WORKSHOP AGENDA

Date: **Wednesday, 20 May 2026**

Time: **9.30am**

Location: **Council Chambers**
Waikato Regional Council
Level 1, 160 Ward Street, Hamilton

Workshop Details:

- Update on Mana Whakahono ā Rohe: Ngāti Tūrangitukua
- Draft Water Security Plan

Order Of Business

1 KARAKIA TIMATANGA

Whakataka te hau ki te uru	**Cease o winds from the west**
Whakataka te hau ki te tonga	**Cease o winds from the south**
Kia mākinakina ki uta	**Bring calm breezes over the land**
Kia mātaratara ki tai	**Bring calm breezes over the sea**
E hī ake ana te atakura	**And let the red-tipped dawn come**
He tio	**With a touch of frost**
He Huka	**A sharpened air**
He hau hū	**And promise of a glorious day**
Tīhei mauri ora!	**Behold we live**

2 WORKSHOP PAPER(S)

2.1 MANA WHAKAHONO A ROHE AGREEMENT WITH NGĀTI TŪRANGITUKUA

Rā | Date: **11 May 2026**

Kaituhi | Author: **Ashley Eden, Kaiwhakarite**

Kaituku | Authoriser: **Mali Ahipene, Pou Tuhono**

TE ARONGA | PURPOSE

1. This report provides an overview of the Mana Whakahono ā Rohe (MWaR) negotiation between Waikato Regional Council (WRC) and Ngāti Tūrangitukua. It outlines the statutory context, summarises the matters proposed for inclusion, and presents a high-level staff assessment of those matters. The assessment considers statutory alignment, consistency with current council practice, indicative deliverability within existing programmes and resourcing, and the durability of provisions through future institutional change. The report also identifies key milestones and next steps. This is an early-stage report and does not seek decisions on MWaR content at this stage. It is intended to support councillor consideration of the proposed elements for inclusion and to seek initial feedback to inform the next phase of development.

KŌRERO WHAKATAKI | EXECUTIVE SUMMARY

2. Ngāti Tūrangitukua formally initiated a MWaR with Council on 7 April 2025. The process is governed by the Resource Management Act 1991 (RMA), which requires the agreement to be concluded within 18 months unless both parties agree otherwise, setting a statutory completion date of 7 October 2026.

3. Ngāti Tūrangitukua have proposed a range of matters for discussion, including Tongariro River flood management, pest management, biodiversity, and resource consent processes. Staff assessment indicates that most of these matters can be progressed within a MWaR, subject to careful framing to ensure they sit within Council's statutory functions, are practical and enabling, and can be implemented sustainably.

4. The report also notes the significant reform context, including the likely transition to a unitary local government model. This context has shaped the assessment, with a focus on ensuring that MWaR provisions are durable, adaptable, and aligned with both current and future institutional arrangements.

HOROPAKI | BACKGROUND

Statutory Framework

5. MWaR agreements are formal mechanisms under the RMA for councils and iwi authorities to agree how iwi will participate in council-led RMA processes. Once initiated by an iwi authority, councils are legally required to progress the agreement unless all parties agree

otherwise. MWaR must address mandatory matters, such as iwi participation in plan preparation and changes, statutory consultation, monitoring, conflict management, and dispute resolution; and may include optional matters like resource consent processes, notification, and other agreed functions.

6. The RMA sets out principles for MWaR development: enduring purpose, good faith, co-operation, open communication, efficient use of resources, and commitment to statutory timeframes. The Natural Environment Bill and Planning Bill carry forward MWaR agreements that existed or were initiated before the Bills receive Royal Assent, ensuring continuity through legislative transition.

Ngāti Tūrangitukua

7. Ngāti Tūrangitukua is a hapū of Ngāti Tūwharetoa, with ancestral ties to the Tūrangi area. Their area of interest includes the Tongariro River, Hirangi Stream, Hangarito Stream, Taupō Moana, and surrounding lands. The Tongariro riverbed is owned by The Tūwharetoa Maori Trust Board on behalf of the relevant hapu, including Ngāti Tūrangitukua. In addition, Ngāti Tūrangitukua are primary landowners in parts of the Tongariro River catchment, which is significant for flood management and river works.

8. Their Treaty settlement was enacted through the Ngāti Tūrangitukua Claims Settlement Act 1999, which recognised their mana whenua, provided redress for historical grievances, and established the Ngāti Tūrangitukua Charitable Trust and Māori Committee as governance entities. Ngāti Tūrangitukua has an existing MWaR with Taupō District Council (TDC) and is now seeking to formalise a MWaR with WRC.

Overview of Progress

9. Ngāti Tūrangitukua's initiation of the MWaR (attached) reflects a desire to formalise and build on the existing relationship with Council. Early discussions confirmed interest in drawing on aspects of the existing MWaR with TDC where appropriate, while also addressing matters specific to regional council functions.

10. An initial hui was held in May 2025 to discuss scope and expectations. Since then, staff have continued discussions and undertaken a high-level assessment of the matters proposed to inform ongoing discussions and ensure future drafting is grounded in statutory scope, operational implications, and future institutional arrangements. The process has used the TDC MWaR as a starting point for analysis and alignment.

11. Ngāti Tūrangitukua will be represented at the upcoming councillor workshop by Tina Porou, providing an opportunity to share their perspective directly with councillors.

Matters Proposed and Staff Assessment

12. While the TDC MWaR provides a useful starting point, it reflects a broader scope arising from territorial authority functions, such as reserve management, which are not directly transferable to WRC and fall outside Council's statutory role.

13. The matters proposed by Ngāti Tūrangitukua fall into four categories:

    a) **Mandatory RMA elements:** Participation in plan making, commissioner appointments, monitoring, conflict management, and dispute resolution. These align with existing

council practice and can be carried forward into a WRC-specific MWaR with appropriate modification.

b) **Discretionary matters:** Engagement processes, information sharing, and topic-specific areas of interest. MWaR provides an opportunity to bring greater clarity and consistency to these arrangements.

c) **Matters for exclusion:** Matters that sit outside WRC's statutory role, are not anticipated to be available under the future resource management framework, or are not sought by Ngāti Tūrangitukua for inclusion in a MWaR with WRC.

d) **New provisions:** Additional matters specific to WRC's regional functions.

14. This high-level assessment is preliminary and indicative only. Relevant staff responsible for each area have provided input. Detailed drafting is yet to occur; at this stage, staff are presenting the high-level assessment to bring councillors up to speed, seek comment, and answer questions ahead of detailed drafting.

Reform Context and Future Alignment

15. This MWaR is being developed during significant reform affecting both the resource management system and local government structure. MWaR provisions are not expected to continue in the same form under future legislation; however, existing arrangements and those already initiated are expected to continue during the transition period.

16. Government has confirmed a defined timeframe for WRC's institutional role. Proposed MWaR clauses have been assessed for statutory fit, durability, and transferability. The agreement focuses on enduring relationship mechanisms, rather than provisions tied to current structures or legislative settings.

17. Local government reform has signalled a move toward a unitary model, where regional and territorial authority functions are consolidated. Under such a model, a single successor entity would assume the functions currently held by WRC and TDC. It is therefore appropriate to seek alignment between the two agreements where practical, particularly in relation to structure, core principles, engagement processes, and RMA participation mechanisms—while avoiding unnecessary duplication or inclusion of matters outside WRC's statutory role.

Deliverability and Alignment with Council Practice

18. Staff have considered whether the proposed matters align with current council practice and can be delivered within existing programmes and resourcing. Mandatory elements are already embedded in council processes and can be implemented without significant change. Many discretionary elements are broadly consistent with existing practice, though they would benefit from clear structure and expectations.

19. Some areas of delivery depend on consistent and reliable engagement, particularly where council functions intersect with external parties, including iwi and landowners. The effectiveness of these relationships is a key determinant of whether work programmes can be delivered as intended.

Tongariro River Flood Management

20. Tongariro River flood management has been identified by Ngāti Tūrangitukua as a priority area for inclusion in the MWaR. This is a significant and appropriate focus given Council's

responsibilities for flood protection and river management within the catchment. Strengthening engagement in this area is desirable from a Council perspective, as effective delivery of flood protection and river works depends on timely engagement, land access, and clear communication with affected parties.

21. The MWaR provides an opportunity to establish a more structured and reliable framework for engagement, including clearer expectations around timing, communication, and issue resolution. This has the potential to reduce delivery risk, improve certainty in annual work programmes, and support more consistent and effective implementation of flood management activities.

Capacity and Engagement Resourcing

22. The TDC MWaR includes provision for ongoing resourcing to support Ngāti Tūrangitukua participation in Council processes. This reflects an established approach to enabling effective engagement where necessary to support statutory processes and delivery outcomes.

23. In the WRC context, resourcing for iwi engagement is focused on enabling effective engagement where it directly supports operational delivery—particularly for Tongariro River flood management activities, where delivery depends on timely engagement with Ngāti Tūrangitukua and coordination with landowners to secure access.

24. Enabling consistent and timely engagement is essential, as it supports greater certainty in work planning and reduces delivery risk. Staff consider that current engagement requirements can be accommodated within existing budgets through reprioritisation.

    If engagement requirements change, or if the MWaR gives rise to delivery expectations that cannot be met within existing programmes, any additional resourcing will be subject to Council's standard decision-making processes, including consideration through the Annual Plan and Long Term Plan. Accordingly, the MWaR will not create a standing or binding funding commitment.

Principles for Drafting the MWaR

25. Detailed drafting of the MWaR clauses will give effect to the assessment approach outlined in this report and the accompanying high-level assessment attachment. Staff will apply the following principles:

    - Practical and enabling
    - Aligned to WRC statutory responsibilities and operating context
    - Consistency with existing TDC commitments (where appropriate)
    - Clarity of roles and responsibilities
    - Avoidance of duplication and conflicting obligations
    - Appropriately resourced and deliverable
    - Durable and adaptable through reform

26. These principles ensure the MWaR is practical, fit-for-purpose, and capable of operating effectively within both the current and evolving statutory and institutional environment.

Milestones and Timeframes

27. The project is managed against a defined set of milestones, aligned to the statutory timeframe. Key steps include preparation of an initial draft, iwi review and feedback, legal review, and reporting to Council ahead of finalisation. The agreement must be completed by 7 October 2026 unless an extension is agreed.

Phase	Milestone	Timing / Deadline
Initiation	MWaR initiation received	7 April 2025 (completed)
Early engagement	Initial hui held (s58R RMA)	26 May 2025 (completed)
Continued Engagement and High-level Assessment	High level assessment of matters	June 2025 – May 2026 (completed)
Governance	Councillor workshop (overview)	May 2026
Detailed Drafting	Initial MWaR draft prepared	May – June 2026
Legal Assurance	Legal review of draft	July 2026
Governance	Draft MWaR to Council	August 2026
Completion	MWaR finalised (statutory deadline)	7 October 2026

Conclusion

28. The MWaR process with Ngāti Tūrangitukua presents an opportunity to formalise and strengthen the partnership between Council and mana whenua, while ensuring statutory obligations are met and operational delivery is supported. The high-level assessment confirms that most proposed matters can be progressed within a MWaR, provided they are carefully framed to align with Council's statutory responsibilities, are practical and enabling, and are deliverable within existing resources. The approach also anticipates future institutional change, seeking alignment with existing agreements where appropriate and ensuring provisions are durable and adaptable.

29. Councillor feedback on the proposed elements for inclusion is sought at this stage, ahead of detailed drafting. Staff will continue to engage with Ngāti Tūrangitukua and bring a draft agreement back to Council for consideration prior to the statutory deadline.

NGĀ TOHUTORO | REFERENCES

Ngāti Tūrangitukua Claims Settlement Act 1999 | New Zealand Legislation

Mana Whakahono ā Rohe Ngāti Tūrangitukua and Taupō District Council

ĀPITIHANGA | ATTACHMENTS

1. **Ngāti Tūrangitukua Initiation Letter (Doc: #35903340)** ⇩
2. **Ngāti Tūrangitukua High-Level Assessment (Doc # 35866787)** ⇩

NGĀTI TŪRANGITUKUA
"Ka hui tātou te pukai matakirikiri o Tūrangitukua

7 April 2025

Chief Executive

Waikato Regional Council

160 Ward Street
Hamilton Central
Hamilton 3204

Tēnā koe Chris,

Re: Initiation of Mana Whakahono ā Rohe Agreement between Ngāti Turangitukua and Waikato Regional Council

Ngāti Turangitukua formally invites Waikato Regional Council to enter into a Mana Whakahono ā Rohe agreement under Section 58O of the Resource Management Act 1991 (RMA). This agreement will provide a framework for strengthening our relationship and ensuring meaningful participation by Ngāti Turangitukua in resource management decision-making processes within our rohe.

