TE TAI ŌHANGA
THE TREASURY

Reference: 20220262

28 October 2022

Dear

Thank you for your Official Information Act request, received on 7 July 2022. You requested:

> *This OIA request relates to the proposed Water Service Entities Bill and the policy development that preceded it carried out by DIA with Treasury input since around 2017.*
>
> *Request 1:*
> *We request all advice, briefing notes, Treasury reports, or other communications provided by Treasury officials to Ministers, or to other stakeholders (such as Treasury ELT members Treasury Directors or their equivalents in other departments) that relate to:*
>
> *- Any debt that is proposed to be raised by proposed water entities and the fiscal risks of that debt*
> *- Balance sheet or other liability risk from the three waters reforms*
> *- How the proposed three waters entities debt will be reflected on the Crown's balance sheet, if at all*
> *- Financing options for local government to support water sector capital expenditure*
>
> *Request 2:*
> *We request any ratings agency, investment banking or other external advice or analysis commissioned by or possessed by the Treasury in relation to three waters reforms and debt.*

On 29 July 2022 I extended the timeframe for responding to your request by 60 days.

Information being released

Please find enclosed the following documents:

1 The Terrace
PO Box 3724
Wellington 6140
New Zealand
tel. +64-4-472-2733

https://treasury.govt.nz

Item	Date	Document Description	Decision on release
1.	30 October 2017	Key findings presentation for departments final	Release in full
2.		Ministers meeting A3 on findings and next steps for three waters 5 November V3	Release in full
3.	17 April 2018	Local Government Water Infrastructure Risk	Release in full
4.	16 May 2018	Aide Memoire - Three Waters Ministers meeting	Release in full
5.		Water chew session	Release in full
6.	28 June 2018	Three Waters slides - update with Min Jones 28 June 2018	Release in full
7.	24 September 2018	Opportunity to shape discussion - Dinner talk with Alan Sutherland, CEO, Scottish Water Industry Regulator, Hon Nanaia Mahuta and Hon David Parker (Ministers only)	Release in full
8.	28 June 2018	Aide Memoire - Future state of three waters system Cabinet paper	Release in full
9.	03 September 2020	Material for 8 April meeting of Three Waters Ministers	Release in full
10.	06 May 2020	Revised Draft Cabinet paper - Investing in water infrastructure and reform	Release in full
11.	06 May 2020	IFF & 3 waters revenue bond financing	Release in full
12.	06 May 2020	Economic Narrative Housing Urban Growth -- 2nd draft funding and financing chapters	Release in full
13.	07 July 2020	Three Waters Reform announcement tomorrow	Release in full
14.	27 July 2020	Three waters Auckland council funding	Release in full
15.	28 July 2020	Local Government Briefing_ Discussions with Auckland Council on the Three Waters Reform Programme and the separation of Watercare	Release in full
16.	13 August 2020	Local Government Briefing Three Waters Reform Programme and the separation of Watercare Further advice 11 August 2020	Release in full
17.	25 August 2020	Watercare Discussion	Release in full
18.	24 August 2020	Watercare discussion	Release in full

19.	04 November 2020	Three Waters Watercare S&P and Moody's discussions - File note	Release in full
20.	10 February 2021	Consideration for Water Assets	Release in full
21.	24 February 2021	Redrafted email for DIA - Three Waters	Release in full
22.	05 March 2021	Follow-up from three waters RES_briefing this morning _ Crown support option development	Release in full
23.		Crown support optionsv3	Release in full
24.	30 March 2021	Follow-up from three waters RES_briefing this morning _ Crown support option development	Release in part
25.	12 April 2021	RES Process - S&P Letters	Release in full
26.	12 April 2021	Memo to TSY RES outcome 210412	Release in part
27.	16 April 2021	RES Process - S&P Letters1	Release in full
28.	20 April 2021	Quick Notes on DIA RES - Crown Support and Credit Ratings	Release in full
29.	28 May 2021	Three Waters Reform Programme - additional information requested at 3PC	Release in full
30.	11 June 2021	Three Waters - Crown lending fiscal impacts	Release in full
31.	01 October 2021	Three waters economic regulation - response to 3PC question	Release in part
32.	05 October 2021	Three Waters - Comments ahead of CBC	Release in part
33.	05 October 2021	Three -waters reform - Ownership and Accountability	Release in full
34.	03 May 2022	RES briefing	Release in full
35.	04 May 2022	Three Waters - draft DIA briefing on S&P engagement and accounting	Release in full
36.	04 May 2022	WSEs and the FSG Consolidation	Release in full
37.		Water Service Entities (WSEs) preliminary analysis update when legislated	Release in full
38.	23 May 2022	3W - capital structure pack	Release in full
39.		Treasury - RES slides	Release in full

I have decided to release the documents listed above, with documents released in part subject to information being withheld under one or more of the following sections of the Official Information Act, as applicable:

- names and contact details of officials, under section 9(2)(g)(ii) – to maintain the effective conduct of public affairs through protecting Ministers, members of government organisations, officers and employees from improper pressure or harassment,
- advice still under consideration, section 9(2)(f)(iv) – to maintain the current constitutional conventions protecting the confidentiality of advice tendered by Ministers and officials,
- commercially sensitive information, under section 9(2)(b)(ii) – to protect the commercial position of the person who supplied the information, or who is the subject of the information,
- direct dial phone numbers of officials, under section 9(2)(k) – to prevent the disclosure of information for improper gain or improper advantage.

Direct dial phone numbers of officials have been redacted under section 9(2)(k) in order to reduce the possibility of staff being exposed to phishing and other scams. This is because information released under the OIA may end up in the public domain, for example, on websites including Treasury's website.

Information publicly available

The information listed in the table below is also covered by the request and available on the Department of Internal Affairs website. Accordingly, we propose to refuse the request for this information under section 18(d) of the Official Information Act:

- the information requested is or will soon be publicly available.

Item	Date	Document Description	Website Address
1.	02 May 2021	Three Waters Reform Review of methodology and assumptions underpinning economic analysis of aggregation	https://www.dia.govt.nz/diawebsite.nsf/Files/Three-waters-reform-programme/%24file/farrierswier-three-waters-reform-programme-review-of-wics-methodology-and-assumptions-underpinning-economic-analysis-of-aggregation-released-june-2021.pdf
2.	03 May 2022	Rating Evaluation Service (RES) on the indicative credit rating implications to Auckland Council (Auckland) and Wellington City Council (Wellington)	https://www.dia.govt.nz/diawebsite.nsf/Files/Three-waters-reform-programme-2022/$file/Ratings-Evaluation-Service-(RES)-Letter-Three-Waters-Reform-Programme-May-2022.pdf

3.	10 November 2017	Review of three waters infrastructure services Initial key findings for discussion with the Minister of Local Government	https://www.dia.govt.nz/diawebsite.nsf/Files/Three-Waters-Review-Cabinet-papers-April-2018/$file/Review-of-three-waters-infrastructure-services-key-findings-November-2017.pdf
4.		Information Memorandum Three Waters Reform	https://www.dia.govt.nz/diawebsite.nsf/Files/Three-waters-reform-programme/$file/information-memorandum-standard-and-poors-three-waters-reform-programme.pdf
5.	07 April 2021	Rating Evaluation Service (RES)	https://www.dia.govt.nz/diawebsite.nsf/Files/Three-waters-reform-programme/$file/rating-evaluation-service-res-letter-three-waters-reform-programme.pdf

Information to be withheld

There are additional documents covered by your request that I have decided to withhold in full under the following sections of the Official Information Act, as applicable:

- advice still under consideration, section 9(2)(f)(iv) – to maintain the current constitutional conventions protecting the confidentiality of advice tendered by Ministers and officials,

Item	Date	Document Description	Decision on release
1.		Three Waters Reform Programme – Upcoming decisions discussion for Finance Priorities Meeting, 1 September 2022	Withhold in full
2.		Finance Priorities Meeting Three Waters Reform Programme - Upcoming Briefings & Decisions	Withhold in full
3.	22 May 2022	Capital structure summary	Withhold in full
4.		RE_ Three waters - thinking regarding Crown support and capital raising options	Withhold in full
5.		Indicative RES scenarios 29.5.2022	Withhold in full
6.		Treasury - Crown support capital raising RES scenarios meeting - 3 June 2022	Withhold in full
7.		For Visibility - Comments on the Three Waters	Withhold in full

		F&C Work Programme	
8.		Pricing and capital structure - covering memo	Withhold in full
9.		Treasury - water service entity modelling + rating	Withhold in full
10.	27 June 2022	Capital raising approach	Withhold in full
11.		Treasury - RES slides	Withhold in full
12.	22 November 2021	S&P RES draft letter - Auckland Council	Withhold in full
13.	08 November 2021	RES Letter Nov 2021	Withhold in full

In making my decision, I have considered the public interest considerations in section 9(1) of the Official Information Act.

Please note that this letter (with your personal details removed) and enclosed documents may be published on the Treasury website.

This reply addresses the information you requested. You have the right to ask the Ombudsman to investigate and review my decision.

Yours sincerely

David Taylor
Manager, National Infrastructure Unit

OIA 20220262
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New Zealand's drinking water, wastewater, and stormwater - Now and in the future

Presentation to departments

30 October 2017

Purpose of this session

- To present key findings on a ‘deep dive’ into NZ’s three waters services
- Focus on problem definition
- Anticipate a conversation with Minister(s) in the context of new Government’s priorities

Agenda

Who	What	How long
Allan Prangnell (DIA)	Introduction and purpose	5 minutes
Jane Fleetwood (DIA)	Asset management – key findings	7 minutes
Barbara Annesley (MfE)	Compliance and monitoring – key findings	7 minutes
Hamish Grant-Fargie (MBIE)	Institutional arrangements – key findings	7 minutes
Keith Miller (DIA)	Funding and finance – key findings	7 minutes
Allan Prangnell (DIA)	Questions for agencies/discussion	30 minutes

Introduction – a discussion about three waters

- Aotearoa New Zealand’s drinking water, wastewater, and stormwater services are collectively described as the “three waters” by the sector.
- These services, which are **primarily provided by local authorities**, are fundamental to the wellbeing of our communities and the quality of our environment. Water is a taonga, and the three waters are a critical part of an integrated approach to water management that balances our water service needs with our objectives for New Zealand’s freshwater and marine environments and eco-systems.
- The management of three waters is also unique in the need to **recognise Te Mana o te Wai** – the cultural value of water and water bodies to mana whenua.
- **The three waters represent one of NZ’s core infrastructure sectors. The country’s investment is significant** – the combined local government assets have a $51.4 billion replacement value, with $12.8 billion planned expenditure from 2016 – 2025.
- **These services are coming under pressure, and are not well placed to meet current and future demand.** Housing growth, climate change, declining freshwater quality, increasing expectations from communities, tourism, and ageing infrastructure are all factors. Key sector players – including **LGNZ and Water NZ** – have long identified the need for reform to ensure three waters services are better placed to meet current and future pressures.
- **The final report of the Havelock North Inquiry** into Drinking Water is due on 18 December 2017. Stage 1 of the inquiry has revealed systemic problems at a regional level in Hawkes Bay. Stage 2 is examining whether similar or other issues exist at a national level, and will likely contain recommendations for change.

Three waters' relationship to government priorities

- Responsibility for matters affecting three waters infrastructure falls across Ministerial portfolios and government agencies. Key departments – Internal Affairs, Environment, MBIE, and Health – have been working together to identify key issues and provide advice on the current state and future challenges for three waters.
- The following government priorities, based on party manifestos and the coalition / confidence and supply agreements, are relevant to three waters infrastructure:
  - **Affordable housing, including 100,000 houses over 10 years –** There are issues with funding and financing of three waters infrastructure necessary to ensure housing supply keeps up with demand. The pace for new housing creates a risk that we may miss opportunities to future-proof three waters infrastructure (e.g. water-sensitive urban design, factoring in future demand, ensuring resilience to risks and hazards, and climate change adaptation).
  - **Freshwater quality** – The quality of three waters infrastructure and services has a direct impact on freshwater quality (and vice-versa). In some parts of New Zealand, it will not be possible to improve freshwater quality without tackling three waters infrastructure – for example sewage overflows into stormwater and leaky sewerage pipes impact on urban water quality.
  - **Regional development** – Three waters services are a basic need for economic development. Some councils are struggling to meet current demand. Additional development pressure may exacerbate these problems or limit growth opportunities.
  - **Fit-for-purpose tourist facilities** – Three waters infrastructure is often not fit for purpose in areas experiencing high seasonal demand, and local authorities with small rate-payer bases are struggling.
  - **The public inquiry '10 Years on from the Shand Report'** will look at local government funding and financing issues, and will likely examine three waters infrastructure given its significance in local government capital and operating expenditure, and the challenges some councils are facing in funding and financing infrastructure improvements.

Asset management

Why is good asset management important for 3 waters infrastructure, and for the local communities and businesses that receive water services?

- **Asset management is integral to strategic, financial, operational, and service planning and decision making**
  - Asset management provides communities' desired levels of service in the most cost-effective manner for present and future customers
  - It links council objectives with the levels of service needed to achieve them, the work required to sustain those levels, and the finances needed to support that work
- **Water infrastructure is complex, technical, expensive, and largely hidden – making these increasingly challenging assets to manage**
  - Doing this well requires a range of specialist skills, technology, high-quality data, and effective data systems; however, these are not yet widely prevalent, and some of the greatest opportunities for improvement relate to asset information and data use
  - Good governance is crucial – there are significant decisions to be made, risks to be managed, and trade-offs to be resolved– good asset management and asset information support good decision making
- **For 3 waters infrastructure, the risks and consequences associated with poor asset management/governance can be significant, wide-ranging, and costly – including**:
  - Harm to public health, the environment, and/or property – with associated personal, local, regional, and national costs*
  - Service failures – meaning residents and businesses do not receive essential services at the time and level they need
  - Resilience issues – arising from inadequate planning for / responses to natural hazards and climate change, for example
  - Unnecessary costs and/or poor value for money for communities – due to sub-optimal decisions on the timing and nature of major investments, or failure to extract maximum value from current assets
  - Lack of sufficient water infrastructure to supporting housing development

For example, the contamination of Havelock North's drinking water supply caused 40 per cent of the local population to become ill, and cost $21 million (the majority of which was borne by residents)

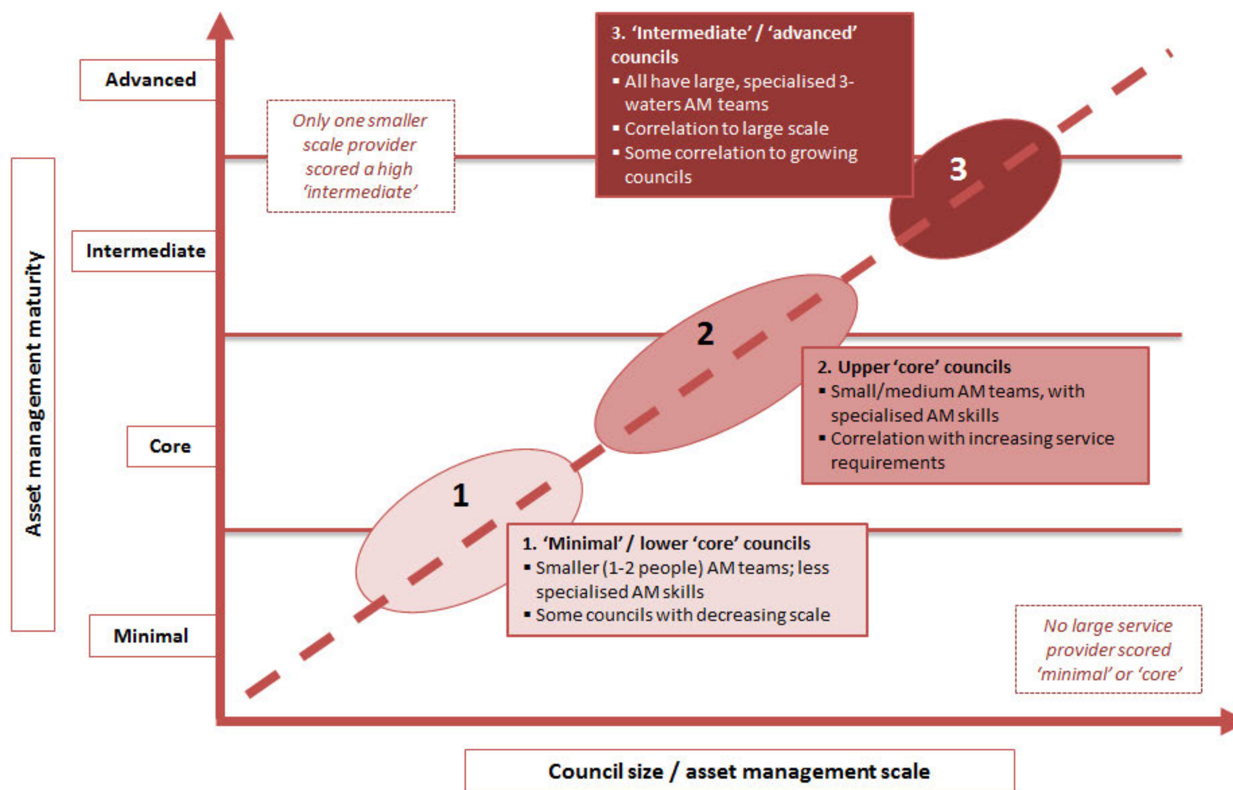
How well is asset management and governance for 3 waters infrastructure currently being done across New Zealand, and are there variations?

- **Research findings indicate there are considerable variations across New Zealand in the maturity of asset management practices – few councils are very advanced, and some are minimal**
- **These variations are largely linked with scale, resourcing, and capability**
  - Maturity generally correlates with council size, which affects the ability to attract/retain suitable expertise, specialise, innovate, afford/use sophisticated technology, and improve data collection and analysis
- **Strength of asset governance also correlates with scale – strongest in Auckland and the Wellington region (large scale, with water CCOs), and reasonably robust in other metro councils, but variable elsewhere**
- **Many councils are working to increase their asset management maturity and governance, driven and supported by a range of factors**
  - Reactions to the Havelock North water supply contamination; regulations and standards; addressing affordability, climate change, and resilience issues; and community expectations are helping to drive improvements
  - Sector initiatives, guidance and tools are supporting advances in asset management practice
  - However, there are risks that improvements will not be sustained, or will not be widespread (e.g. many activities are voluntary and rely on individual capability/motivation and resourcing)
- **Use of shared service arrangements, and informal collaboration, are leading to better asset management and governance in a few places**
  - Wellington Water* has demonstrated that a council-controlled organisation covering several councils in a region can strengthen asset governance, management and technical capability, while retaining asset ownership with individual councils and enabling continued local involvement/engagement
  - Other councils have reported the benefits of voluntarily working together, and sharing best practice and technical expertise – but this collaboration is not extensive or widespread

**** Wellington Water manages, but does not own, water assets for Wellington City, Wellington Regional, Porirua, Hutt City, and Upper Hutt councils. Our research indicated other councils tend to prefer this model to the Auckland / Watercare asset-owning model***

*Recent research indicates that asset management maturity generally correlates with council scale/size**

- Auckland Council / Watercare and Wellington Water are more advanced in asset management maturity, and are continuing to advance
- Other larger / metro councils score at least 'upper intermediate' and demonstrate the benefits of scale through their level of maturity
- Differences at 'tactical' and 'operational' levels are driving the differences in asset management maturity across councils
- Other infrastructure sectors (roading; electricity) are more mature, overall, than 3 waters, though there are variations across council roading services and across electricity distribution businesses
- Best international practice correlates with scale; e.g. Scottish Water has a highly advanced level of asset management



*Based on a sample of 22 councils (6 rural, 10 provincial, 6 metro/unitary). Of this sample, 1 is 'advanced'; 4 'intermediate'; 12 'core'; and 5 'minimal'

CONFIDENTIAL DRAFT - NOT GOVERNMENT POLICY

Research findings: key issues/observations relating to 3 waters asset management practices

- **Most councils (of those sampled) have the basic, underpinning 'architecture' of sensible asset management** (framework, policy, strategy, plan) and follow best practice in setting out their asset management plans, but …
  - the quality of their frameworks and documents varies considerably
  - **above this basic level, maturity is commensurate with scale**
- Asset management tends to be most mature for potable water, followed by wastewater, then stormwater (except in Auckland) – this differential becomes smaller as asset maturity and scale increase
- **Understanding asset performance is an essential part of good asset (and risk) management, but is a work in progress – particularly in smaller councils**
  - Councils have low confidence in their understanding of the condition of their assets (i.e. through condition assessments), but this is less severe in larger, more mature councils
  - Councils have attempted to understand asset criticality, but maturity of understanding varies by scale
  - Many councils do not have mature data, information or quality management systems and processes: in smaller councils, there is a particularly strong reliance on the knowledge of a few individuals and little succession planning
- **Advanced asset management is unlikely to be fit-for-purpose at a small scale with the resources available** – resource constraints are barriers to improvement in smaller councils
- **Asset management maturity increases for all council types/sizes as sector-driven initiatives are taken up;** e.g. guidance, tools and collaboration – sector-driven initiatives have their limitations, though (voluntary nature; rely on individual motivation; take time and money smaller councils do not have)
- **There are mixed views on the shared metadata standards** – more mature councils generally see value; less mature councils do not (smaller councils are less likely to have access to advanced analytics, or to people who can do benchmarking and discuss best practice, making it harder for them to derive value)

CONFIDENTIAL DRAFT - NOT GOVERNMENT POLICY

*Research findings: key issues/observations relating to 3 waters asset governance**

- **3 broad structural/governance models are currently used by councils**: a CCO that owns the water assets (Watercare, owned by Auckland Council); a CCO that manages, but does not own, the assets (Wellington Water); and direct management (all other councils)
- The standard of governance across the interviewed councils varied, especially with respect to understanding of technical issues – but **strength of governance generally correlates with scale**
  - Strongest in Auckland and the Wellington region (because they are large and have CCOs)
  - Reasonably robust in other metro councils (because size generally aids better governance)
- **There are concerns that councils without a water CCO may lack assurances of 'robust' governance** – this observation (which needs to be tested further) was based on several factors, including that:
  - The separation of governance and management is generally blurred, which weakens accountability
  - The governance agenda is often driven by council officers, rather than elected members
  - Issues occurring with the Mangawhai community wastewater scheme were found by the OAG to be, in part, governance failures – but little has changed systemically to ensure such failures do not occur again
  - Councillors are elected to represent community interests, not for their governance skills – therefore, they may not have the mix of skills and experience to deliver best practice governance of these complex, critical water assets
  - Professionalisation of governance of 3 waters is below that of other infrastructure assets (such as electricity and gas) despite equal or greater challenges
- **The standard of governance matters less in a stable context with few critical decisions and risks to manage – but councils are facing a range of challenges and risks, placing a increasing emphasis on effective governance and decision making**
- **Recently, councils have been taking steps to improve governance of 3 waters assets** (especially drinking water), driven in part by the Havelock North water supply contamination incident, but …
  - these steps mostly fall short of compensating for the lack of separation between governance and management
  - there are risks that the current focus will not last, particularly as memories of Havelock North fade

Based on interviews with a representative sample of 13 councils

Compliance and monitoring

Overview of the CME system for 3W: regulatory approach

Drinking water

- Multi-barrier compliance and monitoring system, predicated on high compliance to manage health risks
- Standards are set centrally, monitored & enforced locally
- Overlapping responsibilities, requiring an integrated approach across multiple players

Wastewater and stormwater

- Effects-based approach to managing and monitoring the environmental impact of discharges
- Standards are set at regional level based on (and sometimes above) national environmental bottom lines
- Responsibility for CME largely devolved to regional level

Overview of the CME system for 3W: service delivery

Drinking water

- 653 registered drinking water supplies serving 3.7 million people are covered by national monitoring and reporting on compliance. 99% of the 3.7m are supplied by local authorities.
- Other NZers receive drinking water from 71 private supplies, or very small supplies which are not reported on (but are required to meet standards)

- **Wastewater and stormwater**
- 252 wastewater treatment plants across 50 TAs (Water NZ). An average of 5 each but Far North DC has 15, and Southland DC has 18.
- Around 270,000 households - up to 20% of households in some regions(e.g. Southland) have on-site sewage treatment systems, such as septic tanks
- 95% of wastewater has secondary or tertiary treatment. Approx. 75% is discharged into the sea, 16% into freshwater and 7% on to land
- Stormwater is a complex system involving pipes & tunnels (the primary network) and overland flowpaths (the secondary network). Land use planning and design interact with 'hard' infrastructure, and there is mixed ownership (e.g. private, council, regional transport, KiwiRail) of infrastructure assets
- Most council areas have some stormwater treatment processes, but volumes aren't known.

