

SUBMISSION ON

NPSFM 2020: Improving our freshwater in Tāmaki Makaurau / Auckland

4 December 2023

To: Auckland Council

Name of Submitter: Horticulture New Zealand

Supported by: Vegetables NZ Inc, Potatoes NZ,

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OVERVIEW

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Our submission

Horticulture New Zealand (HortNZ) thanks Auckland Council for the opportunity to submit on the Improving our freshwater in Tāmaki Makaurau / Auckland document and welcomes any opportunity to continue to work with Auckland and to discuss our submission.

HortNZ could not gain an advantage in trade competition through this submission.

HortNZ wishes to be heard in support of our submission and would be prepared to consider presenting our submission in a joint case with others making a similar submission at any hearing.

The details of HortNZ's submission and decisions we are seeking are set out in our submission below.

HortNZ's Role

Background to HortNZ

HortNZ represents the interests of approximately 4,200 commercial fruit and vegetable growers in New Zealand who grow around 100 different fruits, and vegetables. The horticultural sector provides over 40,000 jobs.

There are approximately 80,000 hectares of land in New Zealand producing fruit and vegetables for domestic consumers and supplying our global trading partners with high quality food.

It is not just the direct economic benefits associated with horticultural production that are important. Horticulture production provides a platform for long term prosperity for communities, supports the growth of knowledge-intensive agri-tech and suppliers along the supply chain; and plays a key role in helping to achieve New Zealand's climate change objectives.

The horticulture sector plays an important role in food security for New Zealanders. Over 80% of vegetables grown are for the domestic market and many varieties of fruits are grown to serve the domestic market.

HortNZ's purpose is to create an enduring environment where growers prosper. This is done through enabling, promoting and advocating for growers in New Zealand.



HortNZ's Resource Management Act 1991 Involvement

On behalf of its grower members HortNZ takes a detailed involvement in resource management planning processes around New Zealand. HortNZ works to raise growers' awareness of the Resource Management Act 1991 (RMA) to ensure effective grower involvement under the Act.

Executive Summary

Submission overview

HortNZ believes there has been a clear and comprehensive approach by Auckland Council to providing community with consultation information that explains the different aspects of the NPSFM plan preparation and interrelationship between the different parts of the plan.

- HortNZ is concerned the SVGA area needs to be consistent with the gazetted maps and co-ordinates in the NPSFM 2020. The consultation information shows the SVGA to be over an area that straddles two FMU and across the boundary with Waikato Regional Council. HortNZ is interested to understand and have further conversations to understand how the requirements of the SVGA will be made consistent over the many boundaries.
- HortNZ would like to have recognition of the unique value of the importance of domestic food supply and maintaining food security as a value, distinct from the general irrigation, cultivation and production of food and beverages value. Recognising the particular issues associated with domestic food supply as they relate specifically to the wider Auckland region and its contribution to maintaining food security for New Zealanders.
- HortNZ advocates working closer with the horticultural community to understand how the industry works. HortNZ advocates a toolkit approach to managing freshwater and believe through the adoption of freshwater farm plans, and grower supported tools and research there can be better understanding of grower practice, impacts and mitigations.

Submission

1. Horticulture in the Auckland Region

The Auckland region is an important part of the national food production system. Of significance, there is the Specified Vegetable Growing Area (SVGA) of Pukekohe which plays a critical role in the domestic supply of vegetables to support the population of New Zealand¹.

There is approximately 9400ha of horticultural land in the region, of this 7933ha is in commercial vegetable production. In addition, there is 1378m² of indoor greenhouse production². There is a large degree of diversity in crops produced, with horticultural operations producing potatoes, broccoli, lettuce, onions, peas, silverbeet, carrots, cauliflower, cabbage, pumpkin, avocados, berryfruits and kiwifruit.

Māori have had a long history of cultivation, with Pukekohe recognised as a key productive area that supported a robust economy with crops being traded with other communities outside the region³.

There is a large amount of cross-boundary interactions with Waikato Region where many Pukekohe vegetable growers also have some of their operations located.

2. National issues and the Auckland productive region's role

2.1. Food security

Paris Agreement speaks to a 'fundamental priority of safeguarding food security' and action in a manner that does not threaten food production. Food security is a nationally important issue which needs to be addressed at a strategic level. We have a national food producing system that relies on growing vegetables and fruit in pockets of highly productive land (HPL), with good climate and access to freshwater.

The Auckland region plays a critical role in the national domestic supply of fruit and vegetables. The Pukekohe area is recognised for its productive capacity. The unique soils and climate provide an idea climate for year-round growing. Māori have had a long history of cultivation, with Pukekohe recognised as a key productive area that supported a robust economy with crops being traded with other communities outside the region⁴. Auckland still maintains a high degree of crop diversity with a climate that is ideal for growing a wide range of horticultural crops⁵.

The price of NZ grown fresh fruit and vegetables has been steadily increasing prior to recent damaging weather events⁶. This can be attributed to labour shortages, increased costs in

¹ [Map of the Pukekohe Specified Vegetable Growing Area | Ministry for the Environment](#)

² [freshfacts-2021.pdf](#)

³ [Heritage resources: Heritage \(doc.govt.nz\)](#)

⁴ [Heritage resources: Heritage \(doc.govt.nz\)](#)

⁵ [Auckland ClimateWEB.pdf \(niwa.co.nz\)](#)

⁶ [Fruit and vegetables drive up annual food prices | Stats NZ](#)

compliance, increased costs of horticultural supplies as well as freight and energy costs⁷. The increase of energy costs directly impacts the cost of production in New Zealand of fresh produce. Consumers are price driven, and the consequence of high production costs of New Zealand produce, is that retailers will look to importing produce, or substitutes to meet consumer expectations of price. Importing fresh fruit and vegetables produced in other countries that can otherwise be grown in New Zealand increases carbon leakage due to freight and supports less climate-friendly growing and environmental practices in other countries.

2.1.1. WEATHER EVENTS AND THE IMPACT ON DOMESTIC FOOD SUPPLY

Vulnerabilities in our domestic food supply network have been highlighted during recent weather events with availability of fresh New Zealand grown produce being impacted by the recent rain events⁸, and Cyclone Gabrielle causing damage to key horticultural growing areas such as Pukekohe, Northland, and the East Coast regions of Gisborne and Hawkes Bay⁹.