This Mana Whakahono ā Rohe will support the council's statutory obligations, including recognising our role as kaitiaki, enhancing collaboration, and ensuring that decisions affecting our taiao (environment) align with our values, mātauranga Māori, and aspirations.

Proposed Initial Hui

To begin this process, we request a hui within 60 working days of receiving this initiation, in accordance with Section 58O(3) of the RMA. We propose the following:

Date: 29th April 10.00am-11.30am
Location: Online
Agenda:

- Opening karakia and introductions
- Purpose and objectives of the Mana Whakahono ā Rohe
- Discussion on the scope and priorities for collaboration
- Agreeing on the negotiation process and timelines
- Next steps and scheduling follow-up meetings

We look forward to working together in good faith, in alignment with the guiding principles of Mana Whakahono ā Rohe under Section 58N of the RMA, which emphasise collaboration, transparency, and enduring partnership.

Please confirm receipt of this letter and provide details for the initial hui at your earliest convenience.

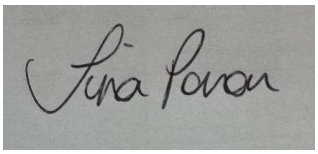
For further discussion, you may contact Tina Porou at tina@poipoia.co.nz.

NGĀTI TŪRANGITUKUA
"Ka hui tātou te pukai matakirikiri o Tūrangitukua

We look forward to your response and to progressing this important kaupapa together.

Nāku noa, nā

Tina Porou



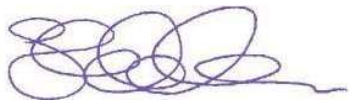
Ngāti Tūrangitukua Environment Committee Chair

tina@poipoia.co.nz

taiao@turangitukua.co.nz

021 931 787

Lauren Fletcher



Ngāti Tūrangitukua Charitable Trust Chair

lauren@turangitukua.co.nz

021 224 8268

Amy Walker

Ngāti Tūrangitukua Māori Committee Chair

ntmcchair@turangitukua.co.nz

0272885091

Ngāti Tūrangitukua and Waikato Regional Council MWaR Assessment

This high-level assessment has been prepared by Waikato Regional Council (WRC) staff using the Taupō District Council (TDC) Mana Whakahono ā Rohe (MWaR) as the starting point. Each clause from the TDC MWaR has been reviewed for its applicability to WRC, with careful consideration given to WRC's statutory responsibilities, operational context, and the current reform environment.

A key lens for this assessment is the anticipated transition to a unitary local government model, under which a single successor entity is likely to assume the functions currently undertaken by both WRC and TDC. Accordingly, clauses have been assessed not only for statutory fit and operational deliverability within WRC's current operating environment, but also for their durability, transferability, and ability to operate effectively within future institutional arrangements. This includes supporting consistency across agreements that may ultimately sit within a single organisation, minimising duplication or conflicting provisions, and ensuring that relationship mechanisms can operate cohesively across functions currently divided between regional and territorial authorities.

Where TDC already has established commitments with Ngāti Tūrangitukua, the recommended approach is to align with those commitments where appropriate, avoid unnecessary duplication, and ensure that any provisions included reflect WRC's distinct statutory role and add value. Provisions can be framed to be enabling rather than prescriptive, with a focus on areas where WRC has a clear statutory or operational responsibility, while also supporting durability through institutional change.

From a resourcing perspective, all provisions identified for inclusion are considered capable of being delivered within existing work programmes. Where additional resourcing is required to implement any provision, the agreement can be framed so that such decisions remain subject to Council's standard financial decision-making processes, including consideration through the Annual Plan and Long Term Plan processes. This provides confidence that the activities contemplated by the agreement will not create unfunded obligations, while also enabling both this Council and any future successor council to determine whether additional resourcing should be allocated over time.

Detailed drafting of the MWaR clauses will give effect to the assessment approach outlined above, ensuring that provisions are practical, enabling, appropriately resourced, and aligned to WRC's statutory responsibilities and operating context. Drafting will also seek to support consistency with existing TDC commitments where appropriate, maintain clarity of roles and responsibilities, minimise duplication or conflicting obligations, and ensure the agreement remains durable and workable through future institutional and legislative change.

Mandatory and Core Clauses for Inclusion

The clauses within this category are mandatory under the Resource Management Act 1991, or are administrative provisions considered necessary to ensure completeness and robustness of the agreement.

Clause	Statutory Context	Intent	Drafting Principle Recommendation
Parties	Mandatory	Identify parties	Draft to be practical, enabling, and aligned to WRC's statutory responsibilities; ensure clarity and durability.
Preamble	Discretionary	Acknowledge mana whenua	Ensure recognition of mana whenua; align with WRC context; avoid duplication; maintain clarity of roles.
Aspirations	Discretionary	Set relationship direction	Frame as enabling and practical; align with TDC where appropriate; avoid duplication; ensure clarity and durability.
Purpose	Discretionary	Establish statutory purpose	Ensure statutory alignment and clarity; provisions must be practical, durable, and adaptable to reform.
Guiding Principles	Discretionary	Guide implementation	Reference statutory principles; ensure clarity, durability, and alignment with WRC's context.
RMA Planning Processes	Mandatory	Enable participation in planning	Draft to be practical and enabling; align with WRC functions; support consistency with TDC where appropriate.
Hearing Commissioners	Mandatory	Support tikanga-informed decisions	Ensure clarity, enablement, and alignment with WRC's statutory responsibilities; support consistency with TDC.
Monitoring – SOE	Mandatory	Environmental monitoring	Frame as a future area of collaboration; maintain clarity of roles

Monitoring – Compliance	Mandatory	Compliance engagement	Ensure provisions are practical, enabling, and aligned with WRC's statutory responsibilities; maintain clarity.
Conflicts of Interest	Mandatory	Ensure integrity	Draft to maintain clarity, transparency, and alignment with statutory guidance; ensure durability.
Dispute Resolution	Mandatory	Manage disputes	Ensure process is practical, enabling, and clear; maintain durability and adaptability through change.
Term and Termination	Mandatory	Provide certainty	Draft to ensure clarity, durability, and statutory alignment; provisions must be practical and enabling.
Review and Amendment	Mandatory	Ensure adaptability	Ensure provisions are durable, adaptable to reform, and practical; maintain clarity and alignment with WRC context.
Notices / Communication	Discretionary	Clarify communication	Draft to be practical, clear, and enabling; ensure provisions are durable and aligned with WRC's context.
Other Interests and Agreements	Discretionary	Recognise overlaps	Ensure clarity of roles; avoid duplication or conflict; align with TDC where appropriate; maintain durability.
Boundary / Rohe	Discretionary	Define scope	Frame as practical and clear; acknowledge boundaries for information; avoid duplication; ensure durability.

Non-Mandatory / Discretionary Clauses for Potential Inclusion

These clauses, drawn from the TDC MWaR, are not mandatory under the RMA but are presented for consideration where they fall within WRC's statutory scope and can be implemented in a practical and proportionate way.

Clause	Intent	Assessment	Drafting Principle Recommendation
Induction	Build shared understanding	Useful to formalise expectations, but prescriptive requirements are considered unnecessary	Draft to be enabling, practical, and aligned with WRC's statutory responsibilities and operating context.
Training and Capacity Building	Support capability	TDC already provides for this; replication risks duplication. However, WRC has a role where engagement supports delivery	Align with TDC commitments where appropriate, avoid duplication, and ensure provisions are deliverable and enabling.
Resourcing / Engagement Support	Support participation capacity	Directly linked to delivery of key WRC functions where delivery of the activity is dependent on engagement	Frame as an enabling provision, appropriately resourced, and subject to Council's financial decision-making process.
Sites of Significance	Protect sites	Existing TDC processes already in place; separate WRC processes would duplicate effort	Align with TDC processes, participate where relevant, and maintain clarity of roles and responsibilities.
Resource Consents	Improve transparency	Limited WRC consenting activity locally; priority is timely notification	Draft to minimise duplication, use existing WRC systems, and ensure practical, future-focused implementation.

Discretionary Clauses for Exclusion

The following clauses from the TDC MWaR are not appropriate for inclusion in a WRC MWaR. They fall outside WRC's statutory role or are not durable in the current reform context, or are not sought by Ngāti Tūrangitukua for inclusion in a MWaR with WRC.

Clause	Reason for Exclusion
Transfer of Powers (s33 RMA)	Not a durable mechanism under reform; uncertain future applicability
Co-governance Committees	Not sought by Ngāti Tūrangitukua
Reserve Management	Territorial authority function

Urupā Maintenance	TA and/or landowner responsibility
Three Waters Infrastructure	Outside WRC mandate
District Functions (e.g. road naming)	Outside WRC statutory role

Clauses Unique to WRC MWaR for Potential Inclusion

Ngati Turangitukua expressed their interest in including provisions in relation to the Tongariro River Scheme and Pest Management. These provisions are specific to WRC's regional role and current operating context and are not included in the TDC MWaR.

They are grounded in areas where WRC has a clear operational responsibility, and where improved engagement supports delivery outcomes.

Clause	Intent	Staff Assessment	Recommendation
Tongariro River Flood Management	Enable structured engagement	Priority area; delivery of scheme work is dependent on consistent engagement and land access	Draft to focus on practical, enabling engagement processes (not technical commitments); alignment with WRC statutory responsibilities, and durability through institutional change.
Pest Management	Recognise iwi interests	Responsibilities vary across land tenure (private, Māori, Crown); WRC role is coordination and regulation rather than delivery	Focus on coordination, alignment across land tenure, and support rather than operational responsibility

2.2 WATER SECURITY ACTION PLAN

Rā | Date: **1 May 2026**

Kaituhi | Author: **Thomas Wilding, Team Leader - Hydrology And Groundwater**

Kaituku | Authoriser: **Tracey May, Director, Science, Policy and Information**

TE ARONGA | PURPOSE

1. To review the Draft Water Security Action Plan for the Waikato region ahead of consideration by the Strategy and Policy Committee at the 18 June 2026 meeting.

KŌRERO WHAKATAKI | EXECUTIVE SUMMARY

2. Water Security is a high priority for the Waikato region, and Beca have been contracted to develop a Water Security Plan by June 2026.
3. The Draft Water Security Action Plan sets out a pathway to prioritise improvements that strengthen drought management and water resource management for the Waikato region.
4. The Piako River and the Waikato River were identified as priority catchments where draft levels of service are not being met or at risk.
5. The Water Security Plan identifies strategic investment options that can materially change supply, storage, reuse, allocation, or efficiency at scale, such as on-farm storage ponds or non-potable wastewater reuse. These can be triggered under an adaptive planning pathway.
6. A base set of actions were identified to improve water security, such as leak detection and efficiency. The base set of actions do not have specific triggers under the adaptive pathways because these should happen regardless.

BACKGROUND

7. The WRC Strategic Direction (2026-2036) includes outcomes for "*Sustainable and reliable access to quality fresh water*". This Water Security Plan is the next step in progressing that outcome - "*Deliver the preferred water security plan actions once they are adopted in June 2026*".
8. Water security was identified as a critical driver in the Waikato Freshwater Strategy (2017). Additionally, the Mayoral Forum, Waikato Regional Council (WRC), stakeholders and the wider community identified water security as a regional priority.
9. WRC produced a Water Security Strategy for the Waikato Region (Council endorsed the strategy in June 2024) to achieve high level outcomes including (from page 17 of the Strategy):
    - Giving effect to the requirements of Te Ture Whaimana o Te Awa o Waikato (the Vision and Strategy for the Waikato and Waipa Rivers).
    - Improving management of supply (e.g. storage) and demand (e.g. efficiency) to reduce water deficit periods.
    - Improving ecosystem resilience (e.g. riparian benefits).

10. A regional Water Security Management Plan was recommended by the Strategy to identify actions, roles and responsibilities and considers a range of information gaps and management options (from page 20 of the Strategy).

11. The Business Case for this Plan was supported by Council and funds were provided over the first two years of the LTP (July 2024 to June 2026). Beca were selected (via competitive tender) to develop the Water Security Plan.

