

Whaitua te Whanganui-a-Tara Whaitua Implementation Programme (WIP) Progress Report

June 2023

Report Purpose

This report provides an update on progress made with implementing the recommendations of the Whaitua Implementation Programme (WIP), developed by the Whaitua te Whanganui-a-Tara Committee, and received by Greater Wellington (GW) in September 2021.

It will be updated every six months and presented at a GW Environment Committee meeting. It will be accompanied by a paper summarising the report, along with the other WIPs, and identifying successes, issues, and risks. In time, this report will be retired as GW moves to integrated Catchment reporting with these recommendations picked up alongside the wider range of environmental programmes GW and others are committed to delivering.

The next progress report may be provided earlier than the proposed six-monthly update as a one-off as the stand-up of the new Rōpū Taiao Environment Group in GW means there is fresh thinking happening on how to consider the outstanding recommendations. The next report will also include more detailed commentary on how the regulatory recommendations are being implemented through the development of plan changes to the Natural Resources Plan.

Initial assessments of how Greater Wellington are supporting the implementation of the recommendations in Te Mahere Wai (the companion document to the WIP developed by Te Kāhui Taiao) have been completed and will be provided as part of future updates.

Te Mahere Wai can be accessed here: <https://www.gw.govt.nz/environment/freshwater/protecting-the-waters-of-your-area/whaitua-te-whanganui-a-tara/te-mahere-wai-recommendations/>

Important note on the limitations of this data

Information provided here is provisional until it has been reviewed and endorsed by reference groups and/or governance groups which are to be established. It includes implementation attributed to organisations other than Greater Wellington and in some cases their agreement has not yet been obtained and therefore may be revised.

The interpretation of some of the more generally worded recommendations, and therefore their implementation category (and any other details provided regarding their implementation), may also be changed by reference groups and/or governance groups.

Interpreting this report

The table below is broken down by recommendation as recorded in the WIP.

Some recommendations in the WIP list multiple actions to be completed. Where these actions require different mechanisms to implement them, the recommendation is broken down in the table as sub-recommendations, reflecting the distinct pieces of work to be implemented.

An example is when a recommendation has multiple bullet points within it and only some of those bullets can be grouped under a single implementation mechanism.

Where this occurs, the wording of the recommendation is shown in full but the non-applicable parts are shown as crossed out. These parts that are crossed out are not lost – they are repeated against a different implementation mechanism.

Implementation Category

The report includes a column showing Implementation Category. This is a high-level grouping used by GW for reporting purposes.

The category ‘NRP Plan Change by 2024’ means a change to the Natural Resources Plan (GW’s regional plan) to be undertaken by 2024. This is underway.

Note that the category ‘To be commissioned by deliverables’ indicates that the work is not currently being implemented so needs to be commissioned. This means an assessment has been made that a new deliverable is required to implement the recommendation, including identifying which organisation will lead its implementation. These are the outstanding recommendations that need resourcing and need to go through the relevant lead agency’s business planning and prioritisation processes to be confirmed.

Summary of Progress

The table and pie chart below show progress towards implementation of the WIP.

Many of the WIP recommendations require multiple agencies to work together to implement the recommendation. In some cases, this has meant implementation has been slower but is considered worthwhile to create more integrated practices.

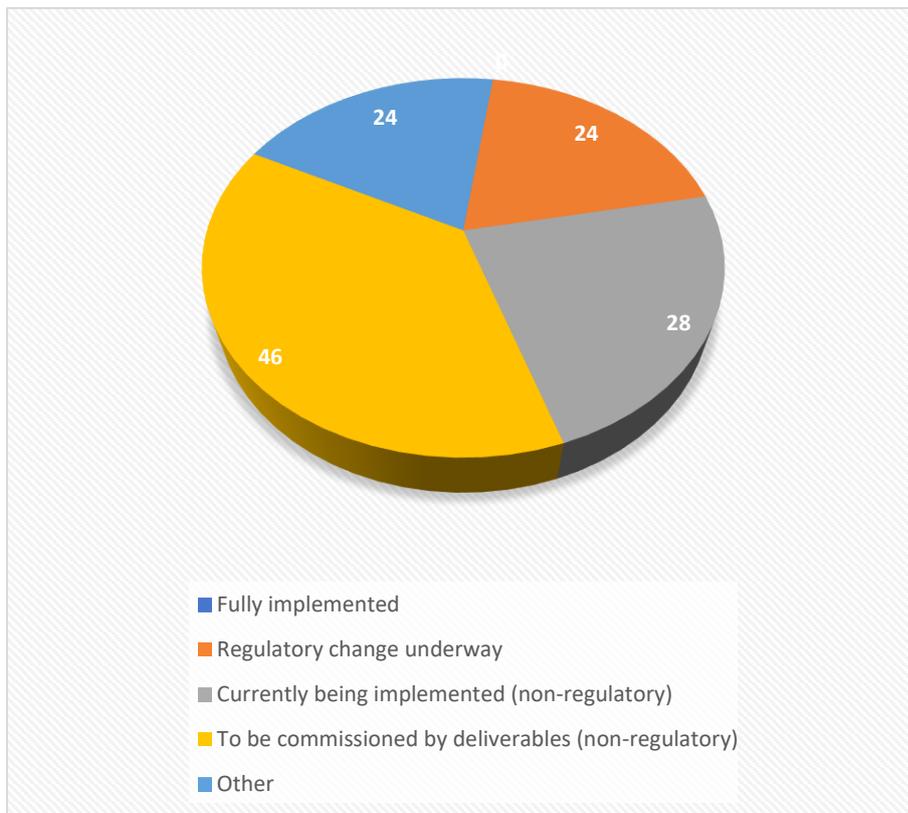
In Te Whanganui-a-Tara a higher proportion of the recommendations need work to be commissioned compared to other WIPs. This is because it was completed more recently and there has been less time for recommendations to be picked up as part of business-as-usual work.

There are gaps in this reporting where agencies haven’t had the capacity to engage with GW and therefore this report does not yet contain the full picture of work being undertaken. This is reflected in the higher number of ‘Other’ recommendations that still require joint assessment and are identified as ‘TBC’ (to be confirmed) within the progress report entries.

The challenge of implementing all GW-led deliverables within the WIP has been accepted with the receipt of the WIPs; however, the outstanding recommendations are subject to prioritisation within a business planning cycle. This has meant that some recommendations with a timeframe of 2022 have not yet been fully implemented as recommended in the WIP. Progress towards these recommendations will continue and will be tracked through these reports.

Implementation Category	Number of recommendations
Fully implemented	0
Regulatory change underway	24
Currently being implemented (non-regulatory)	28
To be commissioned by deliverables (non-regulatory)	46
Other	24
Total	122

Note: The numbers in the table exceed the number of recommendations in the WIP as some recommendations have multiple sub-recommendations to be implemented through different mechanisms.



Accessing the WIP

This report needs to read in conjunction with WIP which can be accessed here: [Greater Wellington Regional Council — Whaitua te Whanganui-a-Tara \(gw.govt.nz\)](http://www.greaterwellington.govt.nz). The WIP provides the context to each recommendation.

Te Whanganui-a-Tara - Progress by Individual Recommendation

Recommendation	Recommendation wording	Implementation category	Comment
1	Greater Wellington adds all 'first steps' attribute states (short term and generational) identified in the catchment chapters of the WIP into the PRNP as part of the 2022 and 2024 plan changes.	Natural Resources Plan (NRP), Plan Change by 2024	Being managed by Greater Wellington (GW) through its regulatory programmes of work.
2	Greater Wellington works with Mana Whenua to complete Te Oranga Wai attributes for freshwater and coastal receiving environments for inclusion in the PNRP as part of the 2022 and 2024 plan changes.	NRP Plan Change by 2024	Being managed by Greater Wellington through its regulatory programmes of work.
3	Greater Wellington proactively communicates the WIP and Te Mahere Wai with stakeholders, community groups and partners through a variety of channels to ensure there is adequate awareness in our whitua to support ongoing dialogue and accountability for implementation.	Currently being implemented	<p>GW led. Many activities have been undertaken:</p> <ul style="list-style-type: none"> • Launch event in November 2021 and recording made available on whitua website. • Newsletter sent to online mailing list advising on completion of Whitua Implementation Programme (WIP) and Te Mahere Wai (TMW). • Interactive catchment tool developed and made available on the whitua webpage. • Marketing campaign promoted WIP, TMW and catchment tool from April-August 2022 through google ads, social media, radio, and newspapers. • Updates to meetings are being provided to other organisations as requested e.g., Sanctuary to Sea. <p>Further communications activities are planned, including activities related to the sharing of this progress report.</p>
4	Greater Wellington establishes a community-led reference group tasked with monitoring progress on the implementation of WIP for Whitua Te Whanganui-a-Tara and ensures that the council is reporting on progress to the wider community in meaningful ways.	Currently being implemented	Greater Wellington is in the process of establishing the group. Discussions have been held with the former Whitua Committee's Co-chairs. A terms of reference has been developed and Council approval is currently being sought for this.
5	Greater Wellington, Mana Whenua and territorial authorities work with communities located around piped and above-ground streams to share those streams' stories through visual images, signs, sculptures, temporary artworks or other interactive ways that the communities design.	To be commissioned by deliverables	<p>New deliverable name: Streams stories visibility community package.</p> <p>GW led.</p> <p>Intended to include signs and other visual indicators of streams which show that a stream exists there in a way that connects people to piped streams and open streams.</p>
6	Greater Wellington works with Mana Whenua to name unnamed streams, including those currently piped underground, starting with large streams and then smaller streams within the whitua (by 2026).	To be commissioned by deliverables	<p>New deliverable name: Stream naming assessment and implementation.</p> <p>GW to facilitate with Ngāti Toa and Taranaki Whānui.</p> <p>Proposed to include the following:</p> <ul style="list-style-type: none"> • Desktop exercise to identify unnamed streams to prioritise (GW led).

