Water Security Action Plan

for the Waikato Region

Strategy & Policy Committee Workshop – 20 May 2026

make
everyday
better.

Agenda

1. Introduction – **Tracey May**
2. Background – **Thomas Wilding**
3. Overview of the Water Security Action Plan – **Robert Brodnax**
4. Next steps – **Robert Brodnax**
5. Questions
6. Discussion - **Chair**

Background – how we got here…

Waikato Freshwater Strategy (2017)

Water Security Strategy (2024)

WRC Strategic Direction (2026-2036)

Regional Water Security Management Plan

Business Case supported by Council and funded in LTP (**July 2024 to June 2026**)

Te Pai Tawhiti / Strategic Direction

Outcome – *Sustainable and reliable access to quality fresh water.*

Next Step - *Deliver the preferred water security plan actions once they are adopted in June 2026.*

Councillor Project involvement to date

Council Workshop held on **27 May 2025**

Strategy and Policy Committee endorsed the Project Plan and Communications Plan on **19 June 2025**

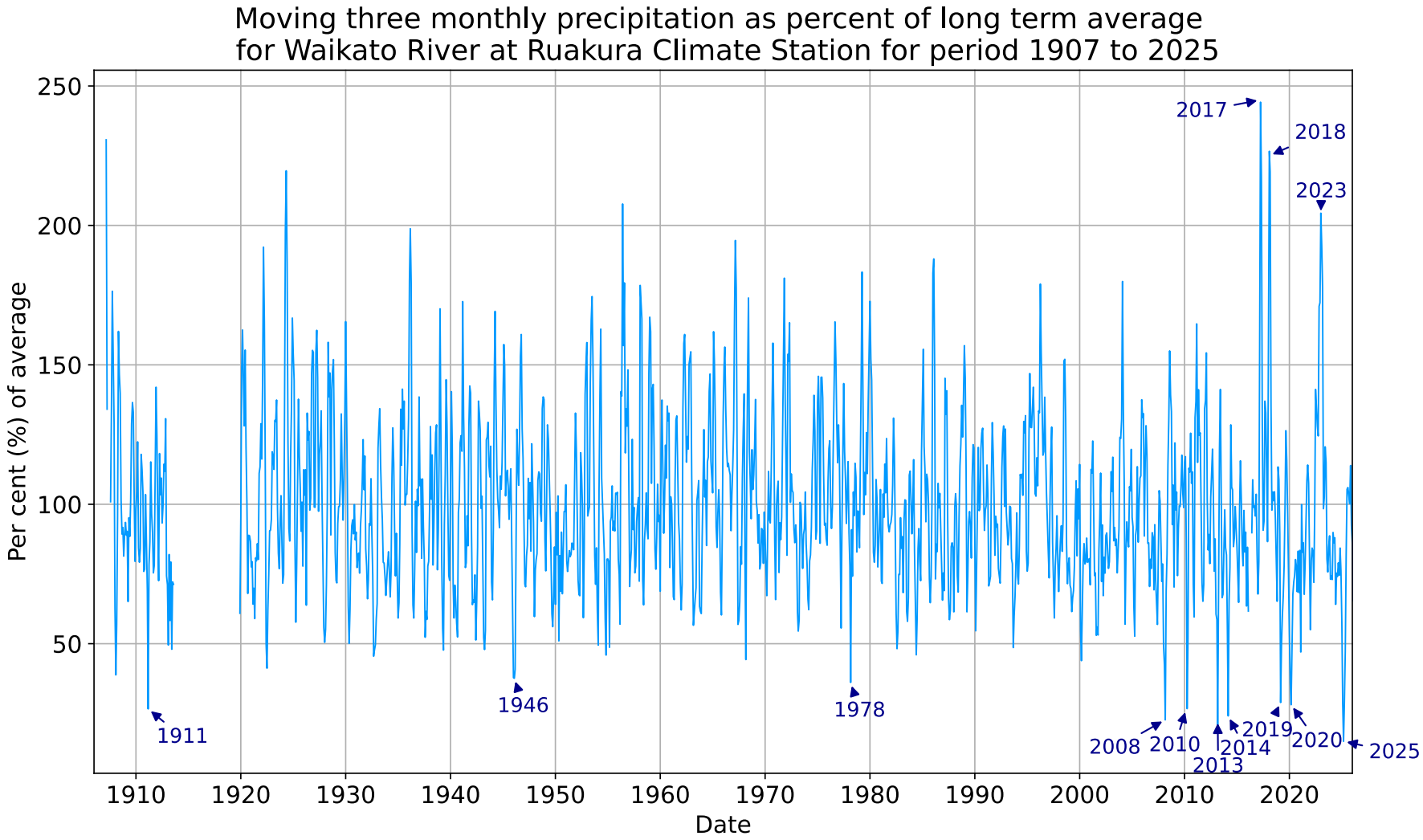
Upcoming KPI for the Chief Executive for the 25/26 year:

"*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*."

What is **'Water Security'**?

The capacity of a population to safeguard sustainable access to adequate quantities of acceptable quality water.