12. The Strategy and Policy Committee endorsed the Project Plan and the approach to communications on 19 June 2025 (online agenda), which set out milestones for the project, linkages to other WRC projects (e.g. Climate Action Roadmap), plus risks (e.g. local government reforms). That followed a Council Workshop on 27 May 2025. The endorsement of the project plan marked the completion of last years' KPI for the Chief Executive.

13. Subsequently, Council set the following KPI for the Chief Executive for the 25/26 year:

    "*Develop a water security plan for approval by the appropriate committee by 30 June 2026. The plan will include a preferred pathway and programme using an adaptive planning approach, a monitoring framework to support implementation, identify specific actions, roles, and responsibilities and address information gaps and provide management options*."

14. The scope of the project is to build on the Water Security Strategy and the past work of the region to develop a programme of actions which includes an adaptive planning pathway response to the regions' water security challenges. This extends across the whole region and all major sectors. This is not a limit setting plan - how much water people can take is covered under the policy and rule framework of the regional plan.

WATER SECURITY ACTION PLAN

15. The Water Security Action Plan sets out a pathway to prioritise improvements that strengthen drought management for the Waikato region.

16. Options across policy, infrastructure, data and partnerships were identified. Infeasible options were removed. Feasible options were assessed against service reliability, economics, regulation, ecology, and social and cultural values. Groups of options were then tested with stakeholders.

17. From the outset, councillors highlighted the rapid change in the water space and the implications for water security planning. So rather than commit to a fixed course of action, irrespective of national reforms, floods or oil crises, Beca have set out an *adaptive* pathway. That sets out the pathway going forward and the triggers for a change of direction.

18. Water security is a bigger problem in areas with low rainfall and high demand. It would be a mistake to invest in the same options for areas with high rainfall. The region-wide approach therefore sets out which catchments are a priority for water security action, starting with:

    (i) **Piako** River catchment (Hauraki plains)

    (ii) **Waikato** River catchment (Tongariro to Port Waikato)

19. The Piako and Waikato have already reached the triggers identified in the draft pathways, as set out in the Water Security Action Plan.

20. A Catchment Leadership Group would be established for each of the two priority catchments. They would be responsible for developing a Level of Service agreements for communities and ecosystems in their respective catchments. Action is then triggered when

those Levels of Service are threatened. New assets can then be put in place to meet the design Level of Service.

21. The Water Security Plan identifies strategic investment options that can materially change supply, storage, reuse, allocation, or efficiency at scale, including:

    - On-farm storage ponds
    - Non-potable wastewater reuse
    - New or expanded reservoirs
    - Managed aquifer recharge
    - Desalination
    - High-security catchment transfers

22. It is important that adaptive pathway triggers allow for the lead-in time for the actions being considered, which can take decades to reach fruition (scoping, feasibility, consenting, etc.).

23. A base set of actions were identified to improve water security that range from business as usual (e.g. municipal drought management plans) to minimum new interventions (e.g. leak detection audits). The base set of actions do not have specific triggers under the adaptive pathways because these should happen regardless (subject to an approval process for new work).

24. Roles and responsibilities are set out in the plan, including:

    - Waikato Regional Council play a critical role in water security as the regulator of water use. Te Ture Whaimana and national legislation provide over-arching direction to regional council.
    - For most people, water flows from the tap every day because of the hard work by district councils to build and maintain water supply networks.
    - For most catchments, how much water is used is driven by the day-to-day decisions of rural, industrial and energy sectors, in addition to their long-term investment decisions on water infrastructure.
    - The formation of Catchment Leadership Groups would enable local communities, water users and mana whenua to actively participate in shaping the Action Plan for their respective catchment.

25. Waikato Regional Council alone does not have the answers and will need to gain mandate and support from a range of public and private stakeholders and iwi partners, many of whom will need to make investments of their own to improve water security.

ĀPITIHANGA | ATTACHMENTS

1. Draft Water Security Action Plan (Doc # 35630317) ⇩

Waikato
REGIONAL COUNCIL
Te Kaunihera ā Rohe o Waikato

Water Security Action Plan

Draft for Councillor workshop

May 2026

Waikato Regional Council

Contents

Introduction

1.1 Why do we need a Water Security Plan?

Water is fundamental to Waikato's economy and community wellbeing. Recognised as a critical regional driver, water security is a strategic priority for the Waikato region.

The Water Security Strategy for the Waikato Region (2023) recommended the development of a multi-agency, regional-scale water security plan that identifies actions, roles and responsibilities for key agencies or sectors to provide our communities effective water security solutions.

This is the Waikato Region's Water Security Action Plan. The plan recognises that an adaptive approach is required to managing water security that is specific to each catchment but based on a common model / method. For two of Waikato Region's catchments, the Piako and the Waikato, there is some urgency due to already high levels of demand, environmental issues such as recent drought events and potential changes in water flows. This plan sets out a series of immediate operational actions that would improve water security in those catchments as well as a longer term staged approach, should the challenges become more acute as a consequence of issues like climate change or increased demand.

1.2 What is our plan?

The Water Security Action Plan is tackling a critical challenge: water security. It takes a whole-of-system approach to deliver an integrated programme of actions aligned with Waikato Regional Council's Water Security Strategy objectives by:

- **Upholding** Te Ture Whaimana o te Awa o Waikato and Te Mana o te Wai by ensuring freshwater ecosystems remain resilient during water deficits.
- **Improving** our understanding of water demand and its economic significance.
- **Addressing** increasing constraints on water availability through a climate change lens.
- **Shifting** our thinking from water abundance to water scarcity.
- **Planning** for growth within water limits and creating future "headroom" for growth.
- **Enhancing** knowledge of water movement and retention in the landscape for longer.

The Water Security Action Plan acknowledges the fact that Waikato Regional Council alone does not have the answers and will need to gain mandate and support from a range of public and private stakeholders and iwi partners, many of whom will need to make investments of their own to achieve the strategic outcomes and implement the plan.

This plan focuses on actions required to maintain water security in the lead up to and during droughts. It will inform future thinking about water allocation policy but is not a review of the Waikato Region's water allocation framework.

Our plan on a page

Key Outcomes

- Deliver action with clear owners, timelines, and measurable outcomes
- Build on what already works and scale proven initiatives
- Lift operational efficiency and demand management
- Prioritise by risk and use adaptive pathways with clear decision triggers
- Integrate catchment-wide outcomes with strong governance and partnerships

Operation actions to improve efficiency

- Review guidelines for irrigation efficiency
- Review current consent holders water use efficiency
- Protect groundwater from contamination rendering it unsuitable for water supply
- Engage stakeholders in decision making processes
- Promote public awareness campaigns for water conservation
- Shade streams to increase resilience to drought and effects of water use

Risk assessment identified Piako & Waikato at highest priority

Strategic options when needed

- Managed Aquifer Recharge
- Construct new reservoirs or expand existing
- Treat wastewater for non-potable uses
- Encourage On-Farm Storage Ponds
- Desalination
- Small Desalination
- High Security Catchment Transfers

1.3 Regional context and current system performance

The Waikato region experienced its driest decade between 2011 and 2021. In recent years, this has been accompanied by more frequent short dry periods, higher summer temperatures, and increasingly variable rainfall patterns. Water demand is highest during summer, which coincides with the time when rivers and streams are at their lowest flows. In several catchments, river flows have dropped to the low flow trigger levels set out in the Waikato Regional Plan, activating water take restrictions and placing increased pressure on available water supplies.

To better understand how the regional water system is performing under these conditions, we undertook an Integrated Systems Assessment. Drawing on available data and stakeholder input, the assessment provided a shared baseline view of water availability, demand, and system resilience across the Waikato region. It highlights where pressures, gaps, and risks exist, and has informed the development of the Water Security Action Plan.

Water availability and system pressure

The assessment confirmed that summer is the most pressured period for rivers and aquifers. In some catchments, water allocation exceeds what can be sustainably supplied, while other areas retain capacity. Minimum flow requirements are not always met, with low flow periods lasting from days to weeks. Current allocation thresholds and minimum flow settings may not fully protect environmental and cultural values, particularly during prolonged dry conditions. Confidence in water availability estimates is further constrained by gaps in monitoring and data in some catchments.

Reduced river and stream flows place stress on ecosystems, particularly aquatic habitats and wetlands. Prolonged dry periods also increase soil vulnerability, making dry ground more prone to erosion and, in some cases, causing soils to become water repellent following drought. These effects can persist even after rainfall returns, slowing recovery.

Demand trends and restrictions

Water demand peaks in summer, particularly for agricultural use, and often increases just as supply declines. Irrigation demand has grown steadily over recent decades, and population growth and expanding industry are expected to add further pressure over time. In response to tightening water availability, some users have sought to reduce the likelihood or severity of restrictions by securing additional water take permits or transferring existing consents.

Where rivers fall below minimum flow thresholds, water use restrictions are applied to protect river health and maintain essential supplies. Restrictions can affect connected catchments, increasing monitoring and regulatory complexity. In some catchments, restrictions occur for up to 18% of the time, while most experience restrictions around 3.5% of the time. The average duration of restrictions is approximately 10 days, with some lasting up to 18 days. Operational measures, such as sprinkler bans, have been used to support minimum flows during periods of high system stress.

Consequences and compounding impacts

Dry conditions have had widespread and compounding impacts across the region. Agricultural productivity has been affected through reduced pasture growth and lower crop yields, with flow on effects for rural communities and the wider regional economy. Extended low flow periods have also reduced the reliability of hydropower generation, adding pressure to regional energy supplies during times of high demand. Droughts occur regularly, and when followed by further dry periods, recovery times are extended and impacts compounded.

Looking ahead

Climate change projections indicate that by 2090 the time spent in drought could range from little change to more than double current levels, depending on the climate model and emissions scenario. Areas such as Hauraki District, Matamata, and Thames–Coromandel are especially likely to face an increased risk of drought. Future conditions are expected to include higher temperatures, more variable rainfall, and increasing pressure on water demand.

In addition, approximately 20 percent of the flow of the Waikato River is water diverted from the Whanganui River catchment via the Tongariro Power scheme. Resource consents for this scheme are set to expire in 2039 and there is no certainty that they will remain in their current form.

Implications for the Water Security Action Plan

Taken together, the regional context and system performance assessment show that the Waikato region will need to strengthen its water management systems at both a regional and catchment level to cope with increasingly variable and intense dry conditions. This means the region will need to work together to:

- Prioritise improved monitoring and information in ungauged or data limited catchments.
- Review allocation thresholds and minimum flows to better reflect ecological and cultural needs and seasonal realities.
- Target actions in catchments where water deficits and restriction durations are most persistent, particularly in summer.
- Prepare for increasing variability by setting clear allocation limits, triggers, roles, and staged response pathways.
- Support transparent, easy to audit governance and accessible reporting.
- Integrate cultural, environmental, and economic values into decision making.

Proactive planning and investment in resilience will be essential to safeguard water security for communities, ecosystems, and the regional economy as climate pressures continue to intensify.

1.4 Waikato Region's water security challenges

Communities across the Waikato are increasingly concerned about how climate change is reducing water availability and the resulting impacts on freshwater ecosystems, urban water supply and demand, electricity generation, primary sector productivity and future regional growth. Water security is both affected by, and a critical part of how we respond to, climate change. Any climate action planning must therefore consider water security, and vice versa.

Technical work completed so far confirms that water security is a regional issue with district and catchment specific differences. While the primary focus is on water quantity, it also recognises the interdependence between water quantity, water quality and the broader environment.

Water management and governance are currently undergoing major reform. The National Policy Statement for Freshwater Management, planning system reform and the government's Local Waters Done Well programme will likely require significant updates to the Waikato Regional Policy Statement and Waikato Regional Plan and possibly resource consents as well. In addition, the government's Local Waters Done Well reforms will reshape the political and operational context for water security in the region with new entities in decision making roles for community water supplies. These reforms will take years to fully implement, and their final form remains uncertain. For this reason, the Water Security Action Plan does not address detailed resource allocation policies or governance issues. However, given ongoing reforms to the water sector, Local Government Act and Resource Management Act, interaction with future water services entities needs further consideration in the implementation of the Water Security Action Plan. This may involve revisiting functions of organisations, enhancing cross agency collaboration and adapting to future consenting and regulatory frameworks.

While these organisational and legislative changes are important, the critical point is that water security is an enduring issue, irrespective of the framework used to manage or deliver water. The Waikato Region's Water Security Strategy shows that climate driven reductions in water availability, increasing demand, environmental pressures and growth are already creating constraints across the region. These pressures will continue, and in many cases intensify, regardless of institutional changes.