			<ul style="list-style-type: none"> • Unnamed streams prioritised for naming and re-named (Ngāti Toa and Taranaki Whānui). • Names determined by mana whenua (Ngāti Toa and Taranaki Whānui). • Geographic Board submission/approved (GW led). • GIS update (GW led).
7	Greater Wellington and territorial authorities add information to property Land Information Memorandum (LIM) reports about wetlands and streams that a property drains to and its pathway to the sea; the source of the property's water supply; and the treatment of its wastewater.	To be commissioned by deliverables	<p>New deliverable name: Adding water information to LIMs.</p> <p>WCC, UHCC and HCC led.</p> <p>Work programme to develop a process to identify information to be applied to LIMs – the recommendation is for wetlands, streams the property drains to, it's pathway to the sea, the source of the properties water supply and the treatment of wastewater.</p> <p>Then implement and notify the changes.</p>
8	Mana Whenua, community groups and Greater Wellington take advantage of opportunities to get involved in the refresh of the National Curriculum, which guides teaching and learning in schools, with a focus on how well it identifies and grows capabilities that will help realise aspirations for communities that care for wai and te taiao.	To be commissioned by deliverables	<p>New deliverable name: Assist National Curriculum Refresh.</p> <p>GW led.</p> <p>Intended to provide input to Ministry of Education National Curriculum Refresh, format determined by Ministry of Education.</p>
9	Mana Whenua, community groups and Greater Wellington work with early learning centres, schools and kura to develop local resources and supports that help teachers and kaiako to provide teaching and learning that connect tamariki with their local waterways, including piped streams, and grow their understanding of the interconnectedness of the wellbeing of our communities and Whaitua Te Whanganui-a-Tara	To be commissioned by deliverables	<p>New deliverable name: Mountains to the Sea programme in Whaitua te Whanganui-a-Tara.</p> <p>GW led.</p> <p>Intended approach is a programme funded by GWRC but delivered by Mountains to Sea (would need to review their work in this whaitua to understand the need for additional work/funding first).</p> <p>GWRC currently fund this programme in Porirua and Ruamāhanga catchments.</p> <p>GWRC might have a supporting role rather than main funder.</p>
10	<p>Greater Wellington, Mana Whenua and territorial authorities establish services to support new and existing catchment or community groups (by 2025), including for:</p> <ul style="list-style-type: none"> • Providing access to easy-to-use data from all relevant sources, including citizen science, especially data that is relevant to each group's locations and needs • Inspiring and supporting the formation of new groups • Funding ongoing organisational and technical support, including lab analysis • Supporting citizen-led science and monitoring with appropriate training and tools • Mātauranga monitoring » Providing specialist support (such as engineering and legal support, help with navigating local government politics, and communication guidance) • Supporting catchment coordinators for catchment-scale projects and help with project management, people facilitation and fundraising (it includes tapping into the wider volunteer base) 	To be commissioned by deliverables	<p>New deliverable name: Community Group Support Service.</p> <p>GW led.</p> <p>Envisaged as a service for community groups that is hosted within GW but may coordinate with Territorial Authorities (TAs). Resourcing of the service may be jointly funded with TAs and informed with Mana Whenua.</p> <p>To provide the services listed across recommendations 10, 11 and 12.</p>

	<ul style="list-style-type: none"> Offering guidance on where to put the best efforts and take actions, consistent with the kawa and Te Mana o te Wai. 		
11	<p>Greater Wellington creates cross-whaitua structures and services that support a coherent and connected approach to local action knowledge-sharing. These should include:</p> <ul style="list-style-type: none"> Spatial and catchment-level planning that helps coordinate efforts aimed at meeting Te Mana o te Wai and community goals, and makes roles and responsibilities clear Community-to-community knowledge exchange and connecting groups The provision of transparent and clear mechanisms for accessing and allocating funding and services, including expert knowledge The provision of frameworks and supports that give community groups confidence that they are working in the interests of Mana Whenua A strategic approach to the use of council support services (such as Mountains to Sea Wellington) Providing a single contact point for questions and advice for all the agencies involved. 	To be commissioned by deliverables	<p>New deliverable name: Community Group Support Service.</p> <p>Refer to comment for Recommendation W10 as the same deliverable includes implementation of recommendations 10, 11 and 12.</p>
12	<p>Greater Wellington and Mana Whenua develop resources (by 2024) that community groups can use and adapt for their own communication with local communities, to help build understanding, connections and involvement that complement messages and campaigns by councils and water agencies.</p> <p>Specific themes to include are:</p> <ul style="list-style-type: none"> Where drinking water comes from, and the relationships between activities in the Hutt Valley and risks to the Waiwhetū aquifer Awa as tīpuna, living entities of distinctive mana and whakapapa Our responsibility to respect the awa and their mana, and act on this in our behaviour with water The state of our waterways, including for different places Action being taken, including for different places Actions people can take, including those specific to their local areas. 	To be commissioned by deliverables	<p>New deliverable name: Community Group Support Service.</p> <p>Refer to comment for Recommendation W10 as the same deliverable includes implementation of recommendations 10, 11 and 12.</p>
13	<p>Greater Wellington, Mana Whenua and territorial authorities partner with communities in developing catchment plans, co-designing their journeys and sharing the delivery process and roles required to achieve Te Mana o te Wai and local outcomes. This will help groups to know where to put their best efforts and provide clear resourcing strategies to follow through with their plans.</p>	Currently being implemented	<p>This will be delivered via catchment plans being introduced through the new Rōpū Taiao Environment Group that was stood up in May 2023.</p> <p>Note that it may be necessary to develop additional implementation at a sub-catchment level to fully implement this recommendation once the new group is stood up.</p>
14	<p>Greater Wellington works with Mana Whenua and catchment groups to make data easily available and accessible in a user-friendly way, including through the use of aggregated data.</p>	To be commissioned by deliverables	<p>New deliverable name: Whaitua Monitoring Plan encompassing each FMU.</p> <p>GW led.</p> <p>This is a broad deliverable which will span all three WIPs received to date. Within WIPs there are numerous stand-alone monitoring and evaluation recommendations which need to be coordinated rather than implemented in an ad hoc manner, and which also need to be aligned with an even broader GW monitoring and evaluation improvement work programme.</p>

			<p>This deliverable ensures that the relevant recommendations across the WIPs are identified for that wider monitoring and evaluation improvement work programme.</p> <p>This is also the deliverable for W15.</p>
15	<p>Greater Wellington provides more specific, local information on water quality to communities – through making existing data more readily available and collecting new data, including via citizen science programmes, Greater Wellington monitoring programmes and the integration of the two (where appropriate).</p>	To be commissioned by deliverables	<p>New deliverable name: Whitua Monitoring Plan encompassing each FMU.</p> <p>GW led.</p> <p>See details in comment for recommendation 14.</p>
16	<p>Greater Wellington, with Mana Whenua and communities, develops a toxic algal bloom action plan that includes:</p> <ul style="list-style-type: none"> • Management actions • A monitoring plan specific to toxic algae • Research priorities • Climate change adaptation • A communications approach that supports community and Mana Whenua visions and outcomes. 	To be commissioned by deliverables	<p>New deliverable name: Toxic algae action plan.</p> <p>GW led.</p> <p>Intended to be an action plan that focuses on monitoring, communications, and research specific to toxic algae (noting monitoring and communication aspects are already being implemented).</p> <p>It will need to bring together all the current work which refers to management actions (e.g., setting limits, improving river health etc. which will improve the prevalence of toxic algae).</p>
17	<p>Greater Wellington amends regulatory documents to require the relevant three waters agency to develop a stormwater strategy (by 2023), within the global stormwater network resource consent, to contribute to achieving the relevant first steps in each of the catchment tables under the heading 'Journey from current state to wai ora'.</p>	NRP Plan Change by 2024	Being managed by Greater Wellington through its regulatory programmes of work.
18	<p>Greater Wellington amends regulatory documents to require the relevant three waters agency to develop a strategy/plan (by 2023), within the wastewater network resource consents, to contribute to achieving the relevant first steps in each of the catchment tables under the heading 'Journey from current state to wai ora'.</p>	NRP Plan Change by 2024	Being managed by Greater Wellington through its regulatory programmes of work.
19	<p>The relevant three waters agency increases the number of repairs and renewals in the public wastewater infrastructure (aligning with the strategy in Recommendation 18) to ensure that:</p> <ul style="list-style-type: none"> • By 2033, no more than approximately 22 per cent of the wastewater pipe network will be worse than grade 3 (average condition) • By 2040, no more than ~12 per cent of the wastewater pipe network will be worse than grade 3 (average condition) • By 2050, no wastewater pipe assets will be below grade 3, and asset management plans will be actively identifying and replacing ageing pipes or pipes in poor condition. 	TBC	Requires conversations between GW and Wellington Water regarding timeframes.
20	<p>Territorial authorities and the relevant three waters agency prioritise the repair and replacement of public wastewater assets that lead to overflows on private or public land.</p>	Currently being implemented	<p>Wellington Water led.</p> <p>Greater Wellington understands Wellington Water are implementing this through their wastewater network overflow resource consent applications which they are currently in the process of lodging for different areas (mid 2023).</p>

