, and live operation.

Variation 4 to Veolia's contract further separated major capital delivery from the operator, leaving Veolia with operational input and site coordination functions, but without delivery or design accountability.

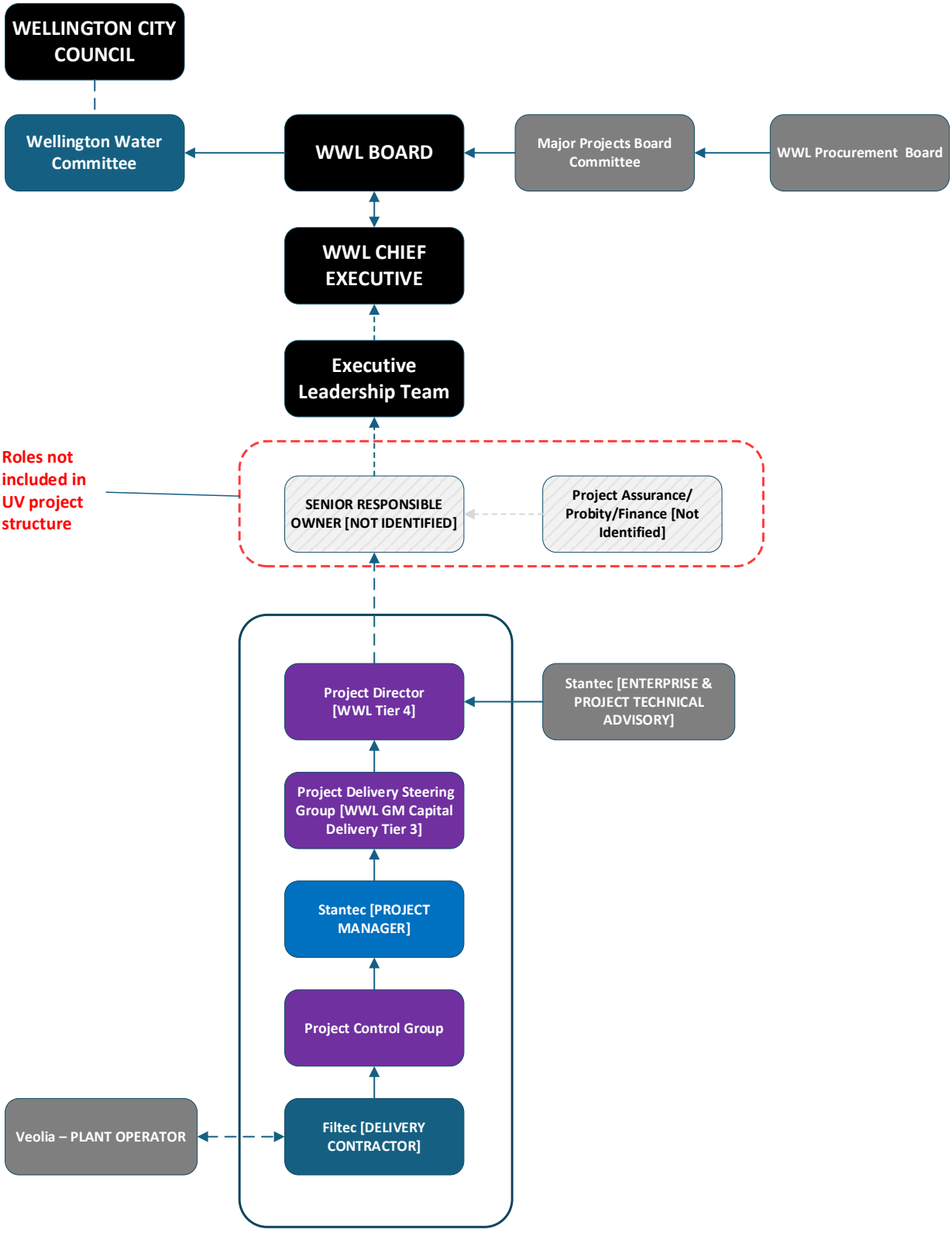
2. Critical whole-of-system risks were not fully resolved before implementation

The project introduced a materially altered hydraulic regime, yet there is no clear evidence that the resulting system behaviour was fully validated before implementation. Filtec did not hold responsibility for system-wide hydraulic modelling; Stantec later identified that key bypass interactions had not been fully understood; and Veolia has stated, but not provided written records, that they raised repeated concerns regarding bypass capacity and high-flow behaviour. hazard and operability study (HAZOPS) issues appear to have been deferred for later consideration without clear ownership or demonstrable closure. Wellington Water disagrees that Veolia raised repeated concerns regarding bypass capacity and high flow behaviour.

3. Governance was not scaled to consequence

Although the capital cost was modest relative to larger infrastructure programmes, the project affected a critical wastewater asset with potentially significant implications for compliance, public health, and environmental performance making it High Risk. The evidence does not indicate that governance, assurance, or review arrangements were strengthened to reflect those consequences. In practical terms, the project appears to have been treated more as a BAU renewal than as a risk-critical intervention in a live treatment plant.