Overview of the CME system for 3W: information and reporting

There are multiple sources of reporting across different dimensions of 3W (e.g. service performance, CME activities, and environmental impacts):

- Local authority annual reports (which include non-financial performance measures)
- CME reports published by some regional and unitary authorities
- Water NZ National Performance Review
- MoH annual report on drinking water quality
- Water for NZ national monitoring website (ESR under contract to MoH)
- MfE National Environmental reporting (e.g. Our Fresh Water)
- MfE's RMA National Monitoring System

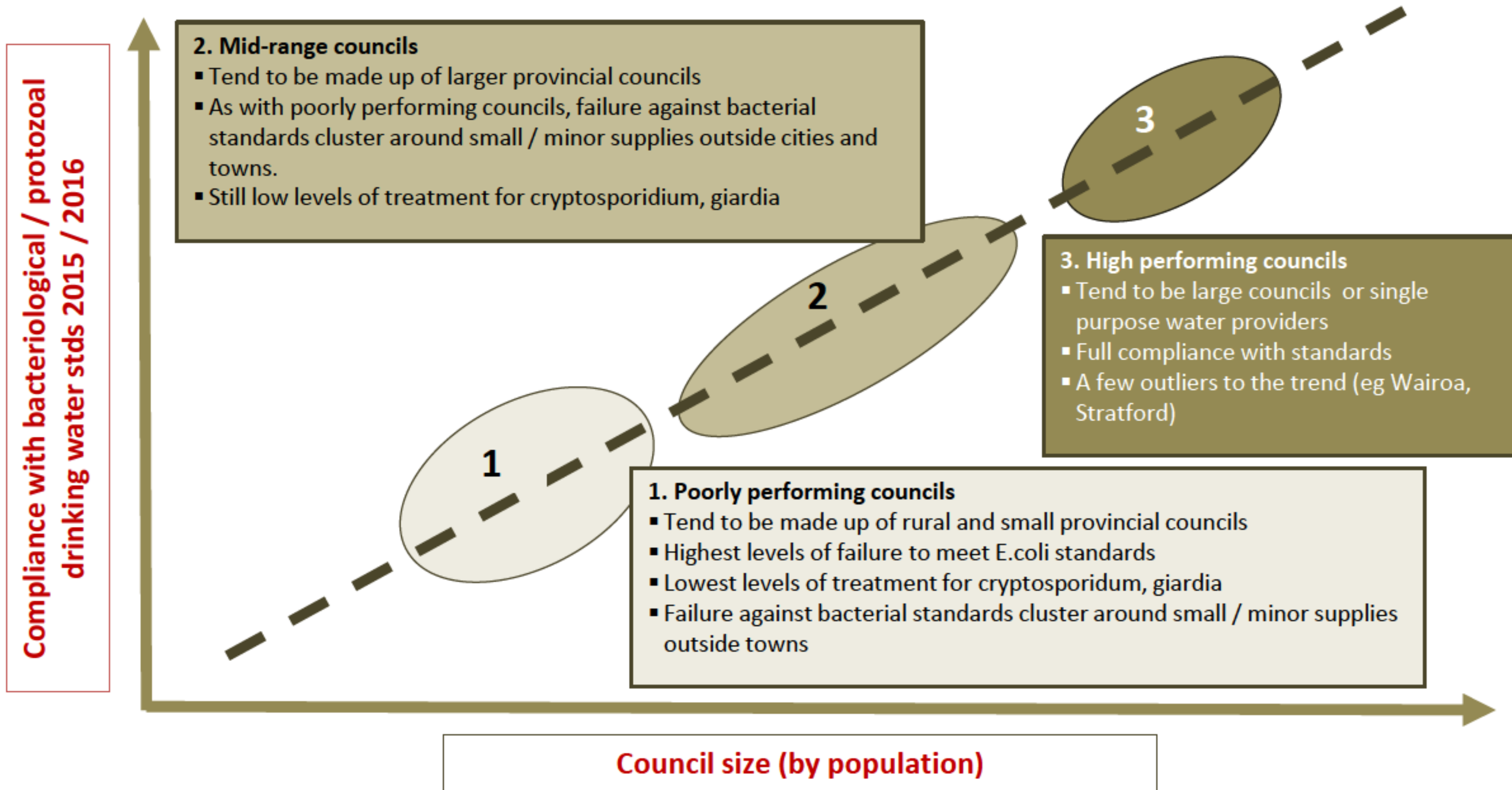
What we found

Drinking Water Compliance

- A significant minority – 750,000 people – have water supplies that don’t meet the NZ Drinking Water Standards.
- Overall compliance with the standards has improved by only 3.7% over the last 7 years.
- High variability across councils in catchment management, and consenting and monitoring practices, to support drinking water source protection.
- The Havelock North contamination is not an isolated event (Havelock North in 1998, three contaminations in Canterbury since 2008, Waiwhetu in 2017, and 27 minor local authority supplies that are failing e. coli standards).
- Scale is a factor in compliance, for both local authority and supply. Non-compliant supplies are more likely to be in rural / small provincial local authorities. But even, in larger provincial / urban local authorities, smaller supplies are more likely to be non-compliant.
- No formal enforcement action taken by DHBs since the current drinking water regime was introduced in 2007.
- Questions about whether there are sufficient Drinking Water Assessors to ensure compliance (Water NZ and DWA submissions to Havelock North Inquiry).

Drinking water quality correlates with council scale / size

- Compliance with DWS tends to be best in mid-to-large councils or single purpose entities (eg Wellington Water)
- Of those councils that do not comply, as size of council decreases, so does compliance with bacterial (E. coli) and protozoal (giardia, cryptosporidium) drinking water standards
- No similar correlation exists for chemical standards – non-compliance tends to group around problematic water sources
- Councils tend to provide best quality water in their cities or towns, with non-compliance is clustered around minor (501-5000 people) or small (101-500 people) water supplies, particularly for failure to meet E. coli standards.
- Twice as many South Island councils show E. coli transgressions



*Based on Annual Report on Drinking-water Quality 2015 / 2016

What we found

Stormwater & Wastewater Compliance

- General MfE finding that regional authority CME practices under the RMA are variable, and enforcement is weak. Identified issues include resourcing, capability, enforcement tools, relationships, costs / risks of legal action
- Regional Councils issued 7 abatement notices, 2 infringement notices and 0 enforcement orders for wastewater and stormwater in 2015.
- Apparently low enforcement activity may mask issues (e.g. softer approaches to facilitating compliance, lengthy consent durations, limited compliance monitoring, expired consents, few or unenforceable consent conditions)
- Approximately 1 in 5 wastewater treatment plants is operating under an expired consent.
- The number of stormwater and untreated sewage overflows varies widely across regions and can occur for multiple reasons, making it difficult to make comparisons between councils and over time. This is improving as councils improve their monitoring and following the introduction of non-financial performance measures under the LGA.

What we found: other aspects

Regulatory stewardship and system oversight

- Acknowledgement by MfE of inadequate central oversight of and support for CME functions under the RMA.
- Even when national directions, standards or requirements are specified, central government has been relatively hands-off in supporting / assisting local authority to give effect to them.

Information / Reporting

- Information provided by local authorities to ratepayers / consumers is highly variable in quality, accessibility and level of detail.
- There is little audit or assurance of the information that local authorities provide about their water infrastructure services and CME activities.
- There is a reasonable amount of national monitoring information available about drinking water but it's technical, difficult to access, and not easily understood by consumers / laypeople.
- Reporting on wastewater and stormwater service performance, compliance and enforcement activities and environmental impacts is via multiple channels, with the most comprehensive reporting done by Water NZ.
- Overall effect is a piecemeal approach that fails to ensure transparency and accountability, and misses opportunities to inform investment planning and service improvements.

Water supply stress

- 12 councils report that 54 of 150 water supply takes come from catchments that are likely over-allocated.

Regulatory institutions workstream

Regulatory Institutions

- This work stream looks at regulatory institutions in the broadest sense i.e. both the regulatory regimes and the regulatory bodies that implement them
- The initial phase of this work has looked at how the 3 waters sector is regulated internationally
- While international comparisons can be useful, any lessons need to be made relevant for the NZ context

unlike some other jurisdictions, NZ's 3 waters sector is **vertically integrated**

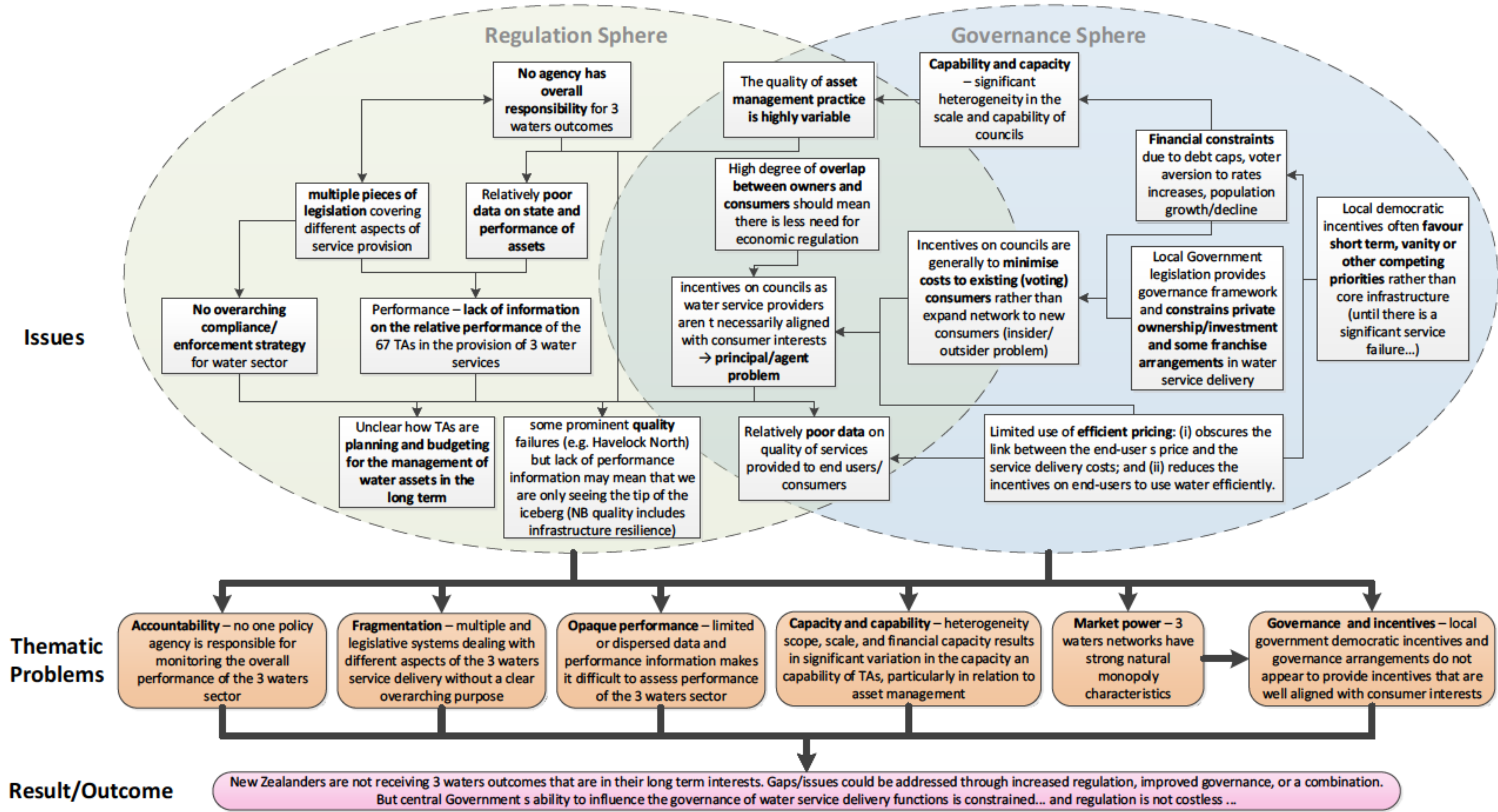
natural monopoly concerns are largely dealt with in NZ through the provision of 3 waters services by **local public monopolies** owned and operated by NZ's 67 territorial authorities. This means that there is a significant overlap of owners and consumers

NZ's 67 TAs employ a wide **variety of pricing and financing practices** e.g. fixed charges, volumetric charging, growth charges, average cost pricing

the typical **economies of scale** involved in water infrastructure networks will be modified to some extent by New Zealand's small population and diffused ownership by 67 territorial authorities

there is **significant diversity in the nature of the issues that NZ's local councils/operators are facing** e.g. rapid population growth/declines, debt constraints, capacity/capability issues

What is the problem – governance, regulation, both?



Governance and Incentives?

- Despite the overlap of owners and consumers through territorial authority ownership and operation, the current local government arrangements do not appear to be providing incentives that are well aligned with consumer interests
- NZ's is not unusual in having locally owned natural monopoly service provision. But we are unusual in not having independent regulatory oversight.
- Relatively light-handed information disclosure regimes are used in most jurisdictions to shine a light on sector performance and sharpen incentives. Price-quality regulation is sometimes used on larger or privately owned providers.
- The independence of the regulator is seen as a critical success factor of overseas regimes.

Capacity and Capability

- 3 waters service provision is fragmented in NZ, but we are far from the only jurisdiction like this. Compared to some jurisdictions, NZ is actually more centralised e.g. ≈ 17000 service providers in Japan, 151000 in US, and 200 in Australia.
- International literature and practice around economies of scope is mixed:
  - generally drinking water and wastewater are provided together, but not always
  - public good attributes of stormwater and the fact that some jurisdictions combine wastewater+stormwater means practice is more mixed
- Impact of scale on capacity and capability of service providers is likely to be greater than pure economic efficiencies (which are likely to be small but non trivial)
- These impacts are likely to be particularly severe for small TAs with declining or stagnant populations → suggests a one size fits all approach is unlikely to yield the best long term outcomes, and some degree of aggregation is desirable
- Some countries have taken deliberate steps to consolidate their water sectors, but there are a range of approaches ranging from merger to shared asset management arrangements e.g. Wellington Water
- NZ's small size also means we need to think about the capacity and capability of regulatory institutions → economy wide regulatory bodies are likely to be more sustainable over the medium to long term than sectoral regulators

Fragmentation, Accountability and Performance

- In NZ, multiple legislative systems and agencies deal with different aspects of the 3 waters service delivery without a clear or unifying overall purpose/objective.
- Overseas jurisdictions employ a range of approaches, but most have:

- The empowering legislation for an economic regulator invariably provides a clear overarching purpose statement encapsulating the desired community outcomes and a high level articulation of how these will be achieved. Other regulatory functions/processes are treated as essential inputs/pass-through costs.
- Fragmented nature of the 3 waters sector and the absence of dedicated regulatory oversight means there is limited or fragmented data on the performance of the sector. This is likely to undermine the existing governance mechanisms as consumers/ratepayers have little information about performance.
- Almost all countries we surveyed have a requirement for information around profitability/financial performance, asset management, and service quality to be regularly disclosed to a dedicated body who then analyses and summarises performance for the benefit of consumers and other interested parties.
- Water reform is often a journey rather than a destination – approaches that improve knowledge of sector performance are often used as a first step to further reform and are a relatively low cost/risk proposition. But unless partnered with improvements to governance and service delivery arrangements, the gains from changes to regulatory institutional arrangements are likely to be modest and long term in nature.

Funding and Financing

Three waters is a large part of the local authority asset and expenditure base

- Local authorities report their three waters assets have a book value of $31.8 billion and an estimated replacement cost of $51.4 billion.
- In the three financial years to 2016, local authorities invested $3.2 billion in improving three waters services.

Local authorities face significant funding challenges for three waters

- Drivers for investment are
  - Meeting drinking water standards
  - Meeting expectations for wastewater treatment
  - Meeting expectations for water quality (stormwater and wastewater overflows)
  - Meeting expectations for resilience
  - **Providing the water services needed for additional housing**
  - **Renewal of existing assets that have reached the end of their useful life**

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  - Meeting drinking water standards
  - Meeting expectations for wastewater treatment
  - Meeting expectations for water quality (stormwater and wastewater overflows)
  - Meeting expectations for resilience
  - **Providing the water services needed for additional housing**
  - **Renewal of existing assets that have reached the end of their useful life**

New sources of capital needed for growth

- Councils are making huge investment in assets for growth – but development contributions are funding only about 2/3rds of the costs. Over the last three years councils funded $478M from rates or borrowing.
- The critical issue for growth funding is to find new sources of capital.
- Simply borrowing more is not the answer – **"We currently consider that the 17 rated New Zealand local councils have high to very high debt and interest burdens relative to international peers"** – Standard and Poors, April 2014
- However – we don't know the exact size of the problem. Between the NPS-UDC development assessments and the 2018 LTPs, a rich story will emerge about the costs of providing infrastructure for growth.

Renewals is not a major immediate problem

- Reviewing LTPs and infrastructure strategies suggests that renewals are being done – over the last three years councils spent $1.8 billion on replacement of three waters assets
- Larger scale replacements will be needed 20 - 40 years from now.
- For small declining councils, the immediate issue is better information needed to understand condition and replacement needs of critical assets

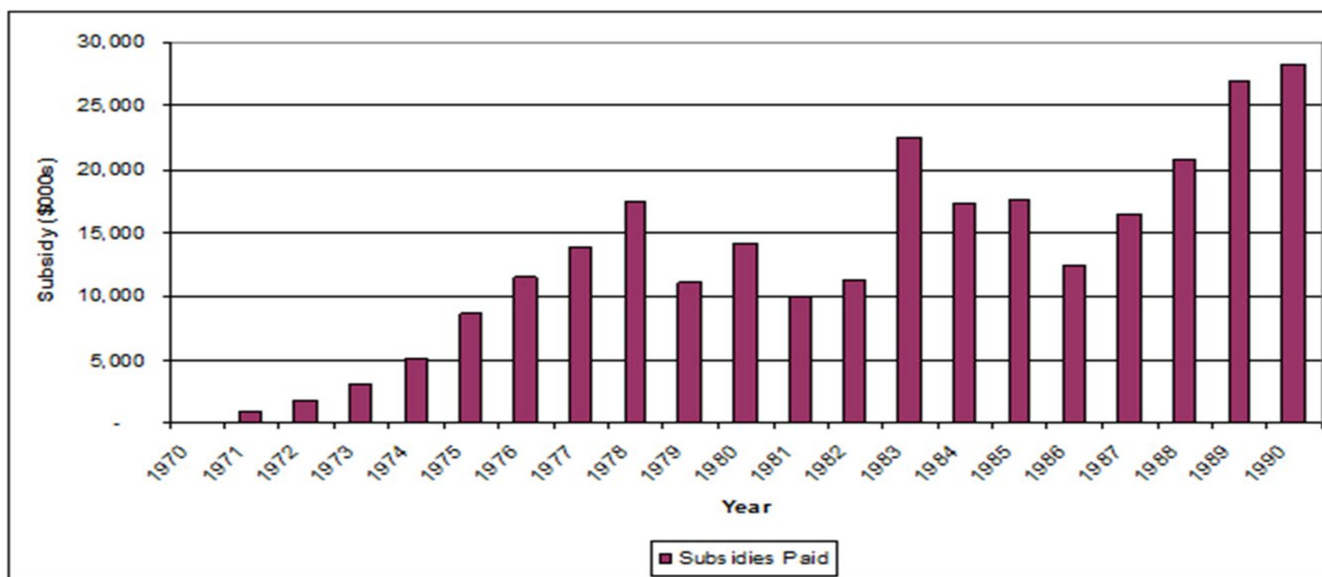
Costs being shifted to future rate-payers

- A more pressing problem is that councils are not fully funding depreciation – and are thereby shifting costs to future rate-payers. The table is for the last three financial years.

	Depreciation ($m)		
	Unfunded	Total	
Stormwater	58	202	29%
Water	45	390	11%
Wastewater	142	458	31%
Total	**244**	**1,050**	**23%**
(excludes Auckland and Christchurch)			

Historically Crown assistance has been more common than not

- The graph shows Crown funding from 1970 until 1990, when financial assistance ceased. It resumed in the late 90's and ceased again when the GFC hit.



Historically Crown assistance has been more common than not

- Crown assistance has focused on capital costs. The Crown paid $1.685m of the $2.159m it cost to upgrade Benneydale's water and sewage systems. Treatment plants are expensive to operate. Benneydale ratepayers pay $2,554 a year each for water and sewage – other rates on top.
- Crown assistance has been reactive and, beyond building the facility, unconditional.

Conclusions?

Addressing growth

- Need to understand the scale of investment required – probably talking $billions. The outcomes of the NPS-UDC and the 2018 LTPs will help quantify this and are likely to show some councils simply cannot fund the required infrastructure.

Meeting environmental and public health standards

- Crown assistance is probably needed, but needs more imagination than past approaches (e.g. about local authority funding systems and use of debt for local shares)

Renewals

- Probably best approach is to co-fund proper condition assessment. Better to understand the problem before we start spending.

Pressures coming down the line for three waters

Increasing community expectations and regulatory requirements (quality)

- Greater recognition of iwi interests and voice in water management
- Increasing community expectations on wastewater treatment and storm water management
- Further strengthening of quality requirements under the NPS Freshwater Management
- Additional NPSs and NESs will increase the compliance load on regional councils
- Likely recommendations from the Havelock North Inquiry could increase standards further
- Maintaining and improving three waters infrastructure in face of declining ratepayer base a reality for many small councils

Increasing demand in the face of supply constraints (quantity)

- Increased water infrastructure capacity necessary to support housing and business growth (with new planning requirements under the NPS Urban Development Capacity)
- Water over-allocation already a reality in some regions
- Scope for greater use of non-regulatory approaches to manage demand (e.g. pricing and behaviour management), alongside regulatory mechanisms.

New challenges (complexity)

- Hazard management (new requirement under 2017 amendments to RMA)
- Greater emphasis on integrated approaches to land and water planning and management
- Climate change adaptation (e.g. rainfall changes, extreme weather events, coastal inundation)
- Technological advances (e.g. water re-use), engineering innovations and design approaches (e.g. water-sensitive urban design) – opportunities but also costs

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Questions for agencies

- Do our findings align with your understanding of the problem definition?
- Have we missed any significant issues or evidence?
- What key themes can you see coming through in this work?
- Are there any alignment issues in relation to advice you're providing on related matters (housing, infrastructure, resource management and planning system, freshwater)?
- What points are important to emphasise in providing a compelling case for doing further work on options for change to improve three waters services?

