

SmartGrowth Strategy 2023–2073

ISSUES AND OPTIONS PAPER

Topic Lead: Steve Hurley

Topic	Three Waters and Other Infrastructure
Issue	1. Three Waters Reforms 2. Water Supply Analysis and Availability 3. Electricity Generation and Supply

Staff Narrative

Overview of feedback received.

Twelve submissions were received on the Three Waters and Other Infrastructure topic.

These submissions focussed on three main issues being; Three Waters Reforms, Water Supply Analysis and Availability, and Electricity Generation and Supply.

Issue 1: Three Waters Reform

Three submissions were received in opposition to the Three Waters Reforms.

The water reforms could not be fully accounted for in the current SmartGrowth Strategy as they were not finalised. Fundamentally, the reforms were about the transfer of responsibilities from Councils to other entities, not long-term planning. Long term planning investigates the physical and financial feasibility of providing the infrastructure to support forecast population increase and settlement patterns. The potential pros and cons of providing the infrastructure is a factor to consider against where expansion should occur.

There is uncertainty in this space with the coalition government signalling that the Three Waters legislation will be repealed and replaced with Local Water Done Well which returns ownership of three waters infrastructure back to the local authorities. Partnering on long term planning and decision making is vital. The SmartGrowth partnership will endeavour to continue maintaining relationships, keep abreast of the changing political environment and deliver accurate reporting to our communities and stakeholders

Issue 2: Water Supply Analysis and Availability

Six submissions were received seeking more clarity on the long-term water supply provision and allocations to cater for increased demand.

The strategy focussed primarily on the challenges that the sub-region faces. Further information which provides context around how water is secured across the district follows.

The reliance on Tauranga City sourcing water from Western Bay of Plenty's area is to be expected considering TCC is largely a developed urban area and the Strategy takes a subregional approach. There are no suitable natural catchment areas within the city from which to harvest rainwater, or areas suitable for bores and stream intakes. These areas are found within the Western Bay District and the situation of a city relying on the neighbouring rural district for suitable sites is typical for NZ.

TCC and WBoPDC work closely together to ensure communities are adequately supplied with clean and reliable water supplies. The Our Water Future Programme (OWF) is a joint initiative of TCC and WBoPDC, with the overall goal of developing a holistic and integrated approach to the management of potable water, wastewater, and stormwater in the Western Bay of Plenty sub-region. It is a response to the challenges for three waters delivery, catering for ongoing growth, the need to adapt to climate change, and anticipated changes in regulation, including the requirement to give effect to Te Mana o te Wai.

The programme seeks to leverage collaboration between TCC, WBoPDC, Tāngata Whenua and other partners to better understand how water supply, wastewater, and stormwater interrelate with each other, and to create a fully integrated approach to sub-regional three waters management capable of achieving public health, environmental, urban amenity (community) and cultural outcomes. One of the key outcomes is to strategically align Three Waters infrastructure planning at a sub-regional scale in accordance with growth assumptions and ongoing spatial planning under SmartGrowth. This work is ongoing with an immediate focus on re-consenting existing water takes and wastewater consents, while advancing investigations into additional water takes, alternative water sources (rainwater harvesting etc), demand management (eg: Waterwatchers) and wastewater treatment and disposal methods

Extracting water for drinking water supply requires consent from the regulator (Bay of Plenty Regional Council), who must consider a range of legislative constraints, regulatory requirements and policies when issuing these consents, including the need to provide for other uses. Recent changes in the regulatory framework also mean that human need is no longer the only determining factor when making decisions about water use. Te Mana o te Wai highlights the importance of sustaining the integrity and health of the water before providing for human use, through a three-tiered hierarchy of obligations:

First, to the water itself, to protect its health and its mauri.
Second, to essential human needs, such as drinking water.
Third, to provide for other uses.

The functionality of water supply infrastructure and its resilience to natural hazard events and operational failure are important factors for efficient water use. As some of the critical infrastructure is located in areas prone to multiple natural hazards, there is potential risk of supply disruption. Water supply is not only dependent on the physical availability of water. Infrastructure resilience, social and cultural factors need to be considered also, alongside the implementation of Te Mana o te Wai. Investigation and analysis of alternative or additional locations for water extraction needs to acknowledge and provide for all of these elements.

