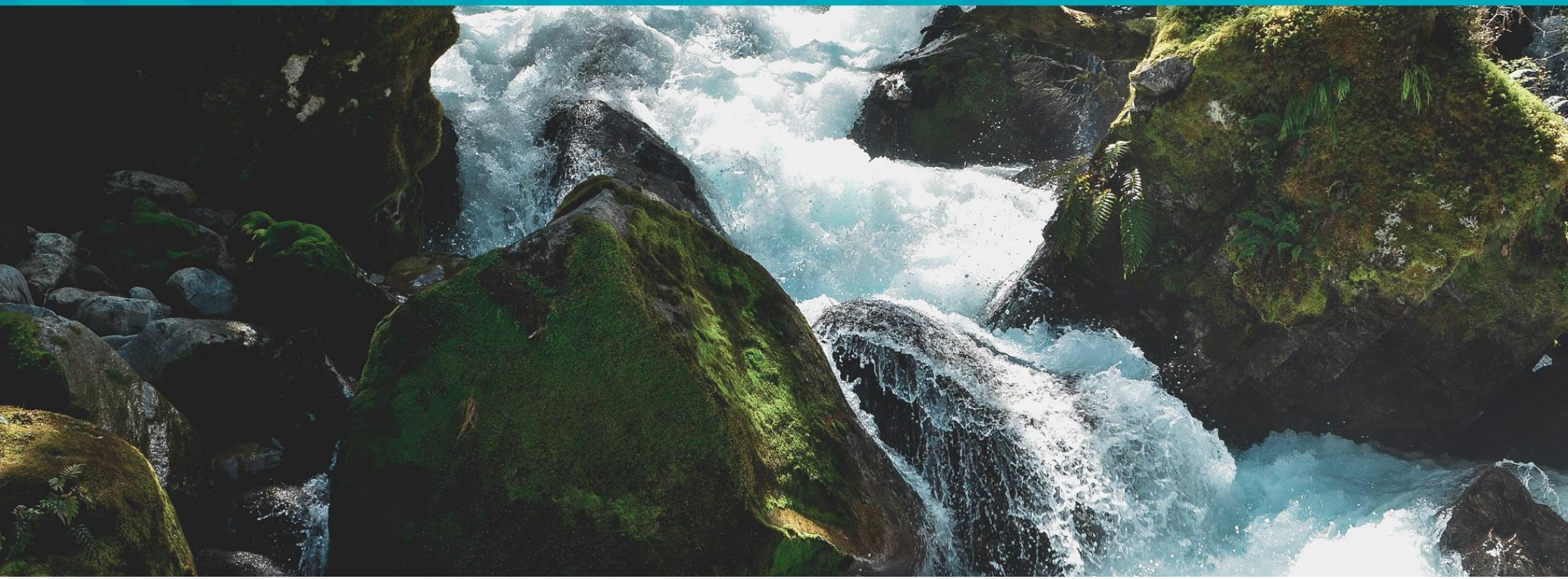
National Wastewater Standards Technical Review Group

Summary of feedback – draft report on monitoring and reporting arrangements for overflows



Scope of report

Feedback on the scope of the report / definitions

- **The draft report currently proposes to exclude combined network overflows -** there was strong support for including combined network overflows in any regime, as they overflow very regularly and could be high risk. Alongside this, excluding combined networks will reduce the incentive for a network owner to address overflows from these networks (eg by separating the wastewater and stormwater network).

- **The draft report currently proposes to exclude bypasses of wastewater treatment plants** from the risk-based monitoring and reporting regime. There was discussion about whether this was appropriate. Bypasses will continue to be consented as part of the operation of a wastewater treatment plant, and this will cover their overall regulation, including how they are monitored and reported.

Feedback on the scope of the report (cont.)