To support the Waikato's long term wellbeing, water security must therefore remain a critical regional priority. Legislative reform may change how services are delivered and by whom, but it does not change the underlying need for a coordinated, future focused approach that ensures reliable, resilient and sustainable water supplies for our communities, environment and economy.

This Water Security Action Plan is not a statutory document. It does not provide detailed regional water allocation accounting or specific local government infrastructure or policy recommendations. Instead, it outlines high level actions, guidance and a decision making process that might be undertaken by local government and other stakeholders, with Waikato Regional Council in a facilitation and co-ordination role.

1.5 Roles and responsibilities

The Water Security Action Plan sets out a clear commitment to delivering catchment specific solutions that reflect the needs, values and priorities of each community. Key to this plan is having a common and aligned understanding across all stakeholders in each priority catchment about the outcomes we are expecting to achieve for the community and environment of that catchment. These are referred to as **"Levels of Service (LoS) Objectives."**

The Waikato Regional Plan sets out the region's current objectives. However, these objectives are not always sufficient for catchments where increasing demand and changing environmental, cultural, or climatic conditions mean that outcomes anticipated by the Waikato Regional Plan are at risk. In these priority catchments, more tailored and forward looking direction is required.

For these catchments, there is a need to develop catchment specific LoS objectives that clearly define what reliable, environmentally sustainable, and culturally responsible water security looks like. These objectives should be developed in partnership with mana whenua and local stakeholders, reflecting shared values, aspirations, and responsibilities for the catchment. LoS objectives provide a clear foundation to:

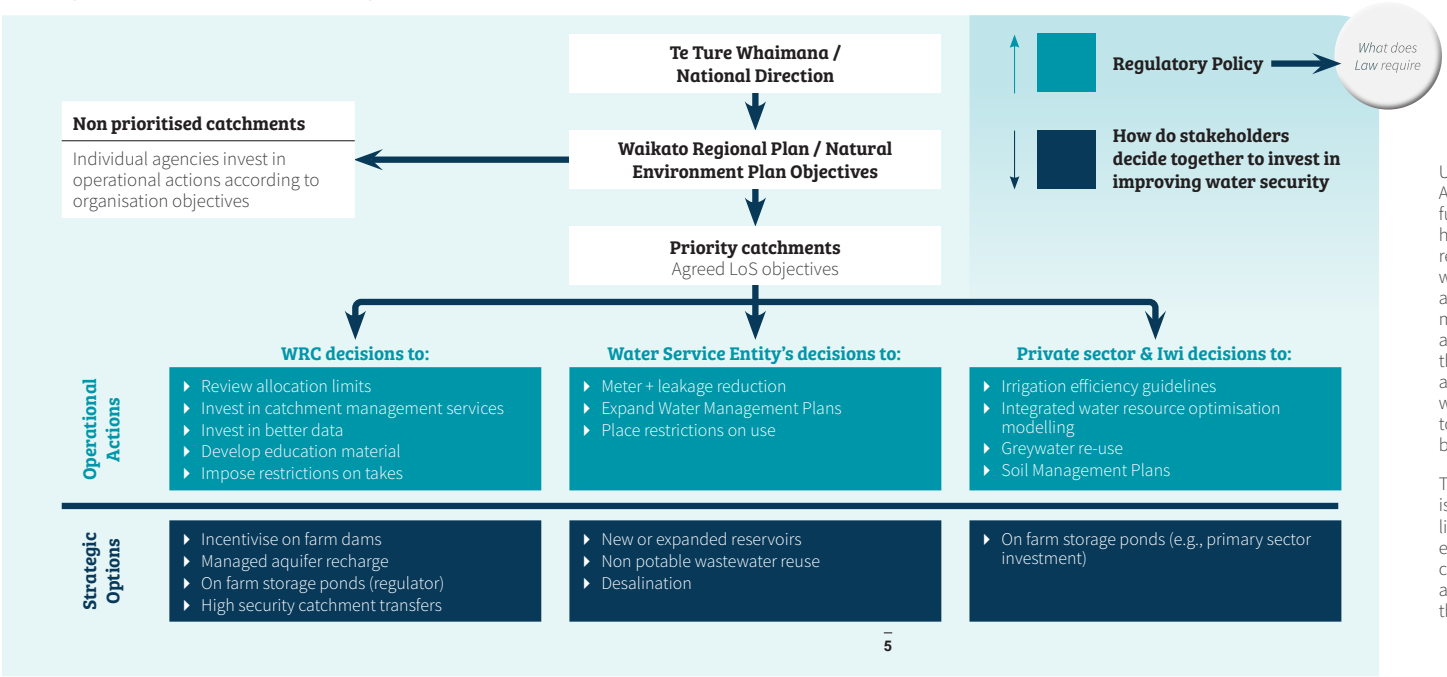
- Guide decision making across agencies and organisations
- Trigger timely actions as risks emerge
- Shape the sequencing and timing of infrastructure and non infrastructure investments

By establishing LoS objectives that are agreed by all potential infrastructure owners and investors within a catchment and adopting them as the basis for internal planning and decision making, actions can be undertaken in a way that is timely, transparent, and aligned with what matters most to communities. This includes protecting ecological health, supporting cultural wellbeing, enabling sustainable growth, and ensuring fair and reliable access to water.

This level of coordinated partnering is not required in every catchment. It is intended only for priority catchments, where risks have become sufficiently acute that multiple agencies and investors must act in concert to maintain agreed levels of service and long term outcomes.

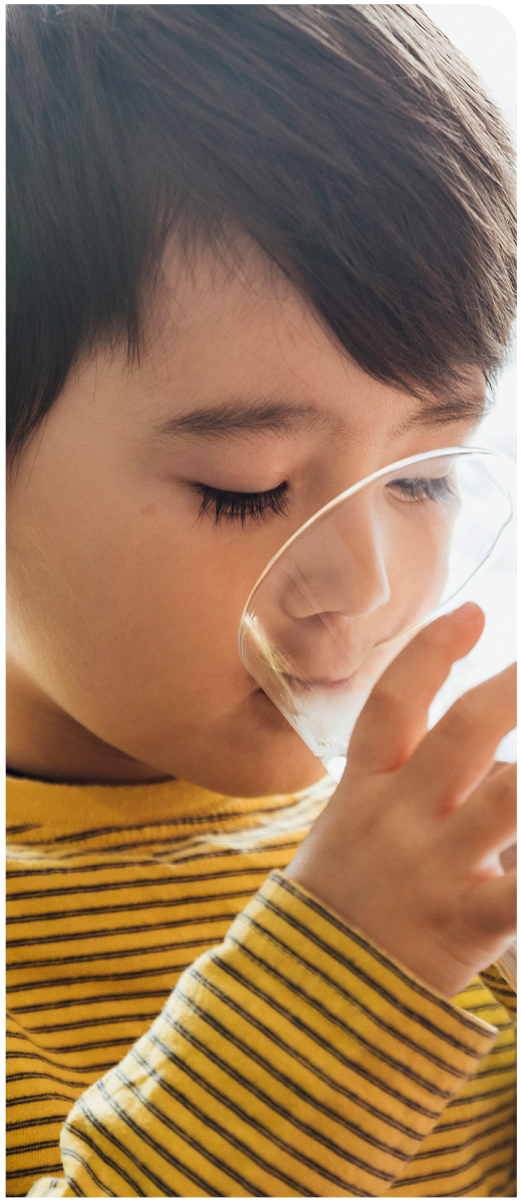
How we envisage the decision making framework for each priority catchment playing out is illustrated in Figure 1 below.

Figure 1: Water Security Action Plan decision making framework.



Ultimately, the Water Security Action Plan works towards a future where every catchment has a tailored pathway to resilient water security, where water management planning and investment decisions are made openly and consistently, and communities can see how their input directly shapes the actions taken to safeguard their water now and for generations to come and have certainty to base their own decisions on.

This Water Security Action Plan is not a static document; it is a living framework designed to evolve with new information, changing climate conditions and ongoing engagement with the people of the Waikato.



2 Our plan for the future

We are taking forward a clear set of options and a practical approach to delivery, starting with near-term operational actions that should be prioritised now while we prepare integrated solutions, and identify strategic options (investments) that will be necessary in prioritised catchments when agreed trigger points tied to LoS objectives are met.

2.1 Operational Actions

Operational actions are the foundation of the Water Security Action Plan.

They provide the "day to day" and "do minimum" interventions that improve water security immediately, while also enabling and informing larger future investments (strategic options).

Their role is to drive early, visible gains in efficiency, monitoring, groundwater protection and demand management, while also improving the data and modelling needed for reliable triggers and adaptive decision making. By enhancing day to day performance and preserving future flexibility, operational actions help keep the region within agreed LoS objectives and ensure catchment specific pathways can evolve based on evidence and community priorities.

22 operational actions have been identified as feasible for the Waikato region and its catchments. These are:

1. Reviewing guidelines for irrigation efficiency
2. Review current consent holders water use efficiency
3. Protect groundwater from contamination rendering it unsuitable for water supply
4. Engaging stakeholders in decision making processes
5. Promoting public awareness campaigns for water conservation
6. Shade streams to increase resilience to drought and effects of water use
7. Metering and leakage reduction
8. Monitoring and regulating groundwater extraction to prevent overuse
9. Ecological Response Modelling
10. Integrated Water Resource Optimisation Modelling
11. Develop Drought Management Plans with an integrated approach
12. Optimise timing of major water takes
13. Large Consent Holder Water Management Plans
14. Spatial Planning for Water Secure Development
15. Promote new land uses that align with water availability
16. Promoting / enabling greater use of groundwater resources for storage and to ease pressure on surface water
17. Reuse greywater at household/ industrial scale
18. Agricultural leakage management
19. Soil Management Plan
20. Establish regulations to cap water use during droughts
21. Coordinating the management of water, land, and related resources across sectors
22. Education on water security

Each operational action will contribute differently to improving water security; there are no silver bullets. Each operation action is categorised used the ease–impact framework in Table 1. These are:

- **Quick Wins:** low effort, high impact operation actions (e.g., shading streams to increase resilience to drought and water use).
- **Critical Enablers:** moderate–high effort, high impact long term, staged initiatives that strengthen water security and enable future strategic options (e.g., metering and leakage reduction).
- **Strategic Operations:** high effort, high impact initiatives delivered through staged implementation, with actions refined and targeted as water security benefits are demonstrated to maximise overall impact (e.g., spatial planning for water-secure development, land uses aligned with water availability, greater use of groundwater for storage to relieve pressure on surface water and greywater reuse).
- **Incremental Improvements:** moderate impact, moderate difficulty initiatives embedded within ongoing delivery programmes, with built in feedback and lessons learned to continuously improve delivery as data quality and coverage improve (e.g., agricultural leakage management, Soil Management Plans, staged drought cap regulations refined through Drought Management Plans, and expanded metering and monitoring).

Many of the operational actions are already underway in some form and these have also been mapped in Table 1 based on Waikato Regional Councils current work programmes.

This is categorised using:

BAU business as usual – work that is already programmed and budgeted for

BAU+ expanded business as usual – would require additional funding

New new work not programmed or currently funded

The expectation is that Waikato Regional Council continue with BAU across all catchments. For BAU+ and New, Waikato Regional Council will need to review these for each priority catchment and prioritise each via the Long Term Plan.

Importantly, not all of the operational actions require Waikato Regional Council leadership. Other agencies need to step up and lead operational actions within their mandates. Notwithstanding this, Waikato Regional Council will play an important role in advocating and supporting others to undertake those tasks.

Table 1: Delivery of operational actions across the region.

