

NPSFM obligations

– a council case study

Auckland Council plans to implement the National Policy Statement for Freshwater through the Auckland Unitary Plan. Article by Dr Claudia Hellberg, Wai Ora Strategy Manager at Auckland Council, and Ian Mayhew, Principal Planner with 4Sight Consulting.

A key purpose of the National Policy Statement for Freshwater Management 2014 (NPSFM) is to set enforceable freshwater quality and quantity limits that reflect local and national values and freshwater objectives. Regional councils are required to implement the NPSFM by December 2025, or by December 2030 if implementing it earlier is not practicable. Regional councils are required to adopt and notify a Progressive Implementation Programme (PIP) outlining the stages and timeframes by which implementation of the NPSFM will be achieved.

Auckland Council notified its revised PIP in December 2015, outlining the stages and timing of its implementation programme. Its PIP included a programme of progressive changes and variations to the Auckland Unitary Plan (AUP).

The council's state of the environment monitoring provides evidence of the degradation of freshwater arising from intensive land use activity. This includes elevated levels of *E. coli*, temperature, nitrate, sediment and heavy metals and lowered levels of dissolved oxygen in the water. River ecology monitoring indicates that half of the monitored sites are characterised as having 'poor' ecology quality.

Collectively, the results indicate that there are likely to be numerous failures of the NPSFM National Bottom Lines (NBL) in Auckland's rivers. Importantly, it is recognised that it is not just water quality that drives degraded ecosystem health. Auckland's typically small urban rivers suffer from 'Urban Stream Syndrome', which is a response to a range of changes such as land clearance, loss of riparian vegetation, increased impervious surface, stream burial and modification and increased contaminant sources that combine to reduce ecosystem health and diversity¹.

In respect of water quantity, the total amount of water allocated in the Auckland region (July 2012 to June 2013) was 107.6 million cubic metres.

Surface water accounted for 63 percent and groundwater 37 percent of the total. Of the amount of water allocated in the 2012/2013 year, municipal supply accounted for 62 percent of the allocation, followed by irrigation (15 percent), industry (12 percent), community (two percent) and other (nine percent). For those identified water catchments in the AUP, the surface

water resources in the Auckland region are not currently over-allocated². Similarly, major groundwater aquifers were not fully allocated in 2013³.

Auckland Unitary Plan

The AUP contains a comprehensive set of provisions for freshwater management and ecosystem health across all levels of the plan (Regional Policy Statement, Regional and District Plan).

The Plan contains numerous objectives and policies that have relevance to freshwater with several key themes, including:

- An overall improvement in water quality and ecosystem health. This reflects the generally degraded state of Auckland's urban freshwater (and coastal) waterbodies and is characterised by objectives and policies that seek to 'maintain where good and enhance where degraded' and progressive improvement/reduction in adverse effects.
- An emphasis on freshwater systems⁴, and strong provisions to manage/minimise stream loss/modification and hydrological change. This recognises the interconnected nature of freshwater systems and the importance of managing hydrology during urban development.
- Integrated land and water management. This is an important aspect of improving outcomes from urban development including greenfield development and urban intensification.
- The efficient allocation and use of water within identified limits.

The AUP also includes provisions for the identification and acknowledgement of mana whenua values and uses, the mauri of freshwater and the (future) development of objectives and limits for freshwater in conjunction with mana whenua.

Alignment of provisions in the AUP against the NPSFM

To assess the extent to which the AUP gives effect to the NPSFM the respective provisions were aligned and a qualitative

1. Paraphrased from M Neale AUP IHP Evidence Topic 046

2. From A Millar AUP IHP Evidence Topic 006

3. Derived from Stansfield, B and Holwerda, N (2015). State of the environment monitoring: Auckland water quantity statement 2012/2013. Prepared by EIA Ltd for Auckland Council. Auckland Council technical report, TR2015/005

4. In the AUP, a freshwater system is defined as: The beds, banks, margins, flood plains and waters of rivers and natural lakes and wetlands, and groundwater systems together with their natural functioning and interconnections.

assessment made on the basis of the comprehensiveness and relevance of the Plan provisions in directing the outcomes sought by the NPSFM. The following conclusions were drawn in respect of the various NPSFM objectives and policies.

Objectives A1 (quality), B1 (quantity) – Safeguard life supporting capacity of water and health of people.

These provisions have been largely given effect to by the provisions of the AUP. While it is acknowledged that the Plan does not explicitly address the National Objectives Framework (NOF) and associated NBL for secondary contact, provisions for stormwater/wastewater and staged stock exclusion from waterways provide for a progressive reduction in existing adverse effects (primarily through network discharge consents and redevelopment of existing land use) on the assumption of a generally degraded current state.

A primary freshwater ecosystem management issue in Auckland is stream loss and physical modification and the effects of hydrological changes associated with urbanisation. Accordingly, the AUP incorporates a framework for the holistic management of freshwater systems, with an emphasis on the management of stream loss/modification, urban hydrology and the implementation of an integrated stormwater management approach. Preservation of minimum stream flows and aquifer water levels also assist in managing instream habitat and contribution of groundwater to stream baseflows.