The timing of these events has also increased the scale of impact, as many seasonal crops were in their harvest period. Considerable investment into growing the crop has been lost, along with the product and flow on impacts to employment, health and safety.

The recovery in some areas from these events is likely to be long, and the ongoing supply of fresh fruit and vegetables vulnerable during this recovery. The Pukekohe and South Auckland production areas were also impacted by the 2023 Auckland Anniversary rain event which occurred just prior to Cyclone Gabrielle. Both of these events have had an impact on the local environment and businesses. Many growers have had in place erosion and sediment control mitigations in keeping with the Erosion and Sediment Control Guidelines¹⁰ developed by industry in response to previous weather events.

2.2. Regulatory change

There is a significant amount of regulatory change affecting the rural community in progress. Some of which Councils have obligations and responsibilities to, and others may be out of a local authority's direct scope, but it is important to be aware of.

HortNZ believes it is necessary to layer all the changes in regulation to get a better understanding of the regulatory and operational landscape growers and the rural community will be working under. The key challenge is how do you ensure primary production is enabled and provided for in the next generation Plan development when considering the changing regulatory landscape.

2.2.1. NATIONAL POLICY STATEMENT FOR HIGHLY PRODUCTIVE LAND

The National Policy Statement for Highly Productive Land (NPS HPL) came into effect October 2022.

⁷ [Food prices are up, but the cost to grow it has skyrocketed | Stuff.co.nz](#)

⁸ [Auckland storm event 9 May 2023 rapid analysis \(knowledgeauckland.org.nz\)](#)

⁹ [Cyclone Gabrielle's impact on the New Zealand economy and exports - March 2023 | New Zealand Ministry of Foreign Affairs and Trade \(mfat.govt.nz\)](#)

¹⁰ [Soil and Water Management \(hortnz.co.nz\)](#)

The NPS HPL is a blunt tool to manage appropriate use of land deemed highly productive (LUC 1, 2 & 3¹¹). Primarily through requirement of Councils to map and zone highly productive land, and manage the subdivision, use and development of this land.

It is important that land identified and protected for its productive values, is able to be used for its best purpose. This includes ability to irrigate, cultivate and enable crops to be grown on the land. HortNZ believes Freshwater Farm Plans will be an effective tool for ensuring production activities can occur while also addressing environmental impacts of those activities.

2.2.2. NPSFM 2020

Implementation of the NPSFM 2020 will be addressed through changes to the Auckland Unitary Plan¹². However these changes will have an impact on water use, access and prioritisation for growers.

Current engagement is happening with some parts of the community. Consultation is an important aspect of the NPSFM process and incorporating community views into planning. However, this also provides a great deal of uncertainty to those in the rural community as until decisions are made and finalised, the future of freshwater access and use is unclear. HortNZ advocates working closely with the rural community to better understand activities, impacts and capacity for change.

HortNZ advocates for whole of catchment approaches, with users at all ends of the catchment having responsibility towards addressing freshwater concerns.

3. Setting our direction for Tāmaki Makaurau / Auckland

3.1. Te Mana o te Wai

Te Mana o te Wai is a framework that provides a hierarchy of obligations to guide the way we manage our freshwater resources in the future. The first priority is to the health of the river, the second, to the health needs of the people, and the third priority is to all other uses.

It is important to recognise the life supporting capacity and purpose of freshwater for sustaining communities. Populations have always thrived and centred in areas where there is access to freshwater. Freshwater has long been used to grow crops to feed populations. A healthy waterway will in turn support populations to thrive.

The Pukekohe area has long been a place of production that supported a large population within and outside to local area¹³, this is due to a number of factors:

- The unique productive capacity of the soils in the area
- A climate that supports year-round production
- Ample freshwater for irrigation of crops

Te Mana o te Wai incorporates a Māori worldview, however it is intended to reflect tangata whenua and community views when identifying values and set limits that prioritise the health

¹¹ [National Policy Statement for Highly Productive Land | Ministry for the Environment](#)

¹² [National Policy Statement for Freshwater Management implementation timeline \(aucklandcouncil.govt.nz\)](#)

¹³ Furey, L. (2006). 'Maori Gardening; An Archeological Perspective.' Department of Conservation

of the waterway. It is important there is a balance between providing for the health of a waterway and that waterway in turn, being able to support our communities.

Given the SVGA of Pukekohe is within the Manukau FMU, and tangata whenua involvement in the ICMP projects, HortNZ would have expected to see reference to the importance of the health of the waterway and its ability to sustain the population through activities such as vegetable production that support human health. Through the collaborative ICMP project, growers, Manawhenua, industry, government and councils have been able to work more closely and build constructive relationships. The aims of the group are to find ways to ensure vegetable production can occur while addressing environmental pressures.

3.1.1. THE FIRST OBLIGATION TO THE HEALTH OF WATER

Te Mana o te Wai establishes a hierarchy of obligations. The first priority is to the health and wellbeing of water bodies and freshwater ecosystems.

The six principles of Te Mana o te Wai provides guidance on who makes resource management decisions and the matters to be considered.

HortNZ supports the position that each waterway, has a unique whakapapa, mauri and characteristics, and as such, believe approaches to each waterway should take into account the unique pressures of an individual waterway when assessing freshwater outcomes and limits.

HortNZ agrees that *water* and *land* have a connectedness that supports and perpetuates life. We believe this includes the role water has to play in supporting land-based activities that support food production.

3.1.2. THE SECOND OBLIGATION TO HUMAN HEALTH

The second priority obligation under the Te Mana o te Wai framework is the health needs of people (such as drinking water).

HortNZ believes the production of fresh produce for direct human consumption requires access to water of a standard and quality that is suitable for human consumption akin to drinking water. This is because the freshwater requirements to cultivate, grow and pack fresh produce needs to be of a standard that is safe for human consumption.

HortNZ sees a distinction between the ability of people to generally provide for their social, economic and cultural well-being, now and, in the future and the requirement to have a diet inclusive of fresh vegetables and fruit. Access to healthy fresh produce is a fundamental requirement of a healthy population the same as access to safe drinking water.