Ruakura - more *storms* **AND** more *drought*



Ruakura rainfall anomaly

(Bevan Jenkins)

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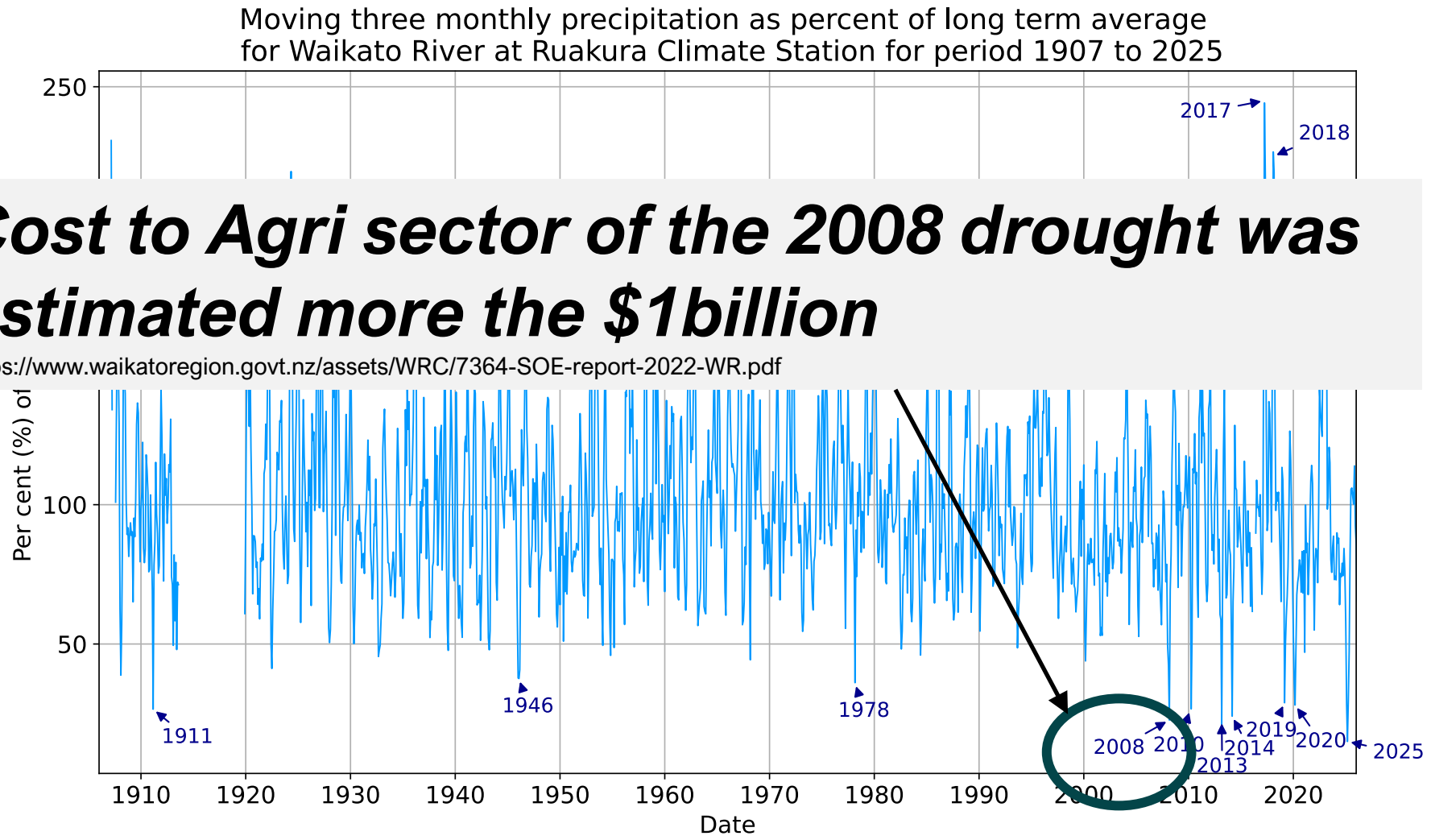


Cost to Agri sector of the 2008 drought was estimated more the $1billion

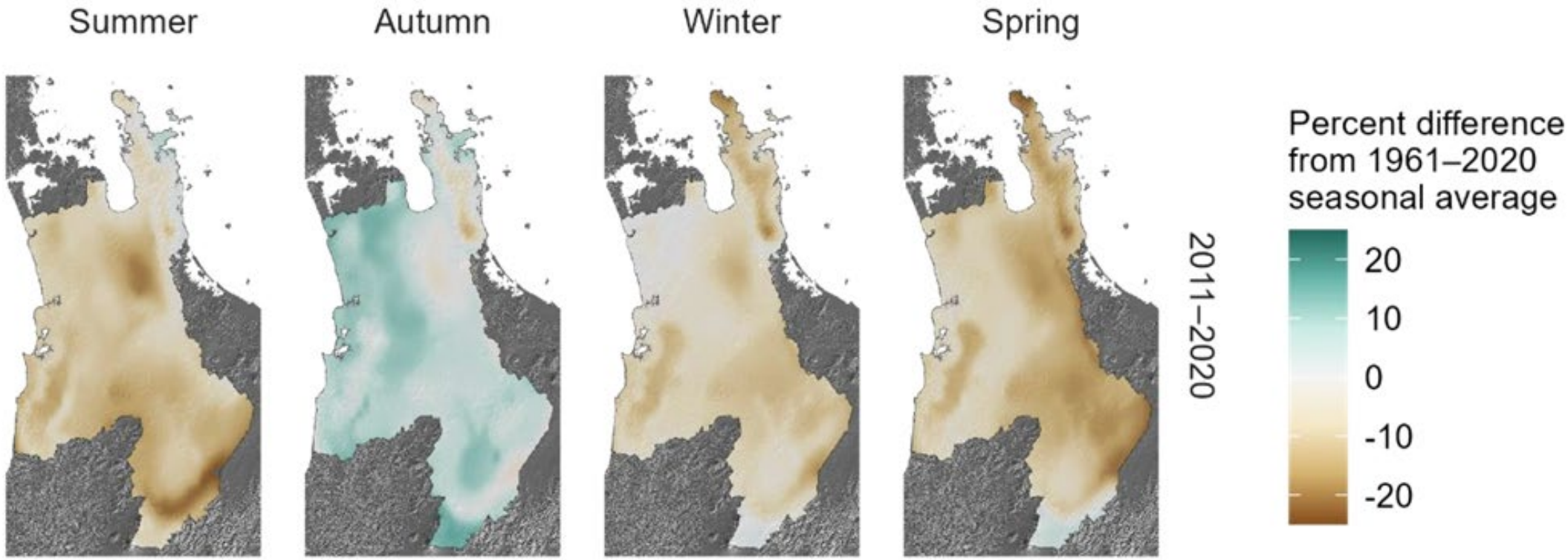
https://www.waikatoregion.govt.nz/assets/WRC/7364-SOE-report-2022-WR.pdf