21	<p>A target of zero wastewater overflows (by 2060) is achieved, except in infrequent situations (such as pump failures or rainfall events) with a >25-year average return period (ARI).¹⁻²</p> <p>To meet this goal, we recommend implementing six-yearly targets for reducing wastewater overflows set out in the relevant three waters agency's 2024 wastewater strategy and resource consent. These overflow reductions must align with our obligation to achieve the relevant first steps in each of the catchment tables under the heading 'Journey from current state to wai ora' and the primary contact recreation national bottom lines set by central government by 2040</p> <p>Footnotes:</p> <p>1 While we appreciate flooding events can result in wastewater contamination in the environment, we should not accept this as 'normal practice' for the wastewater network. By 2060, we expect the wastewater network to be of such a standard that it does not leak wastewater and that overflows only happen under unplanned or extreme events.</p> <p>2 A 25-year average return period (ARI) is a storm of a certain size and duration that could be expected to occur once in a generation, which has a four per cent probability of occurring every year. While historical records indicate this storm should occur every ~25 years, it could occur more than once over this period, but the probability would be low. Similarly, a 100-year ARI storm could occur twice in one year, but the probability would be very low.</p>	TBC	Requires conversations between GW and Wellington Water for latest information.
22	The relevant three waters agency investigates, and reports to, Greater Wellington and Mana Whenua (by 2022) on the feasibility of pre-treating wastewater overflows and any locations where this could be prioritised for upcoming Long Term Plan reviews.	TBC	Requires conversations between GW and Wellington Water for latest information.
23	The relevant three waters agency increases its monitoring of wastewater overflows across the network, with the aim of identifying faults through increased data collection (by 2025). The identified faults are to be repaired in line with the timelines specified in Recommendations 19, 27 and 28	TBC	Requires conversations between GW and Wellington Water for latest information.
24			
24.1	<p>Greater Wellington amends the relevant regulatory documents, and the relevant three waters agency increases its investigations of, the public/private water networks (by 2030) to identify all cross-connections (wastewater connected to stormwater) and inflow faults (stormwater connected to wastewater).</p> <p>The assessed pipe conditions and any faults are to be recorded on the relevant properties' LIMs and updated as repairs are made.</p> <p>[Note: text shown as crossed out shows which parts of a recommendation are being implemented through other sub-recommendations. The text that has been crossed out here in sub-recommendation 24.1 can be found in sub-recommendations 24.2 and 24.3]</p>	NRP Plan Change by 2024	Being managed by Greater Wellington through its regulatory programmes of work.
24.2	<p>Greater Wellington amends the relevant regulatory documents, and the relevant three waters agency increases its investigations of, the public/ private water networks (by 2030) to identify all cross-connections (wastewater connected to stormwater) and inflow faults (stormwater connected to wastewater).</p> <p>The assessed pipe conditions and any faults are to be recorded on the relevant properties' LIMs and updated as repairs are made.</p>	TBC	Requires conversations between GW and Wellington Water for latest information.

24.3	<p>Greater Wellington amends the relevant regulatory documents, and the relevant three waters agency increases its investigations of, the public/ private water networks (by 2030) to identify all cross-connections (wastewater connected to stormwater) and inflow faults (stormwater connected to wastewater).</p> <p>The assessed pipe conditions and any faults are to be recorded on the relevant properties' LIMs and updated as repairs are made.</p>	TBC	Requires conversations with Wellington Water for latest information then other TAs.
25			
25.1	<p>Greater Wellington amends the relevant regulatory documents on, and the relevant three waters agency increases its investigations of, the public/ private water networks (by 2040) to identify all groundwater infiltration (to the wastewater network) and wastewater leakage (exfiltration).</p> <p>The assessed pipe conditions and any faults are to be recorded on the relevant properties' LIMs and updated as repairs are made.</p>	NRP Plan Change by 2024	Being managed by Greater Wellington through its regulatory programmes of work.
25.2	<p>Greater Wellington amends the relevant regulatory documents on, and the relevant three waters agency increases its investigations of, the public/ private water networks (by 2040) to identify all groundwater infiltration (to the wastewater network) and wastewater leakage (exfiltration).</p> <p>The assessed pipe conditions and any faults are to be recorded on the relevant properties' LIMs and updated as repairs are made.</p>	TBC	Requires conversations between GW and Wellington Water for latest information.
25.3	<p>Greater Wellington amends the relevant regulatory documents on, and the relevant three waters agency increases its investigations of, the public/ private water networks (by 2040) to identify all groundwater infiltration (to the wastewater network) and wastewater leakage (exfiltration).</p> <p>The assessed pipe conditions and any faults are to be recorded on the relevant properties' LIMs and updated as repairs are made.</p>	TBC	Requires conversations between GW, Wellington Water, and territorial authorities for latest information.
26	<p>All territorial authorities provide financing mechanisms (subject to appropriate terms and conditions) no later than 2024 to assist landowners to fix faults in private laterals. These mechanisms could be deferred payments collected through rates, or territorial authorities could recover the costs when the properties are sold.</p> <p>Territorial authorities and the relevant three waters agency also provide supporting advice to private landowners on their rights and responsibilities regarding private laterals.</p>	TBC	Requires conversations between GW and each TA.
27	<p>Territorial authorities apply their existing powers under the Local Government Act 1974 and Health Act 1956 to ensure landowners repair all faults related to cross-connections (wastewater to stormwater) and inflows (stormwater to wastewater) within two years of their identification.</p> <p>Cross-connection and inflow fault repairs on private land may be undertaken by the relevant three waters agency. However, the costs are to be covered by the landowners either directly or through other funding mechanisms (see Recommendation 26).</p>	TBC	Requires conversations between GW and each TA.

28	<p>Territorial authorities, through the relevant three waters agency, apply their existing powers under the Local Government Act 1974 and Health Act 1956 to ensure that:</p> <ul style="list-style-type: none"> All identified leaky private wastewater laterals, including infiltration and/or exfiltration leaks, are fixed within five years of identification. Enforcement action is to be taken if the fixes are not made in this timeframe By 2045, all identified leaky private wastewater laterals have been fixed and an ongoing cycle of maintenance is in place <p>A database is developed and maintained of the conditions and ages of all private and public assets in the three waters network.</p>	TBC	Requires conversations between GW, Wellington Water and TAs for latest information.
29	<p>By 2025, territorial authorities and the relevant three waters entity develop a process (such as a 'warrant of fitness'), through which the condition of private laterals is assessed at the point of a property's sale or when a building consent application is lodged. The costs are to be covered by the property owners.</p> <p>The condition of these laterals, and any faults revealed through the process, are to be recorded on the properties' LIMs with the information updated as repairs are made (aligning with the timelines in Recommendations 27 and 28). Once the repairs are complete, an ongoing cycle of inspection and maintenance should be established.</p>	TBC	Requires conversations between GW and Wellington Water and TAs for latest information.
30	<p>By 2024, territorial authorities establish a complete set of regulatory and policy measures that:</p> <ul style="list-style-type: none"> Require landowners to repair all failed private laterals and record these failures on their LIMs until the repairs are complete <p>Provide a funding mechanism to support landowners in making these repairs (such as instalments on their rates bills or councils recovering the costs when properties are sold).³</p> <p><small>Footnote 3: Modified from WCC Mayoral Task Force Review on three waters, Recommendation 23.</small></p>	TBC	<p>Requires conversations between GW and Wellington Water and TAs for latest information.</p> <p>Too detailed for RPS, etc.</p>
31	<p>Relevant three waters agency investigates methods (by 2025) to significantly reduce sludge going to landfills from wastewater treatment plants.</p>	TBC	Requires conversations between GW and Wellington Water and TAs for latest information.
32	<p>Greater Wellington and territorial authorities provide good-practice information and advice to septic tank owners.</p> <p>They also develop a programme for regular septic tank investigations undertaken in rural/lifestyle areas in the whitua, with the aim of improving their understanding of the impact of septic tanks on water quality, ecology and public health.</p> <p>Where septic tanks are identified as affecting water quality, ecology or public health, territorial authorities or Greater Wellington are to work with the relevant landowners to reduce these effects by repairing, replacing or enhancing their septic systems and having an ongoing cycle of maintenance.</p>	To be commissioned by deliverables	<p>New deliverable name: Septic tanks communication stocktake and communications package.</p> <p>GW led overall but see details below.</p> <p>Intended to include an initial stocktake to identify what initiatives are in place across GW and TAs in the whitua to communicate septic tank requirements and gaps to be filled for landowners.</p> <p>Communications package would likely include information on maintenance requirements and permitted rule activity requirements and ensure that initiatives reach relevant occupiers across all TAs.</p> <p>GW to be initial lead for stocktake but communications may be led by individual TAs, including to recognise/build on work already underway.</p>