INITIAL FINDINGS AND NEXT STEPS FOR REVIEW OF THREE WATERS INFRASTRUCTURE SERVICES:

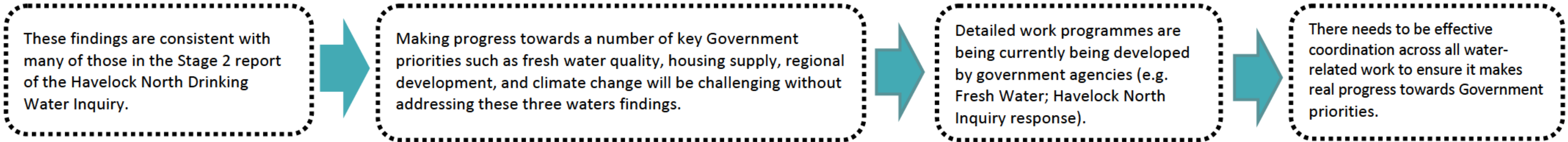
INFORMATION TO SUPPORT MINISTERS' DISCUSSION ON THURSDAY 7 DECEMBER 2017

- A DIA-led cross agency review has focused on three aspects of three waters: funding and financing; asset management performance; and compliance and monitoring.
- Work to date has been largely desk-based and focused on better understanding the issues across these aspects of three waters infrastructure services.
- While the nature and extent of issues varies significantly across councils, officials found evidence of poor performance and pressure points in the system.
- **Overall, seven high level findings were identified:**
  1) **There are risks to human health and the environment in some parts of the country**
  2) **There is evidence of low levels of compliance, monitoring and enforcement against a range of standards, rules and requirements**
  3) **There is evidence of capability and capacity challenges, particularly for smaller councils**
  4) **Variable asset management practices and lack of good asset information**
  5) **There are funding pressures on local authorities driven by growth, asset renewal, and meeting increasing expectations**
  6) **There is inadequate system oversight and connections between key parts of the system**
  7) **Reporting in its current form does not promote transparency, accountability and performance improvement**

Discussion point for Ministers

1. Are you surprised by any of these findings?

   (More detailed information on the findings can be found in the briefing material shared with Ministers prior to the meeting)



- **There is significant scope to strengthen the three waters infrastructure system. Officials have identified four mutually reinforcing drivers of system performance where change could be considered. Action is needed across all four drivers to achieve sustained system improvements, although some staging would be possible.**

1 Effective oversight, regulatory settings and institutional arrangements

- Improving consumer protection, health and environmental regulation, and institutional arrangements
- Better co-ordination of government agencies and policies, strategy and oversight
- Ensuring central and local government work collaboratively towards common goals

Central oversight could be considered as a possible priority action area

2 Funding and financing mechanisms

- Providing a wider set of funding tools and sources to better address multiple issues (such as growth, rural access, resilience, and increasing standards)
- Ensuring that funding streams support planned, sustainable and fit-for purpose infrastructure
- Ensuring that allocation / sharing of costs is aligned to benefits

Funding options for infrastructure for smaller councils and high growth areas could be considered as possible priority areas

3 Information for transparency, accountability & decision-making

- Promoting accessible, robust and consistent information for local government decision-makers and central government policy-makers
- Ensuring that consumers can access data about service, price and quality that is easy to understand

4 Capacity and capability of decision-makers, suppliers and regulators

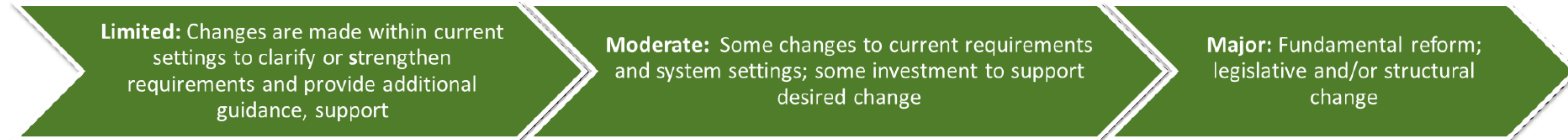
- Addressing scale and specialisation, recognising that a one-size fits all approach may not be appropriate
- Improving monitoring, compliance, and enforcement, underpinned by adequate tools and resources
- Promoting best practice in asset management and procurement

Discussion points for Ministers

2. Do you agree with further three waters work, focusing on these four areas?
3. Are any of the four areas a higher priority than others?
4. Is Cabinet agreement needed to proceed with this work (or only for decisions arising from it)?

Outcome: Three waters infrastructure services that are affordable, resilient, and well-managed, meet health and environmental standards, and the economic, social, and cultural objectives of the communities they serve.

- **There are <u>choices about the nature and extent of change</u> in each of these four areas. Examples of potential changes that could be considered are provided below, noting that further policy work is required to understand the full range of possible changes, and to assess potential benefits, risks and costs.**
- **Some of these changes may be picked up through other water-related work programmes (e.g. fresh water improvement; Havelock North Inquiry response).**



<u>Examples of limited change</u>

Oversight, Regulation & Institutions: Better central and local government coordination; strengthened compliance tools and fines.

Funding and Financing: Targeted, conditional grants or loans for specific purposes/projects.

Information: Support small councils to participate in Water New Zealand's annual performance review; improve data in MfE national monitoring system.

Capacity and Capability: Increased guidance and advice to support best practice; encourage shared services arrangements across councils.

<u>Examples of moderate change</u>

Oversight, Regulation & Institutions: Strengthened oversight, compliance and enforcement requirements under the RMA and/or Health Act.

Funding and Financing: Additional funding and financing tools for councils.

Information: Provide funding for small councils to undertake asset condition assessments.

Capacity and Capability: Incentives and support for shared service arrangements and/or for sector-led performance improvement initiatives.

<u>Examples of major change</u>

Oversight, Regulation & Institutions: Lead agency (new or existing) for water infrastructure strategy & oversight; independent economic, environmental and/or drinking water regulator.

Funding and Financing: Specific government funding stream for water infrastructure, with requirements for business cases, procurement methods, asset management and performance information disclosure.

Information: Task a single agency with gathering and reporting comprehensively on three waters services (or on water more generally).

Capacity and Capability: Establishment of publicly owned, specialist three waters service providers, separate from councils.

<u>Discussion points for Ministers</u>

5. Do you want officials to explore options for change across all levels, or focus on a particular level?
6. Are any potential elements 'off the table' or 'on the table'?
7. What level of stakeholder and public engagement would you like to see?

The level of consultation and engagement with local government and other key stakeholders (e.g. iwi, water infrastructure industry representatives) will depend, in part, on the extent of change under consideration

An indicative timeframe for further work is outlined below, with final details dependent on scope and approach

From: Morgan Dryburgh [TSY]
To: Katie Collier [TSY]
Cc: David Taylor [TSY]
Subject: RE: Local Government Water Infrastructure Risk
Date: Tuesday, 17 April 2018 4:27:02 pm

Hi Katie,

Thanks for suggesting that.

I guess the point I was trying to get across in my first (very long) response was that the likelihood of central government taking on some of the funding of water infrastructure is so removed (first CG would need to make the policy decisions to require compliance with the standards that would lead to the high infrastructure costs, and then CG would need to make a decision contingent on that decision to fund some of that infrastructure cost) that it does not meet the likelihood threshold for a specific fiscal risk.

Hope this makes sense.

Morgan

From: Katie Collier [TSY]
Sent: Monday, 16 April 2018 12:10 PM
To: Morgan Dryburgh [TSY] <Morgan.Dryburgh@treasury.govt.nz>
Subject: RE: Local Government Water Infrastructure Risk

Hi Morgan,

We do have an option of excluding the risk under s26V of the PFA if disclosure would:

- prejudice the substantial economic interests of New Zealand
- prejudice the security or defence of New Zealand or international relations of the Government
- compromise the Government in a material way in negotiation, litigation or commercial activity, or, and
- result in a material loss of value to the Government.

Do you think we could make an argument that negotiation could be compromised?

Ngā mihi,
Katie

Katie Collier | Kaitātari - Graduate Analyst, Fiscal & State Sector Management | **The Treasury - Kaitohutohu Kaupapa Rawa**
s9(2)(k) katie.collier@treasury.govt.nz

From: Morgan Dryburgh [TSY]
Sent: Monday, 16 April 2018 11:20 AM
To: Katie Collier [TSY] <Katie.Collier@treasury.govt.nz>
Cc: David Taylor [TSY] <David.Taylor@treasury.govt.nz>
Subject: RE: Local Government Water Infrastructure Risk

Hi Katie,

Thanks for letting me know.

I agree with you that the policy change risk is unlikely to meet the threshold.

We have some reservations about including a water infrastructure risk, though this is highly dependent on the wording. Including water infrastructure as a specific fiscal risk may give local government the impression that Central Government has made a decision around their willingness to contribute to some of the cost of upgrading water infrastructure, when the messaging from CG so far has been that these costs are the responsibility of local government.

Happy to discuss.

Cheers,

Morgan

From: Katie Collier [TSY]
Sent: Monday, 16 April 2018 10:37 AM
To: Morgan Dryburgh [TSY] <Morgan.Dryburgh@treasury.govt.nz>
Subject: RE: Local Government Water Infrastructure Risk

Hi Morgan,

Thank you for that very comprehensive response.

At the moment we are considering including a water infrastructure risk based on the below, but I will test that with the Minister next week. From my reading of your email, it seems to me that the policy change risk is unlikely to meet the $100 million (over the forecast period) threshold for publication. Would you agree with that?

Ngā mihi,
Katie

Katie Collier | Kaitātari - Graduate Analyst, Fiscal & State Sector Management | **The Treasury - Kaitohutohu Kaupapa Rawa**
s9(2)(k) katie.collier@treasury.govt.nz

From: Morgan Dryburgh [TSY]
Sent: Thursday, 12 April 2018 3:40 PM
To: Katie Collier [TSY] <Katie.Collier@treasury.govt.nz>

Cc: Gopika Gnanakumar <Gopika.Gnanakumar@treasury.govt.nz>; Florence Reynolds [TSY] <Florence.Reynolds@treasury.govt.nz>; David Taylor [TSY] <David.Taylor@treasury.govt.nz>
Subject: RE: Local Government Water Infrastructure Risk

Hi Katie,

Thanks for contacting me.

This is my first encounter with specific fiscal risks, so I hope I've grasped what's being asked. I've set out my understanding, below, about the potential fiscal impacts of future decisions. Do you (or the Risk Committee) then make an assessment as to whether this is a specific fiscal risk?

I have copied in Florence from the Health team to answer anything specifically about Havelock North – while I am across both pieces of work as they are both interconnected, the Health team is leading on the HN work specifically.

I think there are two areas where costs to central government are likely to arise in relation to water. Firstly, around the cost of infrastructure upgrades/compliance costs which will fall on local government, but could be picked up by central government.

The second is direct costs to central government in respect of policy and legislative work to set up new institutional arrangements, if those decisions are made by Ministers.

Infrastructure

As you point out, water infrastructure is owned by local government.

As part of the Three Waters review and response to Havelock North (these two pieces of work are progressing in parallel, but with different areas of priority/focus), DIA commissioned a report estimating the cost of compliance with the Drinking-water Standards and the cost of mandatory treatment for all drinking-water sources currently untreated. The cost of compliance for this was estimated in the report to be between $308.7 and $573.7 million. This cost would fall on local government if Ministers made the decision to require compliance with the Drinking Water Standards for all networked supplies, and to require mandatory residual treatment of drinking water.

No decisions have yet been made to require this. On Monday, Cabinet invited Ministers to report back on the two proposals (mandatory residual treatment and mandatory compliance with drinking water standards) in August 2018. The report back will include information on the cost of this and funding sources.

When decisions are made in August 2018 there is a possibility that Ministers could decide that the Crown will fund some or all of this estimated compliance cost. At the moment, my understanding is that Ministers have indicated a desire for the Crown to *not* fund these compliance costs, and for the cost of upgrades to be spread across the water sector. But I am

unsure whether this is feasible or not.

Policy/institutional arrangement costs

Both the Three Waters review and Havelock North response have gained agreement from Ministers to go away and do work on options for regulators and structural reform of the water sector.

- The Havelock North response will be investigating options for a drinking water regulator, with policy decisions to be made in August 2018
- The Three Waters project will be looking at options for reforming the three waters sector, including the possibility of removing water supply from councils and consolidating supply into larger, specific water entities. Policy decisions will be made in October 2018.
- The Three Waters project will also be looking at options for regulating the three waters sector (so, broader than just a drinking water regulator that the Havelock North response will be looking at). Policy decisions will be made in October 2018.

I am unsure of the magnitude of costs that may fall out of these decisions. If Ministers decide to use existing regulators and re-purpose them, costs could be under $10m. However, they could be over that if there is a decision to establish new regulators.

DIA intends for any funding for these decisions to be sought through Budgets 19 and 20.

A short summary of the two different potential sources of fiscal risk:

1) Infrastructure costs
   The government will consider (in August and October) proposals that could place large compliance costs on local government. These costs are not yet known with any certainty, but $300m is the lowest estimate (and they could be a lot larger). The government may consider funding some or all of these costs, but it is not clear at this stage what they will consider.

2) Policy/central government costs
   The government will consider (in August and October) proposals around institutional arrangements and regulatory settings for the water sector. These proposals could result in costs. Both projects intend that the costs falling out of any such decisions are funded through Budgets 19 and 20.

From: Katie Collier [TSY]
Sent: Thursday, 12 April 2018 1:13 PM
To: Morgan Dryburgh [TSY] <Morgan.Dryburgh@treasury.govt.nz>
Cc: Gopika Gnanakumar <Gopika.Gnanakumar@treasury.govt.nz>
Subject: RE: Local Government Water Infrastructure Risk

Hi Morgan,

Following the meeting of the Risk Committee yesterday, we're interested in putting together a couple of water related risks for the Specific Fiscal Risk Chapter in BEFU.

The first would be about local government water infrastructure. At this point we don't know how much of the risk central government would want to take on. Do you have any thoughts on this? We also need to know, if central government is involved:

- Whether the risk would amount to more than $10million over the forecast period, and also whether it would exceed $100million, and
- Whether there is a chance (greater than 20% but lower than 50%) that Government might incur some kind of financial liability.

We also need something around the Havelock North inquiry – the same information on quantum and likelihood. I know this was part funded through Budget, so we will also put some mention of that. Gopika I understand that you will be familiar with the Budget side of this.

Ngā mihi,
Katie

Katie Collier | Kaitātari - Graduate Analyst, Fiscal & State Sector Management | **The Treasury - Kaitohutohu Kaupapa Rawa**
s9(2)(k) katie.collier@treasury.govt.nz

From: Gopika Gnanakumar
Sent: Thursday, 12 April 2018 1:05 PM
To: Katie Collier [TSY] <Katie.Collier@treasury.govt.nz>
Cc: Morgan Dryburgh [TSY] <Morgan.Dryburgh@treasury.govt.nz>
Subject: RE: Local Government Water Infrastructure Risk

Hi Katie

Morgan (cced) would be the person to talk to, (especially if it's relating to three waters).

Gopika

From: Katie Collier [TSY]
Sent: Thursday, 12 April 2018 1:00 p.m.
To: Gopika Gnanakumar <Gopika.Gnanakumar@treasury.govt.nz>
Subject: Local Government Water Infrastructure Risk

Hi Gopika,

Are you the right person to talk to about putting together a Local Government Water Infrastructure risk?

Ngā mihi,
Katie

Katie Collier | Kaitātari - Graduate Analyst, Fiscal & State Sector Management | **The Treasury - Kaitohutohu Kaupapa Rawa**
s9(2)(k) katie.collier@treasury.govt.nz

Reference: T2018/1287 SH-11-5-3

Date: 14 May 2018

To: Minister of Finance
(Hon Grant Robertson)

Minister for Infrastructure
(Hon Shane Jones)

Deadline: None

Aide Memoire: Three Waters Ministers meeting 16 May 2018

You are attending a meeting at 12pm on 16 May 2018 to discuss the review of three waters infrastructure with ministers.

The purpose of this aide memoire is to highlight the key points of discussion for this meeting, and to outline some key considerations for each of the topics.

Background

The first stage of the three waters review identified seven key findings, indicating the potential to strengthen the three waters infrastructure system

- Capability and capacity challenges, particularly in smaller councils
- Variable asset management practices, and a lack of good asset information
- Affordability issues in some areas;
- Inadequate system oversight and connection between key parts of the system;
- Existing reporting obligations do not provide stakeholders with meaningful information on the performance of three waters services;
- Low levels of compliance, monitoring and enforcement against a range of standards, rules and requirements; and
- Risks to human health and the environment in parts of the country.

Ministers last met to discuss the three waters review on 11 April 2018. At that meeting, ministers were asked to indicate their appetite for change in the New Zealand water sector, and specifically their willingness to move away from the current system where water services are delivered by 67 territorial authorities.

At that meeting, ministers generally expressed support for large-scale change in water delivery, and in particular expressed interest in consolidating provision in a small number of water entities.

Key points for you to consider

This meeting on 16 May builds on the discussions at the last meeting, and will ask ministers to:

- express a preference for either one, three, four, five, or sixteen water providers; and
- indicate their level of openness to private investment in water infrastructure assets.

The ministers attending the meeting will also be provided with a paper discussing whether the aggregated water suppliers should take on two (drinking water and wastewater) or three waters (drinking, waste- and stormwater).

There are two further points that we think are worthy of your consideration alongside the other questions, as the elements of institutional settings for water suppliers should be considered with a whole of system lens:

- who should own the assets – local authorities, the Crown, or a mix of both
- whether the purpose of the new water entities should be to operate on a for-profit or non-commercial basis

Number of aggregated water providers

The Havelock North Inquiry recommended aggregated drinking water suppliers to improve compliance, competence and accountability. The benefits that can be gained by aggregating three waters suppliers also include an increased capability of water suppliers to manage their assets, and the ability to achieve economies of scale.

Increased ability to deploy technology and greater asset management capability

Asset management is a specialist discipline. Bringing the management of water assets into a small number of suppliers would make good use of the relatively small number of skilled asset managers in New Zealand, and allow the skilled asset managers we have to apply their knowledge and capabilities most widely. This also applies to specialist engineering and management expertise.

Water suppliers of a large scale are likely to have greater ability to source and implement new technologies, which can improve their efficiency, resilience, and ability to meet quality standards. A parallel example of this in the electricity distribution sector is that Vector, the largest distributor, has invested in many new technologies which are improving resilience and the efficient management of their networks. Many smaller distributors do not have the same ability to do this.

Economies of scale

The disaggregated nature of water networks means that there is a level at which economies of scale from aggregation will reduce, however, parts of New Zealand's water networks are characterised by a large number of small-scale water assets (such as water treatment plants), creating the ability to achieve some level of economies of scale by consolidating these assets.

The main economies of scale of aggregation are likely to be achieved through the consolidation of back office functions and better utilisation of asset management capability.

Consideration of a single water provider

At the meeting on 11 April, some ministers expressed a preference for a single water supplier for the whole of New Zealand.

While a single water supplier would allow for asset management capability to be spread across the greatest area possible, and give access to the largest balance sheet to leverage debt funding, this arrangement would remove the ability to easily benchmark between water providers, reducing accountability.

Due to the disaggregated nature of most water networks in New Zealand, one single supplier would not necessarily achieve sufficient additional economies of scale to offset the difficulties in regulation and accountability that are lost through an inability to nationally benchmark. We therefore favour more than one water provider, but a small number.

Enabling the use of private capital in water

Due to aging water infrastructure and increasing regulatory standards (such as the drinking water standard and national policy statement on freshwater) there is a large amount of investment required in the near future, regardless of the size of the aggregated water supplier. For example, a report commissioned by the Department of Internal Affairs estimated the cost of mandatory treatment for all drinking water sources, and compliance with the drinking water standards, as being between $308.7 and $573.7 million. A similar report on the cost of compliance with the National Policy Statement on Freshwater has been commissioned, but not yet delivered.

While aggregating suppliers should provide better capability at managing and sequencing this upcoming investment, funding pressures are likely to remain. If private capital is precluded as a source of financing for the upgrade and expansion of three waters assets across the country, a large part of the funding task could fall to the Crown. Depending on the ownership structure, a council owned water provider may remain debt constrained by the parent council's balance sheet position.

Structuring the institutional arrangements for water suppliers that enables the use of private capital would provide the new entities with the flexibility of a large range of financing tools to address this upcoming investment in water infrastructure.

Ownership of assets

There are a range of ownership options for new aggregated water suppliers, which could be achieved in a range of ways. Each ownership type and method of asset acquisition comes with a range of costs and benefits, which will need to be worked out in detail before one model can be seen as preferred.

The type of ownership will also be strongly influenced by both the purpose of the new aggregated suppliers, and the objectives that the government seeks to achieve with regard to local authorities. Whilst initial ownership could be exclusively public, consideration should be given to maintaining flexibility for future ownership structures. This could allow suppliers to secure external expertise and technology that might also involve an equity stake to align interests.

Purpose of new water entities – the question of a profit motive

At the last three waters meeting, ministers expressed a range of preferences on the purpose of any aggregated water suppliers, from not-for-profit to organisations run with a commercial purpose and able to return a dividend to shareholders. It is not clear what “not for profit” means. Return on capital is a legitimate cost and if this is not recognised, then the following unintended effects may arise:

1. Denial of a return on capital represents an implicit subsidy to water supply at the cost of councils’ other functions. If water supply does not bear its true marginal cost, including a reasonable cost of capital, it is likely to distort decision-making. A tendency for the water supplier to (over time) retain unnecessary reserves which could be applied to other critical council functions.
2. A lack of incentive to drive efficiency and utilise best practice and latest technology.
3. A continuing burden on councils or the Crown to fund future expansions and upgrades.

An effective regulatory regime is designed to counter any monopoly power, by allowing water providers only a reasonable return on capital while providing incentives to drive lower prices and better service standards.

If ministers desire access to private capital, as discussed above, water suppliers would need to operate with a profit motive to ensure investors a return on investment. A profit motive would also enable a dividend stream. Depending on the ownership model preferred, dividends could be given back to councils to invest in other infrastructure, or to cover costs incurred through the removal of water supply as a council function.

Ministers have previously expressed a desire to not see a large increase in the cost of water. Operating water suppliers with a profit motive may raise concerns about the

monopoly position of water suppliers to raise prices, if given a profit motive. In other jurisdictions where water suppliers operate with a profit motive, such as England (acknowledging that England's water suppliers were completely privatized, where New Zealand's suppliers will remain publicly owned), a strong economic regulatory regime allows costs to customers to remain low, while driving efficiency in supply within water entities. Our view is that a commercial mandate coupled with an effective modern regulatory regime will be critical to achieve the following outcomes:

1. drive efficiencies which allow lower prices
2. better service outcomes
3. to fund critical future upgrades and expansions (and avoid funding calls on the Crown)
4. to attract capability and expertise to enable advanced planning and asset management

Morgan Dryburgh, Senior Analyst, National Infrastructure Unit (NIU) s9(2)(k)
David Taylor, Manager, National Infrastructure Unit, National Infrastructure Unit (NIU), s9(2)(k)

Water chew session

ELT

Date

Freshwater allocation

Review of Three Waters Infrastructure

Three Waters: current state

- Three waters covers drinking water, wastewater and stormwater
- Three waters infrastructure and services in New Zealand are primarily owned and delivered by 67 territorial and unitary authorities
- Exceptions are **Watercare** (in Auckland) and **Wellington Water** (Wellington), both council-controlled organisations (CCOs)

Potential issues within the current system:

- The small size of many providers affects their ability to manage assets well
- Regulation is limited to drinking water standards – no regulation of price or service standards
- Lack of information about the current state of assets
- Funding and financing challenges

Drivers of water reform

Two main pieces of work provide the drivers for current work on three waters:

Inquiry into Havelock North Drinking Water

The Havelock North Inquiry was established in September 2016 in response to an outbreak of gastroenteritis in Havelock North in August 2016. It is estimated that close to 5,500 people were affected in the outbreak, with 45 hospitalised.

The Inquiry was conducted in two stages, with the second stage releasing its report on 5 December 2017.

Key findings and recommendations of the Inquiry:

- the quality of drinking water in New Zealand is often inadequate
- a low level of drinking water regulation and enforcement
- all drinking water should be appropriately and effectively treated, and compliance with drinking water standards should be mandatory

Drivers of water reform cont.

Review of Three Waters Infrastructure: Stage 1

The previous Government established the Three Waters Review in June 2017 to assess whether current local government practices and the system oversight are 'fit for purpose'.

The first stage of the review involved a review of data and evidence to clarify the problem definition, and identified seven key findings:

- There are risks to human health and the environment in some parts of the country.
- There is evidence of low levels of compliance, monitoring and enforcement against a range of standards, rules and requirements.
- There is evidence of capability and capacity challenges, particularly for smaller councils.
- There is evidence of affordability issues in some places, driven by a range of factors and funding pressures.
- There is inadequate system oversight and connections between key parts of the system.
- Variable asset management practices, and a lack of good asset information, are affecting the efficiency and effectiveness of three waters infrastructure and services.
- Existing reporting obligations do not provide consumers and other interested stakeholders with meaningful information on the delivery and performance of three waters services in a way that appropriately promotes transparency, accountability and performance improvement over time.