Issue 3: Electricity Generation and Supply

Three submissions were received with a general focus on the current constraints in the grid and the investment needed to the generation, transmission and local distribution to support growth.

It is widely understood that that the Western Bay of Plenty sub-region is rapidly growing. The sub-regions electricity infrastructure needs to keep abreast of this rapid growth to ensure power is available when and where people and businesses need it. Transpower and Powerco are working together to plan and deliver the essential upgrades on the electricity network that are needed in the sub-region. This is a long-term programme with delivery spanning over the next 10 years. Consultation was recently completed on the first phase of work, which set out the need for upgrades, technical assumptions, and possible options for upgrades on the high voltage transmission network. Upgrades are required to support both projected population growth and electrification of the economy. Transpower's early work with Powerco indicates that the demand for electricity across the sub-region will increase by at least 60%, but potentially up to 90% by 2035. By 2050, demand could be as much as 145% above what it is today.

From last years long list, further consultation is planned in 2024 to establish a short-list of options following feedback from the first round of consultation, including further technical investigations and analysis. The intention is that this consultation will provide solution options for the public to consider. It will include work that both Transpower and Powerco would need to undertake on their transmission and distribution networks respectively.

The SmartGrowth councils (amongst others) have been active participants in the consultation with Transpower and Powerco. We look forward to

continuation of this to assist Transpower to provide a vital, resilient, and reliable power supply to our communities.

Options overview	
<p>Issue 1: Three Waters Reform</p>	<p><u>Option 1A:</u> Retain the draft FDS text</p> <p><u>Option 1B: (Recommended)</u> Amend the draft text to reflect the changing status of water reform under the coalition government.</p> <p>Update page 122 of the strategy to remove reference to entities and replace with Local Water Done Well references with return of ownership back to local authorities.</p>
<p>Issue 2: Water Supply Analysis and Availability</p>	<p><u>Option 2A: (Recommended)</u> Provide additional text in the draft SmartGrowth Strategy and FDS that recognises the need for ongoing investigation and analysis of potential alternative water sources for growth and increased resiliency.</p> <p>Add bullet points under “Key Three Waters and other infrastructure challenges” (page 124) to reference the need for reconsenting of existing water takes and add references to “Our Water Future” strategy</p> <p><u>Option 2B:</u> Retain the draft SmartGrowth Strategy and FDS text</p>
<p>Issue 3: Electricity Generation and Supply</p>	<p><u>Option 3A:</u> Retain the draft SmartGrowth Strategy and FDS text and Map 15</p> <p><u>Option 3B: (Recommended)</u> Amend the draft SmartGrowth Strategy and FDS text to incorporate Powerco and Transpower distribution and transmission capacity with planned network expansion.</p> <ul style="list-style-type: none"> • Update Map 15 to differentiate the National Grid from the electricity distribution network. • Add NPS-ET to requirements (page 47) • Expand point 8 (page 124) to reference the Western Bay of Plenty Development Plan and note the increase in demands

Issue 1: General – Three Waters Reform	
Option 1A: Retain the draft FDS text	
<p>Advantages</p> <ul style="list-style-type: none"> The scope and direction of the Three Waters Reform is likely to continue to evolve due to changes at government level. By retaining the current draft Strategy and FDS text, the document can be updated in due course when the Three Waters Reform is more clearly defined. 	<p>Disadvantages</p> <ul style="list-style-type: none"> Does not directly align with the direction currently being indicated by the coalition government.
Financial implications	
None. No changes are required under this option.	
Other considerations	
Option 1B: (Recommended) Amend the draft FDS text to reflect the changing status of water reform under the coalition government.	
<p>Advantages</p> <ul style="list-style-type: none"> Reflects the direction currently being indicated by the coalition government. Removes the contention surrounding water reforms. 	<p>Disadvantages</p> <ul style="list-style-type: none"> Undermines the work undertaken to date in identifying entities and potential efficiencies. Will likely alter future LTP/Annual Plans to bring water infrastructure spending back into local Council balance sheets, which may impact budgets across other areas of expenditure. On-going revisions may be required as scope and direction of Three Waters Reform is confirmed.
Financial implications	
LTP's will require ongoing modifications to bring capital expenditure back onto balance sheets which may impact the delivery timeframes of other aspects of the FDS, such as Social Infrastructure or constrain growth until such time as required upgrades are in place	
Other considerations	