33	<p>Greater Wellington provides sufficient Land Management advisory resources and funding to:</p> <p>Support the implementation of actions at property and catchment levels to achieve catchment plan objectives</p> <p>Support landowners' implementation of national stock exclusion rules</p> <ul style="list-style-type: none"> • Help link farmers' action (including through their Freshwater Farm Plans) to catchment plans, and help small block owners to link their actions to catchment plans • Support the implementation of Freshwater Farm Plans to ensure quality delivery of farm planning services and effective connections to catchment plans • Promote the uptake of best management practice, and ensure open communication between landowners and Greater Wellington to keep best practices up to date • Integrate advice to landowners with other relevant objectives to achieve co-benefits (e.g., carbon sequestration, biodiversity) 	Currently being implemented	<p>Led by GW.</p> <p>Additional Land Management roles were appointed prior to stand up of the new Rōpū Taiao Environment Group.</p> <p>The new Rōpū Taiao Environment Group is likely to provide more support and help to ensure these functions are included in catchment planning (but will require confirmation following implementation).</p>
34			
34.1	<p>Greater Wellington supports landowners to exclude livestock from waterways by:</p> <ul style="list-style-type: none"> • Helping them to develop and implement practices that minimise stock access to streams not covered by regulations • Investigating the specific impacts of horses on water quality and considering further stock exclusion regulations if they are identified as a significant source of contaminants. 	Currently being implemented	<p>GW led.</p> <p>Being implemented via farm plans.</p>
34.2	<p>Greater Wellington supports landowners to exclude livestock from waterways by:</p> <ul style="list-style-type: none"> • Helping them to develop and implement practices that minimise stock access to streams not covered by regulations • Investigating the specific impacts of horses on water quality and considering further stock exclusion regulations if they are identified as a significant source of contaminants. 	To be commissioned by deliverables	<p>New deliverable name: Impacts of horses on water quality investigation.</p> <p>GW led.</p> <p>Intended to include an investigation culminating in a report which quantifies the impact of horse activities (including but not limited to grazing) on water quality in Te Whanganui-a-Tara whaitua.</p> <p>Report will include recommendations on regulatory (including stock exclusion) and non-regulatory options to mitigate any identified water quality issues.</p>
35	<p>Greater Wellington investigates alternative incentives (e.g., rates rebates) to increase landowners' uptake of revegetation projects, including projects using native plant species.</p> <p>This applies particularly to landowners with marginal and erosion-prone land (to reduce erosion and sediment loss), wetlands (for nutrient stripping, etc), and rural catchments generally (to slow flood flows further down the catchment).</p>	To be commissioned by deliverables	<p>New deliverable name: Alternative incentives for landowner revegetation projects options paper.</p> <p>GW led.</p> <p>Intended to be an options paper based on research including other council initiatives, ETS opportunities for administrative support by GW, rates rebates, etc.</p> <p>To identify current barriers to change.</p> <p>To recommend any options to be progressed and next steps for this.</p>

36	Greater Wellington supports the development of property-specific information to inform Freshwater Farm Plan development, particularly for managing diffuse discharges, CSA (Critical Source Area, i.e., hotspot) management, riparian planting (to complement stream fencing regs), and management methods for those streams where stock exclusion rules do not apply	Currently being implemented	GW led. Will be incorporated into freshwater farm plans. These things are already being undertaken currently through non-regulatory farm plans.
37	Greater Wellington provides enough staff and resources to: <ul style="list-style-type: none"> Work with forestry groups (New Zealand Farm Forestry Association, New Zealand Forest Owners Association) and contractors to provide proactive advisory support that includes ensuring all forestry operators are aware (by 2023) of relevant regulatory requirements and good practice Ensure all forestry operators in the whitua are monitored for compliance with the National Environmental Standard for Plantation Forestry (NES-PF) and other relevant requirements from 2023 onwards, and share this monitoring information with the community Take enforcement action on non-compliance. 	Currently being implemented	New compliance roles are being established which will increase GW's capacity and resourcing to perform this. Review will be needed to ensure this is sufficient resource to fully implement this recommendation.
38			
38.1	Greater Wellington and territorial authorities: <ul style="list-style-type: none"> Are exemplars of good practice on all council-owned land and infrastructure, including contaminated land, farms, forestry land, wetlands and golf courses. Provide information on how good-practice decisions have been made. Report publicly on their year-on-year improvements. 	Currently being implemented	GW led. 38.1 relates to GW being named (versus 38.2 "and territorial authorities" being named) Currently being implemented for GW through Parks Networks Plan (10 year plan on managing parks), including reporting; Reclothing Papatūānuku Restoration Plan (retiring farm parks except Battle Hill); Forestry advisory service roles being established.
38.2	Greater Wellington and territorial authorities: <ul style="list-style-type: none"> Are exemplars of good practice on all council-owned land and infrastructure, including contaminated land, farms, forestry land, wetlands and golf courses. Provide information on how good-practice decisions have been made. Report publicly on their year-on-year improvements. 	TBC	Requires conversations between GW and each TA.
39			
39.1	Greater Wellington, territorial authorities and the relevant three waters agency set an example by ensuring that (from 2022), their fleet vehicles are renewed with copper-free brake pads or replaced by vehicles with these pads.	Currently being implemented	This recommendation is being managed by Greater Wellington as part of a wider work programme of zinc and copper related recommendations. It includes liaising with the Greater Wellington fleet manager.
39.2	Greater Wellington, territorial authorities and the relevant three waters agency set an example by ensuring that (from 2022), their fleet vehicles are renewed with copper-free brake pads or replaced by vehicles with these pads.	Currently being implemented	Included as a programme in the Stormwater Management Strategy being developed by Wellington Water around leading by example. Unknown whether WCC, HCC and UHCC are taking actions to implement this recommendation.

40	<p>Territorial authorities review and strengthen their plumbing consent and code compliance processes (by 2024), to ensure there are clear accountabilities and consequences for compliance transgressions and ultimately a low risk of future illegal cross-connections.⁴</p> <p><small>Footnote 4: Adapted from WCC Mayoral Task Force Review on three waters, Recommendation 22.</small></p>	Currently being implemented	<p>Wellington Water led.</p> <p>GW understands that Wellington Water have implemented a number of changes to implement this recommendation via updating regional Standards for Water Services which took effect in December 2021. For example, colour coding of pipes. Sign-off procedures have been updated.</p>
41	<p>Greater Wellington and the relevant three waters agency engage with and express the importance of environmental consequences to the Plumbers, Gasfitters and Drainlayers Board, relevant professional regulatory bodies and industry organisations. These organisations shall:</p> <ul style="list-style-type: none"> • Together improve their systems of communication and reporting for disciplinary complaints • Become active and consistent in reporting discovered evidence of sub-standard tradesperson work, especially for instances of illegal wastewater to stormwater connections • Apply disciplinary action as set out under the defined offences in section 89 of the Plumbers, Gasfitters, and Drainlayers Act 2006. 	To be commissioned by deliverables	<p>New deliverable name: Letter to Plumbers, Gasfitters and Drainlayers Board</p> <p>GW led.</p> <p>Letter from GW at GM or higher level to CE of Chair of the Board.</p>
42	<p>The relevant three waters agency works with industry organisations to reinforce or improve standards, communication and training for best industry practice. Priority should be given to industries where there is high interaction with the stormwater and wastewater network (e.g., painters and cleaners).</p>	TBC	<p>Requires conversations between GW and Wellington Water for latest information.</p>
43	<p>Greater Wellington investigates and considers adopting new mechanisms to improve compliance (such as restorative processes and requiring bonds for earthworks and forest harvesting).</p>	To be commissioned by deliverables	<p>New deliverable name: Options paper for New Compliance Mechanisms.</p> <p>GW led.</p> <p>Paper which notes options for meeting the description in recommendation 43.</p> <p>To include recommendations on which options should be implemented and which are not feasible. To include, but not necessarily, be limited to examples listed in recommendation 43.</p> <p>Could include non-regulatory recommendations.</p> <p>May include permitted activities.</p>
44	<p>Greater Wellington and Mana Whenua work with territorial authorities to ensure that all large green spaces (e.g., parks, school grounds, golf courses) are managed to reduce the infiltration of fertiliser into groundwater and waterways, with plans in place (by 2023) that include public reporting.</p>	To be commissioned by deliverables	<p>New deliverable name: Stocktake and mitigation of fertiliser leeching in green spaces.</p> <p>GW led.</p> <p>1. Intended as a workshop on current fertiliser application, including GW, Wellington Water, WCC, HCC, UHCC. To include:</p> <ul style="list-style-type: none"> a. assessing awareness of and compliance with current PNRP rules b. current information available on fertiliser use and potential leeching risk c. area of land fertiliser is being applied to/mapping <p>2. To include TA managed land and privately owned green spaces such as golf courses</p>

			3. Workshop to provide written findings and recommend any next steps for mitigation and how these will be followed up.
45	<p>With input from the relevant three waters agency (by 2026), Greater Wellington and territorial authorities develop or amend regulatory instruments to help reduce the risk of contaminants entering the stormwater system.⁵ These could include:</p> <ul style="list-style-type: none"> • Painting and/or replacing old roofs to reduce the prevalence of heavy metals • Washing paint brushes or cars • Treating runoff from carparks and roads. <p>Footnote 5: Modified from WCC Mayoral Task Force Review on three waters, Recommendation 12.</p>	NRP Plan Change by 2024	Being managed by Greater Wellington through its regulatory programmes of work.
46	Greater Wellington and territorial authorities develop a scheme to support the painting or replacing of large-scale high zinc-yielding roofs, which could include education, advice and incentives.	To be commissioned by deliverables	<p>Two new deliverables, names:</p> <ul style="list-style-type: none"> • Promoting good practice by community and industry. • Reinstate Take Charge Programme. <p><i>Promoting good practice by community and industry</i></p> <p>Note: Promoting good practice by community and industry has been discussed between GW and PCC as the deliverable is also applicable for Te Awarua-o-Porirua WIP. This has identified that clarification with the former Whaitua Committee for Te Awarua-o-Porirua would be useful to define the good management practice intended in that WIP. This may result in a revision of the deliverable and potentially a different deliverable may need to be applied for just Te Whanganui-a-Tara.</p> <p><i>Reinstate Take Charge Programme</i></p> <p>GW led</p> <p>Take charge is the name of a previous education programme.</p> <p>The deliverable recognises that a number of education focussed activities could sit with this programme if reinstated. However, it would not necessarily need to be delivered via the former Take Charge programme exactly as it was, so this description should be considered a starting point rather than the final deliverable to be commissioned.</p>
47	Greater Wellington and territorial authorities develop a scheme to reduce the impacts on waterways from the washing of cars.	To be commissioned by deliverables	<p>New deliverable name: Car Washing Scheme</p> <p>GW led (to facilitate with TAs, Taranaki Whānui and Ngāti Toa)</p> <p>Intended to initially be a workshop with next steps to be identified and documented.</p>
48	Greater Wellington and territorial authorities investigate options to minimise the impacts of agrichemical sprays on waterways and report on options (by 2025).	To be commissioned by deliverables	<p>New deliverable name: Report on Sprays Impact on Waterways</p> <p>GW led.</p>