Stage 2 Three Waters Review

- Agreed by Cabinet in April 2018
- Recommendations to DEV by October 2018
- Being carried out in parallel with the response to the Havelock North Inquiry
- Looking at 4 workstreams:
  - effective oversight, regulatory settings, and institutional arrangements
  - funding and financing mechanisms
  - capacity and capability of decision-makers and suppliers
  - information for transparency, accountability and decision making
- Treasury is providing input into the work through the National Infrastructure Unit

Potential areas for reform

- Aggregation of suppliers
  - Likely to increase asset management capability
  - Greater access to technology, capacity to invest
- Ownership and governance
  - Currently owned by LG but may need a change in ownership or governance to remove debt from council balance sheets
- Investment
  - Treasury has strongly advised Ministers to ensure the flexibility to use private capital
- Commercial mandate
  - Could be used to drive efficiencies
  - Provides the ability to return a dividend

Ministerial concerns

- Ministers have met twice to discuss the direction for three waters at a high level
- They have expressed concerns about:
  - The ‘ease of privatisation’ if water suppliers are aggregated – Ministers are focused on ensuring public ownership
  - Profit-driven water suppliers ‘price gouging’
  - Reductions in local influence and local democracy if suppliers are aggregated

Risks and potential missed opportunities

- Price and service risks if regulation, funding not sorted
- Constraints on council balance sheets remain if reform not structured well
- Potential cost to Crown if funding and financing not flexible enough

Missed opportunities?

- The degree to which technology will change water provision is unclear; will we structure three waters in the best way for today or position it to be the best tomorrow?
- Would vertical separation of water benefit New Zealand?

Review of Three Waters Infrastructure

Update discussion with Minister Jones

Jon Grayson and Morgan Dryburgh

28 June 2018

Three Waters – what you need to know

- The funding challenge is large – therefore the ability to access private capital is crucial to solving current three waters issues
- Aggregation of drinking water suppliers is likely to improve both asset management capability within water suppliers, and achieve some level of economies of scale
- Ownership and aggregation strongly influence funding and financing arrangements, and have implications for pricing across different geographic areas

The funding challenge

- There is a large amount of water infrastructure investment required in the near future, regardless of the size of the aggregated water supplier.
- If private capital is precluded as a source of financing for the upgrade and expansion of three waters assets across the country, a large part of the funding task could fall to the Crown.
- Structuring the institutional arrangements for water suppliers that enables the use of private capital provides the largest flexibility of financing tools to address this upcoming investment in water infrastructure.

Aggregation of water providers

- Treasury agrees that the aggregation of drinking water suppliers is likely to improve both asset management capability within water suppliers, and achieve some level of economies of scale.

- While a single water supplier would allow for asset management capability to be spread across the greatest area possible, this arrangement would remove the ability to easily benchmark between water providers, reducing accountability.

Linkages between different elements

- Because of the interlinked nature of all parts of the system, decisions about aggregation and ownership have implications for funding and financing, regulation, and purpose
- If ministers want suppliers to have access to private capital, water suppliers would need to operate with a profit motive to ensure investors a return

  Not for profit does not necessarily result in lower prices
- Some ownership models could constrain council or water supplier borrowing ability

  More diverse ownership reduces this risk

Link to the Infrastructure Funding and Financing work

- The IFF work is complementary to the Three Waters review; it suggests tools that could help support objectives the review is trying to achieve

- In particular, the IFF work indicates that:
  - Shifting ownership out of councils could have an effect on the amount that councils are able to borrow
  - The ownership structures of water suppliers will influence their ability to access funding and financing tools; what this means in practice is still being worked through as part of the IFF work

From: Jon Grayson [TSY]
To: ^Parliament: Daniel White
Cc: Morgan Dryburgh [TSY]; David Taylor [TSY]; Chris White [TSY]; Alison Havill [TSY]
Subject: Re: Opportunity to shape discussion - Dinner talk with Alan Sutherland, CEO, Scottish Water Industry Regulator, Hon Nanaia Mahuta and Hon David Parker (Ministers only)
Date: Monday, 24 September 2018 3:24:59 pm

-explore analogies with NZ scenario; eg. was there many small utilities that were consolidated in to a single entity? Were there water quality issues like Havelock North? How were the politics of consolidation managed?
-what is his view of consumers' priorities? (This relates to the "localism" argument we hear; ie. is ownership important to consumers or is it service quality and price?)
-does he have a view whether reforms should relate to 2 waters or 3?

Sent from my iPad

On 24/09/2018, at 3:16 PM, Jon Grayson [TSY] <Jon.Grayson@treasury.govt.nz> wrote:

Dan

This is a good opportunity.

We believe that a good regulatory regime is the key to better outcomes for the consumer (improved service and lowest prices over time) and providing an adequate return to stimulate investment.

Some specific topics for discussion could be:

-the effectiveness of regulation in achieving better services and lowest prices over time
-the importance of benchmarking against their English counterparts (this is relevant because we think there should be more than one water utility for NZ so that benchmarking can occur, whereas Scotland can get away with a single water entity because they can benchmark it against English utilities)
-the potential for the regulatory regime to facilitate third party capital investment and avoid the alternative of the Crown financing the $$$$ for upgrades, replacement and expansion
-comparison of outcomes in Scotland before and after the current regulatory regime
-the importance of scale in the industry, and whether there are any downsides of a single utility that can't be managed through regulation.
-what would he think about the WaterCare model which prevents dividends being repatriated to its owner, Auckland Council?

I hope this helps.

JDG

Sent from my iPad

On 24/09/2018, at 1:25 PM, Daniel White <Daniel.White@parliament.govt.nz> wrote:

Kia ora korua
If there was anything you would like to put in the Ministers mid before his 6.30 dinner tonight with the attendees above, let me know by 4pm
Ngā mihi,

Daniel White
Private Secretary – Infrastructure, Associate Finance and Associate State Owned Enterprises
Office of Hon Shane Jones I Minister for Forestry | Minister of Infrastructure | Minister for Regional Economic Development
Associate Minister of Finance I Associate Minister for State Owned Enterprises | Associate Minister of Transport
6.4 Beehive, Parliament Buildings, Private Bag 18041, Wellington 6160, New Zealand
s9(2)(k) s9(2)(g)(ii)
E: daniel.white@parliament.govt.nz I W: http://www.beehive.govt.nz and http://www.parliament.nz

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Reference: T2018/2886 SH-11-5-3

Date: 10 October 2018

To: Minister of Finance (Hon Grant Robertson)
Minister for Infrastructure (Hon Shane Jones)

Deadline: None

Aide Memoire: Future state of three waters system Cabinet paper– regulation and service delivery

Purpose

The Ministers of Local Government (Hon Mahuta) and Health (Hon Clark) are consulting with you on a Cabinet paper that sets out a road map for decisions on the future state of three waters – drinking water, wastewater and storm water.

This aide memoire highlights some aspects of what the Cabinet paper does and does not ask Ministers to make decisions on, and provides you with Treasury's view on some key considerations as a result of those recommendations.

In summary:

- Treasury is comfortable with the problem definition and the outcomes that this work is trying to achieve.
- This Cabinet paper asks Ministers to make a limited set of decisions relating to the review of three waters, which, overall, do not have significant implications.
- There are some aspects of the paper that could further clarified, to ensure that policy decisions scheduled for 2019 have adequately addressed potential fiscal risks.

Suggested comments for you to provide to the Ministers of Local Government and Health are included at Appendix 1.

Background

On 9 April 2018, Cabinet agreed to proceed with cross-agency work to address the issues identified in the Three Waters Review, and noted that the Minister of Local Government would report back to the Cabinet Economic Development Committee in October 2018 with the results of this work, including policy and funding proposals (CAB-18-MIN-014 refers).

The Cabinet paper 'Future state of the three waters system – regulation and service delivery' is this anticipated report back, and is the next stage in the process to provide Ministers with detailed policy options for changes to the regulation and service delivery of three waters infrastructure.

Treasury is supportive of the overall direction of the review to date, and agrees with the conclusions in the Cabinet paper that there are challenges across the three waters system, including funding and financing to upgrade infrastructure, capability challenges, and regulation.

What the Cabinet paper does

While the expectation by Cabinet on 9 April 2018 was that the October report back would contain policy and funding proposals, the Cabinet paper now asks Ministers to agree that policy decisions are taken in tranches through 2019. This is due in part to the large scale of the task of three waters reform, and the desire to engage with stakeholders throughout the development of policy options.

The Cabinet paper also asks Ministers to agree that an outcome of three waters reform will be that existing three waters assets and services must remain in public ownership.

The Treasury is concerned that, depending on how 'public ownership' is defined, this agreement could constrain funding and financing of the infrastructure upgrades that are likely to be required as a result of future regulatory reform. In a constrained funding environment with increasing regulatory standards, Crown funding is likely to be requested by asset owners.

The amount of funding required to upgrade New Zealand's three waters infrastructure is likely to be significant. The Cabinet paper notes that, based on the results of research commissioned by the Department of Internal Affairs, this amount could exceed $2.5 billion (made up of estimates of $375 - $575 million for drinking water and $1.4 - $2.1 billion for wastewater). These estimates do not include any assessment of costs associated with storm water infrastructure, or horizontal wastewater infrastructure such as pipes.

You may wish to consider:

- What the Government's specific objectives are for public ownership of existing three waters assets and services.
- Whether agreeing to this recommendation is likely to constrain the future ability of three waters asset owners to leverage third party equity investment to fund infrastructure upgrades.
- What 'existing three waters assets and services' covers, and whether agreeing to this is likely to place limitations on funding and financing options available when upgrading or renewing three waters infrastructure.

What the Cabinet paper does not do

As noted above, the Cabinet paper does not ask Ministers to make any decisions on options for regulatory or service delivery reform.

While we do not see this as a problem in itself, as Treasury supports considering a wide range of policy options to address the identified problems, the wide range of variables within service delivery options does not rule out the Crown funding the infrastructure upgrades required.

For example, the Cabinet paper puts forward establishing a national three waters fund as one of the high-level service delivery arrangements proposed for further engagement with stakeholders. There is uncertainty on the source of revenue for the fund. Appendix 1 of the Cabinet paper notes that Crown funding could be one source.

As noted earlier in this aide memoire, the funding required to upgrade New Zealand's three waters infrastructure is likely to be significant.

You may wish to consider:

- The potential fiscal implications for the Crown of particular service delivery options.
- Whether any particular sources of funding (i.e. Crown funding) should be ruled out for particular service delivery models.

Next steps

The Cabinet paper is scheduled for discussion at the Cabinet Economic Development Committee on 31 October 2018. The Ministers of Local Government and Health have sought your feedback on this paper by Friday, 12 October 2018.

If you are concerned about the issues that have been highlighted in this briefing, we have included comments for you to provide back to the Ministers of Local Government and Health as Appendix 1.

You may also wish to consider meeting with the Ministers of Local Government and Health to discuss your feedback on the Cabinet paper, and your future involvement in this work.

Morgan Dryburgh, Senior Analyst, National Infrastructure Unit (NIU) s9(2)(k)
David Taylor, Manager, National Infrastructure Unit, National Infrastructure Unit (NIU), s9(2)(k)

Appendix 1

Comments for Ministers Mahuta and Clark on the Cabinet paper 'Future state of the three waters system – regulation and service delivery'

Overall the problem definition and objectives set out a clear case for reform of three waters infrastructure. However, more work could be carried out to specifically address consideration of the potential fiscal implications for the Crown relating to new or upgraded three waters infrastructure.

Recommended amendments to the paper:

1. The report-back on service delivery arrangements scheduled for late 2019 should be amended to:
    - explicitly include further work on the definition of 'public ownership' and 'existing three waters assets and services', to ensure that this does not constrain the future ability of three waters asset owners to leverage third party equity investment to fund infrastructure upgrades
    - include consideration of funding and financing options for proposed service delivery arrangements
2. The outcomes of the reforms included in para 57 should be amended to include sustainable funding and financing of three waters infrastructure
3. Clarify the purpose of the Budget bid signalled in paragraph 82, if this is not intended to be a request for funding the policy proposals to be agreed by Ministers in June 2019.

From: Morgan Dryburgh [TSY]
To: ^Parliament: Daniel Cruden; Fiona Stokes [TSY]; Michael Lonergan [TSY]
Cc: Simon Duncan [TSY]; David Taylor [TSY]; ^Parliament: Daniel White
Subject: RE: Material for 8 April meeting of Three Waters Ministers
Date: Friday, 3 April 2020 12:15:49 pm

Hi Daniel,

Below are some bullet points for MoF on the slide pack. While I understand MoF has more pressing matters right now, the slides are asking Ministers to consider water investment as an economic stimulus activity, so he may want to be aware of the potential for this work to result in large spending proposals.

Investment in water infrastructure is a challenge that has increased as a result of Covid-19

- Prior to Covid-19, local government had expressed an inability to fund all of the estimated $5.5 billion cost of upgrading water infrastructure to meet new standards
- The ability of local government to invest in water infrastructure is likely to significantly decrease as a result of the Covid-19 impact on council balance sheets
    - Even if central government were to invest in the capital costs of water infrastructure, there is the possibility that the operating costs of new infrastructure is unable to be met by councils. This will need to be considered as part of any economic stimulation investment.

Requests to fund water infrastructure will come through a number of sources

- These slides ask Ministers to consider the role of central government investment in water infrastructure for economic stimulus purposes
- Three waters projects are also likely to be suggested by councils as part of the work that Crown Infrastructure Partners is conducting to put together a list of ‘shovel-ready’ infrastructure projects for investment
- Water infrastructure will also be a component of large scale development projects being led by Kāinga Ora

Infrastructure investment without service delivery change may lock in greater costs over the long term

- The three waters review has identified deficiencies in current service delivery arrangements for three waters. Because of this, investment into current assets and service arrangements is likely to lead to inefficiency and higher costs.
- This creates a risk that any fast-tracked water investment reinforces or exacerbates current problems within the three waters system.
- Any decision to invest in three waters infrastructure should be made conditional on reform of specific service delivery arrangements, or at a minimum not prevent achieving the government’s aims in service delivery reform, to ensure that investment achieves the best outcomes.

From: Daniel Cruden <Daniel.Cruden@parliament.govt.nz>
Sent: Thursday, 2 April 2020 8:37 AM
To: Morgan Dryburgh [TSY] <Morgan.Dryburgh@treasury.govt.nz>; Fiona Stokes [TSY] <Fiona.Stokes@treasury.govt.nz>; Michael Lonergan [TSY] <Michael.Lonergan@treasury.govt.nz>
Cc: Simon Duncan [TSY] <Simon.Duncan@treasury.govt.nz>; David Taylor [TSY] <David.Taylor@treasury.govt.nz>; ^Parliament: Daniel White <Daniel.White@parliament.govt.nz>
Subject: FW: Material for 8 April meeting of Three Waters Ministers

Hi all,

Just saw this – sorry for not sending yesterday afternoon. Any comments on this? MoF isn't attending the meeting (and nor, correct me if I'm wrong Dan, is Hon Jones). I am inclined not to show him these papers given everything else he has on. But if there's anything you think he should be aware of/providing a view on from these papers please let me know by 12pm tomorrow.

Cheers,
Daniel

Daniel Cruden | **Private Secretary (Finance)**
Office of Hon David Parker | Office of Hon Grant Robertson
Parliament Buildings | Wellington | New Zealand
s9(2)(k) | s9(2)(g)(ii) | Email daniel.cruden@parliament.govt.nz

From: Rowan Burns
Sent: Wednesday, 1 April 2020 4:20 PM
To: Amber Coyle <Amber.Coyle@parliament.govt.nz>; Hayden Johnston <Hayden.Johnston@parliament.govt.nz>; Eoin Moynihan <Eoin.Moynihan@parliament.govt.nz>; Māni Tuki <Mani.Tuki@parliament.govt.nz>; Julia Minko <Julia.Minko@parliament.govt.nz>; Geneveine Wilson <Geneveine.Wilson@parliament.govt.nz>
Cc: Elaine Wi <elaine.wi@parliament.govt.nz>; Daniel Cruden <Daniel.Cruden@parliament.govt.nz>; Stephanie Zhang <Stephanie.Zhang@parliament.govt.nz>; Daniel White <Daniel.White@parliament.govt.nz>
Subject: Material for 8 April meeting of Three Waters Ministers

Kia ora

Please find attached material for the multi-Ministers meeting on Three Waters scheduled to take place via zoom on Wednesday 8 April at 5-6pm. In addition to Ministers, we will be joined by Alan Sutherland, CE of the Water Industry Commission for Scotland.

The agenda for the meeting is at the beginning of the attached slide pack.

Officials are welcome at this meeting but we have been asked to limit numbers – so please can we have only one or two per office.

The zoom details are:

Topic: Zoom - Three Waters Minister Meetings
Time: Apr 8, 2020 05:00 PM Auckland, Wellington

Join Zoom Meeting
https://zoom.us/j/661409460?pwd=bVo0cXNsUWFPY2JFRlNGQ3llcGhhZz09

Meeting ID: 661 409 460
Password: 020852

Dial by your location

+64 4 886 0026 Wellington
+64 9 884 6780 Auckland

Meeting ID: 661 409 460

Join by Skype for Business
https://zoom.us/skype/661409460

Ngā mihi
Rowan

Rowan Burns | Private Secretary – Local Government | Office of Hon Nanaia Mahuta
s9(2)(k)

From: Morgan Dryburgh [TSY]
To: "Sarah Baddeley"; Michael Lonergan [TSY]
Cc: Jane Fleetwood; Jason Webber; Orsola.DelSante-Bland@dia.govt.nz; ^DIA: Allan Prangnell; ^MartinJenkins: Nick Davis
Subject: RE: Revised Draft Cabinet paper - Investing in water infrastructure and reform
Date: Wednesday, 6 May 2020 10:57:00 am
Attachments: image001.png
image002.png
image003.png
image004.png
image005.png

Hi Sarah,

I've included below some initial feedback from us on the paper – hopefully this can assist with thinking on further drafts. We will likely have further feedback from other teams within Treasury, and also on this new version of the paper.

I am happy to discuss at 1, but can't speak for Michael's availability.

In terms of the updated paper going to your Minister – are there any updated timeframes for when this is expected to go out for Ministerial consultation/go to a Cabinet committee, etc? Knowing this will be really useful so that we can provide feedback in the most helpful way possible, and also start thinking about how we provide advice to our Minister. MoF has indicated that he will be moving back to a more 'normal' bag schedule from now on so we need to schedule further in advance to ensure he is across papers.

Cheers,
Morgan

Initial Treasury feedback on paper as at 1 May 2020:

Overall the paper does not make a good case for why this investment is necessary now, and cannot wait for later stages of investment (wave 3).

The mixed objectives make it difficult to assess whether the proposed actions will achieve the goals – combining stimulus activity, incentives for local government and service delivery changes to achieve three waters reform mean that success in one area can disguise another area that does not fit well with the stated objectives. For example, investment in water infrastructure is unlikely to be the most successful stimulus activity in the short term. Similarly, it is not clear that Crown investment is necessary to achieve the objectives of three waters reforms.

It is very unclear what the basis is for the proposed investment figures and they have been determined. Its also unclear what the majority of the funding requested will be spent on, in particular the close to $2b that is not related to the decline in local government revenue. It also is not well defined why this investment is required to achieve service delivery reform when one of the objectives of reform is water entities that will be able to fund their own infrastructure without Crown assistance.

Para 34 says that water infrastructure has significant potential to contribute to economic stimulus in the short term. Treasury disagrees – we think that significant investment in new infrastructure projects could help support the longer-term economic recovery. However, it will not materially boost demand in the very short-term due to capacity constraints and long lead times. Because we don't know yet what local government is planning in terms of its expenditure (see below), its not clear whether some or all of this investment would have happened anyway – raising the question of how much demand will actually be boosted.

The argument that this is a response to reduced local government revenues as a result of COVID-19 is not strong.

- The latest estimate of revenue decline is a 2.3-11 percent decrease as opposed to 10-25%
- The increased cost pressures to local government are not identified
- The LGFA has voted to increase debt covenants, meaning there is not quite so much pressure on high-debt councils
- Given the current underinvestment and poor state of three waters assets, any changes as a result of COVID-19 would likely be marginal, and any benefits from maintaining existing work programmes would also likely be marginal.

We do not agree with the $1bn tranche 1 being delegated to MoF and the Minister of Local Government to release the funding – decisions of this magnitude should be made by Cabinet, and should have clear conditions attached. There is also a need for Cabinet to agree the criteria for any funding being allocated.

There needs to be more information about how the number of jobs created has been estimated, and the estimated GDP increase.

It is unclear if the investment described in para 55 is the first tranche or the overall investment.

- What is meant by 'programme-level support'
- Are upgrades to non-compliant water supplies really at risk of not occurring due to COVID-19? If not then why fund these?
- Are marae-based water supplies council owned? If not, how will funding these lead towards the objectives of getting councils to move towards service delivery reform.

When discussing the alternatives to this investment (para 56) you need to explain what the problem is that you are trying to address – otherwise it is impossible to determine whether the option selected is the best to address it.

There needs to be more information about the elements of the service delivery model that the Minister is proposing, the evidence for why they will best address the objectives, and the other options that have been considered. The paper currently only briefly mentions these as it relies on previous 'water Ministers' discussion – but not all of Cabinet will have been present at these meetings. The proper rationale for each element of the model should be laid out.

There needs to be more explanation of why one tranche of funding will not be sufficient to effect change – if the first package of investment is made conditional on reform, won't councils be locked in?

This paper needs to set out what will be an acceptable method for local government to demonstrate that they are agreeing to the conditions of the support package – will an MOU (as suggested) be binding?

There is a high level of detail in the discussion of multi-regional groupings, but it is still unclear which part of the requested funding these groupings will be spending, and on what.

The paper mentions in passing oversight and economic regulation – when will Ministers be making a decision about this?

From: Sarah Baddeley <sarah.baddeley@martinjenkins.co.nz>
Sent: Wednesday, 6 May 2020 9:56 AM
To: Morgan Dryburgh [TSY] <Morgan.Dryburgh@treasury.govt.nz>; Michael Lonergan [TSY] <Michael.Lonergan@treasury.govt.nz>
Cc: Jane Fleetwood <Jane.Fleetwood@dia.govt.nz>; Jason Webber <jason.webber@martinjenkins.co.nz>; Orsola.DelSante-Bland@dia.govt.nz; ^DIA: Allan Prangnell <allan.prangnell@dia.govt.nz>; ^MartinJenkins: Nick Davis <nick.davis@martinjenkins.co.nz>
Subject: Revised Draft Cabinet paper - Investing in water infrastructure and reform

Hi both

Further to my email last night re the potential for a discussion today – please now also find attached a revised draft of the Cabinet paper that has been provided to the Minister of LG for consultation. It should better address the issues raised by you in the last version and also some helpful feedback from Orsola.

Note that since our discussion yesterday, DIA are now considering advice on whether it may be appropriate to move to agree in principle arrangements for the Tranche 1 with better process steps around how that is agreed. Be good to talk that through with you and how that might work to align with the other processes and the report back requirements and delegations to ensure Ministers are well supported to consider this.

Can you confirm you are we able to meet later today to discuss? 1pm is good from our end.

Cheers

Sarah

Sarah Baddeley | Manager, Consulting
MartinJenkins
s9(2)(g)(ii) T s9(2)(k)

Level 16, AIG Building, 41 Shortland St, **Auckland**
Level 1, City Chambers, Cnr Johnston & Featherston Sts, **Wellington**
Wa kato Innovation Park, 1 Melody Lane, **Hamilton**

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From: Chris Parker [TSY]
To: ^DIA: Michael Chatterley; ^DIA: Warren Ulusele; Henry Dowler; Chris Pound; ^DIA: Richard Ward; ^DIA: Keith Miller; ^DIA: Allan Prangnell; "Michael Lovett"
Cc: Morgan Dryburgh [TSY]; John Beaglehole [TSY]
Subject: IFF & 3 waters revenue bond financing
Date: Wednesday, 6 May 2020 4:06:31 pm
Attachments: image001.png
image002.png
4247617_Economic Narrative — Housing & Urban Growth -- 2nd draft funding and financing chapters.DOCX

Hi DIA folk

FYI, and for your comment if you've got time please

I hope you're all well.

I wanted to share some draft material I developed Dec to Feb about funding & financing public infrastructure, and how it feeds into competitive urban land markets. I developed a series of concepts that I'd hoped ProdCom would've included in their Local Govt Funding & Financing inquiry. I've discussed these ideas with several of you over the years, and promised to share this with some of you earlier; sorry for the delay. I've dusted it off now, because of the work DIA's leading on 3 Waters reform, and other covid responses to fund, finance, and supply public works.

I'm trying to contribute to a better understanding about the very deep and complex economic and political challenges with supplying public infrastructures. I hope with your huge collective knowledge in local government that we can improve on the core ideas what I've started as they relate to major policy advice in the next few months. Despite the urgency of today's needs, we think any institutional changes in the medium term need to be developed working backwards from where we need to be in the long-term.