Ruakura rainfall anomaly

(Bevan Jenkins)

Less rain in the Waikato

– drier spring, wetter autumn



Rainfall 2011-2020 percent difference from 1961-2020 average
https://www.waikatoregion.govt.nz/assets/WRC/TR202206.pdf

More demand when rainfall is lowest

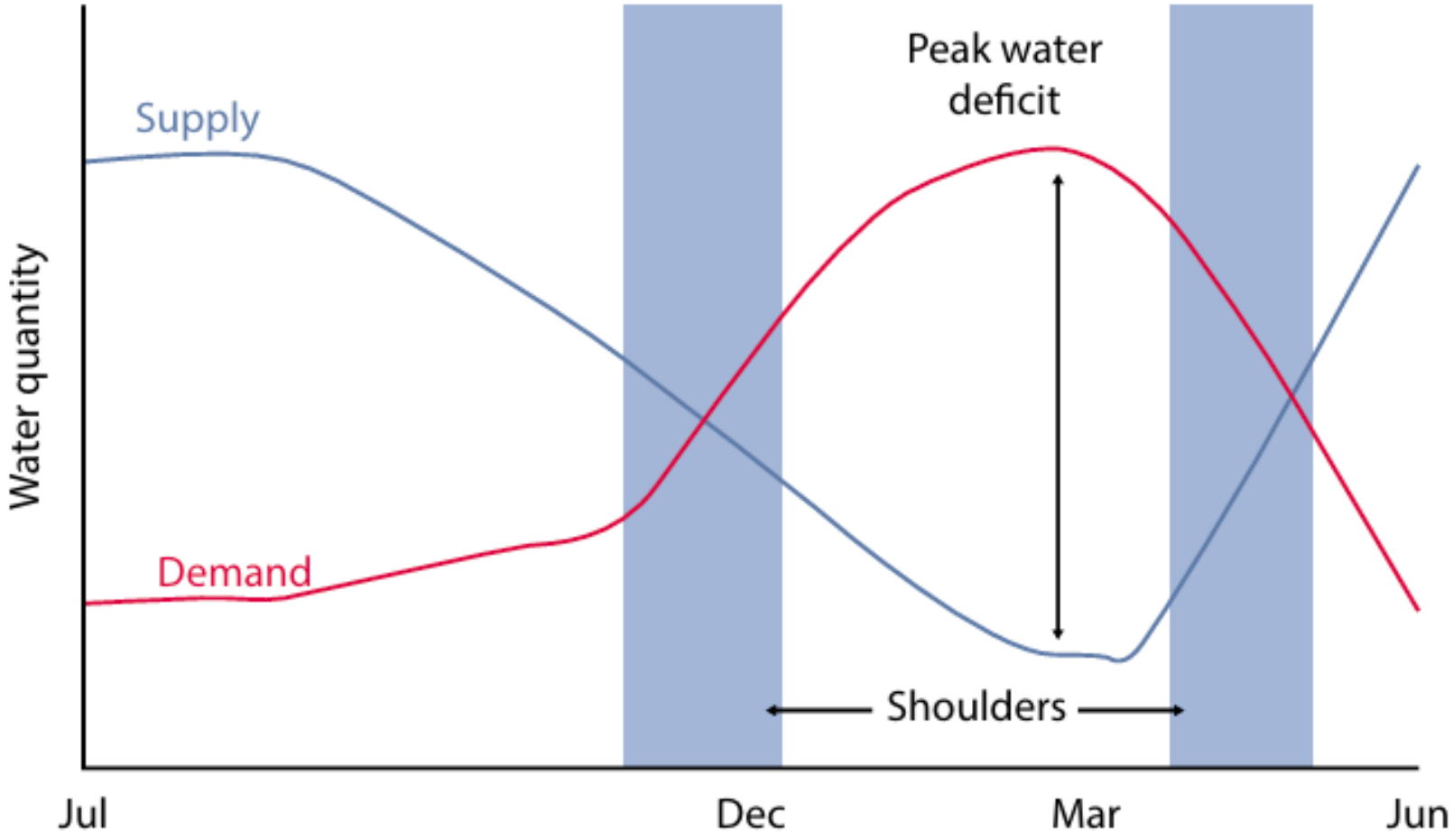


Figure 10: Conceptual model of annual pattern of water availability (supply) and consumption (demand) leading to peak water deficit in summer.