Delivery	Operational Action	What Catchment/s?	Current Status	Description	WRC Role	Lead / support / advocate if not WRC	Cost	Time	Impact
Quick Wins	Review irrigation efficiency guidelines	All	BAU	Maintain scheduled updates; apply current guidance at consent application/renewal; publish a concise applicant/assessor checklist.	Lead	Primary sector	$	T	✓✓
		All	BAU+	Deliver a targeted education programme (factsheets, webinars, on farm demos) aligned to consent cycles and priority sectors.	Lead	Primary sector	$	T	✓
		All	New	Support development of national irrigation efficiency guidelines and prepare for regional alignment and adoption.	Support	Primary Sector	$	TT	✓
	Review current consent holders' water use efficiency	Priority	BAU	At renewal, require evidence of efficient use and realised demand; right size allocations in pressure catchments with clear criteria.	Lead		$	TT	✓✓✓
		Priority	BAU+	Run pre expiry desktop reviews prioritised by catchment pressure; initiate right sizing via plan change or case by case assessment.	Lead		$$	TT	✓✓✓
	Protect groundwater from contamination (high risk zones)	All	BAU	Enforce wellhead security and apply source protection zones through consenting and compliance; issue upgrade requirements as needed.	Lead	Taumata Arowai	$	T	✓✓
		All	BAU+	Update source protection zones definitions and policies for the regional plan review; consult, publish draft maps and implementation timelines.	Lead	Taumata Arowai	$$	TT	✓✓
	Stakeholder engagement in decision making	Priority	BAU	Implement a structured engagement plan with iwi, industry and consent holders; document how feedback informs decisions.	Facilitate	All	$	T	✓✓
	Public awareness campaigns and education on water security	All	New	Design and deliver a water security awareness programme with KPIs (reach, participation) and a monitoring/evaluation loop.	Lead	Water Entities	$$	TT	✓✓
	Shade streams to increase resilience to drought and water use	All	BAU+	Re-target existing incentives to prioritise riparian shading in hotter, water short catchments; track canopy cover and temperature outcomes.	Lead	Waikato River Authority	$$	TT	✓✓✓
		All	New	Assess and, if viable, implement a user charge to fund riparian fencing/planting, with transparent fund governance.	Lead	Waikato River Authority	$$	TTT	✓✓✓

Delivery	Operational Action	What Catchment/s?	Current Status	Description	WRC Role	Lead / support / advocate if not WRC	Cost	Time	Impact
Critical Enablers	Metering and leakage reduction	All	BAU	Maintain metering in Cambridge and Te Awamutu; work with providers to scope and prioritise metering expansion across remaining schemes and large industrial users.	Advocate	Water Services Entities	$	T	✓✓
		All	New	Design and implement a cross sector metering and leakage programme: standardise data capture, embed continuous leakage monitoring with trigger thresholds, and require improvement actions when losses exceed limits.	Support	Water Services Entities	$$	TTT	✓✓✓
	Monitoring / regulating groundwater extraction (compliance telemetry and logging)	All	BAU	Operate the groundwater level network; require meters/telemetry for takes; audit data quality and follow up on anomalies.	Lead		$$	T	✓✓
		All	BAU	Apply consent conditions and sustainable yield limits; assess local and cumulative effects and enforce compliance.	Lead		$	T	✓✓✓
		Priority	BAU+	Clarify sustainable yield policy to account for cumulative stream depletion; prepare plan change materials and technical guidance.	Lead		$$	TTT	✓✓✓
	Ecological response modelling	Priority	BAU	Set allocation limits informed by ecological response; use conservative defaults in low pressure catchments and detailed models for high value/pressure systems per Method 3.3.4.9.	Lead		$$	TT	✓✓✓
		Priority	New	Develop reach/species specific flow–ecology models and resilience metrics; calibrate with historic and simulated flows to inform limits and consent conditions.	Lead		$$$	TTT	✓✓✓
	Integrated water resource optimisation modelling (start with current datasets; iterate)	Priority	BAU	Engage with operators using reservoir/gate optimisation models to ensure compliance with consent limits; share data/scenarios and coordinate during operations.	Support	Consent holders	$	T	✓✓
		Priority	BAU	Set and maintain limits for run of river takes; provide clear operational guidance to consent holders on day to day decisions within those limits.	Lead		$	T	✓✓
		All	BAU	Set environmental limits through consents/hearings; require and assess optimisation evidence for large storage proposals as appropriate.	Lead		$	TT	✓✓✓
		All	BAU	Coordinate with dam operators on release operations.	Support	Energy sector, CDEMG	$	T	✓✓
		All	BAU+	Advocate for providers to extend operational models to include broader water security and dynamic ecological objectives; convene technical forums to share best practice.	Advocate	Water and energy sector	$	TT	✓✓
		Priority	New	Build catchment scale optimisation models using current datasets; simulate options against LoS Objectives, test trade offs/sizing, and iterate with monitoring feedback.	Lead	Relevant stakeholders	$$$	TTT	✓✓✓
		All	New	Run optimisation scenarios during plan changes/consent reviews to improve multi user and ecological outcomes under climate variability; use outputs to inform limits and conditions.	Lead	Relevant stakeholders	$$	TT	✓✓✓
	Drought Management Plans	Priority	BAU	Encourage water agencies to expand Water Management Plans with alternative sources, meter triggered actions, and extreme event procedures.	Advocate	Water services entities	$	TT	✓✓
		All	BAU	Ensure municipal Water Conservation, Demand Management and Drought Management Plans meet Section 3.3.3 Policy 9/Method 8.1.2.2 of Waikato Regional Plan, audit implementation and reporting.	Lead	Consent holders	$	TT	✓✓✓
		All	BAU	Support CDEM agencies to align drought plans with hydrological triggers and water security objectives; integrate data sharing and communications.	Support	CDEMG	$	T	✓✓
		Priority	BAU	Maintain a regional Water Security Action Plan to coordinate proactive, region wide drought management across multiple takes.	Lead	All stakeholders	$$	TT	✓✓✓
	Optimise timing of major takes	Priority	BAU	Apply and enforce policy/consent restrictions that trigger at low flows; enable global permits to direct water to highest value uses within limits.	Lead	Consent holders	$	T	✓✓✓
		Priority	New	Develop policy and/or apply consent reviews to require operational optimisation for broader water security objectives, not just compliance.	Lead	Consent holders	$$	TTT	✓✓✓
	Large Consent Holder Water Management Plans	Priority	New	Require large consent holders to prepare and implement Water Management Plans with demand management, efficiency/leakage targets, drought triggers, reporting, and continuous improvement (phased via consents).	Lead	Consent holders	$$	TT	✓✓✓

Delivery	Operational Action	What Catchment/s?	Current Status	Description	WRC Role	Lead / support / advocate if not WRC	Cost	Time	Impact
Strategic Operations	Spatial planning for water secure development	All	New	Embed water security overlays and hazard/availability constraints into spatial plans; align growth areas with reliable sources and infrastructure staging.	Lead	Territorial Authorities, Water Entities	$$	TTT	✓✓✓
	Promote land uses aligned with water availability	All	New	Use regional policy and consenting to encourage land uses matched to local water availability and seasonal variability; provide guidance and mapping to Territorial Authorities.	Lead	Territorial Authorities	$$	TT	✓✓✓
	Greater use of groundwater for storage/pressure relief on surface water	All	New	Assess hydrogeological capacity and risks; enable managed aquifer recharge/seasonal storage and adaptive allocation to relieve surface water pressure.	Lead	Resource Consent holders	$$$	TTT	✓✓✓
	Greywater reuse (household/ industrial)	All	New	Develop regional guidance and advocacy with three waters agencies to permit safe plumbing systems (e.g., backflow controls) for greywater reuse.	Advocate	Water services entities, Taumata Arowai	$$	TT	✓✓
		All	BAU	Maintain permitted frameworks for dairy shed effluent land application; monitor compliance and environmental outcomes.	Support	Dairy sector	$	T	✓✓
		All	BAU	Continue effects based consenting for industrial process water reuse/land irrigation; promote onsite reuse consistent with Policy 3.4.5.2.	Lead	Resource consent holders	$	T	✓✓
		All	BAU+	Introduce policy levers and guidance to enable broader greywater reuse while managing health and environmental risks (via plan change and codes of practice).	Lead	Taumata Arowai	$$	TTT	✓✓
Incremental Improvements	Agricultural leakage management	All	BAU	Enforce consent compliance; investigate anomalies where metered use exceeds limits; require repairs and report closure.	Lead	Primary Sector	$	T	✓✓
		All	New	Establish routine post meter audits and analytics to detect distribution losses; issue remedial notices and provide good practice guidance.	Lead	Primary Sector	$$	TT	✓✓
	Soil Management Plans	All	BAU+	Partner with primary sector to provide guidance/training and pilots that improve soil water holding, infiltration and rooting depth for drought resilience.	Support	Primary sector	$	TT	✓✓
		All	BAU	Progress plan changes addressing land use intensification (e.g., PC1) with co benefits for soil moisture and drought tolerance; update consenting guidance.	Lead		$$	TTT	✓✓
		All	BAU+	Strengthen policy/methods to explicitly integrate soil health and drought resilience outcomes alongside contaminant limits.	Lead		$$	TTT	✓✓✓
		All	New	Develop incentives and extension programmes for drought tolerant soil practices (e.g., cover, organics, irrigation scheduling) with monitoring of outcomes.	Lead	Primary Sector	$$	TT	✓✓
	Drought capacity regulations	Priority	BAU	Apply restriction triggers based on allocations and Q5 flows; maintain clear communications and enforcement protocols.	Lead		$	T	✓✓
		Priority	New	Update restriction thresholds and triggers based on optimisation modelling and revised levels of service; implement via plan change/consent variations.	Lead		$$	TTT	✓✓✓

2.2 Strategic Options

Strategic options are discrete investments or policy choices that materially change supply, storage, reuse, allocation, or efficiency at scale. They are major investments that require significant capital investment and/or regulatory change.

Six strategic options were identified for consideration when the operational actions are no longer proving adequate. These strategic options are prepared for staged activation through an adaptive approach. The options will not necessarily be relevant in all catchments and require significant investments and planning. Timeframes vary by site; progression is triggered by monitoring evidence, risk evaluation and monitoring against agreed LoS Objectives.

1. Managed Aquifer Recharge	
Purpose	Improve groundwater reliability and baseflows while safeguarding water quality, cultural values and ecological outcomes.
Lead agency	Waikato Regional Council
When to activate	If groundwater reliability or baseflow indicators threaten LoS Objectives.
Key dependencies	Site hydrogeology, consenting pathways, land access, monitoring networks, and construction market conditions; progression depends on evidence from pilots and ongoing monitoring.
Core metrics	Recharge and recovery performance; groundwater and baseflow support.

2. New or expanded reservoirs	
Purpose	Lift seasonal reliability, manage peak demand, and support environmental flows while protecting cultural and ecological values.
Lead agency	Water Services Entities
When to activate	If storage reliability or peak demand coverage falls below LoS Objective targets.
Key Dependencies	Site complexity, consents, land access, funding, and market conditions; staged delivery based on evidence and LoS performance.
Core Metrics	Seasonal yield uplift; peak demand coverage; environmental flow and cultural support; water quality; dam safety Key Performance Indicators.

3. Non potable wastewater reuse (irrigation/industrial)	
Purpose	Substitute industrial and irrigation demands to improve reliability and reduce pressure on freshwater sources.
Lead agency	Water Services Entities
When to activate	Where suitable offtakes exist and reuse can materially reduce restriction days against LoS Objectives.
Key dependencies	Wastewater Treatment Plant capacity and reliability, effluent quality, proximity to demand clusters, consents, land access, funding, conveyance/ storage, user readiness and offtake agreements, community acceptance.
Core metrics	Reuse capacity and volumes; reduction in freshwater abstraction and peak demand clipping; reduction in restriction days vs LoS Objectives; cost per m3; energy/carbon intensity; operational reliability.

4. On-farm storage ponds	
Purpose	Improve peak demand management and drought resilience, and protect environmental flows, with safe and efficient design and operation.
Lead agency	Waikato Regional Council as regulator, Primary Sector as investor
When to activate	If agricultural peak demand and drought exposure threaten LoS Objectives.
Key dependencies	Land access and topography, source water availability and conveyance, consent conditions and monitoring, integration with irrigation scheduling and farm operations, adoption rates, and community acceptance.
Core metrics	Storage and supply performance, Waikato Regional Council support to prioritise implementation, adoption and integration.

5. Desalination (seawater and/or brackish)	
Purpose	Provide drought resilient supply independent of local inflows/salinity and relieve pressure on sensitive surface/groundwater systems.
Lead agency	Water Services Entities
When to activate	• Large, centralised plants: for substantial, long term base supply where regional demand justifies scale. • Small, modular package plants: for faster, flexible, lower demand augmentation (including seasonal or mobile deployment).
Key dependencies	Intake/outfall sites, marine works, consents, reliable energy supply (including renewable options), land access, conveyance/storage integration, funding, and community acceptance.
Core metrics	Production capacity/volumes; proportion of demand met; reduction in restriction days vs LoS Objectives; end use water quality compliance; marine receiving environment performance (entrainment/impingement, brine plume thresholds); energy/carbon intensity; recovery efficiency; cost per m^3.