Generally food production and supply can fit within the third-tier priority. However, access to fresh fruits and vegetables is a fundamental requirement of a healthy population and human health needs and requirements.^{14,15}

This view is supported by Bay of Plenty Regional Council in their response to Minister Parker's Letter. In it they agree that 'Vegetable production for vegetable consumption arguably fits within the second priority (providing for human health needs) under the Te

¹⁴ [Vegetables and fruit - NZ Nutrition Foundation](#)

¹⁵ [Eating and Activity Guidelines for New Zealand Adults | Ministry of Health NZ](#)

Mana o te Wai hierarchy of obligations, as well as the third priorities (social, economic and cultural well-being).¹⁶

3.1.3. RECOGNITION OF DOMESTIC FOOD PRODUCTION

When considering uses of water, it is important to recognise some uses have a greater role in supporting primary health needs than others. Water for irrigation of vegetable crops, for example would be more essential for ongoing human health and survival than irrigation of sports fields, or water for industrial uses.

Draft Freshwater Plan for Northland recognises domestic food supply as a regional value. This is recognising that domestic food production is important and can occur in many areas over the region¹⁷. This then is considered as a value region wide

3.2. Long-term vision

DRAFT LONG TERM VISION - AUCKLAND-WIDE

While supportive of the draft long-term vision, we think this could be improved to be more directive on land use change as an adaptation to climate change as it relates to the allocation, use and reliability of freshwater and food supply/security.

In terms of land use change we note that diversification to horticulture presents an opportunity to reduce emissions while increasing food production, as identified by the Climate Change Commission. 'Ināia tonu nei: a low emissions future for Aotearoa' includes the assumption (in the Demonstration Path) that nationally, 2,000 ha of land will be converted to horticulture per year from 2025 and notes that the Commission expect this could increase if "barriers - such as water availability, labour, supply chains and path to market - are addressed". Opening up more opportunities for conversion to lower emissions production systems and land uses, including horticulture, is listed as a critical outcome. The advice also notes that further land use change from livestock agriculture into horticulture and forestry (from 2021, additional 3,500 ha per year converted from dairy) would be required to meet the more ambitious end of the 2050 methane target if new technology does not come through.

Future policy directed to rural production in Auckland will require a holistic response due to the interrelated nature of each element. This will likely be driven by a changing resource management philosophy that promotes outcomes for the benefit of the environment within environmental limits and associated targets. The resource management future may require a more nuanced spatial approach, and important for rural production in Auckland, there will be allocation decisions made on key resources on which those production activities rely (land, soil, freshwater, nutrients). The 'first come first served' approach to natural resource allocation is unlikely to be the future for rural production activities.

The NPS-HPL already promotes a more nuanced approach to the highly productive land resource and realising the productive capability of that land requires water. The NPS-FW SVGA provides the ability to direct specific rural production outcomes for a spatially delineated area. There are opportunities to integrate a variety of land use responses and mitigations to archive multiple objectives relating to freshwater, HPL, climate change, afforestation, food supply/security.

¹⁶ BOP Regional Council response to Minister Parker 3 May 2023

¹⁷ F.A 1.3 - [the-draft-freshwater-plan-change_uvn_1.pdf\(nrc.govt.nz\)](#)

We support the by 2030 aspect of the long-term vision:

5. Land use planning and water management is integrated and contributes to an increase in resilience of freshwater resources to the effects of climate change and enhancement of the health and wellbeing of freshwater bodies.

KAIPARA FMU

As identified in the introduction, the Kaipara FMU is the most rural FMU with 62 percent rural land cover. Given the expansive rural environment and rural resources the area naturally supports primary production of various forms including outdoor fruit and vegetable production and covered cropping some of which is part of the domestic food supply system and an export earner.

Proposed vision for the Kaipara FMU

The vision would be improved through the addition of the following:

4. Innovative and sustainable land and water management practices support food production in the area and improve resilience to the effects of climate change

HAURAKI FMU

While identifying the Hauraki FMU contains large areas of rural land, there is no recognition that the SVGA extends into this environment. HortNZ would like to ensure the indicated boundary area of the SVGA aligns with what it specified in 3.33¹⁸. There needs to be clarity about how the SVGA will be recognised, how the special management considerations will be enabled across the two FMU's. If there is to be use of an overlay - the contents of which as uncertain at the moment, there needs to be further consultation with growers and HortNZ.

It is not clear in the description of freshwater issues for the FMU if there are particular issues associated with setting target attribute states relative to ensuring the domestic supply of fresh vegetables and maintaining food security for New Zealanders is not compromised.

Proposed vision for the Hauraki FMU

The vision would be improved through the addition of the follows:

5. Innovative and sustainable land and water management practices support food production in the area and improve resilience to the effects of climate change

MANUKAU FMU

The introductions to the Kaipara and Hauraki FMUs identify the rural urban land cover percentage split. The Manukau FMU introduction does not and would be improved by doing so noting that this is less urbanised than the Hauraki FMU.

The introduction describes the Manukau FMU as predominantly rural, drains to the Manukau Harbour and then introduces elements of **international significance** in the form of a reference to the migratory bird roosting and elements of **regional significance** via reference to the Māngere Wastewater Treatment Plant, and several municipal water supply dams.

The Manukau FMU encompasses the majority of the **nationally significant** SVGA.

¹⁸ Part 1, Appendix 5 [National-Policy-Statement-for-Freshwater-Management-2020.pdf \(environment.govt.nz\)](#)

The introduction would be improved as follows:

Predominantly rural with X percent rural land cover and X per cent urban, the 1,106km² area drains to the Manukau Harbour and the Tasman Sea. The Manukau is the second largest harbour in New Zealand and a globally significant migratory bird roosting area. This FMU encompasses the majority of the SVGA and is home to regionally significant built water infrastructure, including the Māngere Wastewater Treatment Plant (MWTP), and several municipal water supply dams.