Timing is critical

https://www.waikatoregion.govt.nz/assets/WRC/Water-Security-Strategy.pdf

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Drought impacts on

HEALTHY ENVIRONMENT

VIBRANT COMMUNITIES

STRONG ECONOMY

Questions?

Stakeholder and iwi engagement

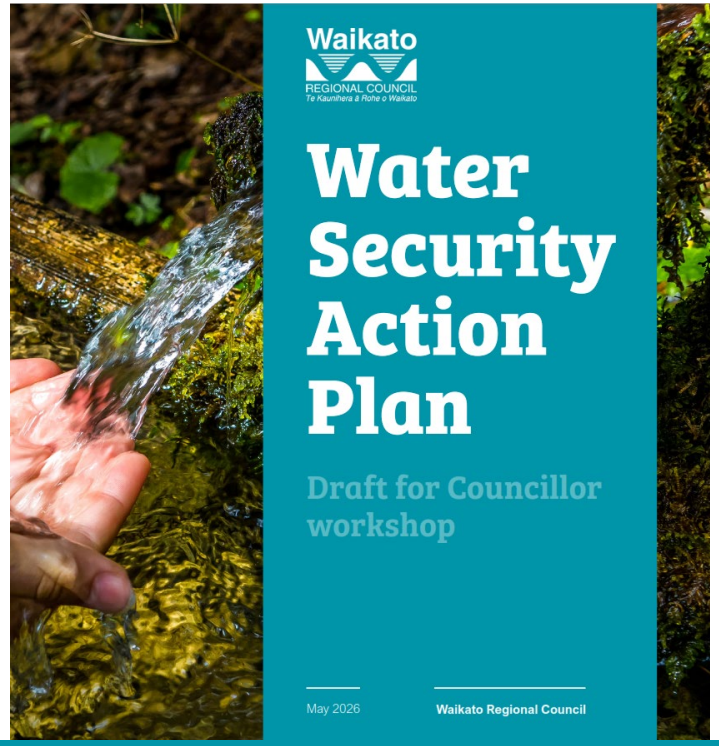
- **Dragon's Den Workshop on 'Options Development' – challenge group:** Dennis Crequer, David March, Brendon Green, David Speirs, Lorraine Kendrick
- **1v1 meetings:** Mercury, MfE, CDEM, iwi
- **Workshop One**: Key industry stakeholders
- **Workshop Two**: Local and regional council representatives
- **Workshop Three**: Iwi, councils and industry stakeholders

- Waikato Regional Council
- Waikato District Council
- Hamilton City Council
- Thames Coromandel District Council
- Rotorua Lakes Council
- South Waikato District Council
- Hauraki District Council

- Mercury Energy
- Genesis
- Waikato River Authority
- Ministry of Primary Industries
- Ministry for the Environment
- Irrigation NZ
- Watercare
- CDEM

- Waikato Tainui
- Raukawa
- Ngati Tara Tokanui
- Ngāti Huarere
- Ngati Porou ki Hauraki

The Water Security Action Plan



What it is…

- Region wide
- Programme of actions
- Adaptive planning pathway response to the regions' water security challenges