Issue 2: Water Supply Analysis and Availability	
i. Option 2A (Recommended) Provide additional text in the draft SmartGrowth Strategy and FDS that recognises the need for ongoing investigation and analysis of potential alternate water sources for growth and increased resiliency.	
<p>Advantages</p> <ul style="list-style-type: none"> Provides more information around how the management of water across the Western Bay of Plenty sub-region is planned. Provides a reference to Our Water Future joint initiative and 30-yr strategy documents Water supply is identified as a critical factor in sustainable development. 	<p>Disadvantages</p> <ul style="list-style-type: none"> This level of detail is not required at this strategy level and is addressed in the TCC Draft 30-year Water Supply Strategy 2024-2054 which identifies urban growth and infrastructure provision as a major strategic challenge.
Financial implications	
None identified	
Other considerations	
NPS-FM changes may allow for more streamlined consenting options	
Option 2B: Retain the draft SmartGrowth Strategy and FDS text	
<p>Advantages</p> <ul style="list-style-type: none"> The draft SmarthGrowth strategy already highlights water supply as a key challenge and includes water supply related growth directives: <ul style="list-style-type: none"> Key challenge: Increased demand on the potable water supply. It is noted that careful monitoring of existing resource consents is required to provide for this demand. Growth Directive: Secure and protect long-term water availability for all our communities within environmental limits set in accordance with Te Mana o te Wai. Growth Directive: Wastewater and water supply networks and treatment plants are managed across the sub-region to achieve efficient and effective investment to service planned urban growth. This level of detail is not required at this strategy level and is addressed in the TCC Draft 30-year Water Supply Strategy 2024-2054 which identifies urban growth and infrastructure provision as a major strategic challenge. 	<p>Disadvantages</p> <ul style="list-style-type: none"> Work being undertaken under TCC Draft 30-year Water Supply Strategy 2024-2054 is not specifically highlighted or referenced.

Financial considerations
None. If required, amendments can be made to the FDS text within the existing budget. Delay in adoption
Other Considerations

Issue 3: Electricity Generation and Supply

Option 3A: Retain the draft Smartgrowth Strategy and FDS text and Map 15

<p>Advantages</p> <ul style="list-style-type: none"> The draft SmartGrowth strategy already highlights power as a key challenge and includes a power related growth directive: <ul style="list-style-type: none"> Development planning is co-ordinated with electricity transmission and supply, and connectivity coverage. 	<p>Disadvantages</p> <ul style="list-style-type: none"> SmartGrowth strategy and FDS does not specifically reference the NPS-ET as a relevant National Policy Statement or specifically demonstrate how the strategy has been informed by this. Does not include an assessment of the extent to which electricity supply is sufficient to support development. Does not specifically identify the National Grid within the constraints analysis (Part 3, Chapter 1) or differentiate the nationally significant National Grid transmission lines and substations from the electricity distribution network.
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Financial implications

None identified.

Other considerations

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Option 3B: (Recommended) Amend the draft SmartGrowth Strategy and FDS text to incorporate Powerco and Transpower distribution and transmission capacity with planned network expansion. Update Map 15 to differentiate the National Grid from the electricity distribution network.

- I. Update SmartGrowth Strategy to include reference to NPS-ET and demonstrate how the strategy has been informed by the policy (Part 3, Chapter 1 onwards).
- II. Add NPS-ET to the requirements chart (page 47, Part 3, Chapter 1) to include the National Grid.

III. Amend Map 15 to differentiate the nationally significant National Grid transmission lines and substations from the electricity distribution network.

Advantages

- Strategy and FDS clearly reference and demonstrate how the strategy has been informed by NPS-ET.
- National Grid considered as part of constraints analysis.
- Maps clearly differentiate the national grid asset from the local distribution network.