It is considered that in some aspects the AUP provisions for freshwater systems (particularly the management of hydrological change and stream loss/modification) go beyond the water quality focus of the NOF.

Objectives A2, B4 – Maintain/improve overall quality & protect freshwater/wetlands.

The AUP largely gives effect to these objectives for both water quality and quantity. Maintaining water quality/freshwater systems where they are good and a progressive improvement in water quality and ecosystem health where they are degraded is a key objective of the Plan.

Wetlands and outstanding (or in this context regionally significant) freshwater bodies are subject to additional ‘overlay’ provisions to assist in protecting their general values – although it is acknowledged that the specific values have not yet been identified through full NPSFM implementation.

The Plan includes a range of activity based rules to manage land use activities, contaminant discharges and stock access to waterways etc, although these are not subject to established water quality limits.

Policies A1(a), B1 – Establish freshwater objectives/limits/targets.

The establishment of objectives for water quality has yet to be given effect. In contrast, allocation limits, flows and water levels have been established for Auckland’s main rivers and aquifers. Hence it is concluded that the outcomes sought by the NPSFM for water quantity have been given effect to, albeit not through the NPSFM NOF process.



INFRASTRUCTURE WITH AESTHETICS

The Kopupaka Reserve, near the Westgate Town Centre in northwest Auckland, forms reserve features walkways and water-retaining areas over the 50-hectare site. ICB Retaining & Construction was contracted to construct the feature walls for the retention of the stormwater ponds, the inlet and outlet structures, public viewing platforms and various other backfilled retaining walls. This work picked up an award this year in Berlin.

Objective B2, Policies A1(b), B5 – Methods/rules to avoid over-allocation.

The AUP gives effect in part to these provisions for water quality and largely gives effect for water quantity.

Establishing freshwater quality limits and targets is complex due to the variety of considerations and influences.

However, the Plan establishes the objective of maintaining water quality where it is ‘good’ or ‘excellent’ (B7.4.1 (2) and E1.2(1)) and includes numerous policies and rules to manage water quality and minimise adverse effects of new development as far as practicable – including discharge, land use/development and subdivision provisions.

The Plan also includes numerous rules that manage activities that may result in contaminant discharges. Additionally, the AUP includes significant provisions in respect of freshwater systems – including managing stream loss/modification, hydrological change, stock access etc – with a view to not just managing water quality but holistically protecting the health and values of aquatic ecosystems.

In contrast, the water quantity section in the AUP has established allocation limits and provides a statutory framework to assess resource consent applications for water takes to ensure that these limits are not exceeded.

Objective B2, Policies A2, B6 – Address/phase out existing over-allocation.

In respect of water quality, a key objective of the AUP is to progressively reduce existing adverse effects and improve areas of degraded water quality and ecosystems. This is particularly pertinent in the urban area, which is the key area in Auckland that has degraded water quality.

This objective is delivered through a range of policies and rules that are focused on taking the opportunities provided by redevelopment to progressively reduce existing adverse effects, although the Plan does not specify by how much or by when. More specific targets will be established by subsequent stages of implementation. In the interim the aim is an upward trajectory in terms of water quality.

Water quantity over-allocation is not identified as an issue in Auckland. However, the AUP includes a policy (E2.3(10)) that outlines how management will be undertaken where water allocation exceeds or is close to exceeding the established minimum flow/levels and availabilities in Appendices 2 and 3.

Accordingly, it is concluded that the AUP gives effect in part to these provisions of the NPSFM for water quality and largely gives effect for water quantity.

Policy A3 – Conditions/BPO rules to meet limits and targets.

The AUP gives effect in part to this policy. There are significant rules relating to land use and discharges in accordance with the Plan objectives and policies. However, limits and targets have not yet been set and hence conditions will reflect policy direction rather than specific limits and targets as envisaged by the NPSFM.

Objective B3, Policies B2, B3, B4 – Efficient allocation, use and transfer of water.

It is considered that the AUP largely gives effect to this objective and these policies. A key objective for the water allocation and use provisions of the AUP is to manage water to maximise is efficient allocation and use (E2.2(4)).

This objective is given effect to through a range of policies that apply to water takes and include establishing priorities for water allocation, requiring applicants to justify the amount of water required for their needs and consider methods of water conservation and methods to optimise the use of water across users including facilitating transfers (within the same surface water catchment) and encouraging shared use and management of water.

Policies A4, B7 – Interim provisions.

As the AUP does not give full effect to the NPSFM, the interim policies required by the NPSFM (Policy A4 and B7) have been included in the AUP.

Part C – Integrated management.

This requirement has been largely given effect to in the AUP, with strong emphasis on the integrated management of land use and development and water quality and freshwater systems. The RPS includes a policy specifically related to integrated management of land use and freshwater management.

Given the development and resource management issues faced by Auckland, this is focused on urban development. It requires the provision of water and other infrastructure to support new growth/intensification, catchment management planning to support structure plan processes and the control of both land use and discharges to minimise adverse effects and progressively reduce existing adverse effects.