The overview goes on to describe that the Manukau FMU is home to a diverse range of land uses in five distinct areas:

- *The native-forested Waitākere Ranges*
- *The urbanised central isthmus*
- *The currently rural but rapidly developing southern areas of Papakura and Drury*
- *The Specified Vegetable Growing Area at Pukekohe*
- *The less populated Awhitu Peninsula including several dune lakes*

The reference here to the SVGA is supported but this is not just 'at Pukekohe' but extends from Waiuku in the west, to the Manukau Harbour in the north, East into the Hauraki FMU and over the regional border with the Waikato region to Pukekawa. While Part 1 Appendix 5 of the NPSFM titles the area as the Pukekohe specified vegetable growing area, the reference to Pukekohe is misleading when the spatial extent is extensive as is the commercial vegetable growing activity and rotational aspect within this area. HortNZ is interested to see how Auckland Council and Waikato Council will work together to resolve cross-boundary issues, as well as how Auckland Council will internally resolve the multiple FMU requirements.

Pukekohe itself is a focus area of greenfield future urban development and intensification. It is also an aquifer recharge area and the largely urbanised head of the freshwater bodies (ground and surface) that extend from Pukekohe Hill to the Manukau Harbour through the SVGA.

The SVGA and other rural parts of the FMU support crops other than vegetables including significant areas of avocados and kiwifruit that are part of the domestic food supply and significant national export earners.

The report commissioned by the Franklin Local Board and Horticulture New Zealand in 2014 identified a quadrupling of the kiwifruit footprint by 2040¹⁹.

The Manukau FMU is also a centre of long-established covered cropping²⁰. This activity has established because of the proximity to market, labour and rural resources such as suitable flat land, water and the ability to manage nutrient discharges. Auckland Council have maintained a Development Contribution exclusion for these activities in recognition of the significant regional contribution to food supply for the largest metropolitan urban area in Aotearoa.

The overview of land use areas is better described as:

- *The Pukekohe Specified Vegetable Growth Area at Pukekohe which extends from Waiuku in the west, to the Manukau Harbour in the north, East into the Hauraki FMU*

¹⁹ Aqualinc (2014). Franklin Future Water Demand Study

²⁰ [23.10.30 HortNZ-FINAL-Submission-on-NPSHPL-Amendments.pdf](#)

and over the regional border with the Waikato region to Pukekawa and includes the Pukekohe expanding urban environment.

We disagree with the manner in which the document describes freshwater issues most affecting the Manukau.

Issues Identified	Comment
High nitrate concentrations in surface water and shallow groundwater in some parts of the Pukekohe Specified Vegetable Growing Area	The freshwater issue is better described as it relates to the purpose of 3.33 of the NPSFM. That is: Attribute states must be improved in the SVGA without compromising the domestic supply of fresh vegetables and maintaining food security for New Zealanders.
Poor ecosystem and macroinvertebrate community health in urban and rural rivers and streams.	The issue should link the urban-rural interface (cause/effect) in this issue noting that the SVGA is for the majority a receiving environment of urban discharges.
E. coli in urban and rural rivers and streams, from multiple sources, including but not limited to pastoral farming, wastewater discharges and on-site wastewater systems	Cause/effect must be linked here noting that vegetable growing is not a source of E. coli and land use change to vegetable production can have positive benefits.
The effects of urbanisation on natural freshwater systems, including: - impervious surfaces reducing groundwater soakage and increasing stormwater peak flows - the discharge of contaminants from failing stormwater and wastewater infrastructure - ammonia, zinc and copper contamination in urban streams - continued modification of streams and wetlands in new developments	The issue should link the urban-rural interface (cause/effect) in this issue noting that the SVGA is for the majority a receiving environment of urban discharges.
Water demand may be exceeding sustainable limits in some aquifers	The issue is not just one of exceedance of sustainable limits but also of the efficiency of allocation and use. More direct recognition of domestic food supply matters is likely in the future planning system. On 27 June 2023 the Environment Committee report on the Natural and Built

	<p>Environment Bill was published. The Environment Committee recommended by majority that it be passed with amendments that include the need for the National Planning Framework to provide mandatory direction on enabling supply of fresh fruit and vegetables. The committee stating that: <i>We consider that ensuring the domestic supply of fresh vegetables and fruit is specifically worth attention in the NPF.</i></p> <p>Aligning with cl 129 of the NBEA and with the direction of travel nationally and globally for food supply requires a specific freshwater response in Auckland.</p>
<p>Water is also taken from streams and rivers for agriculture and horticulture. In summer, when stream flows are low, there may be a need for some or all water users to cut back to ensure there is still water for the health of the river ecosystems.</p>	<p>Again, the issue is not just one of exceedance of limits but also of the efficiency of allocation and use.</p> <p>The Auckland Region has long recognised the importance of crop survival water and the relationship with food production. Refer:</p> <p>AUP E2 Water quantity, allocation and use,</p> <p>Temporary water shortage, including minimum flow and groundwater conditions (12) (f).</p>

10.1 Proposed vision for the Manukau Harbour

While supportive of a particular vision statement for the SVGA this could be improved by removing reference to Pukekohe (noting the broader spatial arrangement of the SVGA as defined in the NPSFM and linking to the maintenance of food security).

6. The Pukekohe Specified Vegetable Growing Area has a healthy freshwater environment where its wellbeing is protected and enhanced while supplying fresh vegetables and maintaining food security for the health and wellbeing of the peoples of Aotearoa New Zealand.

3.3. Values and environmental outcomes

Auckland Council have concluded that with the exception of hydroelectric power, all of the values listed in Appendix 1A and 1B of the NPS-FM 2020 are relevant to the whole of the Auckland region.

Pursuant to 3.9(2), Auckland Council have also proposed two additional values:

- **resilience** to recognise the community desire to increase resilience to hazards and climate change, and
- **amenity** to recognise the value Aucklanders place on being able to access rivers, lakes, wetlands and waterfalls as part of recreation activities that do not involve contact with the water

We consider the additional freshwater value of **resilience** to be a worthy value. **Resilience** speaks to a number of issues including land use change, transition to lower emission production systems, reliability of water supply and maintaining food security.

