



Jenny Marcroft
Parliamentary Under-Secretary to the Minister for Oceans and Fisheries
Parliament Buildings
Wellington

By email: jenny.marcroft@parliament.govt.nz

11 March 2026

Dear Jenny

Contamination events – Mahurangi River

Thank you for contacting me with your concerns regarding the impacts of wastewater (sewage) overflows on the ecological values of the Mahurangi Harbour and the economic impacts on aquaculture operations there.

I have reviewed the material you have provided to my office, made inquiries with the Ministry for Primary Industries (MPI), Auckland Council (the Council) and Watercare Services Ltd (Watercare), and considered the requirements of the network discharge consent and resource management legislation.

The issues you have raised are largely in relation to overflows from Watercare's network discharge consent (NDC), which establishes the authorising framework for discharges from the wastewater network across the Auckland region.¹ As the NDC was granted in 2014, I have not sought to scrutinise or relitigate the decision-making process. Instead, I have focussed on identifying:

- any issues with processes prescribed by the NDC and supporting conditions (including attachments)
- procedural options, or opportunities for improvement, in the processes prescribed by the NDC.

I was also made aware of a dry weather discharge event on 29 October 2025, which resulted in an oyster harvest closure. My investigation has focussed on the wider issue of ongoing network overflows, and I have not addressed that discharge event, which was attributed to equipment failure.

In the course of this letter, I have had to make heavy use of acronyms to assist readability. I have set them out in an appendix so that you can easily reference what they stand for.

¹ The NDC only applies to discharges from the wastewater network and does not apply to discharges from any wastewater treatment plant.

Consent framework

The NDC was granted to Watercare in June 2014, by independent commissioners, under the Auckland Regional Plan: Air, Land and Water, and the Auckland Regional Coastal Plan. The consent was granted for 35 years and authorises:

- the discharge of wastewater from the existing and future public wastewater networks identified in the consent to land, freshwater and coastal receiving environments, during both dry and wet weather flows
- discharges that may occur as a result of network blockages and failures; network damage by third parties; failure at pump stations or storage facilities; and capacity constraints.

Overflows come from three general types of location in the wastewater network, referred to as engineered overflow points (EOPs):

- Type 1 Overflow – an overflow from an engineered overflow point associated with a pump station (this may or may not be in close proximity to the pump station).
- Type 2 Overflow – an overflow from an engineered overflow point not associated with a pump station (a relief point).
- Type 3 Overflow – an overflow that does not discharge from an engineered overflow point but from any other point on the network (usually a manhole) not designed for discharges.

The discharge activity is consented as a restricted discretionary activity. Despite acknowledging limitations on the extent of information available about the performance of the network in some areas of Auckland, the commissioners determined that the consent did not require notification. The NDC sought to align and bring together multiple consents held by Auckland’s legacy councils into one consent. It was intended that this would make administration and compliance of consents related to wastewater network performance simpler to manage for both Watercare and the Council.

The NDC is based on the premise of progressive improvement of the wastewater network, and reduction in the frequency of discharges from the network, over time. At its core, the consent prescribes methodologies, based on frequency of discharge, which are to be used to inform how Watercare determines priorities for investment or improvement to the wastewater network.

Priorities for investment or improvement, and what those improvement actions or projects comprise, are required to be set out in a wastewater network strategy (WWNS). A WWNS needs to be submitted for certification every six years.² The NDC conditions prescribe that any EOP that discharges more frequently than 12 times per year requires

² The first strategy was submitted in 2017, the second in 2023, which is still in the process of being certified by Auckland Council.

a specific investigation. Any analysis or timing of any proposed works for improvement at that EOP must be included in the WWNS.

There are no formal discharge standards that must be met under the NDC, either for volume or quality. The key measure of performance is the frequency of overflows from an EOP. The consent includes a target for each EOP of an average of no more than two wet weather discharges per year (per EOP) as assessed by computer model or actual recorded (observed) incidents from an EOP.³ Any EOP that cannot meet this target lawfully remains within the scope of the consent, but requires its own specific performance standard, referred to as an alternative discharge frequency (ADF). An ADF for an EOP is to be developed by Watercare and certified by the Council in the WWNS. The ADF is a mechanism that helps Watercare identify prioritisation for improvement areas and interventions. ADFs are described in terms of their frequency (how often a discharge occurs).