- **National consistency in definitions of overflows** based on the definitions utilised in the Water Services Authority –Taumata Arowai environmental performance measures - there was strong support for nationally consistent definitions to be used in regional plans and consents. Current terminology is variable, and this creates multiple issues – measurement, comparison of performance across networks / regions, taking compliance and enforcement action are examples.
- The definitions in the Water Services Authority's environmental performance measures would benefit from further definition of "partially treated" to ensure consistent application and that compliance / enforcement action is not compromised.
- Timeframe for classifying an overflow "event". The definitions in the Water Services Authority's environmental performance measures split a single overflow into multiple events where it exceeds a 24-hour period.
- The feedback was this will distort / lead to inaccurate reporting of the frequency of overflows, as an overflow that occurs over multiple days will be coded as multiple events. The preference was to use a more sophisticated classification system that includes overflow length – for example, 24 hours or less; 3 days or less; 7 days or less; and more than 7 days.

International practice

Feedback on international practice

- **There is a small number of international approaches** in the draft report relating to overflows, with limited information about each jurisdiction – there is not enough information to guide policy-making on an approach for New Zealand
- The draft report does not include information about the international approaches that is relevant to New Zealand's potential approach to overflows. For example, a lot of the networks are privatised that the report mentions, and this was not made explicit in the report or the degree to which these are comparable to New Zealand's approach to publicly owned networks.
- The Water Services Authority would be happy to receive any further information from the members of the technical review group about international approaches we could consider further, or key individuals we could contact.

New Zealand

Feedback on approaches in New Zealand to overflows

- There was discussion about the lack of national consistency in approaches to regulation of overflows by regional councils.
- **One challenge that was discussed was the difference in approach to prohibition of network overflows by regional councils** – around half of regional councils prohibit network overflows, despite the fact the networks they apply to are designed to overflow, and generally will overflow regularly.
- This will create challenges for both territorial authority (network owners), regional councils (regulators) and the Water Services Authority if a risk-based monitoring and reporting regime is implemented because network owners will be required to monitor and report events that a regulator has prohibited.
- A preference was expressed by the technical review group **for a national-level body (eg the Water Services Authority or the Ministry for the Environment) to require regional councils** to take a consistent approach to consenting of overflows (for example, requiring them to classify overflows as a non-complying activity). This would address difficulties regional councils face with engagement about management of overflows with their communities, who in some cases strongly prefer prohibition.
- This approach is currently not within the scope of the Water Services Authority's statutory functions. It is within the scope of a national environmental standard made under the Resource Management Act but would need to be prioritised by the Ministry for the Environment.

Feedback on approaches in New Zealand (cont.)

- A second challenge that was discussed was that, **in regions where overflows are required to be consented by regional councils, many overflows remain unconsented.**
- There was agreement that consents should be required for all overflows, with consistent requirements around their monitoring and reporting – there is question about whether this would be in scope of the Water Services Authority's existing statutory functions.
- Other areas discussed by the technical reference group included:
    - some territorial authority owners do not have good information about their networks and where they overflow (for example, "unconstructed" overflows);
    - territorial authorities lack capability to implement a sophisticated risk-based monitoring and reporting regime;
    - options were discussed around how prohibited overflows should be treated under the RMA (for example, section 330, which provides an exemption to plans or consents in an emergency). This was not seen as an ideal way to comprehensively manage overflows in the longer term from a risk management perspective.

Feedback on approaches in New Zealand (cont.)

- **The draft report recommends that the SafeSwim programme would not be an appropriate basis for a national level framework** that applies in other parts of New Zealand because other councils lack the funding or capability. The following themes were covered in discussion about this recommendation:
  - It is a very general recommendation that may not be accurate for all councils which vary widely in funding, capability and existing approaches to overflows;
  - It has been possible to implement SafeSwim in smaller councils (Northland);
  - there is not enough information about the various elements of SafeSwim in the draft report to determine which aspects might be transferable to other councils / regions, and which might not be appropriate;
  - There is likely to be viability in taking a transitional approach to implementation of national level framework that draws on relevant areas of SafeSwim, with elements being implemented over time depending on the capability and capacity of councils.
- The next steps agreed were to consider the SafeSwim programme further, including a presentation of the programme led by Holly Foreman (Auckland Council).