6. High security catchment transfers	
Purpose	Move water from surplus (donor) catchments to deficit (receiver) catchments to improve allocation reliability, peak demand coverage, and environmental flow support.
Lead agency	Waikato Regional Council
When to activate	If receiver catchment reliability drops below LoS objectives and donor surplus is demonstrably available across hydrological percentiles. Progress is contingent on a thorough feasibility assessment and compelling evidence that benefits outweigh cultural, environmental, legal, energy, and cost risks.
Key dependencies	Donor/receiver hydrology, corridors and easements, cross boundary consents, governance and accounting frameworks, energy/grid availability, funding, and acceptance in both catchments.
Core metrics	Transfer capacity/volumes; proportion of receiver demand met; reduction in restriction days vs LoS Objectives; environmental performance (days within guardrails in receiver; donor guardrails maintained); energy/carbon intensity; cost per m3; cultural indicators (culturally safe access days, co design outcomes); operational reliability and integration with allocation/drought management.

2.3 Integrated Water Cycle Management Options

The plan acknowledges that a range of other actions designed to address other environmental problems can benefit water security.

These Integrated Water Cycle Management (**IWCM**) options are enabling measures that enhance overall system performance, resilience, and long term flexibility but are not primarily intended to resolve water security issues during severe droughts. These measures support the health and function of the water cycle by improving water quality and quantity management, ecosystem resilience, ecological outcomes, and urban amenity, and can help maintain flows for longer in the lead up to drought events. Examples of IWCM options include urban stormwater soakage, use of natural lakes and wetlands for water storage, green infrastructure, integrated stormwater management planning, protection and activation of natural recharge areas (e.g., wetlands), and urban heat mitigation measures such as trees and reflective roof colours.

The Water Security Action Plan needs to support and endorse their implementation to achieve broader water management objectives such as Te Ture Whaimana and to assist in maintaining flows for longer in the lead up to drought events, however they are not primary drivers for water security outcomes.

WRC may choose to advance these initiatives under separate programmes or with alternative motivations, such as environmental restoration, community wellbeing, or regulatory compliance. This distinction focuses the Water Security Action Plan on actions directly contributing to water security in drought events, while still recognising the value of broader IWCM options.

3 Strategic Catchment Prioritisation

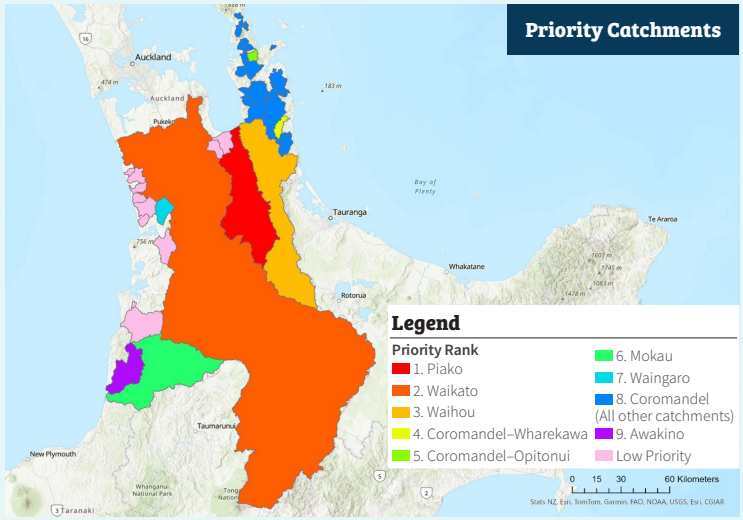
For this Water Security Action Plan catchments were prioritised using a multi-criteria method grounded in the Integrated Systems Assessment, combining restriction exposure (frequency and duration), demand characteristics, and seasonal availability of primary and secondary allocations, with particular attention to peak summer stress and a winter baseline for resilience.

Metrics were normalised and combined into a composite score, then converted to an ordinal rank where '1' denotes the highest priority (most constrained or most in need of intervention) and '10' the lowest. Consistent with this rank approach and to maintain regional coherence, all Coromandel sub-catchments that initially scored at rank 10 have been grouped within rank 8. The resulting prioritisation is:

Table 2: Strategic catchment prioritisation in the Waikato region

Catchment Prioritisation
1. Piako
2. Waikato
3. Waihou
4. Coromandel–Wharekawa
5. Coromandel–Opitonui
6. Mokau
7. Waingaro
8. Coromandel
9. Awakino
10. All other catchments including Marakopa and West Coast.

Development of Catchment Specific Action Plans are to be sequenced according to this prioritisation. Other catchments can be added if pressures and demand require and funding is available.



4 Dynamic Adaptive Planning Pathways

Conditions in the Waikato Region can shift quickly, especially in summer. Acting too early or too late can harm the environment, reduce reliability, or waste money. A clear, indicator based approach supports fair, transparent decisions under uncertainty.

Strategic options need to be ready to go initiatives that can be switched on when needed. These can be initiated through a Dynamic Adaptive Planning Pathways (**DAPP**) process.

DAPP is a way to plan and stage decisions under uncertainty. Adaptive planning means watching for the right signals, understanding risk and making well timed decisions when the signals are triggered. In the context of water security this means keeping an eye on river flows, storage, seasonal outlooks, demand patterns, and environmental and cultural considerations.

What "signals" and "triggers" mean:

- **Signals =** early warnings that start planning and pre work for strategic option(s).
- **Triggers =** the point where we decide to deliver a strategic option.

How the approach works

- **Keep doing the basics:** run day to day operational actions across all priority catchments to delay issues.
- **Watch for signals:** early warnings (from reliability, environmental, cultural and economic indicators) tell us to start "enabling works" so strategic options are ready if needed.
- **Decide at triggers:** when evidence is strong, a trigger / decision point is reached, and the preferred strategic option is built. If conditions change, timing can shift.
- **Stay flexible:** we prepare more than one feasible strategic option so we can choose the best one when we need it.

See Figure 2 for a visual overview of how these elements connect over time. Each element is explained further below.

Figure 2: Dynamic Adaptive Planning Pathways overview—current pathway, signals, triggers, and adaptation thresholds.

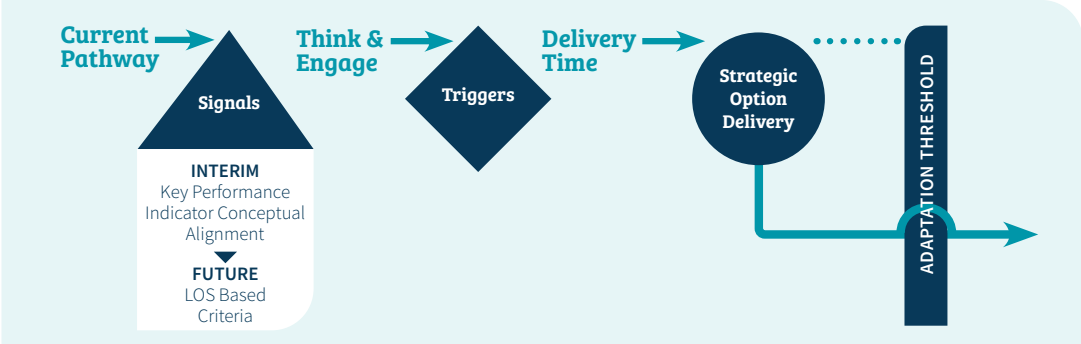


Table 3: Explanation of Dynamic Adaptive Planning Pathways

Current pathway:	Signals:	Triggers:	Adaptation threshold:
This is the baseline sequence of low regret operational actions you commit to now, plus contingent strategic options you keep "ready" with designs / consents so they can be mobilised quickly if needed.	These are monitored indicators showing how the system is tracking and whether risk is rising. They are evidence, not actions. **For example,** signals may be "restriction days trending upward", "more frequent low flow alerts", or "demand growth exceeding forecasts".	These are explicit, measurable thresholds on one or more signals that prompt a governance decision and activation of the next step. They are set early enough to allow for delivery lead time. **For example,** a trigger may be that "restriction days exceed the LoS objectives threshold for two consecutive years").	This is the point at which the current pathway will no longer meet LoS objectives under observed or projected conditions. It defines the latest safe timing by which an adaptation must be in place to avoid service failure or unacceptable impacts.

4.1 What this could look like for Piako and Waikato Catchments

The first two priority catchments - the Piako and the Waikato, are already meeting the signals and triggers identified on these pathways if you apply the draft LoS objectives presented in Table 4. This means delivering a catchment specific operational actions package, establishing catchment leadership groups and preparing to move into a DAPP should occur now.

This plan sets out simple, proposed pathways that we recommend are used as initial concepts to test with catchment leadership groups for the Piako and Waikato catchments. They are not final and need to be confirmed by the catchment leadership groups informed by catchment specific modelling. They simply demonstrate how each catchment leadership group might phase work overtime. More work is needed to confirm LoS objectives and complete modelling before any decisions are made.

4.1.1 Piako Catchment

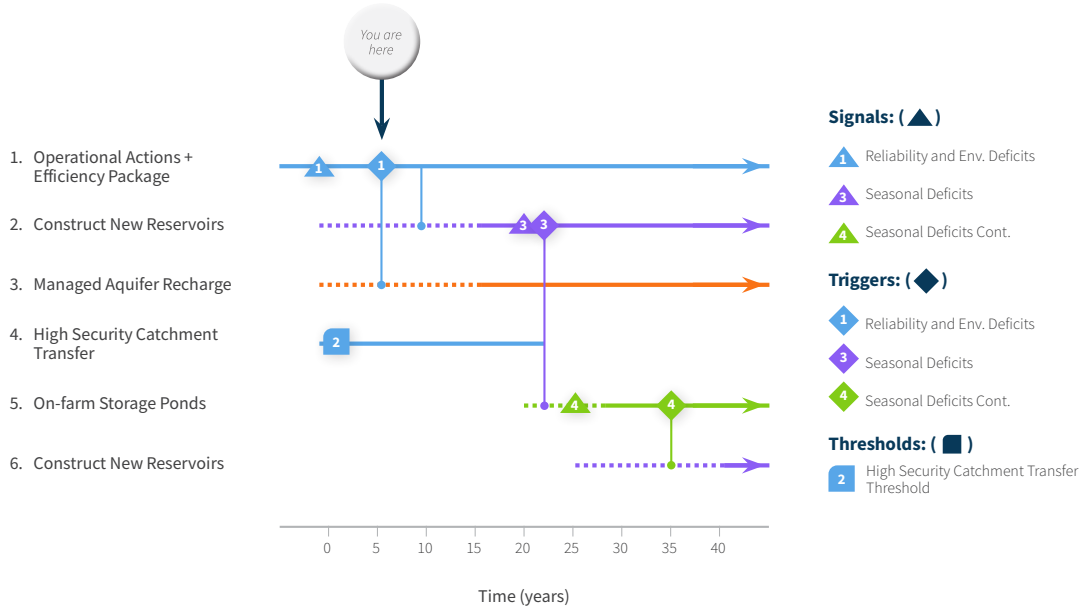


Figure 3: Piako Catchment recommended DAPP

What the figure shows: Piako is likely already outside anticipated LoS objectives for reliability and environmental guardrails, so it is a priority. As soon as possible we should be identifying suitable sites for new reservoirs and exploring funding models. Signals that will initiate enabling works for new reservoirs are already being seen in the catchment. In this example, Managed Aquifer Recharge, and high security transfers; on farm storage are deferred at first due to their likely complexity in this context. In this example we see that inter catchment transfers are later found infeasible, so reservoirs and Managed Aquifer Recharge proceed at pace. As climate pressure grows, smaller on-farm storage options are revisited, planned and then delivered. If signals persist, additional reservoirs are built to stay within environmental and cultural guardrails.

Why this helps: Moves quickly to restore reliability while protecting river health and cultural values.

What the figure shows: the uncertainty regarding continuity of the Tongariro Power Scheme diversions beyond their consent expiry in 2039 and the expiry of the Waikato hydro scheme consents in 2041. This means that the key decisions on the volume of water available for use in the Waikato River will be made within the next ten to fifteen years. The Water Security Action Plan for the Waikato catchment needs to prepare for a future with significantly lower flows in the Waikato River. This means we work now to optimise our current flows using the operational actions. We work across the catchment to understand the different scenarios and explore means of optimising existing resource consents under different flow conditions as well as examining now, whether the Waikato Regional Plan or its replacement regulatory documents under planning law reform could do more to enable and incentivise on-farm storage ponds.