			<p>Intended to be a report which includes a stocktake of current information on use of agrichemical sprays in waterways in the whitua. Could include discussion with spraying contractors, possibly non-commercial users.</p> <p>To identify current state (including regulatory measures) and options for minimising impacts.</p> <p>To focus on non-regulatory options and to make recommendations on options to be implemented.</p> <p>This deliverable spans both W48 and W49.</p>
49	<p>Greater Wellington, territorial authorities, the relevant three waters agency and relevant industry groups develop and implement a pollution prevention programme. This will be outlined, delivered and monitored through various mechanisms.</p> <p>The programme must:</p> <ul style="list-style-type: none"> » Raise the awareness of the public about what they can do to reduce their impacts on harbour and stream health » Promote and incentivise industry good management practice, targeting high-risk land-use activities that contribute relatively high levels of contamination » Identify and target priority areas for contaminant reduction based on the identification of catchments that contribute to localised hotspot areas » Investigate opportunities to enable change by streamlining regulatory processes and removing barriers to businesses and industries initiating change » Work with specific industries/suppliers to increase understanding around risks from exterior chemical cleaning products, with an aim to reduce usage through point-of-sale warnings and changes in product care advice. 	To be commissioned by deliverables	<p>New deliverable name: Report on Sprays Impact on Waterways</p> <p>GW led</p> <p>See details in comments for W48.</p>
50	<p>Territorial authorities and the relevant three waters agency work together in high-risk areas to increase and prioritise regular street sweeping and sump clearance. They also need to investigate other opportunities to capture and clear contaminants from stormwater drains, including those to increase awareness and education with residents and businesses about how they can reduce contaminants (e.g., litter ending up in waterways).</p>	Currently being implemented	<p>Wellington Water has an education programme as part of the Stormwater Management Strategy. Looking to create memorandums of understanding to undertake street sweeping for water quality purposes.</p>
51	<p>Greater Wellington works with territorial authorities, Mana Whenua and landowners to identify and document (by 2026) the locations of potentially contaminated land, including landfills, and the risks to water quality and aquatic ecosystems.</p>	To be commissioned by deliverables	<p>New deliverable name: Contaminated Site Investigation and Remediation Plans Project.</p> <p>GW led.</p> <p>The first part of this is likely already being implemented via the SLUR database (including the HAIL database within this) but the component “and the risks to water quality and aquatic ecosystems” may not be implemented via this. To be discussed further within GW.</p>

			<p>Landfills - Identified 7 high priority closed landfill sites based on risk to water quality. Undertaking desktop assessment using risk assessment tool to assess climate change risk (which relates to water quality).</p> <p>This deliverable has been identified as requiring further assessment within GW.</p> <p>This deliverable spans W51 and W52.</p>
52	<p>Greater Wellington, territorial authorities and Mana Whenua work with owners of land with contaminated sites to further investigate, monitor, develop and implement remediation plans for those that pose medium-to-high risks to water quality and aquatic ecosystems. These plans are to be developed within five years of the identification of these sites, and those posing high risks to water quality are to be prioritised for remediation.</p>	To be commissioned by deliverables	<p>New deliverable name: Contaminated Site Investigation and Remediation Plans Project.</p> <p>GW led.</p> <p>See comments in W51 for details.</p>
53	<p>Agencies involved in the remediation of contaminated land affecting water quality and aquatic ecosystems include Mana Whenua in decision making and involve, consider and contain the visions and ideas of community groups in the planning and implementation, including as part of developing catchment plans (see Recommendation 13).</p>	Currently being implemented	<p>Will be included in the development of catchment plans.</p> <p>If a consent is involved, which it will be if affecting water quality and aquatic ecosystems, Mana Whenua will be involved via the regulatory process.</p>
54	<p>Greater Wellington, Mana Whenua, Hutt City Council, Upper Hutt City Council, the relevant three waters agency and the community actively work together to better protect the current and future sources (surface water and groundwater) of human drinking-water from emerging threats. They do this by investigating the risks associated with water quality and quantity and managing activities that may adversely affect this (such as land use and contaminant discharges). This may include developing district and regional plan provisions and other methods.</p>	NRP Plan Change by 2024	Being managed by GW through its regulatory programmes of work
55			
55.1	<p>The relevant three waters agency's (currently Wellington Water) Regional Standard for Water Services should incorporate WSUD stormwater and water conservation interventions. ⁽⁶⁾</p> <p>⁽⁶⁾ Modified from WCC Mayoral Task Force Review on three waters, Recommendation 7.</p>	NRP Plan Change by 2024	<p>Being managed by Greater Wellington through its regulatory programmes of work.</p> <p>Relates to first paragraph of the recommendation.</p>
55.2	<p>Also, territorial authorities' codes of practice and district plans should be amended to refer to the Regional Standard for Water Services (where applicable) by 2025, and should be mandatory for all developments (greenfield, infill/brownfield and re-development, including infrastructure). It should be supported through education programmes for contractors, community groups, and the design and engineering community.</p>	To be commissioned by deliverables	<p>New deliverable name: WSUD Education Programme</p> <p>Relates to second paragraph of the recommendation.</p> <p>GW led.</p>
56	<p>By 2022, Greater Wellington convenes a WSUD working group with Mana Whenua, territorial authorities, the relevant three waters agency and Waka Kotahi. The group will need to be funded to cover its wide-ranging work, which will aim to:</p> <ul style="list-style-type: none"> » Resolve barriers to WSUD in the Wellington Region » Identify opportunities to retrofit WSUD and green infrastructure into the existing urban environments, incorporating communities and catchment-level planning 	To be commissioned by deliverables	<p>GW led.</p> <p>Regional Stormwater Forum/Working Group set up – made up of GW, mana whenua, TAs, Waka Kotahi and Wellington Water.</p>

	<p>» Identify opportunities to ‘daylight’ piped streams and restore existing streams to promote community connection, habitat restoration and flood mitigation</p> <p>» Lead by example in promoting new WSUD initiatives. The working group should be part of Greater Wellington’s newly established regional stormwater forum. It should also collaborate with key stakeholders (such as developers and commercial, industrial and residential community groups), and help provide education and training material/ programmes for contractors.</p>		
57	By 2025, Greater Wellington, Mana Whenua and territorial authorities amend the relevant planning documents to retain, restore and enhance the natural drainage system – so that they require hydraulic neutrality and water-quality treatment in urban catchments through WSUD.	NRP Plan Change by 2024	Being managed by Greater Wellington through its regulatory programmes of work.
58			
58.1	Greater Wellington and Mana Whenua, together with territorial authorities and the relevant three waters agency, develop (by 2025) a comprehensive suite of regulatory and non-regulatory interventions for new property developments and infrastructure, to be implemented through WSUD via a catchment-management approach.	NRP Plan Change by 2024	Being managed by Greater Wellington through its regulatory programmes of work. Covers regulatory aspects of this recommendation, versus non-regulatory is W58.2.
58.2	<p>These interventions would include water impact assessments, rainwater/stormwater harvesting, rain gardens, constructed wetlands, green roofs, improved sump maintenance, strategic street sweeping and permeable pavements to reduce water-quality impacts and reduce peak wet weather flows. (7). Existing properties and infrastructure should be retrofitted using this WSUD approach whenever opportunities arise (e.g., at the end of an asset’s life).</p> <p>(7) Modified from WCC Mayoral Task Force Review on the three waters, Recommendation 6.</p>	To be commissioned by deliverables	<p>New deliverable name: Expanded Wellington Water’s Water Sensitive Design Guidelines 2019.</p> <p>Wellington Water led (but subject to discussion/confirmation with them).</p> <p>Proposed that the existing guidelines be updated if Wellington Water agree.</p>
59	<p>The relevant three waters agency:</p> <p>» Develops a standardised tool (by 2025) that can be used to assess a development’s potential contributions of contaminants and hydrological impacts</p> <p>» Recommends potential options to mitigate these effects using site-appropriate WSUD green infrastructure. This supports the global stormwater strategy (Recommendation 56) and Recommendation 58.</p>	Currently being implemented	GW understands that this work is already underway at Wellington Water regarding this.
60	<p>By 2025, Greater Wellington and territorial authorities amend the relevant planning documents so that all resource consents for property developments and infrastructure upgrades/repairs require the minimisation of stormwater effects and achieve hydraulic neutrality on-site. Where this is not possible or practical on development sites, a formal stormwater offsetting programme could be adopted to fund more efficient centralised systems in the public realm. (8)</p> <p>(8) Modified from WCC Mayoral Task Force Review on three waters, Recommendation 8.</p>	NRP Plan Change by 2024	Being managed by Greater Wellington through its regulatory programmes of work.
61	Territorial authorities amend regulatory documents, while working with the relevant three waters agency, to (by 2035) reduce the effects of stormwater flooding on public health, safety and property by further integrating the use of roads and open spaces (such as parks and sports grounds) to act as overland flow paths and flood storage. (9)	To be commissioned by deliverables	<p>New deliverable name: District Plan Flood Hazard Mapping and Rules</p> <p>UHCC, HCC, WCC led (subject to GW confirming this with them).</p>