The funding chapter tries to set up some of the core economic issues and political theory issues with local taxes for projects.

The financing chapter tries to explain the deep challenges and opportunities with getting local government entities to have separately rated debts on their overall balance sheets.

There's some attempts to pull the two together to explain a large range of ways to structure local institutions to balance all these complex and competing issues. However, the range of new ideas I'm pulling together means it meanders a bit, so apologies in advance. I've included some case studies for 3 waters, metropolitan mass transit, and roads districts — hopefully they're not too cryptic.

I'm very happy to discuss anything with you please.

Cheers
Chris

Chris Parker | Principal Advisor, Housing and Urban Growth | **Te Tai Ōhanga – The Treasury**

s9(2)(k) | s9(2)(g)(ii) | chris.parker@treasury.govt.nz

From: Michael Chatterley <Michael.Chatterley@dia.govt.nz>
Sent: Tuesday, 5 May 2020 10:38 am
To: Susan Jacobs <Susan.Jacobs@hud.govt.nz>; ^HUD: David Shamy <david.shamy@hud.govt.nz>; Melissa Warmenhoven <Melissa.Warmenhoven@mfe.govt.nz>; ^HUD: Kashmir Kaur <kashmir.kaur@hud.govt.nz>; ^DIA: Warren Ulusele <warren.ulusele@dia.govt.nz>; David Taylor <David.Taylor@hud.govt.nz>; Ernst Zollner <Ernst.Zollner@hud.govt.nz>; Iain McGlinchy <i.mcglinchy@transport.govt.nz>; Gareth Fairweather <G.Fairweather@transport.govt.nz>; Litiana Wilson <Litiana.Wilson@hud.govt.nz>; Aroma Kim <aroma.kim@mfe.govt.nz>; Ross Scrivener <ross.scrivener@mfe.govt.nz>; Marguerite Quin <Marguerite.Quin@mfe.govt.nz>; ^HUD: Tony Chandler <Tony.Chandler@hud.govt.nz>; Chris Parker [TSY] <Chris.Parker@treasury.govt.nz>; Mel Rae <Mel.Rae@hud.govt.nz>; Kate Sedgley <Kate.Sedgley@mfe.govt.nz>
Subject: IFF follow-up: UGA workstream catch-up

Morena all,

Thanks for your time this morning.

As mentioned at the UGA workstream catch-up this morning I mentioned the local government financial implications report that the Local Government COVID-19 Response unit has published. This latest report includes detailed analysis and models three different alert level scenarios. Nationally, we forecast 2.3 - 11% less revenue next FY than was planned pre-COVID-19, noting the national average hides a number of councils that have real challenges. This report was a massive joint effort from
LGNZ, SOLGM, LGFA, Treasury, DIA and councils who have provided invaluable information. The report can be found here (and is publicly available).
For those who were interested in why sticking to low or no rate rises during COVID isn't the Department's first best advice, Kirdan Less has picked up on our first report and wrote a great article backing this view – it's well worth taking five minutes to read.

Brief recap on the IFF workstream update:
Workstream one: Alternative financing models (the IFF Bill)

- The Infrastructure Funding and Financing Bill is progressing well through the legislative process. The Departmental Report is due to the Transport and Infrastructure Committee on 14 May for their deliberation. We're only recommending minor changes.
- COVID-19 has had a minor impact on the Bill with the Business Committee granting an extension to the report back date from 17 June 2020 to 25 June 2020. We still anticipate the Bill being passed this parliamentary term.

Workstream two: Local Government Funding Agency covenants
The below is in-confidence

- Officials have been working with LGFA and the high-growth councils to investigate options. This has coincided with work the LGFA Board has been doing and on Friday 1 May 2020, the Board proposed to the Shareholders Council an increase in the net debt/revenue covenants

to take effect next financial year and then reducing over time to a level higher than present.

- As the debt covenants are part of the LGFA Foundation Policies, any change will not take effect until voted on by shareholders, the earliest this is likely to happen is via a Special General Meeting in June 2020.
- Shareholders are likely to support the increase, but it is not expected to make a significant difference as without additional revenue, councils are unlikely to increase debt levels substantially beyond the current threshold of 250 percent.
- We will continue to progress our work on options and analysis outside of what the Board has proposed.

Workstream three: Existing tools

- In March, Local Government and Urban Development Ministers received a project update briefing outlining initial conclusions, namely:
    a. the option of enabling targeted rates to be used as a 'value capture' tool should not be pursued;
    b. subject to resolving legislative design challenges, volumetric charging for wastewater should be enabled;
    c. caps on uniform charges/targeted rates and reserve contributions should be reconsidered;
    d. the Government should establish a clear policy position and, if practicable, a consistent legislative approach to Crown developments and associated Crown payments to territorial authorities for the capital costs of growth-related infrastructure;
    e. non-rateable land (statutory rates exemptions) should be reconsidered; and
    f. national guidance on DC policies should be developed and published.
- Subject to future advice to Cabinet and decisions yet to be taken, some of the future work could be progressed in the Government's response to the Productivity Commission's final report on local government funding and financing.
- The Department of Internal Affairs is working with LGNZ and SOLGM to develop and publish a comprehensive guide for councils on development contribution policies. This will include a policy template for councils to use – which was also one of the recommendations made by the Productivity Commission.
- Apart from the guidance work, this workstream is largely on hold due to COVID-19 response and recovery priorities and redirection of workstream resources to those priorities.

Stay safe everyone!

Ngā mihi nui,

Michael Chatterley | Senior Analyst – Infrastructure Funding and Financing | **Central Local Government Partnerships**
Department of Internal Affairs | Te Tari Taiwhenua
s9(2)(k) | www.dia.govt.nz

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Housing & Urban Growth Narrative — FUNDING, FINANCING CHAPTERS ONLY

Housing & Urban Growth Team

Lead author Chris Parker

Treasury internal document

6 May 2020

[This document is an extract from a broader report about housing and urban growth. It therefore may suffer from the absence of wider context, which we apologies for. The

financing chapter meanders a bit too much, which we'll tighten up in the next version. We will supply the fuller report when we are able to.]

1.1 Funding infrastructure & public services

Key points

Local governments in New Zealand fund and finance local public infrastructures, such as waters and land transport, with support from developers and the NZ Transport Agency. These infrastructures have high upfront costs, have scale economies and spillovers, and issues of non-excludability. Where they serve growth, they have high risk profiles, with large benefits if successfully implemented but large costs if unsuccessful, and they have high costs of financial capital. Growth infrastructure projects are not conducive to general purpose governments because such governments are generally risk averse, have great difficulty discovering and measuring value, struggle to limit their liability, and need to manage their public powers carefully and prudently.

Methods exist for government systems to complement the market's strength in value discovery and opportunity cost revelation, more alike to New Zealand's local governments system pre-1989, but unlike it post 1989. These involve enabling market participants to petition for the use of public powers to tax, take, and regulate using either formally separated governments or informal arrangements to serve smaller political communities of interest. Risks escalate significantly if the *principle of congruence* is not met, which is that those that pay a tax, should benefit from the tax, should vote on the tax; ie, the *principle of no taxation without representation*. This is much more difficult when it is not possible to evolve government structures (be they formal or informal) to match the community of interest without spillovers to wider communities.

1.1.1 Introduction

This section focuses on issues and constraints for funding public infrastructure provision that contributes to restrictive supply of land and development capacity. This section starts to elaborate on the local public finance issues outlined in section X that constrain the supply of local public services. It does not provide a full treatment of the economic and financial issues of local public infrastructure.[1] In this infrastructure context we define *funding* as the source of revenues to pay for services (such as through taxes and user charges), and *financing* as the methods to shift cash-flows over time to pay for costs (such as through borrowing and saving).

[1] Treasury (2018) is a draft paper for internal use that seeks to more comprehensively descr be economic and financial concepts for infrastructure.

The infrastructure sectors with significant capital cost requirements most relevant to constraints on urban development[2] include:

- land transport (roads, walking and cycling, public transport)
- drinkable (potable) water, wastewater, and storm water (the 'three waters')
- community facilities and public open spaces (eg, swimming pools, parks, libraries, halls etc)
- education (schools, early childhood education, tertiary education facilities etc).

These are generally 'public services' as covered in section X, ie, non-excludable but congestible. Infrastructures such as electricity, gas, telecommunications are necessary for development, but the market supplies these responsively and relatively competitively. Some aspects such as water provision are excludable and not public services by the economic definition, but are provided by local governments. The reason is likely because of their natural monopoly and necessity characteristics, and the intention to ensure low cost supply to all citizens.

In New Zealand both the public and private sectors provide infrastructures. General purpose local governments provide three waters services and local and regional community facilities, supported by developers that provide within development infrastructure and connections to existing networks.

Local governments provide arterial roads and public transport services[3], with approximately 50% co-funding by the NZ Transport Agency (NZTA) funded by national fuel duties, road user charges, and vehicle licensing fees. Developers provide non-arterial roads, but may provide arterial roads, and vest these to the local government. State highways are provided by the NZTA, but they may seek contributions from developers for intersections by restricting network access otherwise. Education and healthcare by central government.

The relative cost of land transport and waters services dominate local government expenditures, and for simplicity are the focus of the rest of this section.

Some key relevant characteristics of infrastructure are:

- *Capital intensive and long-lived*, necessitating finance methods (ie, borrowing and saving) to pay upfront costs when benefits follow over long (potentially intergenerational) timeframes
- *Economies of scope and scale and wide network spillovers* for 'deep' network components, such as arterial roads, water pipes, and water treatment facilities that have large sunk costs and widespread impacts. Infrastructures can share network utility corridors

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2 Health facilities, such as hospitals and primary health services could be added, as investment is required in line with population growth and development. However, developers and local planning systems do not point to these as constraints on development.

3 Regional councils predominantly fund and supply public transport services while territorial local authorities (ie, city and district councils) provide local roads and bus shelters.

- *Sensitive to the 'problem of contiguity'*, requiring well-regulated compulsory acquisition powers of land and property (section X)

- *Degrees of non-excludability*, which makes it technically and/or politically challenging to price efficiently (eg, congestion pricing can be technologically challenging for full mass, distance, price, location-based pricing, and water metres can be politically challenging locally).

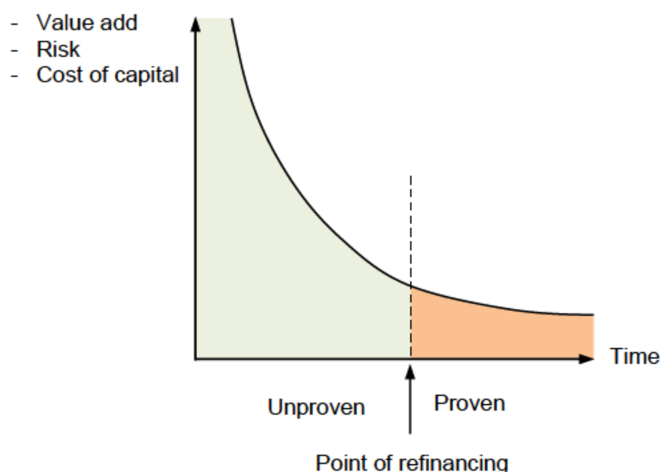
1.1.2 'Unproven' and 'proven' infrastructure

The nature of risk for infrastructure projects is particularly relevant to housing and urban growth, as it determines the nature of investment, economic benefits, and financing and institutional structures. The infrastructure financing literature typically distinguishes the type of works into *greenfield* or *brownfield*, where the distinction relates to risk to project maturity, with greenfield typically being riskier (Weber & Alfen 2010). However, those terms are already established in the urban context, where greenfield means developing rural land, and brownfield means redeveloping urban land. So for our context we will instead use the terms *proven* and *unproven*, which in this context more relates to proven and unproven demand, but can also capture innovation on the supply side (new and improved products, processes and services):

- **'Unproven'** infrastructure projects are assets that are generally constructed for the first time at a specific site. The project is typically in the planning, development, financing, construction or early implementation stage;
    - **Cost-side risks** relate to these factors, as well as the receipt of approvals and environmental permits (called "resource consents" under the Resource Management Act 1991), public acceptance and construction and operation, particularly where new and unproven technologies are used
    - **Revenue/benefit risks** primarily demand and price uncertainty, particularly for user-funded projects. (This is further explained in the case of transport below.) These factors can be fully identified after facilities are operational and seasoned. Unlike 'proven' projects, positive returns may not occur in the first years, making them more suitable for capital gain- or growth-style investors.
- **Proven** infrastructure projects relate to existing, operational assets that have already gone through the 'unproven' / development phase. Already operational and/or have a predecessor of some description at the same location, and may involve the reconstruction, renovation or expansion of existing assets;
    - **Cost-side risks** are much lower, unless extensive replacement or expansion measures necessary, thereby making them more like 'unproven' projects. Typically 'unproven project' cost-side risks are outdated, with main residual risks being operational, regulatory and market risks. Proven risks in brownfield areas also relate to contamination or hidden defects
    - **Benefit and operational risks** are minimal: existing assets are comparatively easy to evaluate (eg, in terms of demand, operation and maintenance) on the basis of historical data and past experience. This makes proven demand projects more suitable to risk-averse yield-driven investors [such as governments].

Figure 1 illustrates this concept, where the vertical axis is simultaneously the value-add of the project (ie, its benefits), associated with higher risk around realising those benefits, with corresponding greater cost of capital. As a project matures, and the benefit profile is observable and can be extrapolated, it matures into 'proven' infrastructure. In general very different types of investors with risk-return and time-horizon motivations play different roles across this lifecycle. A suitable point for the project to transition between investor types, ie, to refinance, is illustrated.

Figure 1 Infrastructure lifecycle unproven to proven demand



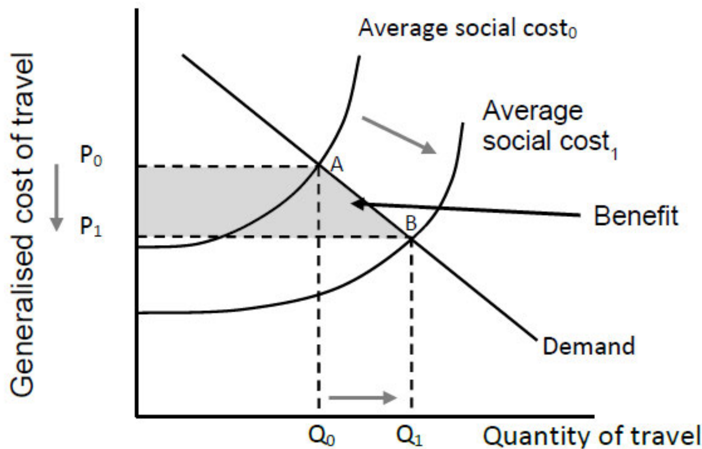
Source: Treasury

It is not uncommon for investment hurdle rates for greenfield investments to be three or four times the cost of capital (Dixit & Pindyck 1994 p7), which cannot be explained using traditional economic theory, but can by using real options.

This conception of unproven demand infrastructure, although straightforward, is unfortunately foreign in the land transport economic appraisal literature. Parker (2013) argued that transport projects that induce land use change cause the demand curve for the project to increase, increasing users' willingness to pay and the benefits (and reduce it elsewhere). In contrast, prevailing transport economic cost-benefit appraisal methodologies must exclude induced land use change and associated benefits and costs because the prevailing methods to value welfare changes are not general enough. Some attempts to capture wider benefits and costs are made in project appraisals, but they are ad hoc. Figure 2 illustrates how benefits of a normal project that lowers the transport costs of using a link in a transport network that already has well-established demand — the definition of a proven project above. The benefits are just the area of the trapezium shaded, using a formula called the "rule of a half" (the average of the top and bottom bases times the height).

Figure 2 Benefits of a proven transport project

Average cost pricing

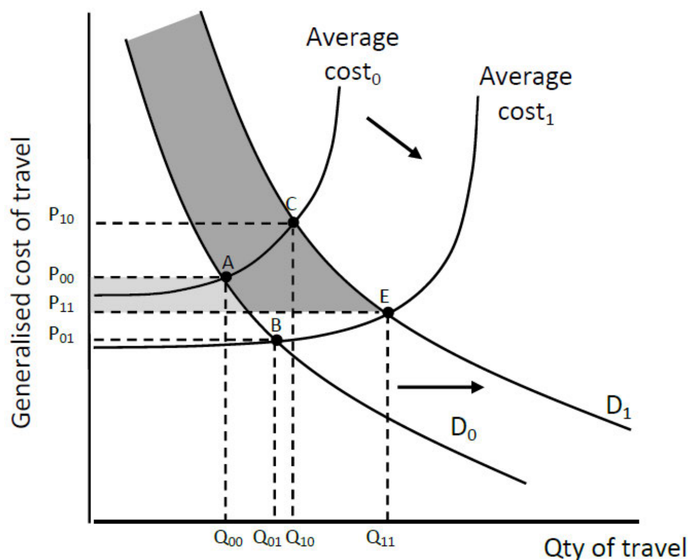


Source: Parker (2013)

Parker (2013) argued that Figure 3 shows a transport project that successfully induces new demand for its use will have two counterfactual demand curves, one in the world where the project had been done sooner, D_1, one in the base case world where it had not, D_0. The benefit is the difference in total social surplus — the shaded area that is the consumer surplus beneath the larger demand curve above equilibrium point E, less the consumer surplus of the base case demand curve above equilibrium point A. (There could be demand reductions in 'related markets', but they should be ignored to the extent price equal their marginal costs, and ignored to the extent their impacts are already factored into the project's demand curve.)

Figure 3 Benefits of an unproven transport project if it succeeds

Social average cost pricing



Source: Parker (2013)

Infrastructure projects that are quite new or different creates additional risks around public acceptability and environmental permits. Given the significant risk and uncertainty as to what the demand, prices, uptake, and investment costs would be, such a project is

unproven by the above definition. The potentially large area of benefits in Figure 3 corresponds to the large measure of value added early in the lifecycle of Figure 1. Therefore more benefits and costs are at stake when developing and operating complex area networks. Further research is required to develop techniques that can reliably estimate the total social surplus changes under endogenous demand curves across infrastructure networks.

A new transport service that induces land use change within existing urban areas, such as introducing mass transit, meets the definition of unproven infrastructure (with high potential benefits, high costs, and high risk), yet will be described by planning system practitioners as brownfield development because it occurs within an established area. The important point is not the terminology, but the economic concepts of benefits and risk, and the difficulty of economic appraisal of unproven projects.

1.1.3 Non-excludability and value capture

Urban transport and water infrastructures provide not just short-run benefits to existing users, but potentially long-run benefits from supporting urban development and growth. A key value proposition is to increase the market viability of development, including through increased likelihood of receiving environmental permits. These benefits, corresponding to the shaded area in Figure 3, are largely reflected in the land values in affected areas, even upon announcement of the projects and prior to construction, and these *ex post* values can be measured. For instance Grimes and Young (2010) measured the value of the Auckland Western rail line announcement, and found property values increased around rail stations to about the same extent as the total cost of project. Grimes and Liang (2008) similarly measured the value of Auckland’s Northern Motorway Extensions by assessing the increased land values, estimating a very high benefit-cost ratio of 6.3.

These land value increases result from the market’s anticipation of the option to develop, and from the user benefits of the project. They are not based on whether development in any one location actually occurs, nor the willingness of a particular land owner to develop or to use the infrastructure.

The land values will also embed the market’s expectation of taxes on the land; if the benefits of a project equal their costs, and costs will be fully funded by taxes on beneficiaries, there may be no net change in land values. If a government announced a project, but delayed announcing the intention to capture value by land taxes on benefiting properties, the land may increase in value and be resold. This can foreclose the government’s ability to levy taxes on project beneficiaries later, because the future land owners have already effectively paid for the project. The problem is they paid the wrong person, the now departed landowner, rather than the supplier of services. Governments need to clearly communicate the funding strategy of a project when announcing the intention to undertake the project if they wish to use the beneficiaries pay principle.

To the extent the infrastructure provider is the land owner, it captures the value if it purchased the land before the benefits were anticipated and capitalised into the land price. In that sense spillovers are internalised through the creation of sufficiently scoped and scaled economic organisation, as described by Coase (1963). Alternatively, infrastructure providers and land owners can bargain to achieve the same result if transaction costs are low enough.

In urban areas with small lot sizes and diverse land ownership, it can be too difficult for the market to aggregate land and integrate it with land owners quickly and responsively, resulting in issues of hold-outs and free-riders.

To the extent suppliers of infrastructure cannot capture enough of the benefits through user charges, land ownership, or negotiations (with land owners, investors and developers), then a market failure can result. The risk is greater the more that a project is unproven than proven, and the more diverse the range of benefiting landowners, which is more acute for brownfield projects.

Therefore, there may be a case to use public powers to tax and to take property to improve allocative efficiency. Using public powers to recover some or all of the value of projects is called *value capture*. Although notionally very simple, there are the following significant economic issues to overcome, introduced in section X, which are the focus of the next set of sections:

- value and cost discovery (ie, willingness to pay and to accept), and distributional risks associated with the misuse of market or regulatory power over democratic minorities (next section 1.1.4)
- time inconsistency of tax authorities that hampers the ability to finance (sections 1.2.3 through to 1.2.5)
- allocation of ownership, residual decision making rights, and risk given the inability to make complete contracts whilst using public powers to compel hold-outs and free riders (section 1.2.6).

1.1.4 Value and cost discovery, and consent

The public powers to tax and take may overcome free-riders and holdouts, but they are not themselves mechanisms to resolve disputes about the incidence of benefits and costs. Technocratic cost-benefit appraisals may assist, but as explained are very challenging as applied to 'unproven' infrastructure before the fact, and stated preference methods can be manipulated by free-riders and holdouts. The use of *ex post* valuations (for rating purposes) as the basis of the tax is complicated by the feedback loop of taxes affecting capital values.

The value of a project is denoted by willingness to pay by users of the project, and its opportunity costs by the willingness to accept by the owners of the factors of production. The value is only certain *ex post*, but *ex ante* they are considered probabilistically. The market's usual ability to reveal these expected benefits and costs *ex ante* and actual benefits and costs *ex post* is one of its greatest strengths over central planning systems, provided market failures are not present, such as market power, externalities, information asymmetries etc.

A fruitful way to proceed is to complement and harness elements of market revelation mechanisms rather than substitute them. The Treasury has studied some of the local government institutions in the USA, which are illustrative because it is the only country we can identify that is able to use *revenue bonds*, which are an alternative to *general obligation bonds* (discussed in the next sections) and where type 2 cities with competitive urban land markets are normal. An Infrastructure NZ delegation to the USA of 42 senior industry leaders further studied their infrastructure institutions (Infrastructure NZ 2017).

In the USA, the processes of constituting voter-approved special taxes pledged to special purpose bonds, or special purpose governments (which they call 'districts') helps to reveal beneficiaries' expected value. Further, major 'unproven' projects (both greenfield and brownfield) typically have multiple co-funders that relate to the various ways that people benefit, using bespoke combinations of special purpose taxes, districts, general purpose governments, and private investors. Their funding contributions, and the terms of those contributions will reflect their differing attitudes towards risk and the type and scale of benefits and costs unique to each party. These are very bottom-up processes, rather than top-down. The key to inducing engagement from stakeholders is the fact that general purpose governments are very constrained in their ability to fund and to finance from general revenues. The payoff to any one party from holding out is reduced because the project is much less likely to occur anyway, or if it did, the needs of the hold out would not be taken into account in the project design.

Of the special purpose districts, the model that seems most supportive of competitive urban expansion in the USA is the Texas municipal utility district (MUD). This model is suitable for 'unproven' greenfield projects, where the number of property owners is relatively low. The process broadly entails (with references to the *Texas Water Code, TWC*):[4]

- petitioning signed by a majority of property owners (by value) to establish the proceedings to create the district (s54.014, 54.015)
- consent of the local municipality if the proposed district is within its extra territorial jurisdiction (ETJ). Consent must be granted unless the city can serve on mutually agreeable terms (s54.016)
- the Texas Commission for Environmental Quality (TCEQ) considers the natural environmental effects, the public good, necessity, the economic benefit to the land and property within the district, and financial viability (chiefly affordability of tax obligations) before approving the district. It will exclude land that does not benefit (s54.020 and 54.021 TWC)
- a confirmation election is held to authorise the creation of the district (s49.102) and to authorise the issuance of bonds (s54.507), with a majority required.