Case studies

Feedback on case studies

- The technical reference group discussed the following themes relating to case studies of overflows and the development of new arrangements between councils and mana whenua.
- Discharge of wastewater is unacceptable to mana whenua, due to the environmental impacts and the tapu nature of wastewater going into areas that provide food and are used for recreational activities. Poorly or untreated wastewater by way of overflows is unacceptable. mana whenua would prefer the complete elimination of overflows.
- While mana whenua can be pragmatic about the fact that overflows cannot be eliminated, particularly in the short-term, they are unable to impact change otherwise. The case studies demonstrate some approaches where there has been collaboration between councils and mana whenua about how to identify and reduce risky overflows particularly where they impact on mahinga kai, places of cultural or spiritual importance, or where there is regular human contact with water (for example bathing).
- Mana whenua have a strong preference to understand where, why and how often overflows are happening, to be involved in discussions around risk management, changes to infrastructure to reduce or eliminate overflows, and ongoing monitoring.

Feedback on case studies (continued)

- A key focus should be creating high levels of transparency about the extent of overflows. The primary value in this work is to build awareness of (and accountability for) overflows, to increase visibility for the community.
- Council applied for consents in each case study for a different reason. It will be important for case studies to include, where possible, the broader context so it is clear why a consent was required, together with the rationale for working with mana whenua on new arrangements.
- The report does not capture the amount of work and effort required on the part of mana whenua. Engagement, together with technical support on design solutions, is often voluntary or unpaid for mana whenua.
- It will be important for any risk management requirements for overflows to utilise existing groups / processes so it does not result in additional burden for mana whenua.
- Is there a risk that discharge to water standards results in a reduction of consultation with the community, but a risk management approach to overflows requires a high level of engagement with the community?

Recommendations in report

Feedback – recommendations in report

In summary, the draft report recommends:

- Councils must have a risk-based monitoring plan listing overflow locations, categorised by risk, with an action plan about how monitoring will be implemented across three years;
- Risk based monitoring would be categorised using the Water NZ scoring matrix and would involve engagement with community and mana whenua;
- Over time all new engineered overflows and pump stations must be installed with overflow alarms and event duration monitoring. Existing overflows and pump stations must be installed with event duration monitoring.
- Post overflow reporting must be made within 10 days of an event (public site managed by the Water Services Authority.
- Councils could have in person sessions with mana whenua following overflows to explain nature, location, impact
- There should be annual reporting covering frequency of overflows, impact, and any work to investigate overflows and reduce frequency.

Feedback – recommendations in report

- There was the following themes raised in the technical review group's discussion about the recommendations in the draft report.
- **The group considered the recommendations in the report did not go far enough**, and should be expanded on and improved – this is a "once in a generation" opportunity to significantly lift council approaches to overflows.
- There should be an aspiration to set, at a national level, requirements for international best practice for council risk-based monitoring and reporting of overflows.
- Because councils vary in their knowledge of networks, capability and funds, **the pathway to achieving best practice requirements could be tailored** – however there would be a clear expectation that all councils would get there over time.
- **A risk-based monitoring and reporting arrangement that is required for all councils is the right starting point**. However the SafeSwim programme (or elements of it) could be incorporated in the approach – Holly Foreman to present to summarise SafeSwim for further consideration.
- The approach needs to include national-level leadership on the current inconsistent approach by regional councils to prohibition of overflows.