	(9) Modified from WCC Mayoral Task Force Review on three waters, Recommendation 14.		GW anticipates that this recommendation will be implemented by updates to District Plans. GW has ongoing work providing up to date flood hazard mapping to all TAs for the Flood Protection Scheme areas. This deliverable spans W61 and W65.
62	By 2024, territorial authorities work with the relevant three waters agency to develop an approach to the ownership and management of green infrastructure for property developments, and ensure this infrastructure meets appropriate standards when being vested to council ownership. (10) (10) Modified from WCC Mayoral Task Force Review on three waters, Recommendation 10.	TBC	Requires conversations between GW and Wellington Water for latest information.
63	Territorial authorities ensure that (by 2024) all green infrastructure is adequately capitalised and depreciated to provide funding for ongoing maintenance and renewals. (11). (11) Modified from WCC Mayoral Task Force Review on three waters, Recommendation 11.	TBC	Requires conversations between GW and Wellington Water for latest information.
64	Greater Wellington works with Mana Whenua, community groups and territorial authorities to amend (by 2024) all relevant regulatory documents to ensure: » That river management enhances habitat restoration and stormwater treatment along the full length of developed rivers » The protection of swimming holes. Specifically, for Te Awa Kairangi/Hutt River, these objectives should be accounted for when undertaking flood protection works	NRP Plan Change by 2024	Being managed by Greater Wellington through its regulatory programmes of work.
65	Territorial authorities update the relevant regulatory documents (by 2025) to ensure they incorporate up-to-date flood hazard mapping and are supported by rules that prevent property development in high-risk areas.	To be commissioned by deliverables	New deliverable name: District Plan Flood Hazard Mapping and Rules. UHCC, HCC, WCC led (subject to GW confirming this with them) This deliverable spans W61 and W65. See comments in W61 for details.
66			
66.1	By 2024, Greater Wellington amends the relevant regulatory documents to include policies that aim to avoid unsuitable property development, with reference to setbacks from stream/river margins and hydraulic neutrality.	NRP Plan Change by 2024	Being managed by Greater Wellington through its regulatory programmes of work.
66.2	By 2025, territorial authorities incorporate rules in their district plans that: » Require WSUD, including hydraulic neutrality in any developments » Provide for buildings to be set back from river and stream margins (these setbacks are to provide for āhua and natural character) » Restrict development in known overland flow paths (in line with Recommendation 61).	To be commissioned by deliverables	New deliverable name: District Plans set backs and restrictions. UHCC, HCC,WCC led (subject to GW confirming this with them) GW anticipates that this recommendation be implemented by updates to District Plans.

67	<p>Greater Wellington amends the relevant regulatory documents by 2023, while working with Mana Whenua and territorial authorities to co-design operational guidelines for undertaking flood works on small urban streams, including those on private property. These guidelines would:</p> <ul style="list-style-type: none"> » Leave room for the river, floodwater and natural processes » Establish native riparian vegetation, which also gives effect to the values in the NPS-FM 2020. 	TBC	<p>GW led.</p> <p>GW is identifying any non-regulatory components as the recommendation is already covered under the PNRP.</p>
68	<p>Greater Wellington, territorial authorities, Mana Whenua and the relevant three waters agency develop plans (by 2030) for the managed retreat and adaptation of three waters infrastructure due to rising sea level.</p>	To be commissioned by deliverables	<p>New deliverable name: Three Waters Infrastructure Managed Retreat Plan.</p> <p>Wellington Water led (but subject to discussion/confirmation with them).</p> <p>GW anticipates that this will be a plan identifying all key infrastructure under threat and how its managed retreat (or adaptation) will be managed and funded.</p> <p>GW notes that this will be dependent on the Climate Change Adaptation Act and the Three Water Reforms implemented, although preliminary work could commence prior to this.</p>
69	<p>Greater Wellington supports and incentivises landowners wanting to restore wetlands and removes barriers for best-practice restoration of the mauri of degraded wetlands.</p>	To be commissioned by deliverables	<p>New deliverable name: Complex wetland restoration resource.</p> <p>GW led.</p> <p>An additional staff member at 1 FTE across the region.</p>
70	<p>Greater Wellington increases the resourcing available to implement and enforce the NPS-FM 2020, National Environment Standards and PNRP provisions about wetland identification, protection and restoration.</p>	Currently being implemented	<p>GW led.</p> <p>GW could support more complex wetland restoration activities if we had more inhouse expertise to support consent holders to get consent. The barrier is the information gathering and putting together the consent application.</p> <p>Need focus on wetland compliance (compliance monitoring for NES-F) and wetland identification.</p> <p>To be followed up once further prioritisation occurs within the new Rōpū Taiao Environment Group.</p>
71	<p>Greater Wellington supports positive relationships with wetland owners, including those with wetlands above the Parangārehu Lakes and at Mangaroa. It also provides assistance to protect and restore those wetlands.</p>	Currently being implemented	<p>GW led.</p> <p>Parangārehu Lakes - Parks and Land Management are engaging with the key landowner.</p> <p>GW is reviewing its communication and engagement and policy settings in relation to wetland owners.</p>
72	<p>Greater Wellington and Mana Whenua seek opportunities to develop and restore wetland habitat when managing and designing flood protection works and developing green spaces.</p>	TBC	<p>GW led.</p> <p>GW is identifying the extent to which this recommendation is being implemented through existing work including farm management plans and Riverlink.</p>

73	Greater Wellington maps all natural wetlands in the whitua, as required by the NPS-FM 2020. This is to be completed by 2024, rather than the NPS-FM deadline of 2030.	Currently being implemented	GW led. Work is underway. Mapped wet areas have been identified using aerial imagery across Kapiti Coast, Porirua and Wellington. These areas still need to be ground truthed to confirm which of the wet areas qualify as natural wetlands.
74	Greater Wellington addresses the issues raised in Te Mahere Wai on the recommendations about the Parangārehu Lakes area.	No applicable deliverables	Te Mahere Wai is being assessed and will be implemented, so there is not a separate WIP deliverable to commissioned/managed here as part of Te Whanganui-a-Tara WIP.
75	Greater Wellington identifies all fish passage barriers on public land by 2025 and private land by 2030.	Currently being implemented	GW led. This work is underway. Barriers on GWRC land have been identified.
76	Greater Wellington, together with Mana Whenua, community groups and territorial authorities, works with owners of fish passage barriers to remediate the highest-risk sites by 2040 and all other sites as soon as practical, but no later than 2045. Catchments highly valued for their indigenous fish and mahinga kai species are prioritised and Greater Wellington reports publicly on the identification and remediation progress.	Currently being implemented	GW led. This work is underway. It is being implemented through the Improving fish passage in the Wellington Region programme. The programme has GWRC funding, and Ministry for the Environment funding from the Freshwater Improvement Fund until June 2026.
77			
77.1	Greater Wellington and Mana Whenua work with territorial authorities to identify (by 2025) the spawning habitats of indigenous fish and mahinga kai species (e.g., inanga) in their rohe.	NRP Plan Change by 2024	Being managed by Greater Wellington through its regulatory programmes of work.
77.2	Greater Wellington and Mana Whenua work with territorial authorities to restore (by 2035) the spawning habitats of indigenous fish and mahinga kai species (e.g., inanga) in their rohe.	To be commissioned by deliverables	New deliverable name: Spawning habitat restoration project GW led. A new project which will need to be scoped to meet the requirements of the recommendation.
78	Mana Whenua and Greater Wellington work together and with input from relevant interested parties, including the three waters agency, to design a new water allocation regulatory regime that: » Gives effect to our understanding of Te Mana o te Wai » Provides for Mana Whenua rights and interests, which may include a specific allocation for iwi » Includes mātauranga Māori in its development and monitoring	NRP Plan Change post 2024	Being managed by GW through its regulatory programmes of work
79	Greater Wellington investigates options for iwi allocation in the current regulatory regime.	NRP Plan Change by 2024	Being managed by GW through its regulatory programmes of work
80	Mana Whenua and Greater Wellington work together to develop a framework of how Te Mana o te Wai (for water quantity) can be achieved and demonstrated. This includes agreeing on the process, measures and indicators of success. Note: This links to wider attribute work, as the measures can't sit with water quantity alone	NRP Plan Change by 2024	Being managed by GW through its regulatory programmes of work