Figure 1 Moa Point UV Renewal Project Structure



Moa Point UV Replacement Project 2024 -2026

4. Interface governance was insufficiently explicit

The live-plant interface between construction and operations was central to project risk, yet decision rights appear to have remained ambiguous. Filtec relied on Veolia to manage plant flows and operating conditions; Veolia could not independently alter those conditions without direction; and Stantec coordinated but did not control plant operations. Important interface risks were therefore left to coordination rather than being governed through clear authority, codified thresholds, and formal escalation points.

5. System limits and operating assumptions were not adequately validated

The behaviour of the bypass system and effluent pipeline under the temporary constrained regime was not fully understood before implementation. Veolia indicated that assumptions were informed in part by approximately 28 years of operational experience under the original plant configuration

That operational history was relevant context, but it was not in itself a sufficient basis for confidence that the system would behave similarly once treatment capacity was reduced and the hydraulic regime materially changed. Reliance on historical plant behaviour may therefore have contributed to expectations that the modified system would continue to perform in familiar ways despite changed conditions.

6. Ineffective risk escalation and closure

Concerns raised during 2025 and early 2026, during the UV Renewal Project meetings, regarding bypass capacity, surcharging, and operating strategy were not demonstrably resolved through a formal ownership, escalation, and closure process.

The available evidence suggests that those concerns persisted over time without being converted into time-bound decisions on mitigation, acceptance, redesign, or stopping conditions. This indicates either that the escalation pathway lacked clarity or that the governance framework did not provide sufficient authority to force closure of whole-of-system risks.

7. Lack of operational contingency planning

Operating the plant at reduced capacity created a temporary but materially different mode of operation. Best practice would ordinarily require explicit safe operating limits, event triggers, revised operating procedures, contingency actions, and a clear understanding of residual risk. The Veolia interview summary indicates that standard operating procedures did not materially change, there was no escalation framework tied to flow conditions, and there were no specific procedures addressing internal flooding caused by reversed hydraulic flows.

Veolia confirmed to the Crown Review that they, as plant operator, had not received direction from the UV project or Wellington Water for any changes to monitoring or SOPs so no changes were made.

Effectively, on the evening of 3 February 2026 the plant was operating in a degraded state without the procedural controls ordinarily expected for a live critical asset under temporary constraints.

Overall Assessment

Overall, the governance arrangements adopted by Wellington Water for the UV Renewal Project fell short of the standard reasonably expected for a live, high-consequence infrastructure project operating in a materially altered plant configuration.

The principal deficiencies were the absence of a single accountable system owner, weak interface governance, incomplete validation of critical operating assumptions, ineffective escalation and closure of known risks, and insufficient contingency planning for the temporary reduced-capacity regime.

The result was a project governed largely through contractual demarcation rather than integrated system stewardship. On the available evidence, that approach was not adequate to manage the operational and hydraulic risks that arose once the plant moved away from its long-established operating state.

Principal Deviations from Best Practice

- No clearly identified single senior accountable owner (SRO) or equivalent whole-of-system integrator.
- Governance and assurance not clearly scaled to the project's actual operational and consequence risk.
- Critical system risks identified but not clearly owned, closed, or independently assured before implementation.
- Interface authorities between sponsor, operator, engineer, and contractor were insufficiently explicit.
- Key hydraulic assumptions and system limits were not validated to the standard expected for a material change in operating regime.
- Reliance on approximately 28 years of operational experience under the original configuration may have shaped expectations that the modified system would behave in familiar ways despite materially different hydraulic conditions.
- Temporary reduced-capacity operations were not supported by sufficiently explicit contingency planning, escalation triggers, and safe operating limits.
- Risk escalation processes did not appear to ensure decision-making and closure of persistent whole-of-system concerns.

Appendix 6 - Regulatory Matters - Consenting

The information provided below is largely contextual to support the understanding of the consenting history of the Moa Point Plant. The focus is on the environmental compliance

In summary:

- The Moa Point Plant operates under five resources consents from the GWRC. In all cases the consent holder is WCC. The consent duration is the same for all being from 11 May 2009 to 11 May 2034, with the exception of one of the air discharge consents which dates from 12 July 1996 to 8 January 2033.
- There is a long history of non-compliance with the consents.
- No specific amendments to the existing consents or new consents were obtained for the possible impacts of the UV Upgrade project, despite the recognised risk of higher flows bypassing the treatment stages of the Moa Point Plant due to one UV Channel being inoperable due to the UV Upgrade Project.
- No consideration was given to the potential risk of having to divert untreated effluent to the Short Outfall in the event the Moa Point Plant and the bypass was unable to cope with high flows due to the reconfiguration of the plant during the UV Upgrade Project.

Consenting history

As noted in the chronology and elsewhere in this report the Moa Point Plant was commissioned in 1997 and fully operational in January 1998. Prior to this wastewater was milliscreened and discharged, untreated, through the Short Outfall into Lavender Bay. The Crown Review understand that this discharge was regulated under a number of consents. These consents were both land use (either consents or designations) that were regulated by WCC or discharge consents (air and into coastal water) that were regulated by GWRC. The consents all related to period in the late 1980s and early 1990s (i.e. before the WWTP was commissioned.