What it is not…

- A review of allocation policy
- Site selection for storage etc.
- Modelling

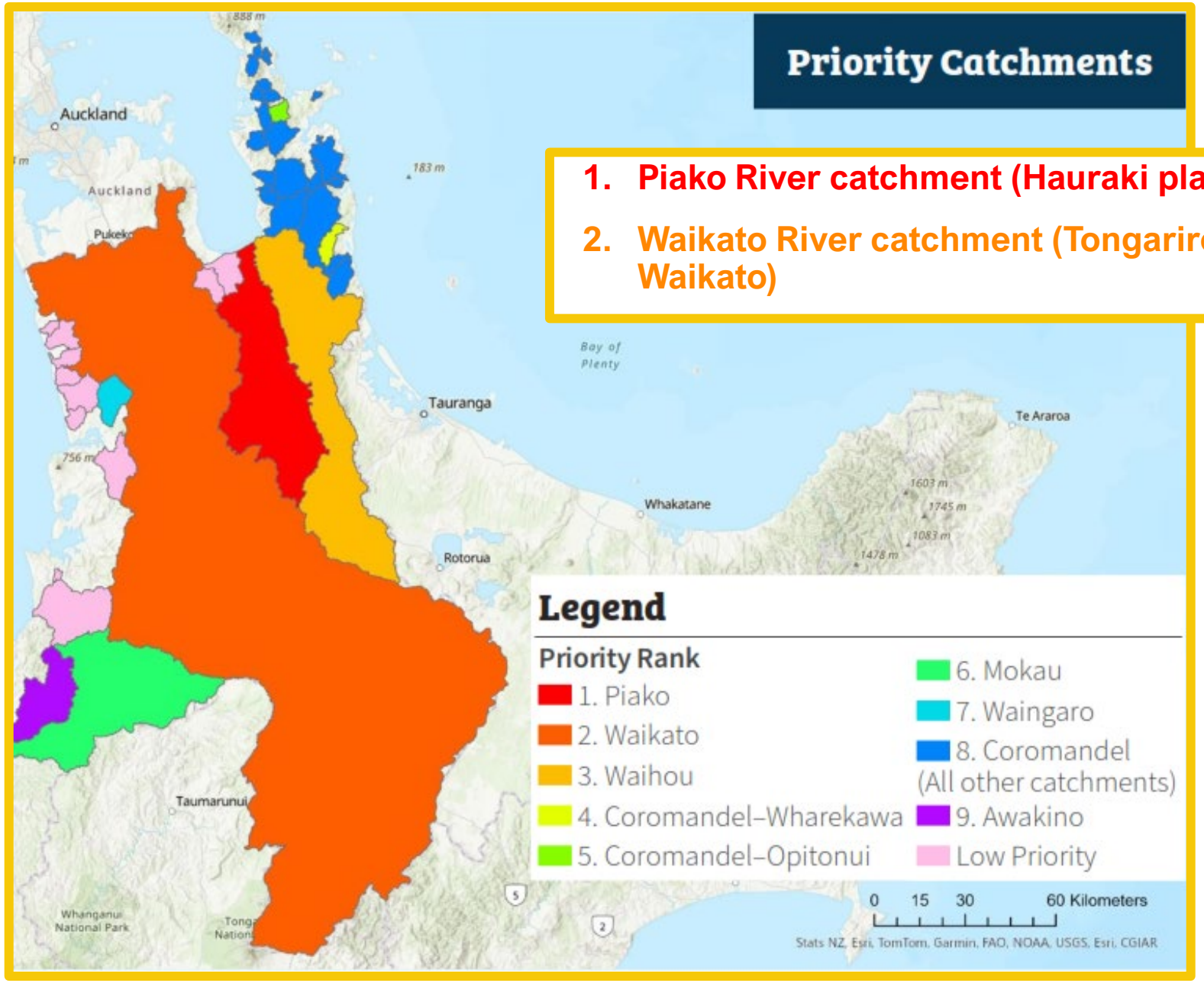
Key Outcomes

- 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

Integrated Systems Assessment

What it told us the Water Security Action Plan will need to do:

- Prioritise better monitoring and information in ungauged or data limited catchments.
- Review allocation thresholds and minimum flows to better reflect ecological and cultural requirements and seasonal realities.
- Target actions where deficits and durations are most persistent, especially in summer.
- Prepare for greater variability by setting clear roles and responsibilities, signals and triggers, and staged responses that can be adjusted as conditions change.



1. **Piako River catchment (Hauraki plains)**
2. **Waikato River catchment (Tongariro to Port Waikato)**

22 Operational actions

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

Delivery	Operational Action	What Catchment/s?	Current Status	Description
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.
		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.
	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.
		All	BAU	Apply consent conditions and sustainable yield limits; assess local and cumulative effects and enforce compliance.
		Priority	BAU+	Clarify sustainable yield policy to account for cumulative stream depletion; prepare plan change materials and technical guidance.
	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.
		Priority	New	Develop reach/species specific flow–ecology models and resilience metrics; calibrate with historic and simulated flows to inform limits and consent conditions.

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Six **strategic options**

How long does it take to deliver these options?

Strategic Option	Year 01	Year 02	Year 03	Year 04	Year 05	Year 06	Year 07	Year 08	Year 09	Year 10	Year 11	Year 12	Year 13	Year 14	Year 15	Year 16
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																

Near Term: Scoping, Feasibility, Early Engagement, Design Requirements, Yield Assessment

Medium Term: Design, Pilot Studies, Decision Gate Scale Up

Long Term: Construction, Scaling, Integration into Operations

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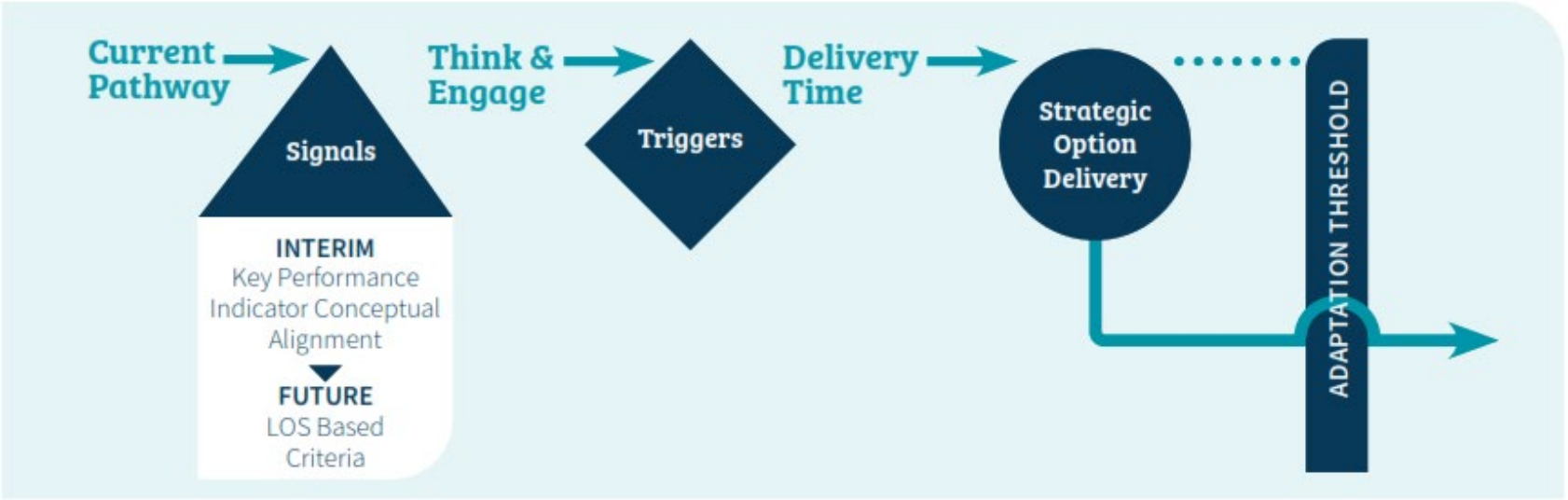
Dynamic Adaptive Planning Pathway