81	Greater Wellington supports Mana Whenua to develop mahinga kai measures related to water quantity.	NRP Plan Change by 2024	Being managed by GW through its regulatory programmes of work
82	Greater Wellington, Mana Whenua and territorial authorities (including Porirua City Council) recognise, promote and provide for the mana of the Te Awa Kairangi/Hutt, Wainuiomata and Ōrongorongo Rivers as awa tupuna for Taranaki Whānui and Ngāti Toa Rangatira. They are treasured taonga and providers of wai ora and hauora (health and wellbeing) for the whole Whaitua Te Whanganui-a-Tara community and Te Awarua-o-Porirua community.	To be commissioned by deliverables	New deliverable name: Hui with mana whenua on how to recognise and provide for the mana of Te Awa Kairangi, Wainuiomata and Ōrongorongo Rivers. GW led (to facilitate with Ngāti Toa and Taranaki Whānui). To be a hui with Ngāti Toa and Taranaki Whānui with actions agreed, documented and implemented.
83	Greater Wellington includes in the PNRP the following water allocation limits for the Te Awa Kairangi/Hutt, Wainuiomata and Ōrongorongo Rivers: » Increase the minimum flows over time to 80 per cent of MALF in 50 years' time: <ul style="list-style-type: none"> • The first minimum flow increase must be included in the upcoming plan changes to be notified by 2024 and will apply from the mid-2030s, or whatever date is most appropriate, to ensure that the new minimum flow applies when the bulk water consents to take surface water in the major water supply catchments are renewed • Future increases in minimum flow must be stepped out in line with the bulk water consent renewals • We expect this pathway for increases in minimum flows to be revised as a result of further investigative work to understand the limits that would achieve Te Mana o te Wai, outlined in Recommendation 107. » Cap the amount of water available to be allocated through consents at the existing consented use.	NRP Plan Change by 2024	Being managed by GW through its regulatory programmes of work
84	Greater Wellington includes in the PNRP the following water allocation limits for all streams (outside the three major water supply catchments): » 100 per cent of MALF for the minimum flow » 30 per cent of MALF for the allocation limit.	NRP Plan Change by 2024	Being managed by GW through its regulatory programmes of work
85	Greater Wellington retains the current policy settings that allow the reallocation of any water that becomes available within the allocation limit to be reallocated.	No applicable deliverables	As this recommendation is to retain the status quo there are no deliverables to be commissioned to implement it.
86	Greater Wellington amends the PNRP policy and rule framework in Whaitua Te Whanganui-a-Tara so the region-wide permitted activity rule (R136) no longer applies to this whaitua. Note: Water takes for reasonable domestic use and animal drinking water are still authorised under section 14(3)(b) of the Resource Management Act. All other takes will require a resource consent.	NRP Plan Change by 2024	Being managed by Greater Wellington through its regulatory programmes of work.
87	Greater Wellington amends the PNRP through a plan change (by 2022) to ensure that all water takes requiring resource consent within Te Whanganui-a-Tara require metering. Electronic metering is required by 2027.	NRP Plan Change by 2024	Being managed by Greater Wellington through its regulatory programmes of work.

88	Greater Wellington reviews all existing consents in catchments outside the major water supply catchments that haven't expired within five years of the whitua plan change, to ensure that any updated allocation limits are applied to consents.	To be commissioned by deliverables	<p>New deliverable name: Water Take Consent Review.</p> <p>GW led.</p> <p>Per s128 of RMA.</p> <p>May also need to include a review/update of the GW charging policy if consent holders who were intended to be charged for the cost of the review.</p> <p>May require supporting hydrological model to identify MALF limits.</p> <p>Note that this work would ideally happen after limits have been amended in the PNRP.</p>
89	In collaboration with catchment communities, Greater Wellington develops a work programme designed for and with landowners (particularly for lifestyle block owners), to ensure they are aware of regulations on the use of water.	To be commissioned by deliverables	<p>New deliverable name: Education Programme for rural land owners</p> <p>GW led.</p> <p>Communication/engagement based activities to include lifestyle block owners and to be per the wording of the recommendation.</p> <p>Should also encompass other regulations relevant to rural owners, e.g. sediment and erosion.</p>
90	Greater Wellington undertakes assessments (e.g., through rural engagement surveys and targeted catchment investigations) to understand any potential changes in the way people are taking unconsented water (section 14(3)(b) of the Resource Management Act about takes).	To be commissioned by deliverables	<p>New deliverable name: Unconsented Water Use Assessments.</p> <p>GW led.</p> <p>Deliverable is still to be designed and agreed within GW but will need to be sufficient to inform decision making.</p>
91	Greater Wellington increases its flow monitoring in small streams in catchments where land use is changing significantly, or there is thought to be a relatively high potential for change (e.g., rural intensification). This is to establish whether any increase in water use is affecting flows and therefore values.	To be commissioned by deliverables	<p>New deliverable name: Whitua Monitoring Plan encompassing each FMU.</p> <p>GW led.</p>
92	<p>Territorial authorities and the relevant three waters agency implement universal residential metering to identify water wastage, reduce demand and enable more effective network management. To enable metering:</p> <p>» Territorial authorities will consult on how to fund water meters by 2025</p> <p>» The relevant three waters agency will install water meters. The whitua committee recognises that water metering enables a range of mechanisms for reducing demand. These include, for example: leak detection; information provision; the identification of potential excessive users for advice, support and/or fines; and volumetric charging.</p> <p>Agreement could not be reached on whether volumetric charging should be introduced as a lever for reducing demand. However, if it is, it will be important to ensure that:</p>	Currently being implemented	<p>Wellington Water are undertaking feasibility assessments and developing an indicative business case. Greater Wellington has funded the economic case.</p> <p>Has been added into the 30-year investment plan for the metropolitan councils. Some Councils have money in their LTPs for water meters.</p> <p>The emphasis should be on Wellington City due to the overall amount of water use.</p>

	<ul style="list-style-type: none"> » Water assets remain in public ownership » People can access enough water to flourish » Vulnerable communities are not disadvantaged » Water is respected as the giver of life and doesn't become a commodity » It prevents exploitation and excessive use by people who can afford it. 		
93	<p>The relevant three waters agency provides the community (by 2022) with information on and practical support for being more efficient with water. The information might cover:</p> <ul style="list-style-type: none"> » Technological solutions (such as the different uses of rainwater tanks) » Water-saving tips » The natural water cycle and where our water comes from. <p>The support could be provided through partnerships with catchment groups, through the Mangai Wai Ora (kaitiaki) programme (see Recommendation 101), professional associations and enterprises (e.g., a Sustainability Trust model).</p>	To be commissioned by deliverables	<p>New deliverable name: Additional funding to improve efficiency of water use by community.</p> <p>Wellington Water led.</p> <p>Will involve a request for funding through the GW LTP 2024 process.</p> <p>Note: Wellington Water are already undertaking work in this area with funding from WCC and HCC, but funding is not sufficient for full implementation.</p>
94	<p>The relevant three waters agency develops a programme by 2023 that engages with commercial water users (and starts with identifying the top 100).</p> <ul style="list-style-type: none"> » The programme: Identifies how water is used » Helps users to understand how their use compares to that of similar industries nationally and globally » Supports businesses to improve water efficiency and/or lower their demand. 	To be commissioned by deliverables	<p>New deliverable name: Additional funding to improve the water efficiency of commercial water users.</p> <p>Wellington Water led.</p> <p>Will involve a request for funding through the GW LTP 2024 process.</p> <p>Note: Wellington Water are writing a strategy that will lead to pilots with the small amount of funding they have. Likely to start with top 10 water users, including customer groups e.g., schools. Not enough to fully implement this recommendation unless it is expanded.</p>
95	<p>Greater Wellington and the relevant three waters agency investigate the current pricing for commercial water users (by 2023), to determine if changes in pricing mechanisms could help improve their water-use efficiency and identify the possible economic implications.</p>	TBC	<p>Requires conversations between GW and territorial authorities for latest information. Will need to be implemented by TAs as they issue water bills to commercial users.</p>
96	<p>Territorial authorities promote the use of rainwater tanks or alternative water-storage solutions for non-potable uses in new commercial and residential developments.</p> <p>Note: The majority of the committee strongly supported rainwater tanks being mandatory for new developments, but there was not consensus agreement. The committee did agree that more rainwater tanks in new developments would be beneficial and their use should be promoted.</p>	To be commissioned by deliverables	<p>New deliverable name: Promote use of Rainwater Tanks.</p> <p>GW led (to follow up with TAs).</p> <p>Will involve following up with TAs to ensure that existing RPS rainwater tanks requirements (policy 42) are incorporated into their respective District Plans or through some other mechanism.</p>
97	<p>Greater Wellington, territorial authorities and the relevant three waters agency incentivise (and support with educational material) the retrofitting of rainwater tanks to reduce demand and/or</p>	To be commissioned by deliverables	<p>New deliverable name: Rainwater Tank promotion and incentivisation initiatives.</p> <p>GW led (to initiate with TAs).</p>

	attenuate stormwater, prioritising suburbs that are prone to flooding due to capacity issues in the stormwater network. Territorial authorities provide a funding mechanism for willing property owners.		Will involve WCC, HCC and UHCC to each identify a project or suite of initiatives to meet recommendation 97 within their jurisdiction. TAs could request Wellington Water to come up with a consistent suite of initiatives across the TAs.
98	<p>The relevant three waters agency ensures that 100 per cent of the public drinking-water network is assessed for leakage (by 2030) and a plan (publicly available with progress reporting) is developed to repair and replace assets in the Wellington drinking-water network so that:</p> <ul style="list-style-type: none"> » By 2030, the network will have an Infrastructure Leakage Index (ILI) of 4.5 or lower » By 2040, the network will have an ILI of 3.5 or lower » By 2050, an ILI target of 2 or less will have been achieved and an ongoing cycle of maintenance will be in place to ensure this continues. 	Currently being implemented	Wellington Water are working with Councils to take a proactive approach to leaks. Wellington Water are asking for additional funding from Councils to reduce leakage. Uncertainty around funding will impact on meeting the targets in this recommendation.
99	The relevant three waters agency investigates additional water storage and harvesting water at high flows as soon as possible to ensure continued security of supply for municipal use.	Currently being implemented	Wellington Water led. These options are being considered as part of the water supply strategy work to be completed in 2023.
100	<p>The relevant three waters agency engages with the community and Mana Whenua (by 2023) on implementing community-scale, urban-water recycling for uses such as firefighting, the irrigation of parks and industrial/commercial applications. Initiatives to be considered should include:</p> <ul style="list-style-type: none"> » Collecting and storing community stormwater in public spaces for non-potable purposes » Using the continuous supply of treated wastewater for non-potable purposes. <p>Continued public education and long-term three waters strategies should also encourage a greater use of recycled urban water, and evaluate where existing networks can be optimised, replaced or retrofitted to make greater use of recycled water.</p>	Currently being implemented	Options for urban water recycling are being considered by Wellington Water as part of their demand management programme. Investment will be requested in the future. This is currently low priority.
101	<p>Greater Wellington provide resourcing for a Mangai Wai Ora (kaitiaki) programme (as outlined in Te Mahere Wai), to be developed and led by Taranaki Whānui and Ngāti Toa, alongside relevant industry bodies to train a workforce of kaitiaki to support the ongoing delivery of work on freshwater projects in the whaitua. The scope of the role could include:</p> <ul style="list-style-type: none"> » Freshwater and coastal monitoring using a range of scientific information, including mātauranga Māori, citizen science and community knowledge to inform the current state of water and the environment » Leadership in freshwater policy and plan development » Providing for cultural relationships with freshwater and coastal environments » Monitoring of mahinga kai and Māori customary use » Checking wastewater and stormwater infrastructure on private and public land, in support of three waters agency roving crews » Providing advice and support for industries on their potential impacts on water quality and mitigations 	Currently being implemented	<p>GW led.</p> <p>Kaiwhina Taiao positions were being progressed through kaupapa funding programme. Internships working with different people in the organisation. Currently under review pending Rōpū Taiao Environment Group implementation.</p> <p>Funding coming for specific mana whenua roles related to monitoring for 5 years. Roles could grow over time to encompass more activities. Under discussion with iwi on funding arrangements.</p> <p>This recommendation references Te Mahere Wai which is being assessed and implemented so may move to there to track implementation.</p>