Feedback - recommendations in report (continued)

- **Monitoring of overflows should be calibrated to risk.** The recommendation in the draft report that there should be telemetric monitoring of overflow points and pump stations should be considered and potentially expanded (for example, to also cover high risk discharge points).
- **Public reporting of overflows is a high priority** for any risk-based monitoring and reporting regime. Both "how" an overflow is reported, together with the timeframe for reporting once an overflow is detected, should be calibrated to risk, with the highest risk (environmental impact and public health) overflows reported immediately, and directly to the community concerned.
- **A blanket requirement that overflows must be reported 10 working days is too long,** particularly given the potential impacts on human health for higher risk overflows.
- The technical review group did not support the recommendation that the Water Services Authority (a body with national-level oversight) should report overflows. The better approach is that the network operator should be required to report overflows from their network both to the public and regional council. This would include (for higher risk overflows) direct and timely reporting to the community concerned.
- **There should be clear connection between all aspects of a risk-based monitoring and reporting regime and regional councils** – including reporting requirements (to allow regional councils to best fulfil their role as the primary regulator, and in relation to pollution response).

Feedback recommendations in report (continued)

- **Technological solutions should be considered / facilitated** as part of a risk-based monitoring and reporting regime – for example, via a form that is online.
- **The role of private service providers / community should also be considered / facilitated** as part of a risk-based monitoring and reporting regime – the solution should not presume that a council operator must be responsible for all roles.
- Other areas that were raised by the group included:
    - Ensuring that "double reporting" does not occur – for example the Department of Internal Affairs (DIA) requires similar reporting through non-financial performance measures.
    - Consider the role medical officers of health play in managing overflows.

Next steps – potential proposals for discussion document

Potential proposals for discussion document

- **The Water Services Authority will issue a discussion document to network operators** on proposals for wastewater environmental performance standards in February / March 2025 – this will include proposals relating to a risk-based monitoring and reporting regime for overflows.
- The following framework could provide the basis for these proposals – these are for discussion with the technical review group.
- The framework would apply to all overflows (including combined networks) except for overflows that bypass a wastewater treatment plant – these will be dealt with through the resource consent that applies to the plant.
- The discussion document should be clear about the purpose of interventions, outcomes sought through proposals, and the action that would be required of councils if the proposals are implemented.

Wastewater risk management plans

- The Water Services Authority could require council network operators to have a **comprehensive wastewater risk management plan**. These plans can be required under section 139 of the Water Services Act, and must "give effect" to any requirements made by the Authority. Once made they must be reviewed every 5 years.
- Councils would "own" the plans and be responsible for making and maintaining them. The Authority could issue guidance setting out its expectations for content of the plans – this could include different approaches for different sized networks.
- The Government is about to introduce legislation requiring stormwater risk management plans from all councils by 2027 – wastewater risk management plans could be required at the same time (based on a total network or catchment approach).

Wastewater risk management plans (cont.)

- The content of plans could include:
  - a map of controlled and uncontrolled overflow points across a network;
  - categorisation of overflow points based on a risk framework – with different approaches for controlled / uncontrolled overflow points;
  - Review of plans required every five years;
  - a monitoring and reporting regime that is based on risk categorisation of overflow points;
  - approaches taken by the network operator to manage, control, monitor or eliminate risks - these would include, for example, inflow and infiltration programmes, education programmes. For more sophisticated operators this could also include, for example, hydrological modelling. The approaches would vary based on type of network and capability of operator (but would be expected to improve in sophistication over time).
  - Councils would be expected to demonstrate how they had engaged with communities (including mana whenua) about where risks are, and how they are being managed, controlled, monitored or eliminated.

Wastewater risk management plans (cont.)

- Once finalised, councils would be required to publish their wastewater risk management plans on a publicly available website, and provide them to regional councils and interested parties (for example, mana whenua or groups affected by overflows).

Framework for categorising risk

- The framework for categorising risk of overflows in risk management plans could be based on one or more “best practice” overseas or local models. Any model would need to accommodate New Zealand specific requirements (for example, mahinga kai sites).
- We would appreciate your advice on a framework which considers both likelihood of occurrence and impact – for example, the approach used by the NSW Environmental Protection Authority (as below).

Likelihood	Impacts				
	Insignificant (1)	Minor (2)	Moderate (3)	Major (4)	Catastrophic (5)
Almost certain (A)	Significant	Significant	High	High	High
Likely (B)	Moderate	Significant	Significant	High	High
Moderate (C)	Low	Moderate	Significant	High	High
Unlikely (D)	Low	Low	Moderate	Significant	High
Rare (E)	Low	Low	Moderate	Significant	Significant

Framework for categorising risk (cont.)