An ADF can be prepared on an individual EOP basis, or on a catchment basis where there are multiple EOPs rated high or very high. The ADF process is part of the NDC. It is not a separate consent or independent approval, and there are no obligations on Watercare or Council to consult any other party when an ADF is required. Generally, the higher the ADF, the higher the priority for improvement or intervention.

The NDC allows existing EOPs to be replaced, and new EOPs to be constructed, provided overflow events will be less frequent than the existing EOPs (in the case of replacement) or will not result in any more than two wet weather discharge events per year. If a new or replacement EOP is expected to result in more than two wet weather overflow events per year, an ADF must be submitted by Watercare and certified by Council prior to construction of the EOP.

The NDC requires a targeted monitoring programme (TMP) to be completed. Given the limited information available on potential temporal and cumulative effects in the consent application, the requirement for a TMP was included as a condition of consent. The TMP is used to validate the scoring and criteria that was assigned to public health, ecological and recreational effects when the NDC was granted. The results of the TMP were to be used to inform the need for any amendments to Attachment 5: Assessment of Effects of Wet Weather Wastewater Overflows (Attachment 5) of the NDC conditions.

Under the NDC, Auckland Council may review the conditions every five years. A review can be undertaken to address any significant adverse effect on the environment that may arise from the exercise of the consent (which was not apparent at the time of the granting of the consent), or to enable water quality standards set by a rule in the operative Unitary Plan to be met. The Council has not exercised its ability to review the NDC conditions to date.

³ Assessed as a five-year rolling average.



Network operation in Warkworth

Under normal conditions, the wastewater network in the Warkworth catchment generally appears to be performing well. Only one repeat dry weather overflow has been recorded in the Warkworth catchment in the last two years.⁴ However, there is a reduction in network performance during wet weather, which results in overflows. This reduction in performance is a consequence of developments connecting to the wastewater network faster than Watercare and Auckland Council anticipated, and aging infrastructure leading to inflow and infiltration (I&I) of ground and stormwater into the wastewater network. Increases in flow due to I&I can (and do) exceed the capacity of the network, which leads to overflows during rainfall events. This situation has been exacerbated due to increased frequency and higher intensity rainfall events.

There are two EOPs, EOP1540 (Elizabeth Street) and EOP790 (Palmer Street pump station), which have regularly failed to meet the NDC target of two wet weather overflows per year. This means that they require ADFs.

- EOP790 is a Type 1 EOP with an ADF of 5.3.⁵ The frequency of overflows at this location has been materially reduced since their peak in 2022, and are expected to be much less frequent now the Warkworth Street pump station new transfer pipeline is online.⁶
- EOP1540 is a Type 2 EOP with a current ADF of 20.5. It has had telemetry in place since 2018 so that Watercare can track the frequency and volumes discharging from this EOP during overflow events.

I understand that EOP1540 is adjacent to a pipe bridge, which has been identified as a throttle/choke point in the network. EOP1540 was not identified in the NDC application or supporting Assessment of Environment Effects and was not formally recognised as part of the NDC consent until the WWNS was submitted in 2017. I note there is some disagreement between Council and Watercare regarding the process that was followed for establishing an ADF for this EOP.

Network improvement

Although recorded as a low priority for improvement when the NDC was granted in 2014, Watercare identified the Warkworth catchment as a priority early in the development of the first WWNS (2016–2017). This led to an overall development strategy to upgrade the Warkworth wastewater network being progressed at a cost of approximately \$450 million.

⁴ This was the result of a loose manhole lid – no further dry weather overflow events have been recorded following repairs.

⁵ As recorded in the 2024/2025 NDC annual report. EOP790 peaked at 26 Wet Weather Overflows in the 2022–2023 reporting period.

⁶ Watercare is also currently looking to increase emergency storage at this site to further reduce likelihood of future overflows.

The upgrade programme was expected to take approximately ten years to deliver and involved five interdependent projects:

- Martins Bay ocean outfall pipe, completed 2021, commissioned 2025.
- Snells Beach Wastewater Treatment Plant, completed 2025.
- Lucy Moore Park pump station, completed 2025.
- Transfer pipeline from pump station to treatment plant, completed 2025.
- Warkworth Growth Servicing Pipeline, in progress.