The US process of voter-approved special taxes pledged to repaying special tax bonds also serves the value discovery function of a stated preference survey, whereby voters have skin in the game and are at lower risk of misrepresentation. The spatial scale of the community of interest and the scope of the matters being addressed depend on the matter at hand. (Some examples feature in sections 1.2.7 and 1.2.8.) Citizens directly vote to approve the striking of multi-year taxes, matched to the duration of a special tax bond the taxes are pledged to. (In contrast, targeted rates in New Zealand need to be struck annually by elected representatives — citizens cannot bypass their councillors — and all debts are general obligations.)

[4] The legislative provisions are contained in chapters 49 and 54 of the *Texas Water Code*. The regulatory provisions for the administration of MUDs by the Texas Commission for Environmental Quality (TCEQ) are contained in section 293 of the *Texas Administrative Code, TAC*.

Consent and the principle of congruence

Any form of tax imposition is, by its nature, a coercive power that can improve allocative efficiency by overcoming collective action problems from public services. However, any use of coercive power creates risks of misuse. Section X introduced the concept of *fiscal equivalence* and the role of diversity in local governments to support political freedom.

Political theorist Schön (2018) applies the fiscal equivalence concept to taxation and democracy as the *principle of congruence*: that 'those that vote on the tax, are those who pay the tax, are those who benefit from the tax'. The principle of congruence is the essence of the democratic principle of "*No taxation without representation*", because the mandatory character of the tax is mitigated by the voluntary dimension of elected representation or direct democratic participation. This degree of consent mitigates against (but doesn't avoid the risk of) exploitation of the minority by the democratic majority or against privileges granted to powerful pressure groups. Schön (p54) also argues for additional constitutional constraints to protect individuals, such as equality of the tax burden or the protection of property, and other arrangements like super-majority requirements or an increase in the number of "veto players" in decision-making processes.

The large scale amalgamation in New Zealand of general purpose governments in 1989 (from 375 to 86, and now 78), and cessation of all (then 453) special purpose governments creates challenges to adhere to the principle of congruence. The risks are acute when exercising public powers to tax and to compulsorily acquire land for unproven greenfield projects in particular because the beneficiaries and the land owners are such small subsets of much broader political communities, the latter of whom are prone to the control of Fischel's *homevoters* (section X). Mismatches (of those that vote, benefit, and pay) risk projects proceeding that are not economically viable and/or are not compatible with the public's values (Tucker 2018 *Unelected Power*). Independent expert assessments of economic viability will mitigate the problem but are insufficient. The institutional design of public powers, in this case to fund 'unproven' public infrastructures, need to be consistent with a society's political values to maintain legitimacy and avoid corrosive cynicism and even distrust of governments developing (Tucker p20).

It would be prudent to apply wherever possible the principles of democratic accountability for taxes — chiefly the *principle of congruence* — to funding methods for local public unproven infrastructures. There should be consideration of alternative complementary forms of administration within the local government system to enhance the power and roles of direct and participatory democracy, and how they affect and trade-off against various policy goals. Avenues for further consideration include:

- referendums on special purpose pledged taxes
- the use of 'non-structural' subdivisions of LRGs (extending the existing use in New Zealand of Business Improvement Districts) and their ability to independently finance
- the use of formal special purpose governments.

There is the question of how to proceed when faced with NIMBYs and BANANAs, as relying on the consent of the targeted community of interest can still lead to hold-up. A higher tier of public authority could override the local resistance to improve allocative efficiency and distributional outcomes. However, a central problem is it risks becoming

politically accountable for the project, and for there to be moral recourse by the lenders to the project if it defaulted on its debt obligations. Methods need to be created to overcome local holdout whilst ensuring access to public finance. These issues are considered in detail in the next chapter.

Special purpose governments versus special purpose vehicles

Currently there is work to establish special purpose vehicles (SPVs) to enable project financing. These will not be political subdivisions of the Crown, ie, special purpose local governments. The considerations relating to financing will be addressed in the financing chapter next. However, there are considerations relating to funding, namely:

- value and cost discovery
- the prudent management and assignment of project risk, and
- the management of coercive power risks when the principle of congruence applies imperfectly.

These issues also have strong interactions with the institutional design features required to enable project financing from government systems. These matters are picked up following the next chapter.

1.2 Financing public infrastructure services

Key points

New Zealand local governments have severe constraints on the ability to debt finance public infrastructure. They can only borrow using the ‘full faith and credit’ of their tax powers and general revenues, called *general obligations* debt. Such debt is highly constrained by credit rating agencies because it is a major risk factor internationally in local and regional government defaults. Yet the total amount of GO debt is an insignificant fraction of the costs of the housing problem that results from supply constraints.

The way that local governments in the USA are financed is exceedingly important and rare, as it is no doubt a key factor in why they have so many Type 2 metros with competitive urban land markets. Each local government can raise different non-tax revenues and pledge them to repaying a range of different bonds that each have separate credit ratings. These are generally credit rated as project finance bonds, where the debt is the present value of the pledged revenues. Where a GO debt could raise only $2.50 against a $1 revenue in perpetuity (at the margin of the debt constraint), a revenue bond could raise in the order of $15 depending on the interest rate.

The USA can achieve this feat because their public institutions are designed to constrain their ability and motivation to bail out these pledged revenue bonds. In contrast, NZ local governments have the ability and motivation to bail out any alternative financing arrangements in the event they default. They cannot credibly commit to not bailing them out, even if they initially wanted to; they suffer from ‘*time inconsistency*’. The motivation is to reduce debt servicing costs by issuing more marketable debts. However, the result is to reduce the amount of debt the local government system can sustain and to restrict the supply of net-beneficial public infrastructure.

USA local governments solve the same time inconsistency problems of bailing out project lenders by addressing four dimensions: prevention, incentives, authority, and means. Respectively, they minimise the chance of financial default and the need to consider stepping in; they reduce the desire to step in, by providing citizen protections and clarifying responsibilities; they reduce the requirement to governments to step in; and they reduce the financial ability for governments to bail out project lenders.

These time inconsistency issues that affect financing should determine institutional structures and the way projects are funded. For instance, general purpose governments (central and local) should perhaps champion specific projects less (such as location specific mass transit projects to support intensive redevelopment) and empower direct democracy more if they want financing for large projects that create value.

Growth projects need more control by developers as the parties best placed to exercise non-contractible decision making rights. But if they have too much control of the public funding and financing arrangements then first mover residents will not be attracted. Balancing the needs of initial residents and the needs of developers to complete developments requires judgement and experience and leads to different scales and scopes of organisation. Determining the optimal approach will require long-term partnerships between market participants and law makers to evolve local funding and financing entities that meet market needs without excess compulsion on unwilling participants.

We provide some examples of how revenue bonds can support complex intensive redevelopment projects, metropolitan mass transit networks, and general council water supplies.

1.2.1 Financing problem and the challenge

Infrastructure can be financed using different capital channels and involve different financial structures. Traditionally infrastructure investments were financed with public funds, but internationally economies are increasingly looking to alternative financing arrangements due to: large public deficits; inefficient public investment spending; and the need to repair/rebuild capital and liquidity buffers following the Global Financial Crisis (GFC) and introduction of new prudential regulation requirements (OECD 2015).

However, in New Zealand the key challenge is to create an appropriate structuring of financing for local public infrastructures. Local government usually debt-finance growth infrastructure projects, sometimes issuing bonds, but usually by borrowing from banks. They can do this individually, and can use the joint action *Local Government Funding Agency* to borrow collectively at scale. All debts of local governments are general obligations, which are guaranteed by (ie, a charge on, and payable out of) the general government's tax revenues equally and rateably with all other general obligation debts of that government[5].

General obligation debts are particularly constrained because councils have large general operating expenses, and their political nature makes them relatively risky for lenders. Once councils are at the GO debt limits, net-beneficial projects that the market is willing to project-finance cannot proceed. Were a NZ local government to issue a project finance bond, ratings agencies at present would treat it as a general obligation debt, and subject it to the debt to revenue ratio of the local government.

General obligation debts of local authorities in New Zealand are generally very high relative to international measures. However, the level of debt finance of public infrastructure services are very low relative to the value of assets, and extremely low relative to the problems created causing Type 3 cities with uncompetitive urban land markets. We will argue the challenge is not to increase GO debts, but to increase the alternatives to GO debt.

Some high growth local governments are constrained by covenanted debt limits to supply public infrastructure to serve growth, such as Auckland, Hamilton, Tauranga and Kapiti

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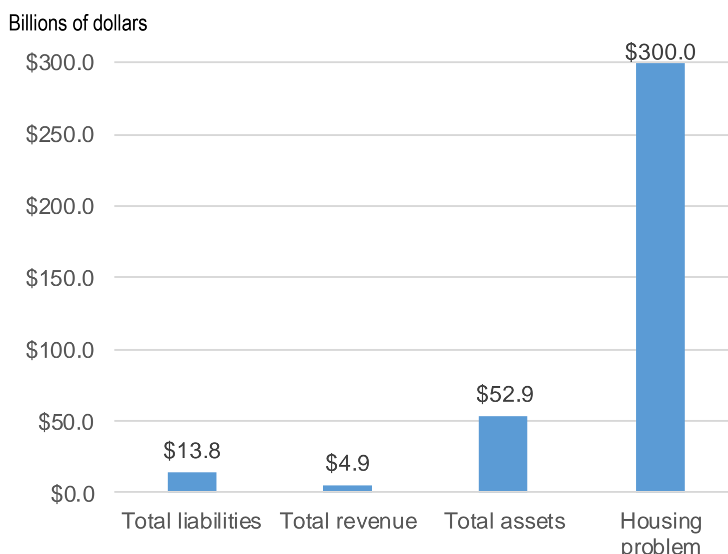
5 Adapted from the definition of s55 of the Public Finance Act 1989 for a New Zealand audience, but the concept is international and applies to all forms of government.

Coast (Productivity Commission 2019 p183). For instance, for year end 2018/19 financial year the Auckland Council group's total liabilities were $13.8 billion and total revenues were $4.9 billion (Auckland Council 2019, p13,14), a ratio of 2.82. Although this ratio is not exactly the same as the debt to revenue ratio used by credit rating agencies, which excludes certain revenue and liability items, it is close to it, as the council is near its limit of 270% to retain an AA rating. A lower credit rating would increase the cost of interest repayments for the full stock of debt. This debt to revenue limit is very high relative to the default upper debt to revenue limit for an AA rating of only 60% (S&P 2014 Table 18). Further, the Auckland Council group's total assets are $52.9 billion, so liabilities are only 26% of assets, which is not particularly high overall given the growth demands.

From the work of Lees (2019) and Nunns (2018) we estimate the cost of supply constraints has led to residential real estate being overpriced in the order of $300 billion in Auckland. This is caused by a chain of events described in section X that creates uncompetitive urban land markets, which in part originates from the debt financing constraints on local governments. These constraints amount to less than 5% of the wider costs of supply constraints, and are one of the main housing supply system bottlenecks.

Figure 4 Auckland local public finance



Source: Auckland Council Annual Report, and Treasury estimate of the size of the Auckland housing problem

1.2.2 Taxonomy of infrastructure finance

The OECD (2015) developed a taxonomy of financial instruments, Table 1. The first column on the left relates to the level of risk. Equity has the highest risk because (a) its repayment is subordinate to all other financing instruments such as debt and mezzanine (mixed debt/equity) capital in the event of insolvency, and (b) it has claims to all residual cash flows. Equity recovers investments only when all creditors have been satisfied.

Traditionally non-public infrastructure finance was dominated by corporate finance, such as on the balance sheets of regulated utilities, and other sectors such as waste, ports, oil and gas, and electricity. Lending would occur on the basis of a largely statistical evaluation of the creditworthiness of the company; that is, an analysis of historical income statements, balance sheets and cash flows. The total freely available assets of the company would be used as security for the bank providing the finance (Weber & Alfen 2010).

More recently, because of increased budgetary constraints, financing of infrastructure has taken the form of project financing — the financing of a standalone, clearly demarcated economic unit. Project financing is the long-term financing of projects based on a limited recourse financial structure where project debt and equity is paid back from the cash-flow generated by the project. It applies most notably for projects characterised by high specificity, low re-deployable value and high intensity of capital.

Across the top of Table 1 are the finance instruments, followed by the market channels of project finance, balance sheet-based structures, and market vehicles.

Finance instruments are divided into principal categories: fixed income into bonds and loans (debt); equity into listed and unlisted shares (provided in return for ownership interests); hybrids into both (such as mezzanine finance are subordinated debt instruments with equity-like participation). These define the level of control of an investment and the types of contractual claims on cash flows. We have adapted the taxonomy to highlight the role of '*revenue bonds*', which is discussed further.

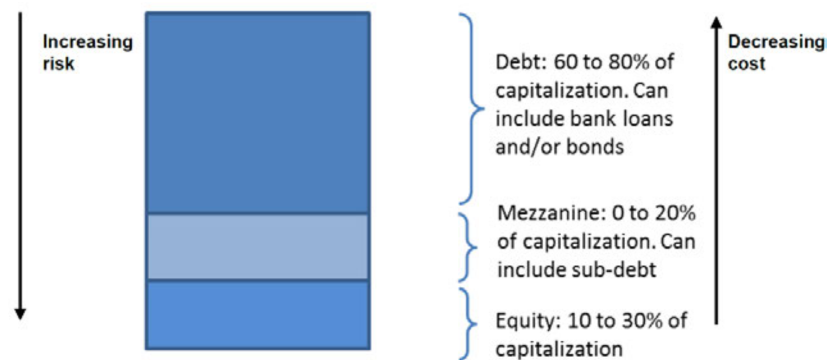
Table 1 Adjusted OECD taxonomy of instruments & vehicles for infrastructure financing

Modes		Infrastructure Finance Instruments		Market Vehicles
Asset Category	**Instrument**	**Infrastructure Project**	**Corporate Balance Sheet / Other Entities**	**Capital Pool**
Fixed Income	**Bonds**	Project Bonds	Corporate Bonds, Green Bonds	Bond Indices, Bond Funds, ETFs
		Revenue Bonds: Project revenue bonds	Revenue Bonds: Enterprise revenue bonds	
		Green Bonds, Sukuk	Subordinated Bonds	
	Loans	Direct/Co-Investment lending to Infrastructure project, Syndicated Project Loans	Direct/Co-investment lending to infrastructure corporate	Debt Funds (GPs)
			Syndicated Loans, Securitized Loans (ABS), CLOs	Loan Indices, Loan Funds
Mixed	**Hybrid**	Subordinated Loans/Bonds, Mezzanine Finance	Subordinated Bonds, Convertible Bonds, Preferred Stock	Mezzanine Debt Funds (GPs), Hybrid Debt Funds
Equity	**Listed**	YieldCos	Listed infrastructure & utilities stocks, Closed-end Funds, REITs, IITs, MLPs	Listed Infrastructure Equity Funds, Indices, trusts, ETFs
	Unlisted	Direct/Co-Investment in infrastructure project equity, PPP	Direct/Co-Investment in infrastructure corporate equity	Unlisted Infrastructure Funds

Source: Adapted from OECD (2015) p15

Infrastructure projects can sustain higher levels of leverage than non-infrastructure, with debt (including subordinated and mezzanine) historically 70%–90% of total capitalisation (Figure 5) for 'proven' infrastructure. Infrastructure projects generally have less volatile cash flows, low-to-manageable operating risk, long-term importance of services, and sponsors of infrastructure projects willing to accept higher levels of debt.

Figure 5 Financing instruments



Source: OECD (2015)

'Unproven' infrastructure (Figure 1) is more relatively reliant on equity and mezzanine finance. Equity financing is particularly relevant for high risk-return projects, such as high growth projects or those with new innovative technologies. Project equity investors face risk as determined through contracts, such as concessions, long-term leases, and *Public Private Partnerships (PPPs)*. Usually they face asset-specific risk and investment return determined by the success of the asset, as no security is provided by the investee. Senior lien debt has first call on collateral, followed by junior lien debt that is progressively more subordinated (further back in the queue). Subordinated debt raises the credit quality of senior tranches by absorbing losses before senior tranches. This can be crucial for securing senior debt for a project finance deal. It also creates different risk/return profiles to appeal to a more diversified set of investors.

The following instruments are focused upon within the infrastructure financing taxonomy, given the context of transport and waters infrastructure in particular:

- *instruments*: project bonds; revenue bonds (municipal, sub-sovereign bonds); direct/co-investment
- *market channels*: bond markets; listed infrastructure funds; unlisted funds.

Project loans are a major instrument, but their characteristics are implicitly captured (via compare and contrast) in the following descriptions of bonds.

Instruments: Project bonds

OECD (2015) describes project bonds as standardised securities for individual stand-alone infrastructure projects, issued by private special purpose vehicles (SPVs). Although borrowers can access lower cost funds by avoiding the intermediary and engaging the wholesale money markets, favourable pricing can generally only be obtained for financially robust projects or companies, ie with 'investment grade' paper (ie, rating of BBB– by S&P or Baa3 by Moody's; Vinter et al 2013 p28).

Project bonds are a growing source of long-term financing of 'proven' projects (ie, post-constructed and commissioned). Typical investors would be pension funds and insurance companies, seeking to balance their long-term liabilities with low-risk long-term investments.

Project bonds are less useful than project loans during construction. In order to ensure a marketable security with pricing certainty usually bonds equal to the whole financing requirement for a project are issued at once. In contrast, drawdowns from bank financing can occur over time. The excess proceeds of a bond issuance, 'negative carry', would be placed on deposit earning a lower return than the cost of funds (Vinter et al).

They can be issued in public markets, or placed privately. Project bonds become more viable when the project volume is large (US$100m+, Weber & Alfen), although revenue bonds (in the next section) are viable for far smaller projects. There are large setup costs, especially for public issues, relating to documentary, publicity and liability that make small issues uneconomic.

The lending arrangement of project bonds (a 'trust deed' or 'indenture') differ from loan agreements. They are more standardised, with covenants that are more objective, in part because bondholders are a more diverse and numerous group of creditors than banks. Seeking determinations on a discretionary basis from bondholders would be unwieldly.

They can be a 'straight bond', where the issue credit rating is judged on the project's performance (its 'standalone rating'), or a 'secured bond' assisted by credit enhancements (eg, bond insurance). One of the most used forms of credit enhancement in the USA (and available to an extent in New Zealand) was monoline insurance, where a highly credit rated specialised entity would guarantee the bond issue. This sector was significantly impacted by the GFC for private project bonds, particularly structured finance, but was recovering post GFC. The sector held up over the GFC for US municipal bonds.

Bonds have various advantages over bank loans (including syndicated loans), such as:

- bonds provide access directly to fixed rate or index-linked finance, thus eliminating the need for separate hedging arrangements
- project bonds can have longer maturities than syndicated loans banks normally accept. Deals with maturities of 50 or even 99 years have been completed (Weber & Alfen). (Banks, under Basel III, are required to establish long-term financing matched to their long-term loans, which would tend to make their long-term lending more expensive, Vinter et al.)
- bonds are more standardised capital market instruments, enable access to investors outside the traditional project finance bank community or outside banking relationships of the sponsors. (This is important given New Zealand banks have limits on counterparty exposure, such as individual councils or the local government sector overall.) They show better liquidity if the issue size is large enough (which can translate to lower costs of funds)
- larger issue sizes can become a constituent of bond indices (representative baskets of securities), adding further demand for securities from passive benchmark investors.

Some disadvantages relative to bank loans are:

- they lack of suitability for unproven investments (for reasons above), because they are inflexible

- bonds typically have a bullet repayment (ie, full repayment of principal at maturity), which may not match the cash flow pattern of the project or may trigger a refinancing risk. However, this can be managed by having annual tranches within a single issue, so principal is repaid continuously over the project life

- projects are unique, and investors find it hard to assess the risks, and are reliant on ratings issued by ratings agencies. Performing due diligence for project issues is more complicated than the credit process for a corporate or government issuer.

Instruments: Revenue bonds

> *Government and municipal [issued] "**revenue bonds**" are project bonds whose payments are directly linked to an infrastructure project, and would fall under the taxonomy as a **market-based instrument** to finance infrastructure. Revenue bonds, though technically linked to an issuer, would **not contribute to public deficits**. These bonds are sold directly to investors through the fixed income markets, generally have long-term maturities, pay fixed or floating coupon rates (and are sometimes zero coupon bonds), and are **rated by the major rating agencies**. The majority of the bonds in this category are listed securities though some issues can be quite illiquid due to small issue size and infrequent trading."*

We understand USA is the only country that issues revenue bonds[6], because only US local governments can credibly commit to not bailing them out using their general revenues, so the concept of government issued project finance bonds is narrower than suggested in the OECD's original description. However, no barriers to other countries using them are evident at present if they too could solve the time inconsistency problem (section 1.2.5).

Revenue bonds are a subset of 'project bonds' covered previously. Some key differences are that issues can be much less than the $100 million benchmark previously described, with some special district revenue bond issues as several million dollars. This could be because of the standardised and regulated design of the administrative arrangements.

In addition to revenue bonds, special tax bonds and special-purpose district bonds are commonplace in the USA too, and are able to provide infrastructure project finance:

- **special tax bonds** (hybrids of general obligation and revenue bonds, funded by specific but broad-based taxes such as motor fuel taxes or sales taxes for financing specific projects or programmes such as transportation), and

- **special-purpose district bonds** (general obligation bonds issued by special purpose local governments funded only by those that directly benefit[7]). These bonds are similar to those being developed in the *Infrastructure Funding and Financing Bill* that had its first reading in Parliament in December 2019, except the special purpose vehicle are not forms of local government.

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6 Personal communications with Standard & Poor's.

7 Strictly speaking, special districts issue guaranteed GO debt, but their bonds are assessed as non-guaranteed by credit rating agencies. The tax-backing just strengthens the rating. In practice, general debts of special purpose entities are treated the same as special debts of general purpose entities.

Instruments: direct / co-investment

> *"Direct equity investment refers to investments made directly in unlisted stand-alone infrastructure assets (often project finance), bypassing fund managers. Large sophisticated investors source investments, perform due diligence, select assets, and manage the asset through its life. Funds that invest directly in assets often have long-term investment horizons.*
>
> *Direct investment has been utilised by institutional investors that have the in-house resources and capability to source assets, perform due diligence, finance the investments and manage/maintain them...*
>
> *Institutions such as pension funds and insurance companies with skills and expertise perform due diligence on infrastructure assets and bid to acquire an equity stake in the business entity. Since outlays can be quite substantial, it is increasingly more common for large institutions to pair up with other investors or even fund managers to acquire stakes in infrastructure investments. Project finance instruments are the most common form of investment; however, private equity stakes in corporate structures are also possible.*
>
> *Direct and co-direct investment in infrastructure also aligns the long-term investment interest of institutional investors, who have long-term liabilities, with that of the management of infrastructure assets. Since investment funds often have an investment lifespan that is shorter than the underlying assets, direct investors can commit capital and manage assets over longer time periods."*

OECD's description is copied above given its succinctness and relevance to New Zealand, in the context of Crown Infrastructure Partners Ltd, NZ Super Fund, and ACC. For instance, ACC issued long-term debt to CIP's Milldale development.

Other market channels are infrastructure equity funds:

- Infrastructure bond markets
  - New Zealand bonds are issued on the NZX Debt Market (NZDX). The Financial Markets Conduct Act 2013 requires debt issuers to publish all the material information (product disclosure statements) on offers on an online register — www.business.govt.nz/disclose.
  - A very useful source on the USA's multi-trillion dollar municipal bond market is the Municipal Securities Rulemaking Board's (MSRB's) *Electronic Municipal Market Access (EMMA)* website, https://emma.msrb.org. EMMA provides free information on virtually all municipal bond offerings, including real-time trade prices, disclosure documents and market-wide statistics. All municipal bond trades are administered through EMMA.
- Listed infrastructure equity funds
  - OECD (2015): Retail investors, particularly diverse investors with small investment amounts, can access direct investment in infrastructure assets through listed infrastructure funds. The fund managers are responsible for

selecting and managing project investments. The funds are not balance sheet style finance like an infrastructure corporation.