The document notes that when asked in 2022, the public provided over 600 pieces of feedback, identifying over 200 individual sites of value and the freshwater values most raised by submitters were:

- ecosystem health, including water quality and habitat
- natural form and character
- drinking water supply
- human contact for recreational purposes such as swimming, boating or fishing

We know the additional value of **domestic food supply and maintaining food security** and the relationship with freshwater quantity and quality was strongly expressed particularly as it related to the SVGA. and conclude that this should be identified as an additional freshwater value for Auckland. This logically reflects the purpose of the SVGA but is a value that extends region wide.

Values 6, 7, 8 & 9²¹ (appendix 1B, NPS-FM 2020), should be kept separate as they relate to different matters and, while there may be a degree of overlap, there will be material differences in the objectives for each value. Value 8 *Irrigation, cultivation, and production of food and beverages* is a value of importance regionally but is distinct from the unique value for **domestic food supply and maintaining food security** which recognises the particular issues associated with **domestic food supply** as it relates specifically to the Auckland region and its contribution to **maintaining food security** for New Zealanders.

Table 2 Auckland’s freshwater values should be amended as follows:

	NPS-FM Values	Relevant to Tāmaki Makaurau
Compulsory	1. Ecosystem health a. water quality b. water quantity c. habitat d. aquatic life e. ecological processes	√

²¹ : • Hydro-electric power generation • Animal drinking water, • Irrigation, cultivation, and production of food and beverage (including fibre), • Commercial and industrial use.

	2. Human contact	✓
	3. Threatened species	✓
	4. Mahinga kai	✓
Must be considered	5. Natural form and character	✓
	6. Drinking water supply	✓
	7. Wai tapu	✓
	8. Transport and tauranga waka	
	9. Fishing	✓
	10. Hydro-electric power generation	✗
	11. Animal drinking water	✓
	12. Irrigation, cultivation and production of food and beverages	✓
	13. Commercial and industrial use	✓
Added	14. Resilience	✓
	15. Amenity	✓
	16. <u>Domestic food supply and maintaining food security</u>	✓
	17. <u>Specified Vegetable Growing Area</u>	✓

3.4. Freshwater environmental outcomes

Under the NPS-FM, an environmental outcome must be identified for every value that applies to an FMU or part of an FMU, and those environmental outcomes expressed as an objective, or multiple objectives, in its regional plan (NPS-FM 2020 Clause 3.9). The objectives must jointly fulfil the long-term vision for freshwater.

An area-specific objective, for the Pukekohe Specified Vegetable Growing Area has been included (linked only to the Manukau FMU) on the basis that this is because the freshwater management needs in these areas are different to the rest of the region. The reason for the limitation to the Manukau FMU is not explained, noting above that the statutory area as described in the NPS-FM extends into the Hauraki FMU.

While stated as an objective, Table 3 then lists the SVGA as a Value with a Proposed outcome/ Auckland Unitary Plan objective. This creates confusion as to the distinction between the value and objective and inconsistency with the NPS-FM.

We propose that this is resolved through identifying the regional value of domestic food supply and maintaining food security and that the environmental outcomes are expressed as an objective with Table 3 to be amended as follows:

Value	Proposed outcome/ Auckland Unitary Plan objective.
<u>Domestic food supply and maintaining food security.</u> and Specified Vegetable Growing Area	Pukekohe Specified Vegetable Growing Area Water quality progressively improves over time while not compromising the domestic supply of fresh vegetables and maintaining food security for New Zealanders. <u>Water quality and quantity is suitable for irrigation for domestic food supply and maintaining food security.</u> <u>Water quality and water quantity allocation frameworks make sufficient provision for appropriately located domestic food production and maintaining food security.</u> <u>The quality and quantity of water used for domestic food production and maintaining food security is resilient to climate change.</u>

3.5. Waterbodies where special management is required

In response to clause 3.33 Specified Vegetable Growing Areas, the document states as follows:

The NPS-FM sets out some areas where a more specific approach is required to manage special sites and features. We are proposing to introduce additional management measures for these areas and develop action plans to support the protection of their special qualities. We already apply a similar approach in the Auckland Unitary Plan, using overlay maps to identify places that require special consideration.

In future, we may identify other areas where we need to manage activities differently. The NPS-FM provides for identification of smaller 'part-FMUs' for these situations.

We support the statement and approach that will see an action plan for the SVGA and the different management of activities. As above we have set out that the future planning arrangement will need to be more nuanced, spatially determined and activity specific to ensure the domestic supply of fresh vegetables and maintaining food security for New Zealanders is not compromised.

It is worth noting that the Deloitte study specifies that in 2018 Pukekohe vegetable growing hub produced 26% of the **value** of New Zealand total domestic vegetable production²². Much has changed in the vegetable production landscape and arguably Pukekohe holds a more significant position. FreshFacts indicate the above-mentioned study is over 5 years old, and out of date, this figure is likely higher²³.

²² [Pukekohe Hub | Deloitte New Zealand](#)

²³ [Fresh-Facts---Online-version-2023.pdf \(unitedfresh.co.nz\)](#)

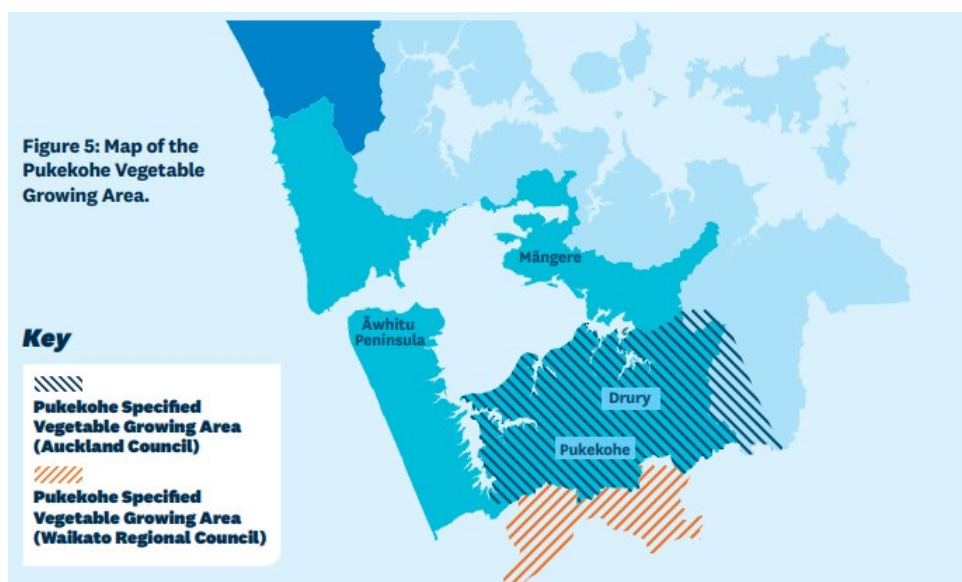
HortNZ believes there needs to be greater understanding about the nitrate situation, the relationship between groundwater and instream nitrates, the impacts of the lag on what we will likely see in terms of nitrate levels over the next 5, 10 and 20 years.