Once peak demand signals are met, we need to be confident that people are starting to build on-farm storage ponds. As climate changes and a high security reliability signal is met, we initiate planning to treat wastewater for non-potable uses. If transfers into Lake Taupo are reduced, a reliability signal triggers the need for new reservoirs or increased storage. Later signals lead to investigating the suitability of Managed Aquifer Recharge to maintain LoS Objectives.

Why this helps: Builds the right things at the right time, keeps reliability up, and avoids rushed decisions.

4.1.2 Waikato Catchment

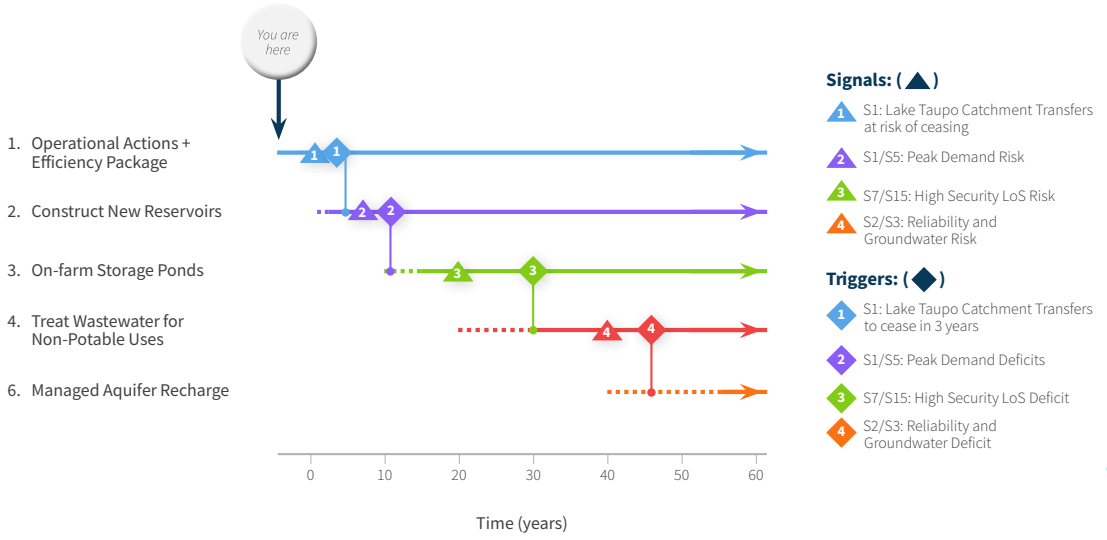


Figure 4: Waikato Catchment recommended Dynamic Adaptive Planning Pathway

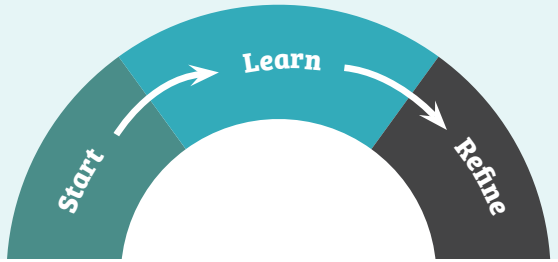
5 Developing Priority Catchment Water Security Action Plans

Once the operational actions identified earlier in the Plan are being implemented across all priority catchments, it is time to move to more catchment specific Action Planning for each prioritised catchment. This action planning should use a **Start–Learn–Refine** prioritisation cycle to move from setup to delivery in clear, staged steps for each priority catchment.

5.1 Start–Learn–Refine process

Roll out early operational actions (efficiency, demand management, leak fixes, public dashboards), establish governance model and form and a continual improvement framework. Seek community input / advice on LoS objectives and how these will be reported on.

Uplift monitoring, data quality and complete baseline modelling.



Build investment readiness (shelf ready strategic options, investment programmes, outline business cases, enabling consents and land access). When LoS objectives triggers are met, proceed with conditional design and delivery. Operate, monitor, and optimise, then review and adapt annually with a deeper three year refresh.

5.2 Delivery Phases

This staged approach shows how we will set up, prioritise, and deliver the water security programme in a way that is transparent, adaptive, and aligned to agreed LoS objectives for each priority catchment.

PHASE 01	PHASE 02	PHASE 03	PHASE 04	PHASE 05	PHASE 06	PHASE 07
Gather data, identify operational actions package and implement quick wins	Set up and commitment	Initial current state modelling, LoS objectives and Key Performance Indicators / risks	Baseline Modelling and Current State Uplift	Develop DAPP, Adaptive Strategic Options, Consenting and Investment Readiness	Conditional Design, Delivery and Operation	Review and Adapt (annual; three year deep dive)

Figure 5: Delivery Phases Overview

PHASE 01

Gather data, identify operational actions package and implement quick wins

Purpose: Deliver visible improvements while larger strategic options are prepared.

Description:

Start with the data:

- Start with your priority catchments first, clean the data up, fill any gaps including additional monitoring stations, if required.
- Analyse your records of water use.
- Require electronic metering for all water takes.
- Confirm that Q5 levels are still appropriate. Where they are not, undertake ecological response modelling to understand consequences and guide settings.

Build value and transparency for water:

- Educate irrigators and water users on water stewardship and efficiency.
- Publish your data so water users have real time view of inflows, outflows and related indicators.
- Increase transparency with open dashboards and regular communications to build trust and shared understanding.
- Identify and implement other operational actions as appropriate.

Use your existing regulatory levers:

- Prioritise resource consent reviews for priority catchments.
- Examine your rule frameworks - could more be done to enable on-farm storage ponds by landowners?

What this phase will deliver:

- Roll out operational action initiatives; fix obvious leaks and data issues.

Outputs:

- Quick win operational action list and benefits realised.

PHASE 02

Set up and commitment

Purpose: Create the foundation for decisions and delivery.

Description:

Accelerate priority catchment approaches:

For the first **two priority catchments** this phase happens in parallel with Phase 1.

- Establish catchment leadership groups in the two priority catchments.
- Confirm with them the LoS objectives, risk appetite, willingness to invest, confirm the DAPP map.
- For the Waikato catchment, start with modelling scenarios for no or reduced catchment inflows (from climate change and loss of Tongariro Power Scheme diversion.
- For the Piako develop an integrated model that captures levels of service performance across different demand scenarios which includes ecological responses.
- For both, confirm whether the operational actions will be enough to manage water through droughts. If not, start investigating sites of larger scale water storage and reviewing how existing resource consents will operate under reduced inflows.

It is essential to establish leadership groups at the catchment level to enable local communities, water users and mana whenua to actively participate in shaping the Action Plan for their respective catchment. These groups will play a critical role in supporting governance in:

- Defining LoS objectives based on user needs and priorities.
- Determining, at a finer scale, which operational actions are most appropriate for their catchment.
- Providing community leader oversight for water security initiatives, including storage and related infrastructure.
- Setting up an Enterprise Risk Management Framework. This will provide a cohesive approach to identifying, comparing, and managing risk and opportunity across catchments, sources, treatment, networks, consents, drought management, reuse/storage, and customer engagement. Using consistent tools, language, and thresholds aligned to ISO 31000 principles, it enables clearer, evidence-based decisions on strategy, capital investment, resourcing and operations.

Membership should include mana whenua and key stakeholders to ensure diverse perspectives and robust advice to decision makers. For large and complex catchments such as the Waikato, there may be value in establishing subcatchment groups to address local issues in more detail. However, these groups must operate within a unified governance framework to maintain consistency and integration across the wider catchment, ensuring that actions in one area do not create unintended consequences in another.

Given Waikato Regional Council's regulatory responsibilities, it is logical that the Waikato Regional Council takes on a facilitation role in catchments with multiple water users, similar to its approach for flood and drainage infrastructure. In catchments where there is only a single significant water user, such as a municipal authority, leadership arrangements could be jointly determined between that authority, Waikato Regional Council, and other relevant regulators.

At a minimum, each catchment based leadership group should include representation from iwi, District Councils, and Waikato Regional Council. Additional participation should be sought from major users such as industry, energy operators, and significant industrial water users (e.g., Fonterra) that are dependent on the catchment. These groups should work on a consensus basis with the ability to make recommendations but with actual decision making on investments or regulatory interventions reserved to the relevant accountable authority / investor.

What this phase will deliver:

- Establish catchment level leadership groups that represent the catchment community with clear roles and accountabilities to refine and implement catchment specific programmes based on this Water Security Action Plan.
- The terms of reference for these groups could be based on the existing catchment sub-committees although their focus would be on water security, not flood control so membership may be different.
- Establish operating budgets and implementation funding for these catchment leadership groups.
- Funding to come via the agreed lead agency (which could be Waikato Regional Council, a water entity or a local authority).

Outputs:

- Catchment level leadership group terms of reference, delegations, budgets for implementation.
- Partnership protocols with key stakeholders and community engagement plans.

Figure 6: Delivery Phases Detailed

PHASE 03

Initial current state modelling, LoS objectives and Key Performance Indicators / risks

Purpose: once the catchment leadership groups are established, they work together to use today's evidence to set a baseline, explore future trade offs and choose targets the community can understand and support. Define clear, measurable service expectations for water security that reflect community needs, environmental limits and affordability.

Description:

Initial Current State Modelling

What to collect: supply system configuration, yields and constraints, demand by customer type, past restriction history, emergency measures used, environmental limits, growth forecasts, costs and data quality. The Integrated Systems Assessment is a good starting point but more information at a catchment level is required. For example: catchment-specific demand and ecological requirements. This will help to assess the current level of water supply security and create a sound platform for discussing potential changes and trade offs.

Developing LoS objectives

LoS objectives need to be simple, smart and not applied solely to regulatory approaches. LoS objectives are not the same as the Objectives recorded in the Waikato Regional Plan in that they should be specific to catchments and not written in legal language required to inform carefully balanced consent decisions. They need to be meaningful to the average user or member of the community and not ambiguous or subjective.

LoS objectives set out:

- **What we aim to deliver:** reliable supply, safe water quality, healthy environments, cultural wellbeing, fair and affordable service, and meeting rules and standards.
- **How we measure it:** things like the number and length of outages, test results for water quality, impacts on streams and aquifers, and feedback from mana whenua and customers.
- **When we act:** clear thresholds for stepping in, with regular public reporting and a focus on continual improvement.

Examples of LoS objectives

These simple examples show how LoS objectives work in practice. Final thresholds are confirmed through detailed analysis and engagement.

Table 4: Draft LoS objectives

Draft LoS objectives	What we watch:	If we see:	We do:
Restrictions and reliability	The likelihood and duration of water restrictions (modelled stochastically, probability based modelling of weather, demand and storage).	The chance of restrictions rising above agreed levels, or restrictions needed more often or for longer.	Step up demand management, communicate early about potential restrictions, and bring forward supply, storage or network upgrades.
Highest and best use of water	Economic productivity per litre (e.g., $/ML), efficiency of use by sector, and outcomes from allocation reviews.	Persistent lower value use or efficiency trending down.	Review and adjust allocations, support transitions to higher value, lower impact uses, and expand innovation and best practice programmes.
Transparent, user friendly allocation system	Time to decision, guidance clarity, application rework rate, compliance and appeals, and completeness of published data.	Delays, confusion, rising appeals or gaps in published information.	Simplify processes and tools, publish clear rationale and data and increase user support and training.
Environmental flows reflect ecological requirements	Flows against ecological thresholds, water temperature, and key habitat/ health indicators.	Flows approaching minimum ecological requirements or temperatures trending high.	Adjust abstraction and operations to restore natural variability, enhance shading/thermal refugia, and prioritise restoration actions.
Year round, culturally safe and equitable access to awa	Culturally safe access days at key sites, mauri indicators co developed with mana whenua, and real time data transparency.	Access constrained or mauri indicators declining.	Co design actions with mana whenua, publish timely advisories and data, and adjust operations to restore safe, equitable access.

In short, LoS objectives make it clear what matters, how we track it, and when we act so decisions are timely, transparent, and aligned with community values.