Disadvantages

- Map becomes cluttered and difficult to interpret.
- Potentially significant input required with Transpower to undertake constraints analysis.

Financial implications

N/A

Other considerations

Recommended Decisions

Issue 1: Three Waters Reform

Option 1B: Amend the draft FDS text to reflect the changing status of water reform under the coalition government.

Update page 122 of the strategy to remove reference to entities and replace with Local Water Done Well references with return of ownership back to local authorities.

Issue 2: Water Supply Analysis and Availability

Option 2A Provide additional text in the draft SmartGrowth Strategy and FDS that recognises the need for ongoing investigation and analysis of potential alternative water sources for growth and increased resiliency.

Add bullet points under “Key Three Waters and other infrastructure challenges” (page 124) to reference the need for consenting of existing water takes and add references to “Our Water Future” strategy

Issue 3: Electricity Generation and Supply

Option 3B: Amend the draft SmartGrowth Strategy and FDS text to incorporate Powerco and Transpower distribution and transmission capacity with planned network expansion. Update Map 15 to differentiate the National Grid from the electricity distribution network.

- I. Update Map 15 to differentiate the National Grid from the electricity distribution network.
- II. Add NPS-ET to requirements (page 47)
- III. Expand point 8 (page 124) to reference the Transpower’s Western Bay of Plenty Development Plan and note the increase in demands anticipated

Decision – Issue 1: Three Waters Reform

Option 1B: Amend the Introduction at Page 122 by including the amended text as follows:

This includes updating page 122 of the strategy to remove reference to entities and replace with Local Water Done Well references with return of ownership back to local authorities.

Remove introduction wording and replace as follows: (new text underlined):

Three waters (water, wastewater, stormwater) and other infrastructure and services (electricity, gas, telecommunications) act as enablers but can also be constraints for sustainable development and growth.

This section sets out the challenges that our growing sub-region faces in providing potable water supply, treating wastewater and managing stormwater. The way in which three waters infrastructure is planned for and managed needs

to change to respond to existing and future challenges. Three waters infrastructure is a critical component of enabling growth particularly in urban areas. In order to effectively and efficiently provide for this service over time integrated and sustainable solutions are required to ensure the long-term prosperity of the subregion. A strong collaborative approach across council jurisdictions in partnership with iwi and tāngata whenua will be critical to making the changes needed.

TCC and WBoPDC work closely together to ensure communities are adequately supplied with clean and reliable water supplies. This requires not only sustainable water sources (availability) but also reliable infrastructure that conveys water from the source to the end-user. This is particularly challenging in a fast-growing urban environment accommodating an increasing number of people and businesses. Establishing the infrastructure necessary to bring potable water from the source to the end-users requires sophisticated demand forecasting, robust planning and sufficient funding.

The Our Water Future Programme (OWF) is a joint initiative of TCC and WBoPDC (in addition to 10yr and 30yr planning strategies), with the overall goal of developing a holistic and integrated approach to the management of potable water, wastewater, and stormwater in the Western Bay of Plenty sub-region. It is a response to the challenges for three waters delivery, catering for ongoing growth, the need to adapt to climate change, and anticipated changes in regulation, including the requirement to give effect to Te Mana o te Wai.

The programme seeks to leverage collaboration between TCC, WBoPDC, Tāngata Whenua and other partners to better understand how water supply, wastewater, and stormwater interrelate with each other, and to create a fully integrated approach to sub-regional three waters management capable of achieving public health, environmental, urban amenity (community) and cultural outcomes. One of the key outcomes is to strategically align Three Waters infrastructure planning at a sub-regional scale in accordance with growth assumptions and ongoing spatial planning under SmartGrowth.

This work is ongoing with an immediate focus on re consenting existing water takes and wastewater discharge consents, while advancing investigations into additional water takes, alternative water sources (rainwater storage, recycled wastewater etc), demand management (eg: Waterwatchers) and wastewater treatment and disposal methods to provide for growth into the future.