The document introduces the SVGA as follows (including map):

13.6. The Pukekohe Specified Vegetable Growing Area

The Pukekohe area is identified as a Specified Vegetable Growing Area in the NPS-FM because of its significance for national food security. It produces 26 per cent of Aotearoa’s vegetables. The SVGA status means that special provisions apply, essentially allowing for a slower process for freshwater improvements. There are major issues with instream nitrate in several streams in the Pukekohe area. The boundaries of the SVGA are set within the NPSFM but the council can determine how different management approaches should be applied throughout the area.

The management of nitrogen, principally from intensive horticultural activities, is addressed in section 18.



The SVGA is spatially defined in Part 1 of Appendix 5 of the NPSFM.

Pukekohe specified vegetable growing area:

Western boundary

From the point that the Waiuku River meets the Waiuku Stream at NZTM2000 1753472 5876259, up the Waiuku Stream to Waiuku Road to the boundary at NZTM2000 1755854 5875779.

Southern boundary

The north bank of the Waikato River, from the end of Crouch Road at NZTM2000 1756420 5868522 to the end of Bluff Road at NZTM2000 1778986 5871955.

Eastern boundary

From the arm of the Pahurehure inlet at NZTM2000 1771949 5896064, eastwards along Elliot Street until it becomes Broadway, along Clevedon Road which becomes Papakura-Clevedon Road until the point at which the national grid transmission lines

cross the road at NZTM2000 1778853, 5900012. Following in a southward direction the transmission line to the Auckland Council and Waikato Regional Council regional boundary at NZTM2000 1788858, 5882363.

Northern boundary

From the mouth of the Waiuku river NZTM2000 1753472 5876259 to the north following the coastline of the Manukau Harbour to the eastern most arm of Pahurehure Inlet at NZTM2000 1771949 5896064.

Extending into the Hauraki FMU we remain unsure why the statutory obligation has been ignored in this part of the region.

It is unclear why the term **intensive horticultural activities** have been used. This is not a defined term in the AUP or other regional or nationally planning documents. The horticultural activities within the SVGA nationally significant and need to be considered as such.

3.6. Establishing our baseline for water quality

As described in the document, once a vision is agreed, values and environmental outcomes, there is a need to establish the baseline state of attributes, set targets and put in place methods to help us to achieve the outcomes sought.

Nutrients (Lakes and Rivers)

The preferred direction identifies that because of its significance for the domestic supply of fresh vegetables and New Zealand's food security, targets for nitrate and ammonia toxicity attributes (along with any related periphyton, macroinvertebrate and dissolved oxygen outcomes) can be set below the national bottom line in streams in the Pukekohe SVGA. If the domestic supply of vegetables and food security for New Zealanders is to be maintained then this must be the direction.

Improvements to attribute states are still required and this direction does not mean that vegetable growers are exempt from any requirements (such as limits on resource use, actions plans and conditions on resource consents) aimed at achieving target attribute states.

We note and support the comment that in terms of nitrate concentrations the Pukekohe and Bombay streams are now showing some improving trends. Growers have been making progress on the uptake of good practices – particularly in Pukekohe – there has been a catchment project focused at getting growers on their Freshwater Farm Plan journey- using the EMS (NZ GAP add on).

The grower supported Sustainable Vegetable Systems (SVS) Project aims to refine and improve grower practice further with use of regular testing²⁴.

Growers and industry, along with Councils and iwi have been active participants in the ICMP project focused on vegetable production and addressing environmental impacts of the production.

The practice adoption has been tracked through Horticulture NZ's Growing Changes project²⁵.

²⁴ [Working with the industry on Sustainable Vegetable Systems \(SVS\) · Plant & Food Research \(plantandfood.com\)](https://plantandfood.com)

²⁵ [Growing Change | Horticulture New Zealand – Ahumāra Kai Aotearoa \(hortnz.co.nz\)](https://hortnz.co.nz)

Sediment

The preferred direction identifies that in several parts of our region activities on the land need to be improved to better manage sediment entering rivers and streams. The connection to managing catchment sediment loads to achieve improved outcomes for our estuaries, where a lot of this sediment ends up is also noted.

Any methods that target land use must be proportionate to the activity, its effects, effective and efficient and be cognisant of the improvements to land practices already established or committed to.

Erosion and sediment control guidelines²⁶, projects such as Don't Muddy the Water²⁷ inform grower practice. These are funded and well supported by the growing community.

Copper and Zine (Urban Rivers)

The preferred direction identifies that in some urban streams across the region we need to better manage our activities on land to prevent copper and zinc entering our streams. These metals can also get transported with sediment out into our nearshore coastal environments.

Highlighted here is the fact that the rural environment is often the receiving environment for urban discharges and contaminants. The fix cannot be loaded onto rural landusers just because they sit lower in the catchment. The SVGA catchment is heavily influenced by the existing and rapidly expanding urban centre of Pukekohe as well as other settlements. Urbanising rural land leads to a degradation of water quality.

Macroinvertebrates in Wadeable streams

The document notes that the successful functioning of macroinvertebrate communities is severely altered in heavily modified urban and higher intensity rural catchments.

There is no explanation on what **higher intensity rural catchments** refers to and this is an unbalanced view of the contribution of urban vs rural land use to effects on macroinvertebrate communities.

The Auckland Unitary Plan currently sets a Macroinvertebrate Community Index guideline for Auckland rivers and streams that has a lower bottom line in urban areas to rural.