This RPS objective is in turn given effect to by numerous policies and other provisions that seek to ensure integrated management of land and fresh and coastal water including land use, subdivision and discharge provisions.

A key aspect of integrated management in respect of urban development is the requirement to apply an integrated stormwater management (water sensitive design) approach for

greenfield and major redevelopment. This approach details a range of requirements to ensure that effects on freshwater systems and coastal waters are minimised and reduced where possible.

Part CA – National Objectives Framework.

This has yet to be given effect to.

Part D – Tangata Whenua roles and interests.

The AUP includes provisions in respect of the involvement of Mana Whenua in freshwater management, including integrating Mana Whenua (territorial rights) values, matauranga (Maori knowledge) and tikanga (Maori way of doing things) when giving effect to the NPSFM (B7.4.2(3)), developing specific objectives and limits for freshwater with Mana Whenua (E1.3(7)) and acknowledging Mana Whenua values in the allocation and use of water. Other provisions, including those in Section B6 Mana Whenua, recognise and provide for Mana Whenua values and opportunity for Mana Whenua to be actively involved in sustainable management.

At this stage, the AUP signals the intent to involve Mana Whenua in the establishment of freshwater values and objectives and reflect these values in decision making. For this reason, it is concluded that the AUP gives effect in part to this section of the NPSFM.

Parts CB, CC & E – Monitoring Plans, Accounting, Progressive Implementation Programme.

The requirements of these sections of the NPSFM largely lie outside of the AUP. However, it is noted that the council:

- Notified its revised Progressive Implementation Programme in December 2015. This will be further revised as the implementation programme is refined.
- Has a significant river and groundwater monitoring programme including quality, ecosystem health, flow levels and a range of other metrics.
- Receives comprehensive compliance data on water use and is well placed to develop a freshwater accounting system for water use.
- Is still in the process of setting up a water quality/contaminant accounting system.

The assessment is summarised in the table on page 27.

Conclusion

The assessment of the extent to which the AUP gives effect to the NPSFM indicates that the Plan gives significant effect to many of the requirements of the NPSFM, notwithstanding that specific freshwater objectives, limits and targets have yet to be established through the process specified in NPSFM section CA. In particular, the AUP:

- Includes significant objectives and policies to progressively improve overall water quality/progressively phase out water quality ‘over-allocation’⁵ in the context of a generally degraded current state (primarily in urban areas) and a range of activity based rules that give effect to the policy direction

5. Under the NPSFM, over-allocation means where a resource has been allocated to users beyond a limit or is being used to a point where a freshwater objective is not being met. This applies to both freshwater quantity and quality objectives and limits.

of the Plan – albeit without defined targets and timeframes at this time;

- Takes a holistic approach to freshwater systems/ecosystem management in recognition of the significant impact that stream loss, modification and hydrological change associated with land use and development and stock access has on freshwater ecosystems and other freshwater values;
- Sets water flow, level and allocation limits for Auckland’s most utilised rivers and groundwater aquifers; Includes provisions to manage to these limits, on the basis that Auckland has not identified water quantity overallocation;
- Includes provisions relating to efficient water allocation and use and transfers of allocations;
- Adopts an integrated land use/water management approach, particularly in relation to urban development and intensification/redevelopment;
- Signals the intent to develop freshwater objectives with Mana Whenua.

Much of the AUP freshwater framework is targeted at urban land use and development, given the demand for urban growth and existing effects urban development has had on Auckland’s urban freshwater and coastal environments. However, the Plan also includes a range of activity-based objectives, policies and rules for managing the water quality effects of rural production and other activities in rural areas, again in the absence of

NPSFM Provisions	AUP Provisions	
	Quality	Quantity
Objectives A1, B1 - Safeguard life supporting capacity & health of water	Green	Green
Objectives A2, B4 - Maintain/improve quality & protect freshwater wetlands	Green	Green
Policies A1(a), B1 - Establish freshwater objectives/limits/targets	Red	Green
Policies A1(b), Pol B5 - Methodologies to avoid over-allocation	Yellow	Green
Policies A2, B6, Objective B2 - Address/phase out existing over-allocation	Yellow	Green
Policy A3 - Conditions/rules to meet limits and targets	Yellow	N/A
Objective B3, Policies B2, B3, B4 - Efficient allocation, use and transfer of water	N/A	Green
Policy A4, B7 - Interim provisions	Green	Green
Part C - Integrated management	Green	Green
Part CA - National objectives framework	Red	Red
Part D - Targets, Whenua rules and interests	Yellow	Yellow
Parts CB, CC & E - Monitoring plans, accounting, progressive implementation programme	Delegated by functions outside of the Uniform Plan	

■ Gives effect
 ■ Largely gives effect
 ■ Gives effect in part
 ■ Yet to give effect

freshwater objectives, limits and (where necessary) targets as expected by the NPSFM.

As indicated in the PIP and the AUP itself, it is anticipated that changes to the Plan will be progressively introduced to replace the current general provisions with more specific requirements as they are developed. [WNZ](#)