- Unlisted infrastructure equity funds
  - Unlisted infrastructure equity funds provide a channel to direct investment for institutional investors. Investors participate as limited partners, with the fund often managed by an investment bank or investment management firm.
- Issues with infrastructure equity funds
  - A key issue with funds is matching the time horizon, liquidity, and rate of return demands of investors, particularly limited partners, with the fund manager's. Institutional investors tend to have a long-term horizon and desire 'proven' projects, whereas general partners may pursue performance targets and cash flow and desire 'unproven' projects. New Zealand alone may struggle to enable diversity of funds to serve differing investor preferences.

1.2.3 Unsuitability of general obligations debt for infrastructure

Local governments have the option, not the obligation to issue GO debts using s115 of the Local Government Act 2002; and they generally exercise this option.

The credit rating of general obligation bonds for general purpose local and regional governments ('*LRGs'* as S&P call them) are principally constrained by the debt to revenue ratio — Equation 1 (S&P 2014). For an AA-rated entity internationally the default anchor ratio is 60%. Ratings agencies have expanded this ratio to some 250% (or 270% depending on the definition of the ratio) for New Zealand councils because other countries generally do not assign the functions of major utilities to councils, and other countries do not authorise the receivers of a LRG's debt to levy taxes.

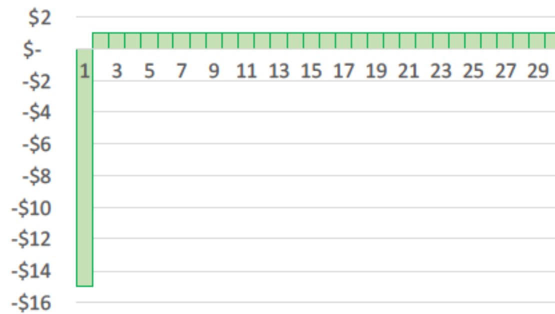
Equation 1 Non-US local or regional government debt to revenue ratio

$$\frac{\text{Tax supported debt}}{\text{Consolidated operating revenues}} \leq \sout{60\%}\ 250\%\ (AA)$$

Credit ratings assess willingness as well as ability to repay debt. The political mood of council taxpayers can prove as important for the value of bonds as the issuer's financial ability to pay (O'Hara, 2012 p179).

Suppose a large new development requires financing of water facilities because long-term benefits followed immediate capital costs. Beneficiaries are willing to pay, say, $1m per annum for 30 years (or some multiple thereof), which at 5% interest rate, enables about $15m of borrowing once it has seasoned to 'proven'; Figure 6.

Figure 6 Cash flow of a development project



A debt-constrained council cannot help finance this project. Suppose that council's revenues are $1b and debts are 250% of this, at $2.5b. Raising annual revenues by $1m but debts by $15m (or some multiple thereof) takes the council beyond its target ratio of 2.5:1, because the project's debt to revenue ratio is 15:1. The best the council can offer is $2.5m, one sixth of that required.

Equation 2 Example of the GO credit constraint

$$\frac{\$2.5b \cancel{+ \$15m} + \$2.5m}{\$1b + \$1m} \leq 250\%$$

Borrowing beyond this ratio with a degraded credit rating may allow the project in question and some others to proceed, but does not solve the fundamental problem. For example, if the LRG increased GO borrowings to 400% of annual revenues and suffered higher interest costs from the worsened credit rating, then the best the LRG can offer the marginal project is $4m debt per $1m of additional annual long-term revenue — still below that required (eg, the $15m per $1m of revenues the market may be willing to lend).

1.2.4 Alternatives to general obligations debt

Conceptually the main avenues to address the constraint of GO finance for local public infrastructures would seem to be:

1) **Material privatisation** with no implicit guarantee of debt by LRGs, such as electricity, telecommunications and gas

2) **Centralisation**, and/or central government fully and explicitly guarantee the utility debt, which is credit rated differently than LRG GO debt

3) **Non-guaranteed LRG issued debts**, such as revenue bonds, special tax bonds, and special district bonds.

Pure privatisation will most likely have some role to play, but is not likely to be a primary strategy able to achieve the goal of housing affordability through competitive urban land markets. As well as the political challenges of privatising land transport and waters, there are economic rationales for the supply of 'proven' infrastructures by LRGs. Further, the central problem that prevents the use of non-GO debt by LRGs is time inconsistency, which is not solved by privatising land transport and waters, because LRGs may still be judged likely to bail them out if they defaulted on debt obligations.

Centralisation creates stronger redistribution outcomes, but it comes at the cost of allocative efficiency risks. Large central institutions find it difficult to discover the value and costs of a wide variety of market demands. It reduces competitive discipline by other suppliers, and creates risks from misusing coercive powers (by the principle of congruence and the problem of tyranny of the majority), and reduces self-determinacy of politically free citizens by creating a large government monopoly. General purpose governments (central and local) are unsuitable investors in 'unproven' infrastructures because by nature they are patient and risk averse. For central supply to be responsive and motivated to respond to demand it would probably require the need to be for-profit, which suffers many of the same political challenges as privatisation.

The most fruitful avenue to enable competitive urban land markets whilst addressing funding and financing challenges is to enable the local government sector to issue non-guaranteed debts. To do so requires addressing the time inconsistency problem of local governments.

1.2.5 The problem of time inconsistency

The general obligations debts of New Zealand LRGs are authorised under s115(1)(a) of the Local Government Act 2002 (LGA02). All LRG debts are general obligations in practice as they relate to the LRGs' credit worthiness, regardless of legal structure, because ratings agencies do a "look through" and judge LRGs would bail out any non-GO debts. This practice of undertaking look throughs increased after the GFC, and is intended to take account of the risk of cascades of defaults that crash financial systems.

S&P's *Government Related Entity* assessment

S&P (2015) documents the methodology for assessing the likelihood of a government (be it a LRG or a sovereign) providing extraordinary support in the event that an entity defaulted on its debt obligations. Such an entity is called a '*government related entity*', and the assessment applies regardless of whether it is publicly or privately owned. The GRE's credit rating is enhanced, and the additional contingent liabilities count against the relevant government. The method is summarised in Table 2:

Table 2 S&P's role-link matrix to assess the likelihood of extraordinary government support

Likelihood of Extraordinary Government Support		Importance of the GRE's **Role** to the Government			
		CRITICAL	VERY IMPORTANT	IMPORTANT	LIMITED IMPORTANCE
Link between the GRE and the Government	INTEGRAL	Almost certain	Extremely high	High	Moderately high
	VERY STRONG	Extremely high	Very high	High	Moderately high
	STRONG	High	High	Moderately high	Moderate
	LIMITED	Moderately high	Moderately high	Moderate	Low

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Source: S&P (2015)

S&P assess a default of the GRE would have a critical impact for the government, for one of the following reasons:

- “the GRE operates essentially on behalf of the government and its main purpose is to provide a key public service that could not be readily undertaken by a private entity and that would be likely conducted by the government itself if the GRE did not exist, and/or
- the GRE is among the most important GREs in the country/region and it plays a central role in meeting key economic, social, or political objectives of the government or in the implementation of a key national or regional policy.”

S&P assesses the strength and durability of the link between the government and a GRE as *integral* if:

- “the GRE is essentially an arm of, and/or very tightly controlled by, the government, and/or there is a legal framework in place that provides for explicit government support for the GRE. In addition, the government has a policy, supported by a track record, of providing considerable and timely credit support in all circumstances
- the government has a policy, supported by a track record, of providing timely support to the GRE in all circumstances, AND:
- the GRE has a special public status or is a government agency and can be considered as an extension of the government; OR:
- the government fully owns the GRE and acts more as a manager than a shareholder. It drives the GRE's strategy, determines key budgetary decisions, and maintains a very tight degree of control to ensure the implementation of the GRE's policy role. We expect none of these factors to change in the long term — AND:
- The government has clear and robust processes and procedures in place that enables effective governance, monitoring and control over the GRE. It has the administrative capacity and mechanisms for responding to the GREs financial distress in a timely manner.”

Were a NZ LRG to issue a revenue bond, ratings agencies at present would treat it as a general obligation debt, and subject it to the debt to revenue ratio of the LRG. For instance, Auckland’s Watercare independently issues debt, but its debt is counted towards its parent, Auckland Council’s, debt to revenue ratio. Rating agencies judge the likelihood of step-in by Auckland Council so likely that Watercare’s debt is not treated as a contingent liability of the council, but as a direct liability of the council.

In contrast, US LRGs issue multiple bonds on the single balance sheet

The USA is the only country where LRGs can issue non-GO bonds, and have multiple credit rated bonds; the reasons we believe are explained further below. Accordingly, it has its own variant of the ratings methodology (S&P 2013 table 14) that adjusts the debt to revenue ratio as "*Net direct [general obligation] debt as % of total governmental funds revenue* ". Pledged revenues are excluded from the measure of governmental funds. Table 3 is an example of the multiplicity of bond issues on a LRG’s consolidated balance

sheet. It was not until a 2017 US State Department funded *International Visitors and Leadership Programme* sponsorship of a Treasury official to study sustainable urban policy that New Zealand discovered this.

Table 3 City of Phoenix, Arizona, bond ratings

City of Phoenix, Arizona
Bond Ratings

Exhibit H-11

Description	Rating (1)		
	Moody's	S & P	Fitch (2)
General Obligation	Aa1	AA+	AAA
Senior Lien Excise Tax Revenue (3)	Aa2	AAA	AA+
Junior Lien Excise Tax Revenue (4)	-	-	-
Subordinated Excise Tax Revenue (3)	Aa2	AAA	AA+
Senior Lien Airport Revenue (3)	Aa3	AA-	-
Junior Lien Airport Revenue (3)	A1	A+	-
Senior Lien Street & Highway User Revenue (5)	-	-	-
Junior Lien Street & Highway User Revenue (5)	-	-	-
Senior Lien Wastewater System Revenue (3)	Aa2	AAA	-
Junior Lien Wastewater System Revenue (3)	Aa2	AA+	-
Senior Lien Water Revenue (5)	-	-	-
Junior Lien Water Revenue (3)	Aa2	AAA	-
Rental Car Facility Charge Revenue Bonds (3)	A2	A	-
State of AZ Distribution Revenue Bonds (Convention Center) (3)	Aa2	AA	-
Transit Excise Tax Revenue Bonds (Light Rail) (3)	Aa2	AA	-

(1) Represents underlying rating.

(2) Fitch Ratings assigns a single Issuer Default Rating for all General Fund credits. Currently, Fitch does not rate the City's Enterprise or Special Revenue credits. To date, Fitch has only rated the City's Series 2017 General Obligation Bonds, and the Series 2017A, 2017B, and 2017C Subordinated Excise Tax Revenue Bonds.

(3) Issued by the City of Phoenix Civic Improvement Corporation.

(4) No bonds outstanding. As long as the Excise Tax Loan remains outstanding, there are additional requirements that must be met in order to issue Junior Lien Excise Tax Revenue bonds.

(5) No bonds currently outstanding.

Source: City of Phoenix (2019)

US LRGs can do this because rating agencies judge that if a non-GO bond defaulted, the LRG would not bail it out from its general revenues. They have solved the '*time inconsistency*' problem that plagues NZ LRGs. Time inconsistency is where a decision maker has inconsistent preferences with respect to time, a topic grounded in *game theory* and more commonly described by economists as *sequential rationality*. This is a problem everyone else calls '*keeping your promises'* (Fischel 2015 p61). NZ LRGs would like to not bail out alternative financing arrangements, but such a position is not judged credible by ratings agencies: they would bail out the arrangement if it defaulted.

Strategies to solve the time inconsistency problem

The reasons US LRGs can have separate credits whilst other countries LRGs cannot are not documented in literature. From Treasury's own investigations there are deeply ingrained cultures and mindsets that permeate all the formal and informal elements of their local public institutions and supporting capital market institutions.

Elster (1984) provided a framework of analysis for analysing the time inconsistency problem, which is the basis for our analysis. The categories of solutions are:

- *Manipulate the feasible set*:
    - change the reward structure before the game is played, which economists call 'strategic precommitment', such as through public side bets / contracts (eg, a contract to commit to quitting smoking, NZIER 2012)
    - restrict the set of practicable (practically possible) actions, such as legally banning some actions; remove discretionary ability.
- *Manipulate the character* (strengthen the willpower and change the preference structure):
    - change the decision structure, such as creating different decision makers with different payoffs, such as delegating decisions to quasi-independent experts, eg, an independent central bank to avoid the costs of the political business cycle, Kydland and Prescott (1977), Singleton et al (2006), Tucker (2018).
- *Manipulate information and stimulus* (change the belief system or avoid exposure to certain signals). Elster's example is a quitting smoker avoiding temptation caused by crossing the road rather than walk past tobacco shops.

After reviewing the legislative provisions for about a dozen classes of special districts and municipal service provisions, visiting several states, and meeting regulators, professionals, and industry bodies we have deduced some frameworks that seem to guide their institutional design.

The first is there are four levels of protection to prevent moral and legal recourse by an alternative financing arrangement to a LRG:

1) **Prevention —** checks and balances beforehand and during a project's life to make sure an arrangement is well planned and managed with minimal risk of default and failure. For example:
    - the Texas Commission for Environmental Quality's expert review of the viability of proposed Municipal Utility Districts (TWC s54.021); or
    - section 293.47 of the TCEQ's rules in the Texas Administrative Code (TAC) require co-funding of 30% by developers to provide 'skin in the game' to insure the feasibility of construction projects. Developers use their own higher cost capital in 'unproven' phases, and are only partially reimbursed once projects mature to 'proven' status); or

- supporting co-regulatory frameworks (such as tailored rating agency methodologies that better target risk factors, such as for municipal water services in particular, eg S&P 2016)

2) **Incentives** — to minimise net incentives to LRGs to step in, eg:

   a) provide protections in law to citizens and service users to ensure they're not held up by the receiver in the event of default. For example, by law there is a first lien on revenues to operations and maintenance expenses, including all salaries, labour, materials, interest, repairs and extensions necessary to provide efficient service, even if the municipal water provider is in receivership (eg, Texas Government Code, TGC section 1502.056), and there is no ability to accelerate principal payments

   b) limiting tools available to bond holders, with some districts authorising lenders to have the right to seek a Court order (TWC s54.518), whilst enabling municipal bankruptcy[8], where the latter shields against abuse by the Court action

   c) minimise wherever possible the role of elected representatives in the LRG in creating the arrangement, so if it defaults, they don't feel morally responsible. This could be through using voter-approved special taxes pledged to special tax bonds, and/or voting to create special purpose local authorities;

   d) all whilst providing sufficient protections to bond holders to help ensure there's a market for the securities. For example, enabling a local government to commit to limiting the use of revenue (TGC s1502.058); pledging a lien to bond holders on revenue (TGC s1502.052); ability to commit an inferior lien to additional obligations (TGC s1502.061); and granting the right of franchise to operate a utility (TGC s1502.053)

3) **Authority** — typically clarify in law and explicitly and clearly in contracts and disclaimers the LRG is not responsible for the debts of the alternative arrangements. They may forbid in law any legal recourse by revenue bond holders to councils (eg, TGC section 1502.054). One could perhaps go further and simply outlaw the use of local government taxes to fund any debts but its own issued GO borrowings.

4) **Means** — the practical ability to provide taxpayer support. In the City of Phoenix's case, so much of their revenue is pledged that their remaining discretionary revenue is modest and could not bail out more than a couple of the bond issues even if they wanted to.[9] This is a form of strategic pre-commitment. Another is to use slow and uncertain processes to approve tax increases, reallocate spending, and raise new GO debts (particularly because votes by the people are required to authorise them).

The second framework is a *character, collateral, cash-flow* approach. Every model is tailored to the prevailing circumstances, but the design dimensions relate to *character* (such as legitimacy, decision making, responsibility, and reputation), *collateral* (such as

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8 LRGs can generally file for bankruptcy; only 13-14 cannot, and they are compelled to negotiate a solution in the event of default. Source: Filenote (3948505.1) of meeting with S&P, Dallas, Texas, 12 April 2018.

9 Personal communications, internal reference Meeting notes (Treasury:3665518v1)

incentives and payoffs relating to protections and exposures in the worst case scenario of debt default), and *cash flows* (resources generated and expended, timing, and risks). When a model has certain exacerbating features, other dimensions are emphasised to mitigate against them.

From analysing multiple institutional arrangements the following patterns are emerging:

1. *The more that elected representatives of LRGs champion alternative financing arrangements, the greater the use of direct democracy to insulate them*

    - For example, requiring two-thirds majority by county voters to approve the issuance of special district bonds by a county-created Road District (Texas Transportation Code s257.116)

2. *The more that citizens and businesses champion public projects, the more regulated the approval and continuation of projects*

    - For example, requiring State Regulator in approving a district's creation (TWC s54.021) and Attorney General approval for a district bond issue (TWC s49.184), or legal requirements limiting recourse by municipal water bond holders to the LRG (eg Texas Government Code s1502.054) and ensuring continuous service provision of water services (TGC s1502.056)

3. *The greater the conflict between the needs of investors and citizens, the narrower the scope or scale of the project vehicle(s)*

    - For example, using several large scope but smaller scale project vehicles for very large developments, or separating the tax function from finance and investment functions (smaller scope but larger scale vehicles). These concepts are further explored in section 1.2.6.

4. *The more use of project financing for utilities, the less recourse to public debts able to bail them out or fund unviable projects*

    - For example, citizen-initiated constitutional reforms to limit general taxes and public debts.

    - Further, the GO debt to general revenue ratio limit for an AA-rated LRG, all else equal is only 60% (relative to the 250%–270% in New Zealand). This is because economically viable investments are financed with non-GO debt, leaving GO debt for more pure public goods and services. '*The sheer size of utilities relative to LRG general revenues and GO debts is generally enough to keep LRGs' feet to the fire*'[10].

[10] Source: Filenote (3948505.1) of meeting with S&P, Dallas, Texas, 12 April 2018.

As a result of applying these layers of protections and guidelines, rating agencies do not judge US LRGs of being likely to provide extraordinary support in the event of default on debt obligations by a Government Related Entity. They have:

- no legal frameworks for explicit support
- little track record of providing support
    - for example, in the GFC in Florida approximately USD$4 billion in community development district bonds went into default, yet not one Florida general purpose local or regional government was required to fund the debt service on the defaulted bonds. Additionally, not one jurisdiction in which the defaulting districts were located had their credit rating downgraded. Source: National Association of Home Builders (2014 p5)
- separated political accountability between management and shareholders; and
- little administrative capacity or mechanisms to respond to GREs' financial distress in a timely manner.

Application to New Zealand

The frameworks above are highly relevant to New Zealand's current funding and financing challenges. For instance, light rail and general mass transit projects in developed urban areas are a focus of government at present. These confer substantial value to the land owners within the restricted corridor of the project. Governments the world over typically desire but are unable to capture that value to help pay for the project, especially when the landowners typically did no work to create the value — otherwise such a scheme results in a large transfer of wealth to property owners.

However, guideline 1 means the more that a government, whether it be central or local, champions the project, the greater the need to use direct democracy to insulate them from moral recourse of project bond holders in the event of default. If that insulation is insufficient, the bonds will be regarded as general obligations of that government by ratings agencies, which are typically highly constrained.

However, major 'unproven' projects in existing urban areas such as mass transit usually require some form of democratic leadership because of the large number of affected people and the public powers required to tax and take property. The challenge is to empower citizens and businesses to champion public projects, and to make funding and capital contributions — guideline 2. That is, create a culture of bottom-up advocacy and empowerment, not top-down forcing. For instance, one minority contribution of London's *Crossrail* project is a £4.1 billion contribution from businesses doing just that, after they lobbied for the project and for a targeted rate on business owners, and businesses voted approval in a special referendum.[11]

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[11] rackcdn.com//assets/library/image/c/original/crl-fundingbreakdown.jpg.

However, Crossrail's majority investors were the Department for Transport, Transport for London, and the Greater London Authority, and the project has had multiple funding extensions and top-up loans. There are limits to the ability of a project to have no recourse when it is particularly large and critical to economic development, as it triggers the 'critical impact' assessment of the rating agencies' GRE

Against the dimensions of *prevention, incentives, authority,* and *means* New Zealand LRGs our initial assessment is they perform poorly, as explained in Table 4. This is not an accident: NZ LRGs intentionally maximise moral recourse by lenders to their general revenues (for example using s115 of the Local Government Act), to improve the bankability of their debts (ie, to get better borrowing terms). Further detailed analysis of actual targeted rates against these dimensions would be useful. Not solving the time inconsistency problem means that:

- the local government sector as a whole can borrow less than is required, and
- tax-guaranteed debts may not be as credit worthy as user charge revenues dedicated to utility revenue bonds, especially for water utilities.
    - For instance, Table 3 on page 24 shows the City of Phoenix's *Junior Lien* [ie, subordinated] Water Revenue Bonds and its Subordinated Excise Tax Revenue bonds are both rated AAA by S&P, higher than its GO bonds at AA+, let alone AAA for its Senior Lien bonds for each of excise tax, wastewater, and water.

Table 4 Assessment of time consistency of New Zealand local governments

Dimension	Assessment	Comment
Prevention, to prevent default	Ok	LRGs manage the design, construction, operation and maintenance of local infrastructures, including those vested to them by developers. However, there are no independent bodies currently tasked with assessing the viability of investments, such as the TCEQ for MUDs
Incentives against stepping in	Poor	NZ LRGs are authorised under section 115(2) of the Local Government Act 2002 to give to the LRG's receiver in the event of default on debt obligations the power to levy and collect rates and enforce their payment. There are protections in s40D in the Receiverships Act 1993 for essential public services, but they do not elaborate like US state legislation, such as s1502.056 of the Texas Government Code. Local taxation has heavy reliance on elected representatives of LRGs, because citizens have no power to create LRGs, special purpose districts, and there are no legislative provisions for long-term pledged targeted rates authorised by plebiscites. Targeted rates here in NZ need to be struck annually by elected representatives of LRGs; Councillors cannot be bypassed.
Authority to step in	Poor	No legislation clarifies that LRGs are not liable for the liabilities of alternative financing arrangements to general obligations. No legislation prevents LRGs from using general revenues to bail out alternative (ie, non-GO) financing arrangements.

assessment descr bed above. It is not clear if metropolitan area special district models such as those described in section 1.2.8 are better able to prevent cost blowouts.

Dimension	Assessment	Comment
Means to step in	Poor	There are ample means for LRGs to be able to pay for the defaulting debts of alternative (ie, non-GO) financing arrangements. LRGs don't require voter approval to raise rates, or issue new issue GO debts; each LRG is protected by the 'step up' provisions of member LGFA borrower LRGs; and LRGs can reprioritise spending relatively quickly, despite 10-year plans and annual plans having prescriptive process requirements. In the last resort an LRG is likely to be protected by other LRGs (such as the step-up provisions of the Local Government Funding Agency).

1.2.6 Ownership and residual decision rights given incomplete contracts

Should a special financing arrangement have discretionary powers or not? On the one hand, special purpose entities may be given powers to adapt and change arrangements over the life of the project. Alternatively, they could be established with fixed revenues and very minimal administrative roles after the initial project bonds are issued. The institutional form and the allocation of powers depends on how emergent issues are expected to be, and the ability to anticipate and manage them. However, with more powers comes more risk from misuse of powers. This section outlines some key considerations in the context of urban development.

Evans, Guthrie, and Quigley (2012) describe contemporary microeconomic foundations for the structure and management of the public sector. Many of the ideas that underpin the major economic reforms in the decade after 1984 related to institutional economic concepts of *transaction costs*, *principle-agent* theories, and *contestability*. In the last 30 years theorists have further considered issues of '*contractual incompleteness'* — the inability to write contracts that explicitly address every relevant contingency. This is very relevant to urban development, as it is a very complex area with high uncertainty and sunk costs, which in turn requires investment flexibility and application of real options analysis. The issue of public or private ownership becomes refocused on the debate on the allocation of *residual decision rights* that add the most value to a project.

Evans et al describe the profound impact of Grossman and Hart (1986). Residual decision rights are the authority to make non-contractible investments (effort) in production. Those rights should be assigned to the party that has the greatest impact on social surplus, and that party should own the rights to the surplus generated by the investment to provide sufficient incentive to maximise social surplus. These issues are more severe when relationship-specific asset investment must be sunk early in a project, and the investor is at risk of hold-up by suppliers or others with market or political power.