- The framework would apply to all overflows, including those from combined networks and the proposal is to use comprehensive wastewater risk management plans as the mechanism to drive better risk management reporting for overflows.
- Risk management is a “beyond compliance” approach that actively requires an operator to understand risks and hazards, and have a plan for how to manage, control, monitor and / or eliminate them.

Monitoring arrangements

- The Water Services Authority can impose monitoring requirements as part of wastewater environmental performance standards – these would be required as part of new overflow consents.
- In addition, operators could be required at minimum to have telemetric monitoring at the following network points:
  - all engineered overflow points or discharge points classified as “high risk” in wastewater risk management plans.
  - all new constructed overflow points and all pump stations;
  - all existing engineered overflow points, based on a timeframe required by the Authority;
  - all uncontrolled discharge points (manhole sensors) where there are high frequency overflows. Telemetry for medium frequency uncontrolled discharge points would be based on over a timeframe required by the Authority.

Monitoring arrangements

- Monitoring requirements should be flexible enough to ensure that appropriate technology can be employed for the specific characteristics of a site (which can vary widely).
- Monitoring requirements should not “lock in” particular types of technology – allow for innovation.
- Monitoring requirements should ensure that telemetry is fit for purpose, and should not (for example) require more sophisticated or expensive technology than is required, or require technology that does not operate well.

Reporting arrangements

- The Water Services Authority can impose reporting requirements as part of wastewater environmental performance standards – these would be required as part of new overflow consents.
- Operators could be required to implement reporting arrangements based on the risk framework in their wastewater risk management plan.
- Reporting could discriminate between “first response” and “follow-up” reporting.
- “First response” reporting could include the time and estimate of flow, together with public health warnings, and could be required at the site of the overflow, on a website maintained by the network operator that is accessible to the public, to the relevant regional council, and to communities that are likely to be at risk or affected (for example, mana whenua groups or communities close to the overflow site).

Reporting arrangements (cont.)

- Timeframes for “first response” reporting of overflows could, for example, be required as follows:
  - overflows categorised as high risk – 2 hours;
  - overflows categorised as medium risk – 24 hours;
  - overflows categorised as low risk – 48 hours.
- “Follow up” reporting could be required within 1 week of the event and would include response time, resolution time, and an assessment of the public health and environmental impact
- “Follow up” reporting could be required on a website maintained by the network operator that is accessible to the public, to the relevant regional council, and to communities that are likely to be at risk or affected (for example, mana whenua groups or communities close to the overflow site).

Addressing prohibitions on overflows

- The discussion document could highlight existing prohibitions on overflows that are part of regional water plans and identify that a risk-based monitoring and reporting regime is essential to better understanding the nature of the problems and ensuring that network operators are addressing them.
- Alongside this, a wastewater environmental performance standard could specifically require the risk-based monitoring and report arrangements identified in this slide pack. These would need to be implemented as part of new resource consents.
- The Water Services Authority would also need to engage with regional councils about existing prohibitions on overflows and how they propose to amend regional water plans to reflect these new requirements – we would appreciate your advice on how best to do this.
- Ways to incentivise or promote global / network wide consenting arrangements could also be included in the discussion document, and as part of engagement with regional councils.

Iwi / Māori and overflows

- The discussion document should include the preferences / aspirations of iwi / Māori, including the feedback / insights from the case studies. It should indicate the areas in the Government's proposals that address these areas.
- The Water Services Authority has statutory obligations relating to Treaty settlements in specific catchments. The discussion document should identify these obligations and indicate the areas in the proposals relating to overflows that will address these areas.
- Other obligations between council operators and iwi may be relevant to the proposals (for example, mana whakahono a rohe under the RMA). The discussion document should complement arrangements of this nature, and ensure there is flexibility to allow these "at place" arrangements to continue to operate.