The programme of works had to be delivered in sequence – first a new outfall for the new Snells Beach wastewater treatment plan (WWTP) had to be constructed, then the WWTP had to be constructed and commissioned, followed by construction of new pipework to transport wastewater to the WWTP, and a new pump station commissioned to free up capacity in the network and enable wastewater to be transported to the WWTP.

I understand Watercare has attempted to deliver the upgrade programme as quickly as possible. I acknowledge that while the Warkworth Growth Servicing Pipeline was approved in 2021 and expected to be completed in 2025. Its delivery was delayed due to opposition from some members of the community and local businesses. A revised design and construction methodology was approved in 2024, with construction (at the time) due to be completed in 2028. Since then, Watercare has sought to accelerate the delivery of the Warkworth Growth Servicing Pipeline project in stages. Stage 1, the installation of a trenched pipeline along Elizabeth Street, is expected to almost eliminate overflows in the Warkworth catchment and be completed by December 2026.⁷ Stage 2, which will provide capacity for new housing north of the Mahurangi River, is projected to be completed in late 2027.

I understand that the timeliness of the delivery of the upgrades, and consequently the timeliness of any reduction in network overflows, has been dictated by the order in which the upgrades have needed to be constructed and commissioned. Watercare advised that the implementation of any solutions out of sequence would have only shifted the problem downstream and resulted in overflows elsewhere in the network. As an example, Watercare has stated that hydraulic modelling indicated any bypass installed before the Warkworth Street pump station was commissioned would have resulted in manholes in the main street of Warkworth overflowing during and following rain. This may have had public health consequences for the community.

In addition to the capital works programme, Watercare has been restricting new connections to the wastewater network in Warkworth since April 2024, and has spent approximately \$12 million on investigations and other efforts to reduce overflows in

⁷ Statement by Watercare Chief Executive, Jamie Sinclair. <https://www.stuff.co.nz/nz-news/360789385/mahurangi-oyster-farmers-apprehensive-about-accepting-mysterious-10000-payments>



Warkworth since 2021.⁸ This includes a significant ongoing operational programme, which is aimed at:

- identifying where stormwater is entering the wastewater network, to assist with prioritising renewals and rehabilitation;
- repairing and replacing aging pipes and infrastructure;
- identifying and attempting to resolve illegal connections to the wastewater network from private property.

Since August 2025, when the Warkworth Street pump station was commissioned and further interventions were able to be progressed, Watercare has:

- installed a new pumped bypass system across the Elizabeth Street bridge to prevent overflows in low to moderate rainfall. Discussions with the Council suggest this has been working as intended, with overflows not being recorded in wet weather events that previously would have resulted in overflows;
- implemented operational interventions when rain is forecast. These include isolating and managing flows, to mitigate overflows at EOP1540, by organising pump stations to be shut down and sucker trucks to take the wastewater load from pump stations to other points in the network for transfer to the WWTP;
- introduced a monthly flushing programme in the network upstream and downstream of EOP1540 to maximise performance and mitigate the risk of blockage in the network.

Aquaculture impacts

Network overflows in the Warkworth catchment discharge either directly or indirectly into the Mahurangi River. The river flows into the Mahurangi Harbour, where over 100 hectares of Pacific oyster aquaculture farms are located. Oysters are classified as a bivalve molluscan shellfish (BMS) and their harvest and sale is regulated to protect human health under the Animal Products (Regulated Control Scheme – Bivalve Molluscan Shellfish) Regulations 2006.⁹

The requirements that must be met by persons involved in, and for activities involving, BMS harvested for human consumption under the regulations are further prescribed by the Animal Products Notice: Regulated Control Scheme – Bivalve Molluscan Shellfish for Human Consumption (the BMS Notice).¹⁰ Under the BMS Notice, the Mahurangi Harbour (Growing Area 301) is classified as a conditionally approved growing area, which means that harvesting of oysters may be undertaken under certain conditions that are

⁸ <https://www.watercare.co.nz/builders-and-developers/consultation/growth-constraints-in-warkworth>

⁹ Made pursuant to s 166 of the Animal Products Act 1999 and s 25 of the Animal Products (Ancillary and Transitional Provisions) Act 1999.