Table E1.3.1 Macroinvertebrate Community Index guideline for Auckland rivers and streams

Land use	Macroinvertebrate Community Index guideline
Native forest	123
Exotic forest	111
Rural areas	94
Urban areas	68

²⁶ [Soil and Water Management \(hortnz.co.nz\)](http://hortnz.co.nz)

²⁷ [Barber-2019-DMTW-ProjectSummaryReportFinal\(1\).pdf](#)

The document notes that urban sites exhibit the highest proportion of degrading trends across the region. Urbanising rural land leads to a degradation of water quality. This is an unacceptable approach for the future.

Fish in Wadeable streams

The document is not clear on the urban/rural contribution to effects on fish in wadeable streams.

The preferred direction identifies that there is no national bottom line for the Fish IBI attribute in wadeable rivers, the council must look to improve fish outcomes through action planning. Noted is that the council has a fish passage action plan in development. Urbanising rural land leads to a degradation of water quality and as noted in the document, many species need the environmental conditions that stream headwaters provide to breed and hunt for food. The SVGA catchment is heavily influenced by the existing and rapidly expanding urban centre of Pukekohe as well as other settlements.

Riparian Habitat (Temperature)

The document states that there is thermal stress to aquatic life in both urban and rural streams with many streams failing the regional bottom line and that council is working to understand the extent of this issue along with long term trends.

Again, there needs to be clarity on the urban/rural contribution. Furthermore, any methods to respond to the issue must be efficient and effective. The significant progress in riparian management that has occurred in recent times has been led by the primary sector. Methods can link to other outcomes like climate change objectives or biodiversity and be incentivised by financial assistance or transferable rural subdivision rights.

E. coli

The preferred direction identifies that reducing the human health risk relating to faecal contamination of waterways is a high priority for mana whenua, Aucklanders and the council, for both freshwater and coastal sites. Council proposes to decrease the level of E. coli in our rivers and streams and maintain the quality of our lakes to better manage the average risk of infection for our communities.

Vegetable production is not a source of E. coli and is a contaminant of concern in the context of domestic food supply and maintain food security for New Zealanders. Irrigation and vegetable crop processing requires clean uncontaminated water.

In this context and particularly in terms of the SVGA, the direction and methods to manage E. coli must be integrated with land use change that overlays food production needs with improving water quality outcomes.

3.7. Targets and methods to get us to our water quality goals

The document notes that specific targets for each attribute will be set after Auckland Council's baseline assessment is further refined, in time for the 2024 plan change.

These targets must be developed with Tangata Whenua and the community and HortNZ would like to be part of the discussion.

The document makes the following statement:

Targets in the Pukekohe Specified Vegetable Growing Area. The SVGA that is in place for Pukekohe provides an exemption, allowing us to set targets below the national bottom line for nitrogen and other attributes impacted by nitrogen. We expect that the targets for this area will be set to stop further degradation and progressively improve in the long term. Interim targets, for example every ten years, will ensure actions are in place to achieve the long-term management outcomes.

HortNZ has concerns with the language used here and the misinterpretation that might occur and influence limit setting and targets. The SVGA does not provide an exemption, but an extended time frame.

The importance of the domestic supply of fresh vegetables and maintaining food security for New Zealanders is specifically recognised in the provisions of CI 3.33 of the NPS-FM 2020: Specified Vegetable Growing Areas of Pukekohe and Horowhenua. The provisions provide a pathway through the NPS-FM 2020 for vegetable growing in these areas (as opposed to an exemption). In short, the NPS-FM 2020 provides the ability for a Regional Council to set a target attribute state below the national bottom line in Pukekohe or Horowhenua but an improved attribute state is still required to be achieved and vegetable growers are not 'exempt' from any requirements (such as limits, action plans and resource consent conditions) aimed at achieving attribute states.

These provisions expire in 10 years or earlier if a tailored set of National Environmental Standards for commercial vegetable production come into force. The Government has stated that it will be working with councils and relevant iwi and hapū to achieve this and reduce contaminant loads and meet bottom lines. The ICMP project is a collaborative approach to recognising vegetable production needs to occur, and environmental outcomes also need to be improved and identifying ways these can happen.

The document expressed that for limit-setting attributes where Auckland Council sets targets to improve, it is planning to use a load reduction approach. This means reducing the amount of a contaminant that is released into waterways over time. Auckland Council are considering the use of proportional load reductions (as opposed to absolute loads) reflecting the nature of the tools currently available to Auckland Council as the resource manager. Auckland Council expect these tools to improve over time. Furthermore, it is noted that Auckland Council will also need to adapt the management approach over time to have regard to the foreseeable impacts of climate change.

HortNZ is unsure what the meaning and impact of this approach is and would like to have further discussion with Auckland Council to understand the approach, impacts and intended outcomes.

While we agree that the management approach will need to adapt over time to have regard to the foreseeable impacts of climate change, there are bold decisions on land use for the future and allocation of water and nutrients that should be made now.

3.8. Achieving the targets: limits and action plans for water quality and ecosystem health

Management tools under consideration

A range of possible regulatory and non-regulatory approaches are described as being under consideration for achieving water quality outcomes. HortNZ advocates a toolkit approach which means growers are able to incorporate a variety of methods that are

appropriate for their properties to best meet the issues rather than singling out specific mitigations. We comment on these as follows:

Use of riparian margins (urban and rural)

As previously mentioned, the significant progress in riparian management that has occurred in recent times led by the primary sector. Methods can link to other outcomes like climate change objectives or biodiversity and be incentivised.

Rural activities (e.g. farming, horticulture and forestry)

- *Amend existing AUP provisions for rural production activities, such as setting limits to restrict the expansion or intensification of rural land uses and introduce more restrictive permitted activity standards for ancillary farm earthworks.*

Rather than limit setting, the direction should be one of land use change to achieve multiple outcomes. This should be an integrated planning response.

HortNZ wishes to view the evidence (and s32) upon which Auckland Council might make this change. The ancillary farm earthworks provisions were included in AUP with performance standards that manage associated effects (including adherence to the Horticulture New Zealand publication 'Erosion and Sediment Control Guidelines for Vegetable Production' (June 2014) for cultivation.