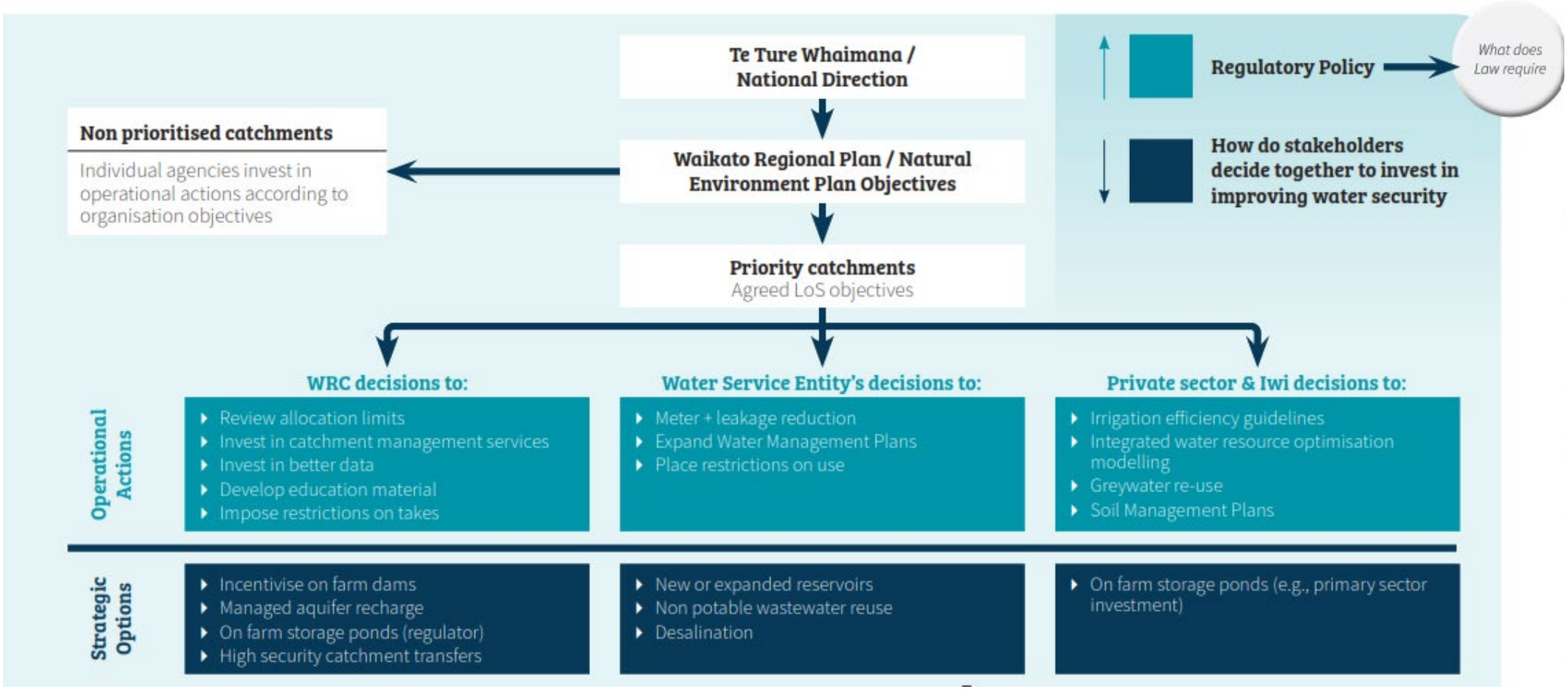
What "signals" and "triggers" mean:

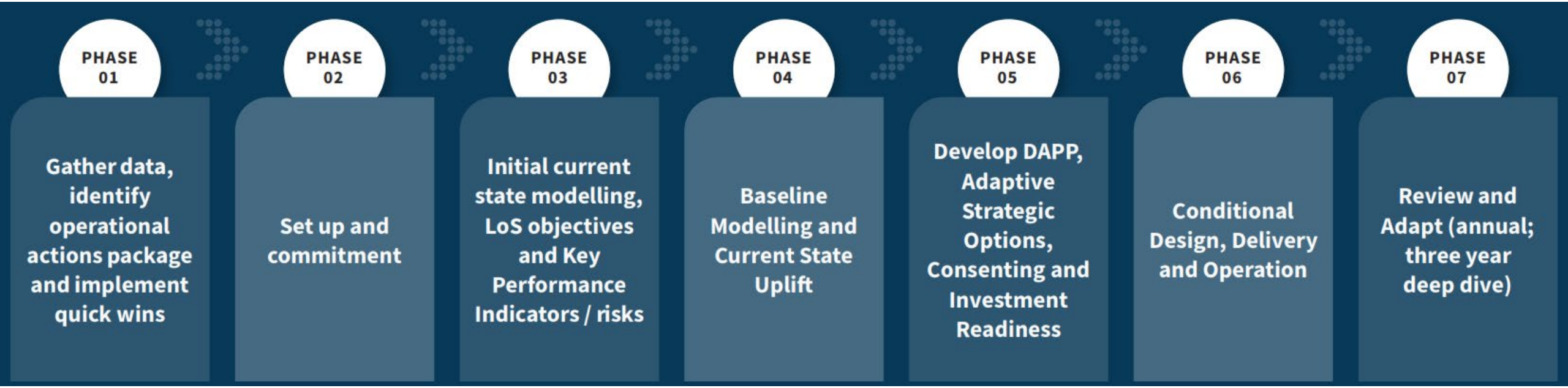
- **Signals =** early warnings that start planning and pre work for strategic option(s).
- **Triggers =** the point where we decide to deliver a strategic option.

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.

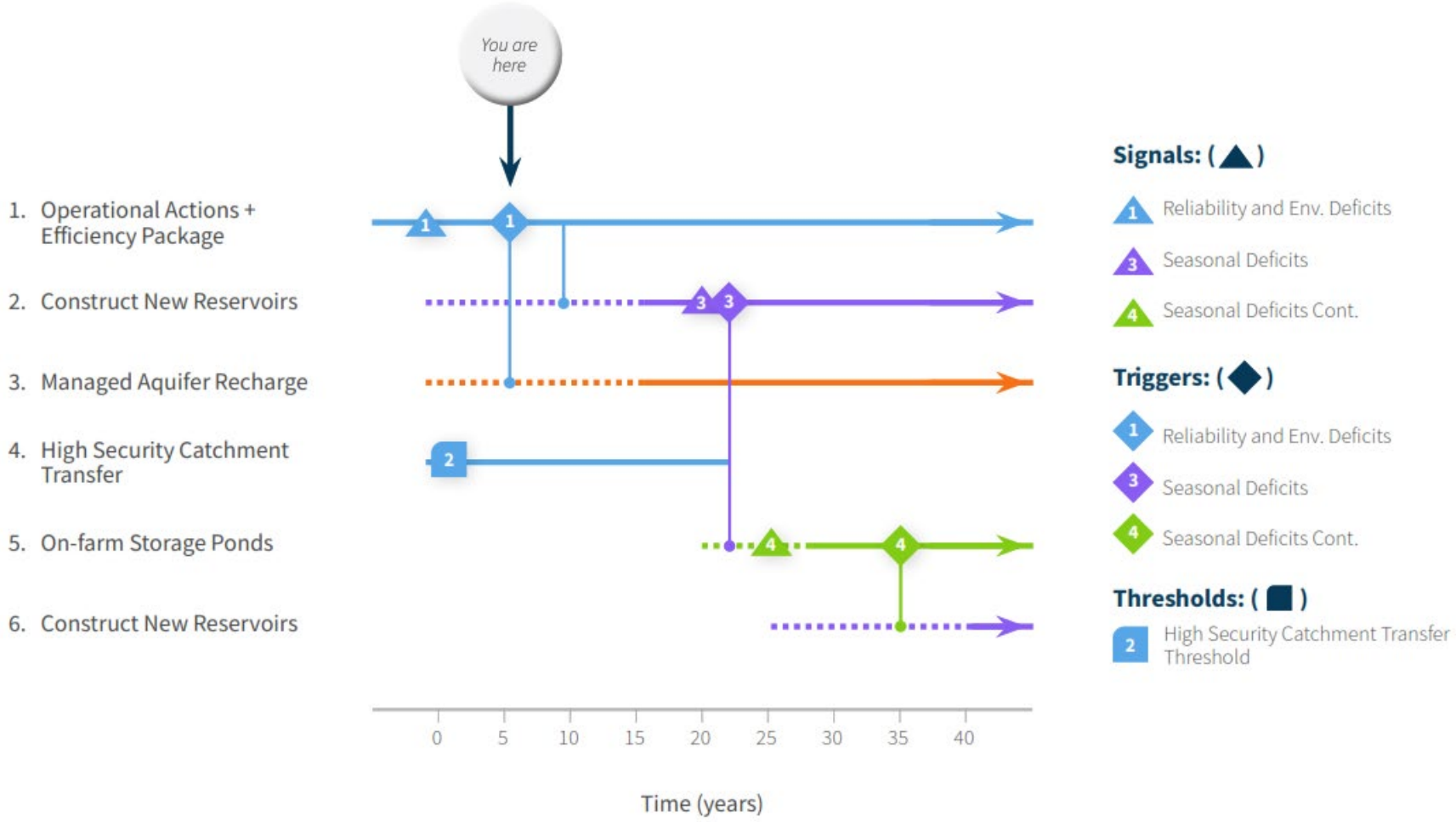
Decision making framework



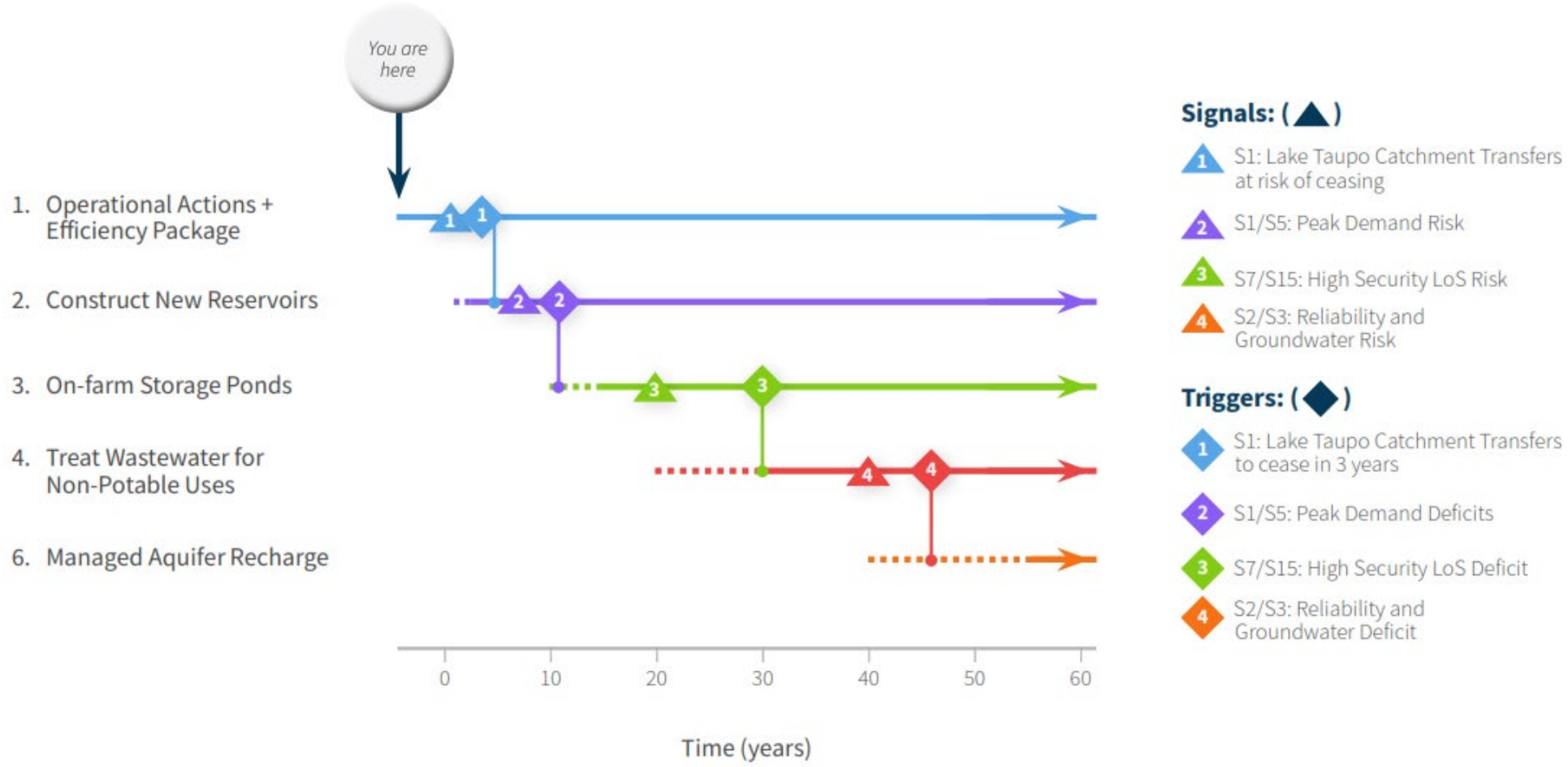


Delivery phases

Recommended for Piako catchment



Recommended for Waikato catchment



Key messages

Water security is already a live risk, not a future issue

The region needs to move from reactive to planned, staged decision-making (**DAPP**)

The immediate priority is improving efficiency and demand management (**Operational Actions**)

Major infrastructure is likely (**Strategic Options**) but only when clearly justified

Priority catchments (**Piako and Waikato**) require urgent, co-ordinated action

Delivery depends on partnerships, not just WRC action

Next priority steps…

Get your data right!

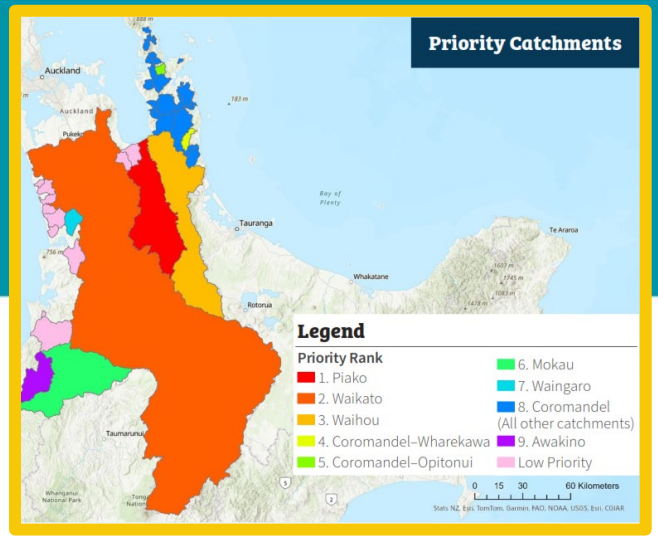
Establish catchment leadership groups in the two priority catchments

Relationships – IAWAI and Waikato Waters Limited involvement

Questions?

Discussion

Discussion Point 1



1. Priority catchments – Piako & Waikato

- Where is water security the key issue?
- Who are the key water players in each catchment?
- Are there urgent issues/community pressures that we need to consider in prioritisation?

Discussion Point 2

WRC role

- What roles should WRC play vs other agencies?
- Do we have a role beyond water regulator?
- If Catchment Leadership Groups were established, what would WRC role be on those Groups?