¹⁰ These notices are issued pursuant to the Animal Products Act, s 167(2), to supplement provisions of the regulations.

documented in the growing area’s management plan. The requirements for the management plan are set out in Part 4 of the BMS Notice and include, amongst other matters, setting harvest criteria. The harvest criteria describe the conditions under which an MPI Animal Products Officer must open or close the area for the commercial harvest of BMS for human consumption.

The Mahurangi Harbour management plan harvest criteria define when the growing areas close and open for harvest, based on the level of rainfall over the previous 24- or 48-hour period. Closures prevent the harvest of oysters, which may have been affected by unacceptable levels of bacteria due to rainfall run-off from the variety of land uses in the harbour’s catchment. When the rainfall harvest criteria are exceeded, MPI will close the growing area, preventing the harvest of oysters until sufficient time has passed for oysters to cleanse themselves to a level where they are considered safe for human consumption. MPI advises that the harvest criteria are informed by extensive sampling data and a detailed assessment of the growing area and the surrounding environment, including potential pollution sources, known as a Sanitary Survey (Schedule 1 of the BMS Notice), which must be completed every 12 years. The most recent Sanitary Survey was completed in December 2023.

There are four separate harvesting areas in the Mahurangi Harbour Growing Area, and they all have slightly different thresholds for closure, with those closest to the Warkworth township having more restrictive criteria.¹¹ The criteria also differ across seasons with more lenient thresholds in summer months. The length of closure is applied on a sliding scale based on risk, with no closure for smaller rainfall events (the smaller events vary across harvesting areas) and up to a ten-day closure where rainfall over 100 mm has been recorded in a 24-hour period.¹²

The management plan also includes an additional 28-day closure every January due to a yachting regatta. This is due to an anticipated increase in leisure boating, resulting in an increased risk of uncontrolled sewerage discharges to the harbour.

Outside of the management plan harvest criteria, the BMS Notice prescribes additional closure requirements for “emergency reasons”.¹³ Amongst the emergency closure requirements, and most relevant to this matter, is that MPI must implement a mandatory

¹¹ GA301A- located within Cowan Bay towards the Upper Harbour; GA301B- located within Dyers Creek towards the Upper Harbour; GA301C- located within the Pukapuka Inlet and Browns Bay towards the Lower-Mid Harbour; GA301D- located within the Te Kapa Inlet towards the Lower Harbour.

¹² The closure period is taken from the time of the end of any given 24- or 48-hour period during which the minimum closure level is exceeded, at the point where the total is at its maximum. Every 24/48-hour block is assessed using a sliding window and the closure period extended accordingly.

¹³ Note that while considered an “emergency” under the Animal Products Notice: Regulated Control Scheme – Bivalve Molluscan Shellfish for Human Consumption (the BMS Notice), it is not recognised as an “emergency” event under the NDC.

28-day closure if a growing area is impacted by a “sewage event”, unless a greater or lesser time is determined to be required by a shellfish specialist.¹⁴

Absent wastewater overflows, I note there would still be closures of the harvest areas due to exceedance of the rainfall-related harvest criteria. However, the duration of those closures is now extended because of the wastewater overflows occurring upstream.

The contaminants of most concern to MPI and the oyster industry from a sewage spill are bacterial and viral pathogens (particularly norovirus), as viruses can persist for a long time in the environment. I understand that in the event of a sewage overflow from the Warkworth catchment, Watercare notifies MPI and the aquaculture operators, and that decisions on any closures or restrictions are made and imposed by MPI on a case-by-case basis.

MPI advises that the threshold or criteria, which trigger a closure of the growing area, have evolved over time as more data has become available. MPI has confirmed it is most concerned when overflows exceed 40 m³. Overflows exceeding 40 m³ will result in an “emergency” (sewage event) closure. MPI’s harvest closure decision is based on information about the overflow and the network (e.g. location and volume of overflow, expected ratio of stormwater to sewage), which is provided by Watercare, environmental conditions, sampling data from previous spill events in the area and other factors, such as the rate of viral illness in the community at the time. Factors, such as rainfall volume at the time of the event (the influence of dilution) and the period of time between separate overflow events, also contribute to a closure determination.

In most cases, rainfall would precede an overflow event, and a rainfall closure would apply, based on the harvest criteria. If an overflow has occurred, MPI receives relevant information from Watercare, and decides whether to notify an “emergency” closure (28-days) to manage the public health risk. MPI may undertake event-driven oyster flesh sampling to check for norovirus at MPI-defined sites across the four harvest areas. This is typically 3–7 days after wastewater overflow events, with follow-up sampling (around day 21) undertaken at MPI’s discretion. During the 2024–2025 reporting period, a total of 135 samples were collected for norovirus analysis, of which 34/135 or 25% tested positive for norovirus.

I understand that results, to date, indicate that following an overflow event the harbour is impacted by diluted low-level contamination. This is enough to be of concern to public health, but it is not usually significant enough, and persists long enough, to require a 28-day closure. MPI advises that while a 28-day closure may be initially notified, it is more common for the closure to be lifted and the harvesting area to be re-opened after 21 days, provided sampling results are clear for norovirus.

The most recent annual review of the management plan, which covers the period from 1 November 2024 to 31 October 2025, records that the total closure period for growing

¹⁴ Shellfish specialist means an MPI Animal Products Officer who is designated by the Director-General as a shellfish specialist to provide specialist advice and direction on BMS matters.

areas 301A and 301B was 206 days of the reporting period. Growing Areas 301A and 301B were closed due to:

- rainfall based harvesting criteria for a total of 23 days respectively
- boating activity for 28 days (the regatta)
- emergency events (sewage events) for 155 days.

The total closure period for Growing Areas 301C and 301D was 194 days. Growing Areas 301C and 301D were closed due to:

- rainfall based harvesting criteria for a total of 11 days respectively
- boating activity for 28 days (the regatta)
- emergency events (sewage events) for 155 days.

Due to changes in the way MPI have been recording and reporting reasons for closure, drawing comparisons across different reporting periods is challenging. However, what is clear, is that the duration of closures during the most recent reporting period indicates the frequency and duration of closures due to sewage events has increased.

All of the work undertaken by MPI related to the administration of growing areas, including consideration and implementation of closure of growing areas and any sampling or review of applications to shorten the duration of a closure, is on-charged to the aquaculture operators in the growing area. This approach to cost recovery compounds the economic impact for aquaculture operators who, while absorbing the costs of closure, continue to bear the costs of administration and assessments relating to the closure. I understand that some of these costs are currently being covered by Watercare.

Monitoring and response

The TMP, which was expected to confirm the veracity of the methodology developed to assess effects on the environment at the time consent was granted (2014), has been progressed in stages. The TMP was revised post-2016, based on a preference for continuous monitoring and a higher resolution understanding of potential effects from Watercare. Post-2016, Watercare and its experts have progressed a pilot study, working to determine the best proxies or indicators to be used to assess effects, with what is considered (by Watercare) to be a robust proposed TMP finalised in late 2025. Watercare is planning to submit the TMP to the Council for certification in early 2026. The need for any changes to the scoring or criteria in Attachment 5 of the NDC conditions is not expected to be confirmed until TMP monitoring results are received and analysed, and the need for any changes becomes clearer.

The monitoring that must be undertaken by Watercare, as required by the NDC, is limited to telemetry (which records the duration of overflows at Type 1 EOPs),¹⁵ the TMP, and the

¹⁵ High risk Type 2 EOPs (such as EOP1540) may also have telemetry installed.

requirement for event-based monitoring responses where a significant effect is observed.¹⁶ There is no targeted receiving environment monitoring, or reporting, specific to or required by, the NDC. However, I understand monitoring data relevant for assessing effects from overflows in the Warkworth catchment is collected through other avenues, including state of the environment monitoring, the Safeswim monitoring at Ōpahi Bay, Sullivans Bay and Scotts Landing, and the ongoing monitoring programme required by the Warkworth Wastewater Treatment Plant (WWTP) consent.¹⁷ This includes a monitoring probe at the discharge point of the WWTP that records certain parameters at 5-minute intervals.¹⁸ In short, Watercare considers that high-resolution data is available to determine any effects following overflow events and changes to the receiving environment over the longer term.

To date, Watercare reports that the results of the known monitoring undertaken in Warkworth indicate:

- the environmental monitoring/reporting does not indicate noticeable degradation or impact. Over time, there has been a general trend of improvement in most nutrients, with results indicating the receiving environment is in the A-band for nitrogen and ammonia;
- Safeswim sampling indicates little to no traceable microbiological effect at the wider harbour monitoring locations, including Ōpahi Bay, Sullivans Bay and Scotts Landing;
- monitoring results are generally indicative of quality fluctuations at a catchment level following rainfall. Overflow events correlate with increases in turbidity, and reductions in dissolved oxygen and tryptophan (a proxy for faecal matter), during and following rainfall events;
- ecological and human health risks related to pathogens and faecal matter are lower during wet weather overflow events than for dry weather overflows, due to better dilution of contaminants due to higher flows (rainfall and I&I).

In addition, Watercare has been funding the oyster-flesh sampling undertaken by MPI (described above) post-overflow events since 2022. This is a voluntary action by Watercare that is not required by the NDC.

¹⁶ Targeted incident responses such as dry weather overflows where higher risk observed, which requires upstream and downstream sampling, as set out in Attachment 8 of the NDC: The Wastewater Overflow Regional Response Manual.

¹⁷ Although the Warkworth WWTP has now been decommissioned, there are ongoing monitoring and reporting requirements that endure.

¹⁸ Dissolved oxygen, turbidity, optical brightness, tryptophan (a proxy for faecal coliforms) and physiochemical parameters (pH, temperature, conductivity, etc).

Recommendations

I note concerns in your letter and media commentary that Watercare has increased the allowable overflow events per discharge point from two to 200 events annually, and reclassified heavy rainfall from 20 mm to 10 mm. From my inquiries, there is nothing to suggest that this is the case. I have been advised that the ADF of 200.5, recorded in one of the NDC annual reports, was an error that has been corrected in all documentation since, and no change to the criteria or definitions for wet weather or dry weather overflows has been made. I understand from Watercare that the requirements in Auckland (via the NDC) for categorising dry weather overflows and wet weather overflows are more restrictive than other areas of the country. This is so that overflow events are linked to causality (rainfall vs blockage or some other problem in the network).¹⁹

Ultimately, the overflow issues in Warkworth are the consequence of growth outpacing the capacity of wastewater infrastructure, exacerbated by its age. I have not inquired into how, as development increased in the region, those decisions were balanced against existing consented activities that may be impacted downstream by the cumulative effects of discharges, such as aquaculture.

Investigating the sequence of decision-making would be a major, separate exercise and is not one I have had the time or resources to explore. As a result, I cannot offer any findings in respect of the way planning decisions have been arrived at, or the contribution they may have made to the potential for any resulting liability. I appreciate that those impacted by the wastewater overflows and oyster harvest closures may have anticipated that would be an outcome of my inquiries – and understandably so, given the economic consequences involved.

I note the improvements in the reduction of frequency and volumes of wastewater overflows, as a result of investigations and interventions to date, specifically those since August 2025. But addressing the overflow issues in the Warkworth catchment has been, and remains, reliant on significant capital expenditure and the completion of the medium-long-term (approximately ten years) delivery programme. Until the majority of these capital works are delivered at the end of 2026, resolution of the wider network issues causing the overflows in the Warkworth catchment, and elimination of those overflows, is unlikely. Based on my inquiries, I have not identified any obvious ways in which delivery of these capital works could have occurred faster.

My inquiries have highlighted several aspects of the multiple regulatory frameworks that apply and indicate improvements that might be considered by the relevant responsible

¹⁹ Watercare uses 10 mm of rainfall as the threshold to classify events as wet weather overflows (WWO) versus dry weather overflow (DWO): an overflow is classified as WWO if rainfall in the preceding 24-hours exceeds 10 mm; otherwise, it is classified as DWO. Through this approach, responses to DWO (which have generally more pronounced effects) are prioritised and causality of the overflow, for example whether as a result of a blockage or equipment failure vs capacity issue, can be more accurately attributed.

agencies. While my investigation has identified areas that may require clarification or improvement in the NDC framework, I have not assessed whether these matters amount to non-compliance with the NDC. Although I note this is being considered by the Council.

Network Discharge Consent (NDC)

While the NDC is based on the principle of progressive improvement and includes a methodology for prioritisation for investment,²⁰ this is largely predicated on the frequency of overflow(s) rather than their potential environmental impact. The methodology states “...catchments with high frequency/high volume discharges to receiving environments of lesser value would be ranked above catchments with high receiving environment values where the risk of overflows is low, which reflects the underlying risk management approach.”

Recommendation 1: Watercare and the Council might consider whether this underlying risk management approach is fit for purpose – whether a risk-based approach, based on frequency, is more appropriate than one based on sensitivity or the value of a receiving environment, noting this need not be limited to only ecological sensitivity.

Recommendation 2: Watercare and the Council could also review the categorisation or value of receiving environments across the region. Specifically in relation to Warkworth, they might like to consider whether the Mahurangi River and Mahurangi River Estuary need to be recategorised as Class 1 receiving environments (currently Class 2), given the public health interests of recreational users and the presence of aquaculture operators.

Outside of the TMP, there is no requirement for receiving environment monitoring or reporting prescribed in the NDC. I understand monitoring information collected by the Council and Watercare can be used to inform the assessment of effects under Attachment 5 of the NDC. However, it is unclear exactly what monitoring can be used, whether the resolution of this monitoring is appropriate, or how the information might then be used to inform priorities for investment or improvement to the network or improvements to any other processes of the NDC.

Recommendation 3: The Council and Watercare may consider whether the NDC annual report should include an assessment of recorded or reported adverse effects in the relevant catchment, drawing on the external monitoring information that is available. This would provide more transparent tracking of environmental trends within the context of the NDC and is particularly important where external monitoring demonstrates clear trends, sensitivities or outcomes that are directly relevant to wastewater network performance and investment prioritisation, as required to be set out in the WWNS.

It appears that there is discrepancy in the expectations of Watercare and the Council regarding the type of information and the level of detail that is required for annual reports and the WWNS. This has resulted in considerable delays in the certification of the WWNS

²⁰ See the NDC at Attachment 4 (Methodology for Prioritising Catchments and Wastewater Network Improvement Works).

while information issues are resolved. Changes to the information that must be included in annual reports has also led to delays in these being submitted. Of note, there appears to be a difference in the expectations between the Council and Watercare about the information requirements related to existing EOPs (those existing when the NDC was granted). This includes:

- what process should be followed when an existing EOP fails to meet the target of an average of two wet weather overflows per year, where an ADF has not been established (or certified) as required by condition 9(b) of the NDC;
- the process to be followed where the performance of existing EOPs with a certified ADF has worsened (frequency of overflows has increased) or improved. There are examples where performance of an existing EOP has changed, but the ADF has not been revised (or certified).

I note that there is no apparent mechanism for certification of an ADF outside of a WWNS, and a WWNS is only required every six years. In the worst case, up to six years could elapse before the Council has visibility that an EOP is not performing as expected or has had an ADF established (or requires one), which in turn could affect the prioritisation of improvement works or investment in interventions. I understand the Council see this risk as being addressed, in part, by the requirement for reporting on overflow events in each annual report (on a location/EOP basis), and that this provides an avenue for the Council to seek new ADFa, or changes to ADFs, in response to incident reporting.

Recommendation 4: For the consent documents that require certification, the information to be provided and its level of detail should be clearly agreed between the Council and Watercare.

Recommendation 5: The Council might consider whether changes to the NDC conditions or supporting attachments are required to clarify the process (or processes) to be followed when the performance of existing EOPs changes. This could include the inclusion of a mechanism for “as required” certification of ADFs where changes in the performance of existing EOPs are observed.

It appears that Watercare has been proactively amending the Potential Effects and Potential Risk scoring/classifications in response to changes in the frequency of overflows in the WWNS.²¹ Specifically, I note the increase in Potential Effects and Potential Risk scoring/classification in response to the increase in overflow frequency for EOP 1540 in the 2023 WWNS. However, I question why these increases were only applied to the immediate receiving environment, being Mahurangi River Tributary (4), and were not carried through to the main stem of the Mahurangi River or the Mahurangi Estuary, which are the ultimate receiving environments for discharges from EOP1540 (and notably all other discharges from the Warkworth catchment). As evidenced by the impacts on

²¹ Noting that only information relating to the Warkworth catchment was reviewed for the purpose of inquiring about the specific concerns raised.

aquaculture in the Mahurangi Harbour, environments well downstream can be significantly affected by overflow events.

Recommendation 6: Council and Watercare should consider whether Attachment 5 of the NDC consent, and the NDC framework more generally, includes sufficient recognition of the potential cumulative effects on the downstream receiving environments.

I have not compared the NDC against the recently released wastewater standard for network overflows and bypasses,²² noting that this standard does not come into force until 19 December 2028. However, I understand from my investigation that the development of the standard has been informed by the NDC framework.

Targeted Monitoring Programme (TMP)

The NDC decision report (to grant the consent) records concerns about the consideration given to temporal and cumulative effects, and the limited way in which this was addressed in the application. The decision notes that these concerns would be addressed by a monitoring regime, and that condition 16(b) required assessments of temporal and spatial cumulative public health as well as the ecological effects of wastewater discharges, so that the results could be factored into the first WWNS (2017). Attachment 5 was subsequently updated to include a framework for assessing both spatial and temporal cumulative effects.

Alongside the specific assessment to address the gap identified during consideration of the NDC in relation to temporal and cumulative effects, the NDC included conditions requiring a TMP to validate the assumptions used in the Watercare model(s) for assessing recreation, public health and ecological effects. As previously set out, the TMP has been progressed in stages and is yet to be completed. As the second stage of the TMP pilot study has yet to commence, it may be some time before sufficient data from the TMP is available to determine whether updates to Attachment 5 of the NDC need to be made, and longer again for those updates to be made and to have them certified. There may be issues with the assumptions used in the original assessments, which will endure until those assumptions can be validated (by the TMP results), to the detriment of the receiving environment.

Recommendation 7: Watercare and Auckland Council might consider how the second stage of the TMP could be best facilitated to support the timely generation of data and ensure that any required updates to the NDC are made as soon as practicable.

Aquaculture impacts

While there would still be a period of closure due to rainfall in many cases, it is clear that the duration of harvest area closures due to emergency events (sewage overflows) has significantly increased in the most recent reporting period, indicating that the problem and

²² <https://www.taumataarowai.govt.nz/wastewater-sector/wastewater-standards/management-of-overflows-and-bypasses-standard>



its impacts on aquaculture operators have been worsening. The severity of each overflow event is assessed by MPI on an ad hoc basis using information provided by Watercare, consideration of relevant environmental factors and norovirus test results from sampling. Outside of MPI, there is a lack of transparency as to exactly what information is considered and what criteria are applied when deciding to impose a closure and its duration.

Recommendation 8: Given the length and impact of harvest closures, MPI might consider making the decision-making process for harvest closures, including all potential criteria that may be applied, publicly available.

Recommendation 9: When a decision to close a harvesting area is made, MPI might also consider whether a closure notification should be accompanied by a publicly available explanation for the decision. This could include the criteria that have been applied and the information that has been relied on in making the decision.

Conclusion

While I have made a series of specific recommendations to Auckland Council, Watercare and MPI, the way events have unfolded in the Mahurangi catchment suggest that the sequencing of development and infrastructure is a critical matter, particularly in ecologically sensitive environments. I have taken the liberty of sharing this letter with the ministers responsible for local government and resource management law reform, along with the Infrastructure Commission, the Commerce Commission and Taumata Arowai. In the context of the current massive reforms of planning and environmental law, and a possible upheaval in the structure of local government, there may be lessons that can be learned and applied that will avoid a repeat of what has been experienced in the Mahurangi catchment.

Yours sincerely

Rt Hon Simon Upton

Parliamentary Commissioner for the Environment
Te Kaitiaki Taiao a Te Whare Pāremata



Appendix: Acronym reference

ADF	Alternative Discharge Frequency
BMS	Bivalve Molluscan Shellfish
EOP	Engineered Overflow Point
I&I	Inflow and infiltration
MPI	Ministry for Primary Industries
NDC	Network Discharge Consent
TMP	Targeted Monitoring Programme
WWNS	Wastewater Network Strategy
WWTP	Wastewater Treatment Plant