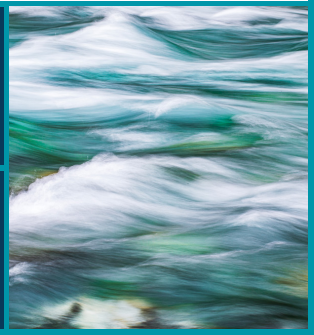
Water security LoS objectives during drought

Piako catchment

- Waikato Regional Council will retain sufficient instream flows and manage water allocation to safeguard the life supporting capacity of the Piako River, its tributaries and associated ecosystems.
- People and stock have access to drinking water they need for wellbeing and sanitation.

Waikato catchment

- No more than 7 days in water restrictions per annum.
- No fish kills arising from drought conditions.
- Habitat is not permanently lost.



PHASE 03

Continued

Establishing Key Performance Indicators / risks (signals and triggers)

We use an adaptive "signals and triggers" approach to make timely, transparent decisions about water security. As we set clear LoS objectives (what we aim to deliver and how we measure it), our signals (early signs) and triggers (when we act) move from broad concepts to specific, measurable thresholds the community can see and we can audit.

How it works:

1. **Align with what matters:** Link signals to the outcomes people care about – for example: reliable and resilient water, value for money, meeting rules and standards, healthy environments and cultural wellbeing. While we finalise the LoS objective KPIs, we note the assumptions and data we need to stay aligned with the Water Security Action Plan.
2. **Set the thresholds:** Once the LoS objective measures are set, each outcome gets clear criteria, how often and how long an issue must occur, our confidence in the data, and the window for action so we respond at the right time, consistently.
3. **Keep it traceable and accountable:** We document how signals and triggers link to measures, decision points and actions. Any changes go through governance and version control, ensuring transparency, data integrity and alignment with our water security goals.

What this phase will deliver:

- Work with the catchment leadership groups to set LoS objectives with the community, water users and mana whenua (e.g., reliability, restriction days, environmental and cultural guardrails).
- Agree indicators, targets, data sources, and reporting cadence.
- Run initial current state modelling using available data to estimate performance against LoS objectives (with confidence ranges). Focus areas include:
  - Supply–demand balance and near term restriction day likelihood.
  - Source reliability and consent constraints.
  - Network losses (e.g., leaks) and demand patterns.
  - Environmental/cultural guardrails and compliance status.
  - Document assumptions, data gaps, and uncertainty; publish plain language LoS objective statements and initial status.

Outputs:

- A concise baseline report and data pack that is specific to the catchment in question (including uncertainties and gaps).
- LoS objectives framework, indicator set, and an initial LoS objectives baseline (with uncertainty bands).
- Assumptions and data gap log; reporting schedule and method.
- Public LoS objective statements and an initial dashboard of current performance.

PHASE 04

Baseline Modelling and Current State Uplift

Purpose: Strengthen the evidence base and complete an integrated baseline model that clearly describes current system performance and supports robust triggers, decision windows, and timely investment decisions.

Description: Phase 4 establishes a decision ready understanding of how the water resource system is performing today, where pressures are emerging, and when intervention is required to stay within agreed LoS objectives. It builds on the Phase 3 initial baseline by improving data quality, strengthening system integration, and explicitly accounting for uncertainty and delivery lead times.

What this phase will deliver: An enhanced integrated baseline model will:

- **Integrate decision critical information in one coherent view**
  Bring together LoS objectives, hydrology, demand, system constraints, delivery timeframes, early warning indicators, decision triggers, and risk.
- **Improve data quality and confidence**
  Uplift monitoring, instrumentation, telemetry, and QA/QC processes so that model outputs are reliable, transparent, and suitable for public reporting and formal decision making.
- **Clarify current system status**
  Recalculate the current ("now") system performance against LoS objectives using improved data and methods, clearly identifying performance gaps, emerging risks, and uncertainty ranges.
- **Define decision windows and trigger thresholds**
  Establish trigger points and decision windows aligned to LoS objectives expectations and real world planning, consenting, and construction lead times, identifying the latest safe points to initiate interventions.
- **Support investment prioritisation and staging**
  Enable comparison across options and catchments by assessing urgency, benefits, readiness, risk reduction, and affordability, supporting near term investments to be staged in the most effective order.
- **Test plausible future conditions**
  Assess system performance under a range of credible futures (e.g. climate variability, growth and demand scenarios) to keep options flexible and reduce the risk of over or under building.

Outputs:

- Integrated baseline model, supported by a targeted data quality improvement plan.
- Updated public summary of current performance vs LoS objectives, including confidence levels and key uncertainties.
- Technical notes documenting modelling methods, assumptions, limitations, and the derivation of triggers and decision windows.

PHASE 05

Develop DAPP, Adaptive Strategic Options, Consenting and Investment Readiness

Purpose: Build "ready to go" strategic options without over committing.

Description: This phase delivers a prioritised, adaptive pipeline of shelf-ready strategic options and investment programmes, aligned to Levels of Service (LoS) objective triggers. It is underpinned by robust option screening and outline business cases that clarify sequencing, dependencies, and trade-offs. The phase advances preparatory design, consenting, and land access to reduce future delivery lead times without committing to construction, and establishes a transparent decision-making framework with clear activation criteria, accountabilities, and funding pathways. These are captured in a living options register with defined readiness levels.

What this phase will deliver:

- Develop shelf ready strategic options and investment programmes linked to specific LoS objectives triggers.
- Complete option screening / Multi Criteria Analysis and prepare outline business cases.
- Progress enabling activities (preliminary design, indicative consents, land access) to reduce time to deliver, without committing to build.
- Define activation criteria, decision gates, accountabilities and funding pathways.
- Maintain an options register with clear readiness levels.

Outputs:

- Option investment programmes and outline business cases.
- Readiness register, with activation criteria and dependencies.

PHASE 06

Conditional Design, Delivery and Operation

Purpose: Move to delivery and ongoing operation when evidence confirms it is required, while maintaining performance against LoS objectives and improving over time.

Description: This phase is activated when agreed Investment objective triggers are met and validated. It integrates conditional delivery with ongoing operations, ensuring capital works proceed only where justified by performance data, forecasts, and thresholds. Design, procurement, construction, and operation are managed as a single adaptive lifecycle, allowing work packages to be progressed, paused, scaled, or stopped as conditions change, in line with agreed guardrails and governance.

What this phase will deliver:

- When an LoS objective trigger is met and validated, activate the relevant option(s) per the investment programmes.
- Confirm full business case, funding, and governance approvals.
- Proceed to detailed design, procurement, construction, commissioning, and operation for triggered work packages.
- Operate assets to meet LoS objectives, supported by monitoring, optimisation, and forecasting.
- Publish performance against LoS objectives and respond to alerts when thresholds are reached.
- Pause, scale, sequence, or stop delivery if conditions change, supported by adaptive review and assurance.
- Drive incremental improvement in operations, data quality, and decision models.

Outputs:

- Detailed designs, contracts, constructed assets, and operational delivery for triggered packages.
- Operational performance reports demonstrating outcomes against LoS objectives.
- Optimisation actions implemented through operations.
- Ongoing alerts and trigger responses informing future investment decisions.
- Change and decision logs documenting activations, pauses, scaling, or stops and the evidence supporting them.

Note:

- Timeframes vary by option scale and the level of readiness achieved in Phase 5.

PHASE 07

Review and Adapt (annual; three year deep dive)

Purpose: Learn, update, and reprioritise - continual improvement in action.

Description:

Review and adjust:

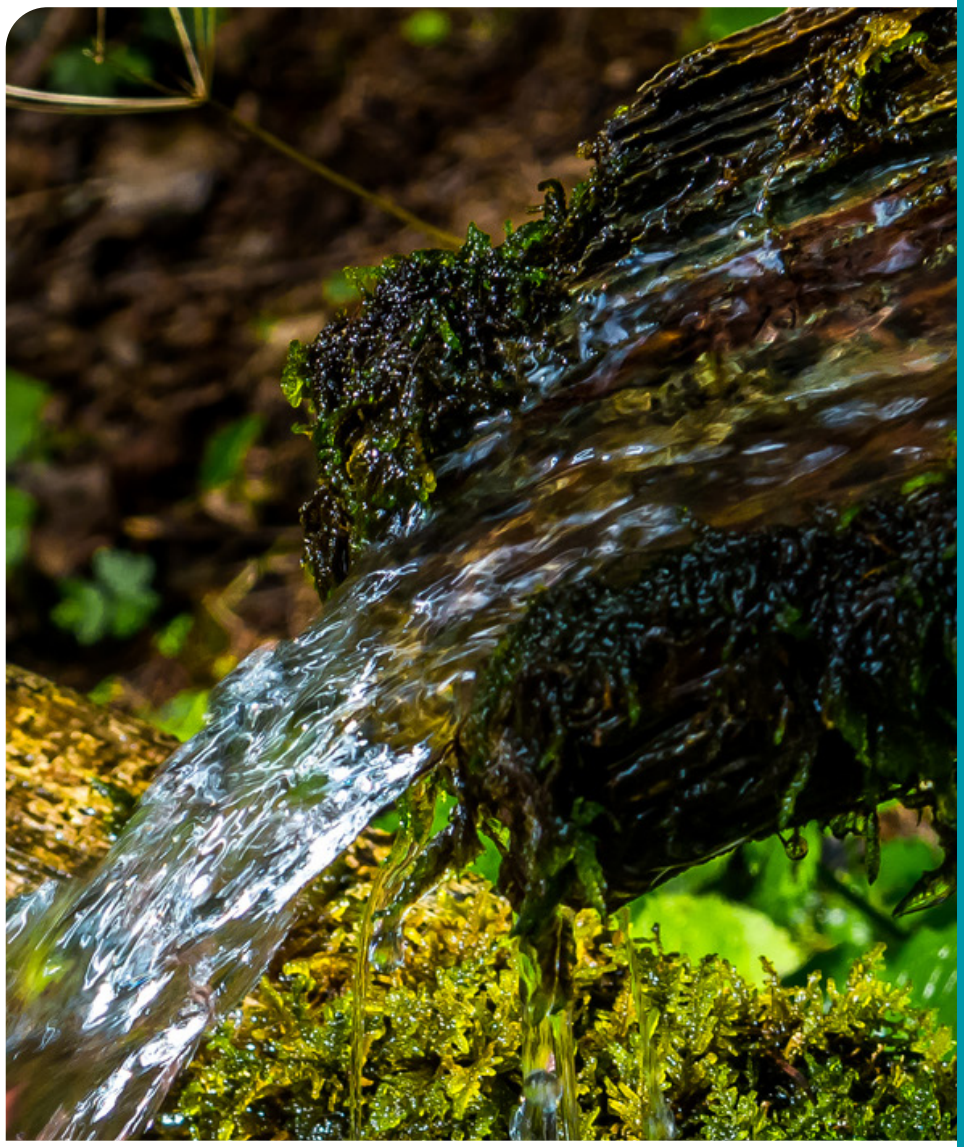
- Keep tracking the key data (drought frequency, demand vs supply, inflows etc.) for all catchments.
- Adjust priorities as these change over time.

What this phase will deliver:

- Review outcomes, update LoS objectives/targets, and refresh the model and data.
- Adjust the programme and investment priorities based on new evidence.

Outputs:

- Annual public review and a deeper three year refresh.
- Updated roadmap, LoS objectives and prioritised portfolio.

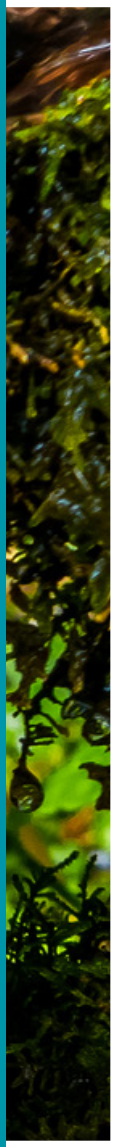


Waikato
REGIONAL COUNCIL
Te Kaunihera ā Rohe o Waikato

Water Security Action Plan

Draft for Councillor workshop

May 2026



3 KARAKIA WHAKAMUTUNGA

Unuhia, unuhia	**Draw on, draw on,**
Unuhia mai te uru tapu nui	**Draw on to the supreme sacredness**
kia wātea, kia māmā,	**To clear, to free**
te ngākau, te tinana, te hinengaro,	**our heart, body and soul**
i te ara takatū	**Our pathway prepared**
Koia rā e Rongo	**Lo, there is peace**
e whakairia ake ki runga	**suspended high above**
kia tina! TINA!	**manifest!**
Haumi ē, hui ē, TĀIKI ē!	**draw together!**
	Affirm!