The functionality of water supply, wastewater and network utility infrastructure and its resilience to natural hazard events and operational failure are important factors for maintaining essential services to urban areas. As some of the critical infrastructure is located in areas prone to multiple natural hazards, there is potential risk of disruption. Infrastructure resilience, social and cultural factors need to be considered also, alongside the implementation of Te Mana o te Wai.

Partnering on long term planning and decision making for three waters is vital in a changing policy environment. The SmartGrowth partnership will endeavour to continue maintaining relationships, keep abreast of the changing environment and deliver accurate reporting to our communities and stakeholders.

Other physical infrastructure and utilities, such as telecommunications, electricity, and gas services are essential for communities, enable business and underpin the provision of public services. They are a fundamental part of planning for growth and development in the sub-region.

As our sub-region grows, the pressure on our three waters assets and the water resource continues to build. To respond to this growth in the recent past there has been considerable investment into strategic three waters infrastructure networks. This includes construction of the Southern Pipeline for wastewater and the Waiāri water supply scheme. As a result of key strategic investments some areas have good futureproofing.

Map 15 shows the infrastructure networks across the subregion. This includes water supply, wastewater and electricity. Map 16 shows the marine infrastructure for the sub-region, including the Port, mooring areas, jetties and the Harbour Development Zone.

Reason

- Reflects the direction from government with Water Reforms repealed.
- Removes the contention surrounding water reforms.
- Provides more information around how the management of water across the Western Bay of Plenty sub-region is planned.
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Decision - 2: Water Supply Analysis and Availability

Option 2A Provide additional text in the draft SmartGrowth Strategy and FDS that recognises the need for ongoing investigation and analysis of potential alternative water sources for growth and increased resiliency.

This adds bullet points under “Key Three Waters and other infrastructure challenges” (page 124) to reference the need for reconsenting of existing water takes which ties into the introduction section.

Delete first bullet point relating to Three Waters Reform and replace with

- *Changing direction from Government*

Add new second bullet point

- *Reconsenting of existing water supply and wastewater disposal consents which may impose greater restrictions*

Reason

- Reflects the direction from government with Water Reforms repealed.
- Water supply is identified as a critical factor in sustainable development.

Decision – Issue 3: Electricity Generation and Supply

Option 3B: Amend the draft SmartGrowth Strategy and FDS text to incorporate Powerco and Transpower distribution and transmission capacity with planned network expansion. This includes:

- i. Updating Map 15 to differentiate the National Grid from the electricity distribution network.
- ii. Adding NPS-ET to requirements (page 47)
- iii. Expanding point 8 (page 124) to reference the Transpower’s Western Bay of Plenty Development Plan and note the increase in demands anticipated as follows (revised text underlined):

Power supply faces similar issues given strong population growth and increased power demand. The electrical load in the western Bay of Plenty has approximately tripled over the last 25 years. The demand for electricity across the sub-region is projected to increase by at least 60%, but potentially up to 90% by 2035. By 2050, demand could be as much as 145% above what it is today. This is one of the highest load growth areas in New Zealand.

There is an ongoing need to address reliable power supply issues considering increased power demand driven both by population growth and electrification and decarbonisation of transport and industry. Electricity transmission and distribution companies will play a major role enabling reduction of greenhouse gas emissions by providing connections to renewable energy sources to address the effects of climate change.

A joint Western Bay of Plenty Development Plan is being developed to plan and deliver the essential upgrades to the electricity transmission and distribution networks that are needed in the sub-region to support both projected population growth and electrification of the economy.

Significant upgrades will be required to meet the demand for electricity and for a renewable energy future. This may result in constraints on developable areas to accommodate expansion in the local and transmission networks to provide for larger footprint transformers and structures along with widened supply corridors to safely carry high voltage infrastructure. Early engagement with electricity transmission and distribution companies and all utility operators will be essential to ensure there is sufficient corridor space for the electricity infrastructure to

meet safe clearance requirements while maintaining the required separation between other infrastructure services.

Reason

- Strategy and FDS clearly reference and demonstrate how the strategy has been informed by NPS-ET.
- Maps clearly differentiate the national grid asset from the local distribution network.

Date approved:

Approved by: