



MEMO

TO Te Awarua-o-Porirua Whaitua Committee
FROM Project Team
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Timeframes for Objectives

It is important to set timeframes for objectives to be achieved for a number of reasons including:

- Values are 'at risk' the longer an objective is not achieved. Shorter time frames reduce the time that the values are at risk, while longer time frames extend the time that values are at risk.
- The timeframe by which an objective is to be achieved will drive the pace of the implementation policy package (i.e. shorter timeframes may require more regulation and increased costs while longer timeframes may ease the costs/burden on certain sectors and/or communities)
- Timeframes help assess progress towards achieving the objective and whether an additional (or tougher) policy/management regime is needed in order to achieve the objective.

Timeframes need to be set for objectives where an improvement is required. The degree of effort required to make improvements from one band to another will vary from location to location and for the different attributes. Some attributes may be more difficult to improve than others equally some locations will require more effort than others.

There is no ideal timeframe to meet the Committee's draft objectives but there is a clear benefit in setting a timeframe. The decision is a balance between how long we are willing to tolerate the values being at risk, the pace of implementing the policy package and the opportunities to assess and review progress towards achieving the objectives and implementing policy package.

Where the current state is already meeting an objective, no timeframe is required, however there is the requirement to maintain the current state. In most cases, to maintain the current state, policy recommendations are required to ensure it does not get worse.

Pathogen objectives

The National Policy Statement for Freshwater Management (NPS-FM) sets a national target to have 90% of rivers that are 4th order and above¹ suitable for primary contact (C band and above for *E*.

¹ Porirua Stream, Pauatahanui Stream and Horokiri Stream in the Porirua Whaitua

coli) by 2040. The objectives and policy package developed by the Committee is aimed at meeting this requirement. It is therefore logical to also adopt 2040 as the date for the *E. coli* objectives in each of the Water Management Units (WMU).

If the *E. coli* objectives in the freshwater are to be achieved by 2040, we can also assume the harbour objectives for Enterococci should also be achieved within the same timeframe.

Sediment objectives

Reducing sediment inputs will take time, as the policy recommendations require planning and then implementation to take place. Where land is to be retired or planted, this will take time not only to put the recommendations in to place, but for vegetation to establish and be effective at reducing sediment inputs.

Reducing stream bank erosion will also take time to be effective with riparian planting and stock exclusion both taking time to establish.

While it is uncertain whether these responses could be implemented within this timeframe, a 2040 timeframe for achieving the sediment objectives is recommended. As noted previously, progress towards achieving the objectives will be monitored and reviewed, and if necessary amendments made to the policy package should progress towards the objective not be met.

Ecological toxicity objectives (heavy metals, ammonia and nitrate)

The opportunities to reduce ecological toxicants will be wide and varied, and likely to occur in steps as opportunities for brownfield development or redevelopment/treatment of existing 'high risk' sources arise. When that development does happen the reductions should happen relatively quickly.

Reductions in ammonia and peak nitrate are mainly achieved by reducing wastewater overflows and are therefore connected to the *E.coli* objectives.

A 2040 timeframe is recommended for the ecological toxicity objectives. This provides consistency with other objectives and a timeframe for many of the necessary brownfield or redevelopment opportunities to arise.

Ecological indicator objectives (MCI, periphyton, native freshwater fish, macro-algae)

The main driver of change to achieve the ecological objectives are the habitat related recommendations. As noted with the sediment objectives, it will take time to plan and then implement any riparian planting and other habitat improvements within the whaitua. In addition, recommendations aimed at achieving the other objectives, such as sediment and ecological toxicity, will also help in achieving the ecological indicator objectives.

A 2040 timeframe is also recommended for the ecological indicator objectives. This provides consistency with other objectives, though there is also uncertainty whether these responses could be implemented within this timeframe

Freshwater objectives and timeframes

WMU name	<i>E. coli</i>			Ammonia			Nitrate			Dissolved Zinc			Dissolved Copper			Periphyton			MCI			Native fish		
	Current state	Objective	Time frame	Current state	Objective	Time frame*	Current state	Objective	Time frame*	Current state	Objective	Time frame*	Current state	Objective	Time frame*	Current state	Objective	Time frame*	Current state	Objective	Time frame*	Current state	Objective	Time frame*
Taupo	E	B	2040	A	A	M	A	A	M	B-C	A	M	D-C	B	M	C	B	2040	C	B	2080	C	B	2040
Western headwaters	A	A	M	A	A	M	A	A	M	A	A	M	A	A	M	A	A	M	A	A	M	C	A	2040
Northern Hills	E	B	2040	A	A	M	A	A	M	A	A	M	A	A	M	C	B	2040	C-B	A	2040	B-A	A	2040
Eastern Hills	E	C	2040	A	A	M	A	A	M	A	A	M	A	A	M	C	B	2040	C-B	B	2040	B	A	2040
Urban	E	C	2040	C	A/C ²	2040	B	A/B ³	M	D	C	2040	D	B/C ⁴	2040	C-B	B	2040	C	C	M	B/C	B	2040

* M – Maintain current state

² The attribute state for median ammonia is estimated to be A state and the maximum is estimated to be C state. The attribute state objective is to maintain the median in A attribute state and improve the maximum to C attribute state.

³ The attribute state for median nitrate is estimated to be A state and the 95th percentile is estimated to be B state. The attribute state objective is to maintain the median in A attribute state and maintain the 95th percentile in B attribute state.

⁴ The attribute state for median copper is estimated to be B state and the 95th percentile is estimated to be D state. The attribute state objective is to maintain the median in B attribute state and improve the 95th percentile to C attribute state.

Harbour and coastal objectives and timeframes

WMU Name		Enterococci			Total zinc in sediment			Total copper in sediment			Macro algae			Sedimentation rate		Muddiness		Muddiness	
		Current state	Objective	Timeframe	Current state	Objective	Timeframe*	Current state	Objective	Timeframe*	Current state	Objective	Timeframe*	Objective	Timeframe	Objective	Timeframe*	Objective	Timeframe*
Onepoto Arm	Intertidal	D	C	2040	B	B	M	A	A	M	B	B	M	The average sedimentation rate is less than 1mm per year in the Onepoto Arm (assessed as the rolling average over the most recent five years of data)	2040	Sediment mud content does not exceed 20% in the intertidal sediments and should not increase from current state	M	Spatial extent of soft mud shall not exceed 15% of the available intertidal area and no increase in soft mud area from current	M
	Subtidal				C	C	M	B	B	M									
Pauatahanui Arm	Intertidal	D	B	2040	A	A	M	A	A	M	B	B	M	The average sedimentation rate is less than 2mm per year in the Pauatahanui Arm (assessed as the rolling average over the most recent five years of data)	2040	Sediment mud content does not exceed 20% in the intertidal sediments and should not increase from current state	M	Spatial extent of soft mud shall not exceed 15% of the available intertidal area and no increase in soft mud area from current	M
	Subtidal				B	B	M	A	A	M									
Coast		B	B	2040															

*M – Maintain the current state