The Crown Review has not done a thorough analysis of these consents. Rather the review focussed on the consents that existed during and prior to the February 2026 incident. Reference to older consenting arrangements are included purely for context.

The Crown Review notes that:

> *"Prior to the commissioning of the Moa point wastewater Treatment Plant, sewage from the catchment was milliscreened and discharged through the short outfall at Lavender Bay. While the short outfall has not been used on a continuous basis since the plant was commissioned, the short outfall has been retained as an emergency overflow for unavoidable discharges such as an*

unforeseen mechanical failure of the pump station. Discharges from the short outfall are not consented and it is not proposed that consents are sought."[13]

This discharge, to what is commonly described as the 'Short Outfall', was consented or authorised under the regime that applied before the Resource Management Act 1991 (RMA) came into force in October 1991. The Crown Review has not seen any specific consent or certificate documentation but notes that it is referenced in several old reports that date to the time prior to the construction and commissioning of the Moa Point Plant.

Consents past and present

The following table has a list of the consents that have been held and are currently held by the Moa Point Plant. Of note is that all the references in the table to the 'submarine outfall' are to the colloquially known 'Long Outfall'.

Table 12 Moa Point Resource Consents

Reference & Date	What consent is for	Term
WGN900025 Water right (Water & Soil Conservation Act) 30 July 1991	To continuously discharge disinfected treated effluent from a submarine outfall located 1,800m offshore, south of Lyall Bay at an average of 3,300m3 per hour, up to a maximum rate of 14,500m3 per hour. **Location**: Map Reference NZMS 260, R27:606823	10 years from the when the sewage effluent is received into the treatment plant Note replaced by WGN040203 [23309]
WGN940058(02) Coastal Permit to occupy the coastal marine area Issued June 1994	Coastal Permit to occupy the coastal marine area in respect of the Moa Point sewage outfall structure (Short Outfall)	8 years from date of issue. Expired 2002 Replaced by GN020245 [22025])– Coastal Permit to occupy the coastal marine area in respect of the Moa Point sewage outfall structure (Short Outfall) was issued in July 2002, amended in August 2009, and expires in July 2037.

[13] WCC Strategy and Policy Committee Report 6 dated 7 December 2006.

Reference & Date	What consent is for	Term
WGN930066 Coastal Permit (RMA – note it was under the transitional provisions so related to the pipeline that was there) 7 September 1993	Consent to occupy the foreshore and seabed **Location** - South of Wellington International Airport. The area of the seabed bound by Raekaihau Point to the west and West Ledge to east. Map Reference NZMS 260; R27:613.839	10 years from the date on which the Moa Point Plant is commissioned (handwritten note says 8 January 2008)
WGN040203 [23309] Discharge consent – coastal water 20 September 2004	Consent to discharge mixed disinfected secondary treated and milli-screened wastewater to the coastal marine area during and/or immediately after heavy rainfall, when the quantity of wastewater arriving at the Moa Point Plant exceeds 3,000 litres per second (the secondary treatment capacity of the Moa Point Plant). **Location** - Cook Strait, from an existing submarine outfall located approximately 1,870 metres offshore, south of Lyall Bay Beach, Wellington, at or about map reference NZMS 260:R27;606.823	Expires 8 January 2008 – this appears to have replaced WGN900025
WGN910096 Discharge consent – air From the date of commissioning the plant	To continuously discharge deodorised air from the Wellington Waste Water Treatment Plant Ventilation System. Up to 25,000 litres per second, 90,000 cubic metres per hour or 2,160,000 cubic metres per day **Location** - South of the Miramar Golf Course, east of the present Airport Milliscreen Plant	To the 10th anniversary of the commissioning of the plant
WGN080003[31505] Discharge consent – coastal permit 11 May 2009 to 11 May 2034	Consent to continuously discharge up to 260,000 cubic metres per day of secondary treated and disinfected wastewater from the Moa Point Plant into the coastal marine area via an existing submarine outfall. **Location** - Coastal marine area between approximate map references NZMS 260: R27; 2660742.5982398 and NZMS 260: 2660710.5982311	11 May 2034

Reference & Date	What consent is for	Term
WGN080003 [26183] Discharge consent, Discharge to air 11 May 2009 to 11 May 2034	Consent to continuously discharge contaminants (including odour) to air from the Moa Point Plant ventilation system. Location - Moa Point Plant, Stuart Duff Drive, Miramar, Wellington at or about approximate map reference NZMS 260: R27; 2661614.5984078	11 May 2034
WGN080003 [26182] Coastal permit to occupy the foreshore and seabed 11 May 2009 to 11 May 2034	Consent to occupy the foreshore and seabed of the coastal marine area with an existing submarine outfall pipeline. **Location** - Coastal marine area between approximate map references NZMS 260: R27; 2661386.5983981 and NZMS 260: R27; 2660710.5982311.	11 May 2034
WGN960094 [1471] Discharge consent. Discharge to air 12 July 1996 to 8 January 2033	Consent to discharge contaminants to air from the operation of a wastewater pumping station. Up to 3.5 m3/s. **Location** - Moa Point Pumping Station at or about map reference NZTM 1751477.5422388	8 January 2033
WGN080003 [35047] Discharge Consent	Consent to occasionally discharge up to 4500 litres per second of mixed disinfected secondary treated and milli-screened wastewater to the coastal marine area via an existing submarine outfall during and/or immediately after heavy rainfall, when the quantity of wastewater arriving at the Moa Point Wastewater Treatment Plant exceeds 3000 litres per second **Location** - at or about map reference NZMS 260:	11 May 2034
WGN020245 [30030]	Consent to occupy the coastal marine area in respect of the Moa Point Wastewater Treatment Plant sewage outfall (Short Outfall)	2 July 2037 Replaced [22125]

Reference & Date	What consent is for	Term
Permit to occupy the coastal marine area	**Location** - Moa Point, Wellington at or about map reference NZMS 260:R27;617.833	

Post commissioning in January 1998

On 22 March 1995 Anglian Water Limited (AWL) received a factual (it was not legal advice) report from Chapman Tripp that was entitled "Wellington Wastewater Treatment Plant: Resource Management Consents Affecting Construction, Design and Operational Performance". This report did not just consider Moa Point Plant but all the assets that AWL was going to operate as part of the Clearwater Contract. The report helpfully summarises the regulatory matters under the RMA as follows, noting it covers both the construction and operational phases of the Moa Point Plant:

- Drainage-Sewage Treatment designation (land use consent essentially) (note this is in effect permanent until changed in the District Plan.
- Air discharge consent during site excavation (note this was held by AWL and expired on 2 July 1996).
- Air discharge consent for discharge from the Moa Point Plant ventilation system.

Coastal permit to discharge effluent to coastal water (from the Long Outfall called the "new Lyall Bay outfall) (effluent quantity in terms of allowable hourly average and maximum quantities is a condition 3,300m3 per hour up to a maximum of rate of 14,000m3 per hour). Consent was granted on 30 July 1991 and expired 10 years from the operation date - which was January 1998, so expired in 2008.

There is also a list of consents related to the outfall construction and design of the outfall. The consent was granted 7 September 1993 and expired 10 years after the operation date which was January 1998 so expired in 2008.

Reconsenting 2008

On 7 December 2006 the Strategy and Policy Committee of WCC received a report on the background, process and timeline regarding the consent renewal applications for the MMWTP (and associated Carey's Gully Sludge Dewatering Plant)[14]. The key elements of this report with regard to consenting are:

- The Moa Point Plant operates under four existing consents (which are noted above). These consents all expire in early 2008 and new consents must be

[14] Report 6 of WCC Policy and Strategy Meetings 00726_1215;52 Part 51A

lodged by July 2007. The most significant are the two discharge consents which provide for:

- The continuous discharge of disinfected secondary treated effluent to Cook Strait via the Long Outfall, south of Lyall Bay, during 'normal operating' conditions that requires an effluent standard of 20g/m^3; 30g/m^3; 200 per 100ml standard for biochemical oxygen demand, suspended solids and faecal coliform bacteria (20:30:200).
- The discharge of mixed disinfected secondary treated and milliscreened wastewater to Cook Strait via the Long Outfall to the coastal marine area during and/or immediately after heavy rainfall when the quantity of wastewater arriving at the Moa Point Plant exceeds 3000 l/s (bypass consent)

The report goes onto explain that the second of these consents was obtained in September 2004 following the triplication of the Kilbirnie interceptor, which increased the capacity for flows to Moa Point Plant. The bypass consent contained several conditions relating to the notification of bypass discharges, signage, monitoring, and reporting.

WCC's approach to the reconsenting of the Moa Point Plant required decisions on three key issues:

1. The duration of the consents that will be sought at time of application (a maximum duration of 35 years is allowed under the RMA);
2. Whether to maintain or alter the effluent quality standard discharged through the Long Outfall during 'normal operating' conditions; and
3. To what degree the wastewater system will contain peak wet weather flows prior to discharge.

At the meeting of the Strategy and Policy Committee WCC agreed to:

> *"Note that officers will report further to the Strategy and Policy Committee on the key elements of the resource consent applications for the Moa Point Wastewater Treatment Plant including the proposed approach to the management of bypass discharges from the long outfall during extreme wet weather.*[15]*"*

At the meeting of the Strategy and Policy Committee on 1 March 2007 the Strategy and Policy Committee considered a further report entitled Moa Point Plant and Carey's Gully Sludge Dewatering Plant – Resource Consent Application Process Update[16] the Strategy and Policy Committee was asked to agree that:

- complete elimination of overflows occurring in extreme wet weather events is not affordable;

[15] Extract of Minutes Strategy and Policy Committee dated 7 December 2006.,
[16] Report 4 of WCC Policy and Strategy Meetings 00726_1215;52 Part 51A

- the conveyance of all flows occurring in extreme wet weather events to the Moa Point Plant is ruled out as a practical option.
- the options for reducing the frequency and/ or effects of bypass overflows in section 4.5 and section 4.6 [of the Report] will be presented in the draft Assessment of Environmental Effects.