	<p>» Supporting education on local streams, water quality and water usage in schools and the community</p> <p>» Clearing waterways of rubbish, riparian planting and reporting pollution.</p>		
102	<p>Mana Whenua, Greater Wellington and territorial authorities engage with relevant Workforce Development Councils (WDCs) to identify how the WDCs can best contribute, through their leadership roles in vocational education and training, to growing the workforce needed to take care of water.</p>	<p>To be commissioned by deliverables</p>	<p>New deliverable name: Workforce Development Councils workshop.</p> <p>GW led.</p> <p>Workshop involving the parties identified in recommendation 102. Content and format to be agreed with the parties in advance and an alternative mechanism may be identified as more appropriate.</p>
103	<p>Greater Wellington and territorial authorities continue to advocate and petition central government for new regulations to restrict the supply of water for water-bottling activities.</p>	<p>No applicable deliverables</p>	<p>Prior to the WIP being submitted, GW and TAs have supported the need for new regulations, via Local Government NZ and submissions on central government proposals. This is expected to continue.</p> <p>As the recommendation is to continue current approaches and does not identify any additional specific work to commission or manage, it has been classified as no applicable deliverables.</p>
104	<p>Greater Wellington advocates to central government in 2022 for the Emissions Trading Scheme to include the protection and restoration of natural wetlands, whether or not they are currently functioning wetlands.</p>	<p>To be commissioned by deliverables</p>	<p>New deliverable name: Letter to Minister of Climate Change advocating for wetlands inclusion in ETS.</p> <p>GW led.</p> <p>Letter from Chair GWRC to Minister for Climate Change requesting inclusion of wetlands in the ETS and outlining the benefits of this.</p>
105	<p>By 2022, Greater Wellington, Mana Whenua and territorial authorities (through the regional stormwater forum – see Recommendation 56) will advocate to central government to introduce with urgency rules that will phase out copper brake pads in vehicles by 2030 or earlier.</p>	<p>Currently being implemented</p>	<p>This recommendation is being managed by Greater Wellington as part of a wider work programme of zinc and copper related recommendations. It includes liaising with other Councils with similar concerns and jointly engaging with Ministry for the Environment to seek abolition of copper brake pads.</p>
106	<p>Greater Wellington partners with Mana Whenua to use mātauranga Māori in developing an understanding of water quality and quantity within the whaitua (e.g., our understanding of springs, aquifers and wetlands, and stream water-quality monitoring).</p>	<p>Currently being implemented</p>	<p>GWRC are employing three mātauranga Māori roles that will sit in Te Hunga Whiriwhiri that will work across the new Rōpū Taiao Environment Group looking at how we incorporate mātauranga Māori across our work programmes and decision making.</p>
107	<p>Greater Wellington partners with Mana Whenua to develop a comprehensive approach to understanding, managing and allowing for mahinga kai values throughout the whaitua. This should build on existing work by Mana Whenua and include:</p> <p>» Developing attributes for understanding whether the values are being provided for with Mana Whenua</p> <p>» Designing and implementing a comprehensive monitoring programme to provide information on current state and trends</p> <p>» Developing targets for mahinga kai throughout the whaitua</p>	<p>NRP Plan Change by 2024</p>	<p>Being managed by GW through its regulatory programmes of work</p>

	» Determining any management methods beyond those already recommended in this WIP that are required to achieve the targets.		
108	<p>Greater Wellington works with Mana Whenua and communities to develop measures for community participation in and connection to their water bodies – and in doing so build on the kaupapa framework, Te Oranga Wai, being developed by Mana Whenua (as outlined in Te Mahere Wai). ‘Community connection’ is important beyond narrow in-stream measures of environmental outcomes. It spans participation, mental health, spiritual connection, identity, sense of place, story and culture, and physical health needs.</p> <p>Note: This recommendation should only be undertaken once the kaupapa framework, Te Oranga Wai, being developed by Mana Whenua is complete and only if there are identified gaps in meeting wider community needs</p>	To be commissioned by deliverables	<p>New deliverable: Community Connection Measures Workshop.</p> <p>Workshop with subsequent implementation actions identified, agreed and carried through.</p> <p>As noted in the WIP recommendation 108, this work cannot take place until the Te Oranga Wai framework is complete.</p>
109	<p>Greater Wellington, Mana Whenua and the relevant three waters agency undertake, or continue to undertake, investigations to determine the changes in minimum water flows and allocation required to meet the long-term whaitua vision and Te Mana o te Wai. Investigations are to begin by 2022 and to be completed by 2027. These investigations should lead to a package of actions and a timetable for implementation. Their scope should be defined in detail and include, but not be limited to:</p> <p>» Prioritising catchments based on information requirements, values and pressures, which includes any catchment focal points for small stream investigations beyond the main water supply catchments</p> <p>» Mātauranga Māori and quantifying water flows to support Mana Whenua values and outcomes for catchments of interest</p> <p>» Testing alternative minimum water flow and allocation regimes alongside a range of municipal water supply infrastructure options</p> <p>» Facilitating the implementation of any new allocation regime and detailed assessments of its implications for municipal water supply infrastructure</p> <p>» Assessments of the implications of climate change on stream flows » Ecosystem function modelling</p> <p>» A review and revision of the Waiwhetū aquifer’s management</p>	NRP Plan Change post 2024	Being managed by Greater Wellington through its regulatory programmes of work.
110			
110.1	<p>Greater Wellington supports and invests in research (to begin by 2023) to better understand our aquifers. This includes investigations of the:</p> <p>» The hydrogeology of aquifers (such as groundwater sources and flow paths, and water availability)</p> <p>» Indicators of aquifer ecosystem health, such as stygofauna</p> <p>» Stressors on aquifer ecosystem health, such as contamination from E. coli and land uses</p> <p>» Risks to the sources of human drinking water, including from emerging contaminants.</p>	Currently being implemented	<p>Wellington Water led.</p> <p>We understand that Wellington Water is implementing the first bullet point. Undertook a drilling campaign across the aquifer to understand more about the hydrology and hydrogeology. Results captured in updated Hutt Aquifer Model (HAM5). It’s being used by Wellington Water for optimising use of the resource and enhancing infrastructure and supply resilience.</p> <p>Wellington Water has developed a GIS catchment risk tool that includes sites (e.g., HAIL sites, closed landfills) to understand the risks to the sources of drinking water across the aquifer.</p>

	Note: Ecosystem health encompasses the five elements of the NPS-FM 2020 – water quality, water quantity, habitat, aquatic life and ecological processes.		We understand Wellington Water is implementing the fourth bullet point. Wellington Water has lodged a source water risk management plan with Taumata Arowai around the risks to the sources of human drinking water. GW sampled for emerging contaminants after the Kaikoura earthquake (2017 & 2018). We may sample again in the future for the state of the environment reporting.
110.2	To support this research, Greater Wellington develops a monitoring network for aquifer ecosystem health by 2023.	To be commissioned by deliverables	New deliverable name: Aquifer ecosystem health monitoring (e.g. stygofauna). GW led. To have three stages: 1) Set up monitoring bores to sample what's in the groundwater (set up bores suitable for this – can't use current bores). 2) Research work to input into overall national conversation to develop indicators for groundwater. 3) Research work to follow on to identify the stressors to the indicators on groundwater dependent ecosystems.
111	Greater Wellington initiates (by 2025) and carries out more investigations into the nutrient sources of Te Awa Kairangi/Hutt River, to help in developing the actions needed in future to manage toxic algae. These investigations may include: » Nitrogen coming from tributaries and groundwater in the Pakuratahi and Mangaroa River catchments » Nitrogen entering the shallow, unconfined Upper Hutt aquifer » The contribution of sediment-bound phosphorus » Identifying the sources of fine sediment and its role in toxic algal bloom formation.	To be commissioned by deliverables	New deliverable name: Nutrient sources of Te Awa Kairangi/Hutt River Investigation. GW led. Will likely need to include substantial field work, collecting data and a spatial map of nutrient loads, etc. To culminate in a report. Could potentially be a PhD thesis.