- *Consider whether to introduce limits on nutrient discharge volume, on catchment nutrient loads, or on fertiliser application for horticulture.*

If this is the direction, there must be consultation with the horticultural sector, and this cannot conflict with existing AUP such as those for greenhouse nutrient solution discharge nor 3.33 of the NPS-FM for the SVGA.

NES limits the amount of synthetic N-Fertiliser applied to pastoral farms, along with reporting requirements for dairy farms. Horticulture has been specifically excluded to ensure domestic food supply is not compromised. Also to reflect inaccuracy of current models and in recognition of the other management methods horticultural growers use to manage nitrogen.

HortNZ believes this a matter best managed through Freshwater Farm Plans.

- *Identify alternatives to current nutrient practices such as high fertiliser application rates.*

This is unlikely in current practice and a matter managed through Freshwater Farm Plans.

- *Promote good farm management practices through Freshwater Farm Plans to address dissolved oxygen, dissolved reactive phosphorus, E. coli, sediment and to reduce faecal contamination in rural streams and supporting non-regulatory incentive schemes. Existing schemes include the Waterways Protection Fund, the Kaipara Moana Remediation, and industry group initiatives such as the Sustainable Dairying - Water Accord.*

Support the use of Freshwater Farm Plans and non-regulatory incentive schemes. There are other incentives that could be available including afforestation / biodiversity credits, rates relief, transferable rural subdivision.

- *In the Pukekohe Specified Vegetable Growing Area: - Set minimum riparian buffers between vegetable growing paddocks and waterways, nitrogen application limits,*

and a consenting requirement for changes from other land uses to vegetable production. Use non-regulatory approaches to improve nutrient management, such as voluntary reporting of synthetic fertiliser use, and reporting and mapping sub-drainage systems in vegetable paddocks.

The appropriate on farm response to riparian buffers between vegetable growing paddocks and waterways is already established in the AUP and a matter to be managed through Freshwater Farm Plans. Prescribed minimum riparian buffers are not best planning nor horticultural practice. As discussed in Andrew Barber's evidence to PC2, a toolkit of mitigations is a better approach, where growers can use a combination of different mitigations to address sediment loss. Vegetated buffer strips efficacy can be overstated and in practice, channelising of water can be an impediment to their efficacy²⁸. It is important that buffer strips are one of many options available to use, and implemented on properties where they will have an impact.

Land disturbance/ earthworks activities (urban and rural)

Clarity needs to be provided as to the activities / definition of land disturbance / earthworks. As noted above, the ancillary farm earthworks provisions were included in AUP with performance standards that manage associated effects (including adherence to the Horticulture New Zealand publication 'Erosion and Sediment Control Guidelines for Vegetable Production' (June 2014) for cultivation.

Freshwater Farm Plans

As noted in the document FFPs will be gradually phased in across Tāmaki Makaurau from late 2024 and will be a key method for implementing the NPS-FM. These will build on the work growers have already done.

The document goes on to state that the AUP plan change could include specific links to farm plans. For example, the AUP could:

- *Specify additional information requirements relating to what information is supplied through the freshwater farm plan process, such as a requirement that all plans for dairy farms include a nutrient budget, or that data is supplied in a digital format, or includes a map of instream structures that are barriers to fish passage.*
- *Include additional regulatory requirements through rules in the AUP where the freshwater farm plan is used as a tool for demonstrating compliance. If the AUP included a new rule requiring that dairy effluent is discharged to land a set distance from waterways, the farm plan would then have to include actions to address this additional regulatory requirement.*
- *Create alternative permitted activity pathways for an activity where a freshwater farm plan is in place.*

The AUP should not extend, conflict or create implementation issues through extending further information needs and requirements into FEPs.

3.9. Managing water quantity

²⁸ Statement of Evidence to Proposed Plan Change 2 (Horizons Regional Council). Andrew Barber for Horticulture New Zealand (FEP and sediment management)

As described in the document, once a vision is agreed, with associated values and environmental outcomes, there is a need to establish the baseline state of attributes, set targets and put in place methods to help us to achieve the outcomes sought.

There will be links and overlaps between the values and the attributes that work towards shared outcomes. In addition to the use of numerics, we see benefit in including specific attribute bands and descriptions **domestic food supply and maintaining food security** and narrative attribute states.

Attributes for Domestic Food Supply and Maintaining Food Security Value

Value	<i>Domestic Food Supply</i>
Freshwater body type	<i>All</i>
Attribute unit	<i>Domestic Food Production Water Allocation</i>

Attribute band and description	Narrative attribute state
<i>Band A</i>	
<i>The allocation and use of water for domestic food production is sufficient to provision existing and future needs.</i>	<i>Excellent</i>
<i>Band B</i>	
<i>Highly productive land is mapped in the Auckland region. Water allocation and use displays a priority to domestic food production</i>	<i>Good</i>
<i>Bottom Line</i>	
<i>Band C</i>	
<i>Highly productive land is mapped in the Auckland region and water allocation recognised and provisioned for domestic food production</i>	<i>Fair</i>
<i>Band D</i>	
<i>Highly productive land is mapped in the Auckland region and the value of domestic food production not recognised in the allocation framework or decision making.</i>	<i>Poor</i>

Target Attribute States for Domestic Food Supply and Maintaining Food Security Value

Attribute	Target State 1	Target State 2
<i>Domestic Food Production Water Allocation</i>	<i>Band C, by 2025</i>	<i>Attribute bottom line, by 20..</i>

Revising take limits

The document notes that Revised flows, levels and take limits may mean that less water is available for allocation, and existing water permit allocations may need to be reviewed.

As above, the future allocation framework should respond to the value of domestic food supply and maintaining food security. This should also respond to climate change and more efficient reduced emission food production systems. During low flows, the current priority to crops for human consumption established in the AUP must remain.

Allocation and phasing out over-allocation

The allocation issue discussed above is address in the document as follows:

Some water uses are prioritised above others. Currently, we prioritise domestic needs, municipal water supply, and animal drinking water. We could be more specific, for example, the plan could prioritise water allocation and use for agriculture or horticulture over other users, in areas where Auckland has highly productive land.

HortNZ considers the region has a duty (statutorily and for the wellbeing of the regional and national community) to make clear allocation decisions that favour domestic food production.