The Strategy and Policy Committee agreed with these recommendations, and this is recorded in the minute from the meeting.

History of non-compliance

There is a long history of non-compliance at the plant. There have been numerous actions taken over the years including abatement notices. No prosecutions have occurred. Looking at the more recent compliance record from 2021 to 2025 the following is noted:

Generally, there have been no significant non-compliance recorded for the air discharge consents. The same cannot be said for the coastal water discharge consents (WGN080003 [31505] and (WGN080003 [35047])

In the following reports: Moa Point WWTP Compliance Monitoring Report – 2021 – 22 (1 July 2021 – 30 June 2022); Moa Point WWTP Compliance Monitoring Report – 2022 – 23 (1 July 2022 – 30 June 2023; Moa Point WWTP Compliance Monitoring Report – 2023 – 24 (1 July 2023 – 30 June 2024); and Moa Point WWTP Compliance Monitoring Report – 2024 – 25 (1 July 2024 – 30 June 2025). Similar comments are made in each of the reports[17]:

- The reports noted significant non-compliances for both consents.
- The overall compliance summary is stated – Poor.
- Overall poor management of site and consents. There are repeated and/or multiple breaches of consent conditions. This is resulting in actual or potential environmental effects that are beyond what was considered when the consents were issued. This is considered unacceptable and the consent holder needs to give immediate attention to meeting their consent requirements.

It is clear that from the time it was commissioned and was operational that the Moa Point Plant has a history of non-compliance.

Wellington Water (now Tiaki Wai) applied for resource consents in May 2023 across its Western and Moa Point Wastewater Treatment Plants network to address wet weather overflow discharges. This application is currently on hold to allow time for the applicant (Wellington Water / Tiaki Wai) to consider amendments that may be required to the

[17] Note taken from the first report listed https://www.wellingtonwater.co.nz/assets/The-Network/Wastewater/Wastewater-Treatment-Plants/Moa-Point/Moa-Point-WWTP-Compliance-Report-2024-2025.pdf

application following the notification of the change to the planning framework (Plan Change 1 to the Wellington Natural Resources Plan) and the introduction of the Local Water Done Well legislation.

Appendix 7 – Contractual Oversight

Contract and Asset Management Summary

Wellington City Council – Clearwater Contract and WCC/WWL Management Services Agreement

Based on the contract documents, reports and associated material presented to the Crown Review by Wellington Water, Veolia and WCC it is clear that many of the potential disadvantages inherent in long term DBO contracts appear to have become apparent in relation to the Clearwater Contract and the asset management of Moa Point Plant since 1998, including:

- Lack of focus on long term asset management, or achieving continuous and ongoing improvement (of contractual performance or of the Moa Point Plant itself)
- Reduction in expertise and resourcing levels dedicated to Moa Point Plant within both WCC and Veolia.
- Lack of operational knowledge with respect to day-to-day operations and operational (including asset management) data within WCC.
- The challenges experienced at handover of the Moa Point Plant and transition to the Veolia Contract.
- The condition of the asset and transfer of asset/asset management information and data transfer (to WCC before being passed on to Veolia under the Veolia Contract) at handover being suboptimal.

The impact of the WCC/WWL MSA appears be that that it further distanced WCC from the operations and asset management of the Moa Point Plant.

From the outset of the Veolia Contract (under which Wellington Water not WCC was the principal, in accordance with the WCC/WWL MSA) this 'distancing' appears to have contributed to WCC relinquishing its responsibilities as asset owner and consent holder, and entity responsible for the delivery of wastewater services to Wellington City. WCC appear to have acted as if such responsibilities had been substantially delegated to Wellington Water under the WCC/WWL MSA without continuing to exercise appropriate oversight of that delegation and ongoing stewardship as asset owner and consent holder.

Wellington Water Limited – WCC/WWL Management Services Agreement

Prior to the Veolia Contract, Wellington Water's role in relation to the Moa Point Plant and Clearwater contract is unclear. The WCC/WWL MSA did not cover the Clearwater Contract, so it appears Wellington Water had no formal contractual role. However, in

practice it is understood that Wellington Water did step into an informal management and oversight role.

This lack of clarity or formal role appears to have impacted the transition to the Veolia Contract as both WCC and Wellington Water relied to some extent on Veolia as the incumbent operator under the Clearwater Contract, and also being the contractor under the new Veolia Contract. As with WCC, this does appear to have contributed to the condition of the asset and transfer of asset/asset management information and data transfer (to WCC before being passed on to Veolia under the Veolia Contract) at handover being suboptimal.

Other significant issues impacting the effectiveness of the WCC/WWL MSA have been identified in the January 2024 Field Force 4 Contract Review (referred to below). From this, it is clear that effective stewardship, oversight and asset management of the Moa Point WWTP was not being achieved under the WCC/WWL MSA.

Wellington Water Limited – Veolia Contract

The 2020 transition of Wellington Water's role to being the principal under the Veolia Contract does not appear to have created any 'step change' to greater focus on long term asset management, achieving continuous and ongoing improvement (of contractual performance or of the Moa Point Plant itself).

Significant challenges and performance issues arose in relation to the Veolia Contract from the outset (as referred to below). Asset management planning and capital renewals appear to have continued to take a back seat to day-to-day plant operations. Both WCC and Veolia appear to have been more focused on contractual performance and compliance issues than longer term asset management.

This appears to have resulted in a reduction in expertise and resourcing levels dedicated to Moa Point Plant within Veolia, to the point that Wellington Water and Veolia agreed to vary the Veolia Contract to provide that more complex capital renewals (such as the UV upgrade project) would not be undertaken by Veolia.

Wellington Water Limited – Filtec Contract

The potential risks of Wellington Water, not Veolia, being principal to the 'separate' UV Renewal Project contract with Filtec do not appear to have been fully mitigated.

Key recommendations – contractual oversight

Wellington City Council

1. With the establishment of Tiaki Wai it is understood that WCC will no longer be the owner or consent holder in relation to the Moa Point Plant. However, WCC should not see its role as one of simply governance. WCC will remain ultimately

responsible both as one of the owners of Tiaki Wai, and likely in the eyes of Wellington residents and ratepayers, for the delivery of wastewater services.

3. Although direct day-to-day operations and asset management in relation to the Moa Point Plant will be the direct responsibility of Tiaki Wai, WCC should remain actively engaged in exercising informed oversight and stewardship, including through the Tiaki Wai Partners Committee, with the oversight expected of any local authority in a comparable owner or partner role in relation to a water services organisation. In this regard WCC must retain sufficient resources and expertise to fulfil this role.

Wellington Water (and Tiaki Wai)

Although Tiaki Wai's role (including asset ownership and consent holding) will be broader than Wellington Water's, Tiaki Wai's role in relation to contractual oversight and asset management will be similar. With regard to this contractual oversight and asset management role, the Crown Reviews key recommendations are:

1. Ensure all contractual arrangements for operations, maintenance and asset management (or Moa Point Plant and other assets):

    - enable Tiaki Wai's direct oversight and input into asset management. In relation to asset management, Tiaki Wai must lead and not just respond;

    - ensure active and real time asset management data integration between Contractor's and Tiaki Wai's asset management systems, with ownership of that data vested in Tiaki Wai and appropriate provisions for handover of all such data at conclusion of all contracts;

    - include appropriate provisions focused on achieving continuous and ongoing improvement (of contractual performance and of the relevant underlying assets) and active risk management; and

    - incorporate collaborative contractual settings to facilitate the above.

2. Ensure Tiaki Wai's staff and consultants involved in all contractual arrangements for operations, maintenance and asset management, from contractual governance to day-to-day contractual oversight, have the appropriate levels of expertise and support to effectively deliver on industry leading asset management.

3. Tiaki Wai must be aware that active contractual oversight and asset management, including continuous improvement and active risk management, requires significant resourcing, much more so than traditional contractual performance monitoring and enforcement. Tiaki Wai must ensure adequate levels of resourcing to properly implement and support such active and collaborative contractual oversight and asset management.

Contract Background and History

Summary of contractual arrangements

The key contractual arrangements relevant to the operation of the Moa Point Plant and the February 2026 flooding event are:

- The February 1995, 25 Year (1995 to 2020) Design Build Operate (**DBO**) Contract for Wastewater Treatment Project (**Clearwater Contract**) between WCC and Anglian Water International Ltd who assigned it in 2004 to Anglian Water International (NZ) Ltd, which eventually became Veolia Water Services (ANZ) Pty Limited (**Veolia**). This contracted included the Moa Point Plant and associated 1.8km ocean outfall.

- The October 2013 Contract for Provision of Management Services Relating to Water Services (**WCC/WWL MSA**) with Capacity Infrastructure Services Limited (from 2 October 2015, Wellington Water Limited). The WCC/WSL MSA excluded the Moa Point Plant/Clearwater Contract but included the Veolia Contract (below) from 2019.

- The June 2019 Regional Wastewater Treatment Plant Services Contract between Wellington Water and Veolia (**Veolia Contract**) to operate four WWTPs including the Moa Point Plant.

- The 30 December 2024 Contract for the Moa Point, Seaview, and Western WWTP UV Renewals between Wellington Water and Filtec Ltd (**Filtec Contract**). The scope of the Filtec Contract included the design, procurement and installation of a new UV system at the Moa Point Plant.

- The 2024 services agreement between Wellington Water and Veolia to provide certain services to support the UV Renewal Project (**Veolia UV Agreement**).

Observations on the Clearwater Contract

The nature of long-term DBO contracts is to assign single point responsibility to the contractor for design, build, and operations over an extended period (in the case of the Clearwater Contract, 25 years). While this can offer advantages for a principal or asset owner (here, Wellington City Council (WCC)), it also presents inherent risks. These became evident under the Clearwater Contract at the Moa Point Plant.

Under the Clearwater Contract, the transfer of operational and asset management responsibilities to the contractor distanced WCC from Moa Point Plant operations, contributing to a gradual decline in internal capability. This was compounded by the introduction of Wellington Water.

Both WCC and Veolia focused primarily on operational delivery, contractual compliance, and performance, with limited emphasis on long-term asset management and capital renewals. The contract framework did not effectively incentivise continuous improvement

or active risk management. This created a long-term compliance-driven environment rather than enabling performance or asset optimisation.

As assets aged and new consents were introduced, the approach shifted to maintaining existing performance—"*doing the best with what we have*"—rather than pursuing upgrades, despite provisions within the Clearwater Contract to enable improvements. Over time, Veolia's resource commitment appeared to reduce, consistent with maintaining profitability over a long-term contract. Veolia also retained most plant knowledge and data, with limited integration into WCC systems, creating ongoing challenges that persisted into the subsequent Veolia Contract.

Asset management was further affected by unclear roles between WCC and Wellington Water. The WCC/WWL MSA did not cover the Clearwater Contract, resulting in ambiguity in responsibility for Moa Point Plant.

Observations on the WCC/WWL Management Services Agreement

After the Veolia Contract commenced in 2019, the Moa Point Plant fell within the scope of the WCC/WWL MSA, under which Wellington Water (rather than WCC) was the principal. This appears to have further distanced WCC from operations and asset management, extending the chain of responsibility between asset owner and operator, and reinforcing a "back seat" approach by WCC.

Key Findings of the January 2024 Field Force 4 Contract Review of the WCC/WWL MSA for WCC and Wellington Water were:

- The MSA does not adequately support the overall objective of WCC.
- Effective contract management is limited by the lack of specific requirements and a focus on issues at an operational level.
- The current contract does not specify the level of services and deliverables at an appropriate level of detail.
- A lack of a consolidated view of contract costs impacts the ability to accurately assess the level of funding requirements and risk.
- The lack of appropriate performance monitoring and management measures inhibit the ability to effectively manage the contract risk and performance.
- Inconsistent processes impact effective service delivery across the value chain.
- A number of disparate systems with little or no integration to support the end-to-end delivery service model.
- Data is not being used to effectively to manage and drive the performance of contract/business.
- Asset Management and the development of the Annual Works Program is fragmented with an emphasis on the funding requirements as opposed to Service Delivery and Network risk management.

- Current customer supporting systems and processes are ineffective in delivering on the desired customer experience.

From the above it is clear that effective stewardship, oversight and asset management of the Moa Point Plant and Veolia Contract was not being delivered under the WCC/WWL MSA.

Observations on the Veolia Contract

On 18 June 2019, Wellington Water awarded Veolia the Veolia Contract. BAU services for Moa Point commenced on 24 February 2020. The contract term is 11+3+2 years (cl 2.1), with an initial term to 30 June 2030.

Under Variation #2 (24 December 2020), Veolia agreed to undertake transition services previously delivered under the Clearwater Contract. Wellington Water noted:

> "*The transition was somewhat artificial… because Veolia had already been operating Moa Point for 20 years… there was no formal handover…"*[18]

Further:

> "*It was largely artificial for WWL to be required to confirm… the specified condition of the WWTP… given that WWL primarily relied on Veolia itself…"*[19]

Wellington Water has itself identified to the Crown Review the following "Challenges" in relation to the Veolia Contract [summarised]:

- Historic issues with the compliance and performance of the WWTP. These began under Anglian Water and have continued under Veolia's management.
- Trust breakdown between the parties (identified in 2021 Review, which recommended that Veolia and Wellington Water needed to work together more closely and collaboratively to ensure adequate performance of the WWTP).
- The contract is not a collaborative model.
- Reliance on Veolia knowledge and systems - Since the establishment of the Veolia Contract up to the present day, Wellington Water is highly dependent on Veolia for information about the Moa Point plant. This is exacerbated by long-time operator of the Moa Point WWTP. For example:
    - Veolia is responsible for assessing the condition of the WWTP assets but has historically been 'optimistic' in its asset assessments.

[18] Wellington Water Limited submission to the Crown Review Team – May 2026

[19] ibid

"For example, the first Asset Management Plan prepared by Veolia in 2020 was overly optimistic and significantly under-estimated the estimated renewals needed, which impacted Wellington Water's ability to secure the funding needed to undertake necessary work at the plant as well as undermined our ability to strategically plan for future critical work."[20]

- Asset management information which includes asset condition information, asset history and maintenance/renewal plans are held within Veolia's asset management system. Wellington Water commented that:

  "*Because Wellington Water has not historically been funded to enable it to have its own asset management system. Recently, Wellington Water secured funding from its shareholding councils to create its own system (referred to as the TSI programme) and it is anticipated that this will be in place prior to when the term of the contract expires in 2030. This is part of Wellington Water's broader strategy to position itself to reduce its reliance on contractors and suppliers, gain more competitive tension, and help set Tiaki Wai up with core systems needed for any successful water services utility."*[21]

- Resource limitations at Wellington Water.
- Contractual challenges, including:
  - Contract relies on punitive measures for performance.
  - Unlike standard O&M contracts (which tend to be self-reporting), the Veolia Contract places significant onus on Wellington Water to monitor performance, which is challenging when it is not responsible for day-to-day operations.
  - Veolia has under resourced the WWTP (as noted by the 2021 and 2024 reviews).
  - Complexities relating to the Sludge Minimisation Facility (SMF).

Due to the significant challenges and performance issues under the Veolia Contract it was the subject of a series of independent reviews, including:

- December 2021 Independent Review of the Wellington Water Regional WWTP Operating Model.
- December 2021 Wastewater Treatment Plant Asset Management Review ISO 55000 Maintenance Function Audit prepared by Worley (NZ) Ltd.
- August 2024 Independent Review of the Wellington Water Regional WWTP Operating Model.

[20] ibid

[21] ibid

All of the above reviews identified significant performance issues and areas where improvement was required.

In 2025, Wellington Water increased oversight, issuing six breach notices to Veolia for environmental non-compliance and applying one deduction of $150,000.

In summary, key challenges included: a weak transition from the Clearwater Contract; continued reliance on Veolia as incumbent; inadequate enforcement of performance issues; Veolia's effective control of knowledge and data; limited integration of systems; reduced long-term asset planning focus; declining resourcing and expertise; and minimal incentives for continuous improvement.

Observations on the Filtec Contract

The Filtec Contract was a direct contract with Wellington Water, rather than a subcontract under Veolia. While such arrangements can have benefits, they also carry inherent risks. Veolia's single point responsibility was diluted, as Wellington Water effectively assumed responsibility for how Filtec works impacted Veolia's ability to perform.

Wellington Water, not being the incumbent operator, had limited operational knowledge of Moa Point, creating a "knowledge gap" that was not resolved through the Veolia UV Agreement. These risks do not appear to have been fully mitigated.

The methodology and risk focus centred on the UV project itself rather than broader plant operations. For instance, safety planning focused on flooding within the UV channel, not the wider plant. Only audible alarms were installed for channel levels, without SCADA integration, limiting warning capability when the plant was unmanned (as on 4 February). Similarly, consent risk assessments focused on bypass flows, with limited consideration of risks such as shutting down inlet pumps or historical warning signs.

Observations on the Veolia UV Agreement

The scope of Veolia's services under this agreement was limited and primarily focused on UV project risks rather than overall plant operations. It did not adequately address the risks arising from Wellington Water engaging Filtec under a separate contract, nor compensate for Wellington Water's and Filtec's lack of operational knowledge of the Moa Point Plant.

Glossary and Abbreviations

Acronym/Term	Definition
AWI	Anglian Water International Ltd, a company incorporated in England and Wales, the original Contractor under the Clearwater Contract.
BAU	Business as usual
Clearwater Contract	25-year (1995 to 2020) Design Build Operate Contract for the Wastewater Treatment Plant Project between Wellington City Council and Anglian Water International Ltd, with Veolia eventually taking over the contract. The contract included the Moa Point Plant and Long Outfall.
CCTV	Closed Circuit Television
Crown Review	Crown Review Team
DBO	Design Build and Operate
FENZ	Fire and Emergency New Zealand
Filtec Contract	The 30 October 2024 Contract for the Moa Point, Seaview, and Western WWTP UV Renewals between Wellington Water and Filtec, which included the design, procurement and installation of a new UV system at the Moa Point Plant.
GWRC	Greater Wellington Regional Council
HAZOPS	Hazard and Operability Studies. Structured, systematic risk assessment to identify hazards and operational problems.
IPS	Influent Pump Station to Moa Point
LGWSA 2025	Local Government (Water Services) Act 2025
Long Outfall	The 1.8km ocean outfall from the Moa Point Plant that was constructed and operated under the Clearwater Contract.
LTP	Long Term Plan
Moa Point Plant	Moa Point Wastewater Treatment Plant
PLC	Programmable Logic Controller. A rugged industrial computer used to automate machines and processes by executing programmed control logic (e.g., turning motors on/off, controlling valves).
RMA	Resource Management Act 1991
SCADA	Supervisory Control and Data Acquisition. The system used to monitor, control, and collect real-time data from industrial processes.
Short Outfall	The 300m ocean outfall from Moa Point into Tarakena Bay (referred to as Lavender Bay in contract documents) that was in existence prior to the Clearwater Contract.
SOP	Standard Operating Procedures
Terms of Reference	Terms of reference under Appendix 1.
UPS	Uninterruptible Power Supply. A UPS provides backup electrical power when the mains power fails.
UV Renewal Project	Project to replace the original Trojan UV3000 disinfection system installed in 1998.
Veolia	Veolia Water Services (ANZ) Pty Ltd
Veolia Contract	The June 2019 Regional Wastewater Treatment Plant Services Contract between Wellington Water and Veolia.
WCC	Wellington City Council
WCC/WWL MSA	The October 2013 Contract for Provision of Management Services Relating to Water Services between WCC and Wellington Water
Wellington Water or WWL	Wellington Water Limited
WWTP	Wastewater Treatment Plant

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