Section 1.1.2 described the high degree of value-add, risk, and cost of capital inherent in the option value for 'unproven' infrastructures (new, novel infrastructures that create demand, be they for brownfield or greenfield). The development sector, rather than the aggregated NZ local government sector, has the most natural advantage to maximise social surplus in such conditions.

However, Fischel (2015 pages 61, 139, and 273) describes tensions between the needs of developers to provide maximal development to economise on investment and to maintain maximal flexibility, and of prospective homeowners that do not want congestion or anything that creates risk to the value of their homes from intrusive or intensive

development. Glaeser (2008 pp239–241) provides a formal model of the tyranny of incumbent homeowners versus the tyranny of developers.

Fischel describes that two-sided commitment mechanisms are common, where developers constitute a masterplan with associated covenants and conditions, and a self-governing community association. In setting up the association and covenants the initial developer has to think about the configuration of restrictions that will maximise the value of the property to buyers. The motivations of initial developers and future buyers are aligned when there is a competitive development market.

However, if the initial buyers become politically dominant before the development is complete, they will discount the interests of the initial developer. To counter this, it is common in the USA for one vote to be assigned to the owner in an association, and three votes to the developer of each unsold lot. [Note, we will discuss NZ practice with a NZ property lawyer, TBC.] Developers can maintain control of community associations until three-quarters of the lots have been sold. Too much power to one side leads to underinvestment.

When public powers are used, it is important for the long-term maintenance of the legitimacy of the public institutions to balance the evolving democratic demands of the community of interest against the original commitments. The 2018 Infrastructure NZ delegation to the USA studied a range of urban development institutions that balance this tension by reducing either the scope or the scale of the institutions as follows:

- The Stapleton redevelopment of Denver, Colorado's previous airport is several times larger than Auckland's Hobsonville Point development, at 1600 hectares. As at 2018 it had completed over 7,400 homes for approximately 26,000 residents. It has one tax district and one district that issues bonds and administers investment. These functions were separated to ensure that taxes late in the development phase are used to fund growth as per the original masterplan, not redirected to improve the amenity and service levels to existing residents. This structural separation changed the character of decision making to maintain time consistency.

- The delegation visited The Woodlands, in the Houston-Woodlands-Sugar Land metropolitan area, with 12,000 hectares, 116,000 residents, 43,000 homes and 67,000 jobs. It is administered by multiple special purpose districts, including ten MUDs that combine the functions of levying taxes, issuing bonds, and administering public investment.[12] The number of MUDs was minimised subject to not creating too much tension between the needs of developers and democratic demands of residents as areas near completion.

New Zealand policy makers will need to be very conscious of how to balance these competing demands for flexibility later versus rigidity earlier when developing funding and financing entities for 'unproven' public infrastructure, using for example the earlier guidelines 1–4.

This is chiefly relevant to the long-term development of the Urban Growth Agenda's Infrastructure Funding and Financing pillar. It will require balancing the democratic values against market demands by buyers (households and firms) and suppliers of urban

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12 https://woodlandswater.org/

communities. This will require innovation, experimentation, learning as we go, and partnership between private and public sectors.

Hausmann and Rodrik (2006) provide a relevant outline on how to foster truly new markets, institutions, and capabilities for broader economic development. They argue the importance of path dependence, specificity of inputs, the coordination of incomplete markets, and the market's superior ability to make best use of diffuse information and incentives. They describe particular difficulties for markets to make discontinuous-jumps into new markets. They argue some jumps in capabilities requires governmental support for specific inputs, as well as general inputs. But given the vastness of specific inputs relative to scarce resources, governments are doomed to make choices that influence industry development paths, and the best choices are unknowable *ex ante*.

Given those issues, Hausmann and Rodrick argue the need for interaction between governments and markets to choose the right interventions. This requires eliciting information from the market, such as from industry bodies, but this escalates the risk of capture and the need for legitimacy of policy making. To counter this risk they argue for:

- *Open architecture*: the solutions for funding and financing urban infrastructure and public services should not be premeditated whenever possible. Governments may be doomed to choose, but they should do so after maximising the information revealed, and make choices endogenous to (ie solved by) open process;
- *Self-organisation*: enable self-selection of solutions, and combinations of solutions, given the high degree of specificity;
- *Transparency*: facilitate alignment of interest by pledging public disclosure, and independent technical assessments in the public interest.

To achieve the above, they suggest using "*windows*" (eg, specialist government functions), where predetermined rules and instruments are used, the scope of consideration is kept narrow, with a focus on 'new' activities to offset risks of rent seeking.

They argue that governments always struggle to develop new markets, perpetually oscillating between hierarchical (vertical) structures and sector/domain (horizontal) splits. The alternative should instead be to explore network-like arrangements, where the system is designed so that no one node is fully aware, nor needs to be (eg using trade associations, ministries/departments, development banks).

In conclusion they argue an open-minded experimental approach, with a penchant for evaluation is more likely to produce structural transformation than an approach reliant on first principles and/or best practice blueprints imported from elsewhere.

1.2.7 Example application to large urban intensive redevelopment project

The 2017 Infrastructure NZ delegation to the USA studied a large redevelopment in central Portland, Oregon, the Zidell Yards Regeneration. This is integrated with the South Waterfront Transit Oriented Development (TOD) and is located immediately beside the Portland aerial tram that connects to the nearby Oregon Health and Science University. The project involves mass transit, walking and cycling, general public realm improvements, and the remediation and redevelopment of a large industrial site.

The project had multiple investment parties, with contributions from:

- the developer/land owner
- federal funding contribution channelled through the MPO (metropolitan planning organisation) for the light rail project
- a revenue-bond financed contribution from the existing Business Improvement District (BID) funded by a targeted rate on business property
- a revenue-bond financed contribution from the existing Tax Increment Finance (TIF) district funded by incrementing (ie, pledging) the additional general municipal property taxes from the improved capital stock
- a capital contribution from the neighbouring university
- funding from public transport fares.

The business improvement district and tax increment finance districts are examples of using special purpose district bonds to make contributions to public infrastructure. Access to these institutional structures helped enable beneficiaries to create value, to derive finance from that value, and to negotiate with other parties to reveal benefits and costs of projects, all bottom up.

Business improvement districts are commonly administered by New Zealand local governments too. The key difference is the ability of US BIDs to issue revenue bonds or special tax bonds by solving the time inconsistency problem.

Tax incremental finance and the USA's unique property tax practice

We provide a quick note on tax increment finance districts, which is highly USA-specific not just because of the revenue bond financing, but because of their approach to municipal property taxes. We commence with the latter.

It is common in the USA for state constitutions to limit both the municipal property tax rate (as a percentage of a property's 'assessed value' for tax purposes) and to limit the assessed value to historic values plus a low inflation rate. This means that local governments cannot set property taxes to optimally fund local public services, which necessitates the use of alternative funding and financing arrangements, and it means that any urban development creates new net revenues to the LRG, rather than lower tax rates to all taxpayers. This creates sharper fiscal incentives to enable urban growth and development.

In Portland Oregon's case specifically, property tax system was essentially the same as New Zealand's local government rates system, until it was radically altered as follows (Oregon Department of Revenue):

- Prior to two state-wide ballot measures, Measure 5 in 1991-92 and Measure 50 1995-96, Oregon had a pure levy-based property tax system. Governments set levies, estimated assessed value at market values, and set tax rates by dividing total levy by total real market value in the district. Levies were constitutionally limited to an annual growth rate of 6%, but could exceed that with voter approval. New growth could distribute levies across greater value of real estate, leading to a

potential fall in tax rate for some individual properties, but not an increase in total levies to governments, all else equal.

- Measure 5 introduced limits that property taxes must not exceed $10 per $1000 of assessed value for operating taxes (ie, cap doesn't apply to bond interest and principal payments). Measure 50 changed the basis of assessed value to be 90% of the 1995/96 assessed value (which at the time equalled market value), and can only increase 3% per annum. New or materially improved properties get reassessed, with the same ratio of assessed value to real market value of similar property.
- These limits now bind. This means that new growth no longer offsets tax rates to existing property, and it leads to new additional revenue to governments. Taxes are about $3k–$5k per average $350k house.

Infrastructure NZ (2017) described these incentive attributes to support growth. The Productivity Commission (2019 pp178–179) did not support Infrastructure NZ's claim. The Commission noted the US practice of limiting tax rates, and claims that taxing property can lead to higher taxes if property values increase. The Commission thought this would be neither stable nor predictable. This would be true if it were not for the US practice of also limiting assessed values (such as Oregon Measure 50), which is important because it creates stability and predictability. The mechanism for the increased taxes is increased property values in the aggregate from the additional development, not by making housing less affordable across the city.

The use of tax increment finance is common across states in the USA. The premise is that if a local urban area was regenerated and created more property tax revenues, but this was reliant on public infrastructure investment, then the additional tax revenues could be 'incremented' and pledged to a revenue bond to finance the public infrastructure. The argument is the municipality would not have received the tax revenues anyway otherwise. The merits of tax increment finance districts are disputed (O'Toole 2011), as many investments may not be as clear cut as described, diverting needed funding for schools for example.

In the long-term, some variant of tax increment finance could be possible in New Zealand to support intensive redevelopment projects. The mechanism design would need to be unique to New Zealand, but the key attributes are: the ability to revenue bond finance a dedicated revenue stream that the market is willing to buy; the ability to increment general property taxes to that bond; and the consent of the local tax paying community. At best it would be a long-term initiative, because we need to first develop basic models of revenue bond financing.

1.2.8 Example of special purpose authority for rapid public transport

The 2017 Infrastructure NZ delegation to the USA also studied the Dallas Area Rapid Transit (DART) system. DART is a special purpose *Metropolitan Rapid Transit Authority* constituted under chapter 451 of the Texas Transportation Code. The Dallas rapid transit authority levies a 1% sales and use tax pledged to revenue bonds. It operates the longest light rail network in North America, at 93 miles.

A public referendum is required to create a rapid transit authority s451.661. They can compulsorily acquire land (s451.058) and can impose any kind of tax except an *ad valorem* property tax (s451.401) but there must be voter approval (s451.402). In

particular they can levy a sales and use tax of up to 1% (s451.404) and a motor vehicle emissions tax (451.414), subject to sales and use taxes not exceeding 2% sum for all tax authorities (s451.706).

A rapid transit authority can issue bonds using revenues and taxes without voter approval required (s451.352). Operating and maintenance expenses are a first lien and charge against any revenue of a transit authority system (s451.358).

1.2.9 Potential application of revenue bonds to municipal water services

This section outlines the potential gains from revenue bond financing and associated institutional reform to three waters provision in New Zealand. It is indicative and serves only to inform the potential scope of further policy analysis.

Multiple problems are alleged relating to poor governance & accountability of water providers, underinvestment in growth capacity and environmental & health performance, lack of capability, weak regulatory oversight, and an inability for some councils to fund and finance required investments. The severity of some of these issues may or may not be substantiated, but could nevertheless be improved by addressing the financial and commercial structure of the utility.

The reliance on highly constrained GO debt in New Zealand is exacerbated by increasing demands for growth and increasing requirements on levels of service of waters networks, renewal, and resilience.

Revenue bond financed council water departments

If a self-supporting council water utility (such as a Council Controlled Organisation) were able to borrow against user charges only (ie, revenue bonds) with no significant guarantee as judged by ratings agencies, they could potentially qualify for an alternative credit rating criteria, such as S&P's (2016) rating methodology for public 3 waters.

The methodology views revenue-bond financed council water suppliers more as project finance rather than balance sheet finance, whereby cash flows are more important than the value of assets.

For instance, the methodology appraises debts not relative to revenues (like for general obligations), but rather as a '*debt service cover ratio'* to assess if cash flows net of operating expenditures (employment etc) are larger than debt obligations:

Equation 3 Public water revenue bond-financed debt service cover ratio[13]

$$\frac{\text{Revenues less operating expenses}}{\text{Debt obligations (principal \& interest)}} \leq 1.20 - 1.60\ (A - AAA)$$

That is, a council water supplier needs to have revenues (net of operating costs) that are only 20% larger than their debt payment requirements to be A-rated, and only 60% larger to be AAA rated.

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[13] More specifically, the formula is: *[(Revenues – Expenses – Total Net Transfers Out) + Fixed Costs]/(All Revenue Bond Debt Service + Fixed Costs + Self Supporting Debt Service).* Note, depreciation and interest is excluded from the numerator.

In contrast, Auckland Watercare Ltd's debt service cover ratio was in the order of 3.8 in 2017 — 280% larger than debt repayments.[14] The ratios for other councils have not been estimated, because they do not use Council Controlled Organisations with debt separated in financial statements.

Rather than debt, the key elements in S&P (2016) that determine credit rating (and therefore borrowing cost) are:

- **competence** — operational and financial management practices
- **economic fundamentals** — relative household disposable income, local GDP growth, and exposure to large employers and/or customers
- **affordability of water charges** — the utility bill for water, sewer, drainage should be less than 4.5% of household disposable income if the percentage population living in poverty is less than 10%. To contrast, for example, Auckland Watercare (water, sewer) is 0.9%.

Interestingly S&P are indifferent about the supplier's structure:

> *"74. There is no favored governance structure for the utility within the methodology. Some municipal utilities are a department or component unit of the local political subdivision, governed by the same locally elected officials as the LRG. Other utilities are governed by an independent or quasi-independent utility board. The governance structure will be credit-neutral so long as there seems to be the ability for management to operate the utility as an ongoing, viable enterprise, largely independent from politics, with professionals who are capably engaged in risk oversight and can balance interests appropriately."*

Council water departments can form **joint action agencies (JAAs)** to provide cooperative wholesale provision to distribution utilities (eg, regional transmission and treatment). They are appraised as per above (eg, S&P 2005), with an additional focus on:

- **number of participants**
- **'step-up' provisions** (ie, non-defaulting participants increase contributions if a member defaults); and
- **take-or-pay versus take-and-pay contracts**, the former '*hell or high water contracts*' being more credit-worthy by requiring participants make full payment regardless of a project's operational performance or level of service used by individual participants.

What this means is local government water suppliers in the USA are incentivised to structure themselves to have good credit ratings. They secure competent staff, and may amalgamate to improve the average economic strength of their service area, and are incentivised to be cost-efficient. They may establish JAAs for wholesale utility services and/or for shared professional services, whilst maintaining a larger number of local distribution service providers.

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[14] Treasury internal link 3930526.1.

The US approach to GO bond-financed (special purpose) water utility districts

Special districts, such as Municipal Utility Districts, operate using the same credit rating above, despite their issuance of GO bonds rather than revenue bonds. They are special purpose local governments, some with broader urban development public powers. Their revenues include ad valorem property taxes, to enhance credit worthiness given their small balance sheet. They are appraised as though they were revenue bonds because of their special purpose nature, versus general purpose councils.

Facilities would need to be designed and constructed according to regulated required standards. The question of ownership of the assets can be addressed separately. Like *Road Utility Districts* (eg, Texas Transport Code chapter 441), assets could be vested immediately to the relevant council or council water department free of charge if they are willing to receive them, with the bonds repaid by the district. The council would be required to maintain, operate, and renew them as per normal. If the relevant utility is unwilling to receive them, then ownership (including maintenance, operation, renewal obligations) could be retained in order to minimise barriers to entry to the urban land market to promote competition.

How alternative financing & commercial structures could perhaps help

Revenue bonds and special entities may help the US to avoid the presenting problems we have in NZ, with some minor complementing, as follows:

- Financing: by circumventing council GO debt constraints, by definition.
- Regulation:
  - The market provides increased regulatory oversight, chiefly through ratings agencies (albeit at a cost), which helps incentivise better capability and governance.
  - Central government oversight and assistance on the same matters could complement the market regulation. This can include ensuring investments provide value for money (as the TCEQ does when approving MUD applications), and that design and construction standards are balanced.
- Investment and service levels:
  - Access to debt capital at similar borrowing cost, to enable growth, renewal, and service level improvements. Environmental and health performance increases can be financed with relative ease. Alternative forms of organisation can be tailored to local circumstances and opportunities (ie, special districts, municipal utilities, JAAs).
- Capability:
  - For a utility with weak staff capability to get a good rating requires they upskill, outsource professional services, or merge with nearby utilities (horizontally, or vertically).

- Funding:
  - revenues meet the earlier definition of user charges, rather than taxes, and are less at risk of being redirected to low value unrelated activities. Special purpose entities can support freedom and agency for beneficiaries who are willing to pay.
- Consumer responsiveness and land market competition:
  - To reduce insider/outsider (ie, cross-subsidising) monopoly problems of municipal water utilities blocking market entry to the urban land market, new entrant special purpose entities providing distribution utilities could be supported, served by wholesale providers.

From: Morgan Dryburgh [TSY]
To: Kim Martin [TSY]; Matthew Appleby [TSY]; Matthew Collin [TSY]; Joseph Sant [TSY]; Oliver Martin [TSY]; Jennifer Xie [TSY]
Cc: Mark Hodge [TSY]; Michael Lonergan [TSY]
Subject: FYI - Three Waters Reform announcement tomorrow
Date: Tuesday, 7 July 2020 3:30:00 pm
Attachments: image001.png

Hi all,

I am sending you this email as you are likely to be interested in the three waters reform programme and the announcement happening tomorrow.

Background

Cabinet agreed to the reform programme in June, including a significant amount of funding from central government. $700m of funding for local government three waters infrastructure was agreed as part of the most recent CRRF round as a Wave 3 initiative, and DIA has informed me that the PM will be making an announcement about the reform programme and associated funding tomorrow at 11.30am in Havelock North.

The central proposition of the reform programme is to aggregate water services into a small number of large-scale water providers across the country, with professional governance boards that are able to borrow off their own balance sheets. The funding is being provided to councils as stimulus in the wake of COVID-19, but the stimulus funding is conditional on participation in reform.

The first phase of the reforms involves developing the detailed policy proposals for what these entities look like, with the aim of introducing legislation to support the creation of these entities in 2021. Local government are being asked to sign an MoU agreeing to participate in the development of these proposals, in return for receiving funding this year.

Some key points that DIA has asked me to highlight to you:

- The reform will have a significant impact on local government balance sheets. This will also impact LGFA in terms of both existing and future borrowing requirements, as well as LGFA's mandate in this regard.
- There is an opportunity to consider how to best enable the new water entities to be financed outside of existing LGFA constraints.
- DIA would like to engage with DMO early on the potential options, to understand any potential appetite to provide treasury services to the new water entities.
- DIA will look to set up a meeting to engage with you in the next month to start to progress these options.

I am currently leading Treasury's work providing input into the reforms. Andy Hagan has been invited to sit on a 'Programme Board' being set up by Paul James to provide governance to the reform programme – the first meeting is this Friday.

The work so far has been focused on developing an MoU and planning for council engagement, but after the announcement DIA will be moving into planning how the policy options will be developed. I will provide you with more information about the process that DIA is developing when I have it, in order to start the conversation about Treasury's views in relation to the debt/borrowing elements of the reforms.

Please let me know if you have any questions, always happy to discuss.

Cheers,
Morgan

Morgan Dryburgh (she/her) **| Senior Analyst, National Infrastructure Unit | Te Tai Ōhanga – The Treasury**
s9(2)(k) | s9(2)(g)(ii) | Email/IM: morgan.dryburgh@treasury.govt.nz
Visit us online at https://treasury.govt.nz/ and follow us on Twitter, LinkedIn and Instagram

From: Morgan Dryburgh [TSY]
To: Michael Lonergan [TSY]; Mark Hodge [TSY]; Andrew Hagan [TSY]; Joseph Sant [TSY]
Cc: Ben Wells [TSY]; Erana Sitterle [TSY]
Subject: Three waters Auckland council funding
Date: Monday, 27 July 2020 12:23:00 pm
Attachments: image001.png

Hi all,

I've just had a call from Richard Ward. It seems that DIA, through some conversations with the Three Waters Steering Committee, have decided that Ministers' decisions to not allocate any three waters funding to Auckland at this point in time is likely to cause problems.

A joint report was sent to Ministers on 15 July recommending this approach, as Minister Mahuta had directed her officials that this was her preferred method of allocating the three waters stimulus funding. Her preference to not allocate funding to Auckland was based on the judgement that a separate conversation could be progressed with Auckland council about government support as a whole, **as well as progressing work to separate Watercare from Auckland Council's balance sheets.**

The joint report was originally progressed with urgency so that the funding allocation could be announced on 20 July to coincide with the workshops being held with local authorities around the country. The announcement has not yet occurred, and DIA have advised their Minister to hold off announcing the funding allocation until the end of this week, as engagement is occurring without councils requiring the funding allocation.

Minister Mahuta has not yet had a conversation with Auckland Council, or Minister Twyford, who according to DIA is expecting that three waters funding may reduce some of the pressure on LSPs. DIA has recommended to their Minister that these conversations occur.

DIA intend to put up a briefing to their Minister today, suggesting that she have these conversations. It will also likely cover their initial thinking about the possibility of progressing work to separate Watercare's balance sheet from Auckland council as a 'fast track' piece of work before the wider three waters reforms. **An important point to note about this is that DIA have suggested if this separation happened, it would mean that the Crown would be in the position of guaranteeing Watercare's debt, as opposed to Auckland council.**

Richard also mentioned that they have discussed with their Minister the possibility that she may need to allocate some three waters funding to Auckland council, depending on how these conversations go. Any further drawdown from the tagged contingency would require another joint report and the agreement of all four Ministers.

Happy to discuss if you have any questions, and I'll send around the briefing when I get it.

Cheers,
Morgan

Morgan Dryburgh (she/her) **| Senior Analyst, National Infrastructure Unit | Te Tai Ōhanga – The Treasury**
s9(2)(k) | s9(2)(g)(ii) | Email/IM: morgan.dryburgh@treasury.govt.nz
Visit us online at https://treasury.govt.nz/ and follow us on Twitter, LinkedIn and Instagram

From:	Joseph Sant [TSY]
To:	Morgan Dryburgh [TSY]; Erana Sitterle [TSY]; Michael Lonergan [TSY]; Mark Hodge [TSY]; Andrew Hagan [TSY]; Ben Wells [TSY]
Subject:	RE: Briefing: LG202000700 Local Government Briefing: Discussions with Auckland Council on the Three Waters Reform Programme and the separation of Watercare
Date:	Tuesday, 28 July 2020 1:43:32 pm
Attachments:	image001.png

Thanks Morgan,

I'm just copying Jennifer and Ollie so that they can contribute (if appropriate). My general concern relates to your second bullet – can we make this 2-staged? That there is an issue with this proposal, but also that there is a wider policy consideration for the role of CG to LG that would likely need to be resolved before embarking on where any guarantee might be applied?

Thanks,
Joe

From: Morgan Dryburgh [TSY] <Morgan.Dryburgh@treasury.govt.nz>
Sent: Tuesday, 28 July 2020 1:13 PM
To: Joseph Sant [TSY] <Joseph.Sant@treasury.govt.nz>; Erana Sitterle [TSY] <Erana.Sitterle@treasury.govt.nz>; Michael Lonergan [TSY] <Michael.Lonergan@treasury.govt.nz>; Mark Hodge [TSY] <Mark.Hodge@treasury.govt.nz>; Andrew Hagan [TSY] <Andrew.Hagan@treasury.govt.nz>; Ben Wells [TSY] <Ben.Wells@treasury.govt.nz>
Subject: RE: Briefing: LG202000700 Local Government Briefing: Discussions with Auckland Council on the Three Waters Reform Programme and the separation of Watercare

Hi Joe,

The briefing has been copied to MoF's office – though they haven't received it yet.

Dan Cruden is happy to receive key points from us. He has asked for this by COP Thursday at the latest.

I'll hold the pen. For starters, I think the key points we'd want to raise for MoF's attention and make comment on are:

- Ministers should consider their strategic priorities for Auckland prior to making commitments to Auckland council (e.g. priorities for transport, urban growth, regional water grouping including Northland)
- There is a big policy question as to whether the Crown wants to guarantee Watercare's debt, and this also creates precedence risks for the three waters review – removing water infrastructure from council balance sheets only for it to end up on the Crown's would be a suboptimal outcome of reform
- There are large programme risks to the three waters review if DIA does this work – capacity and capability constraints and the likelihood that timelines will slip (further than they already have)

I'll work this into a set of bullet points to provide to the Minister's office and send them around

for input. Happy to take any suggestions for additional points I've missed.

Regards,
Morgan

From: Joseph Sant [TSY] <Joseph.Sant@treasury.govt.nz>
Sent: Tuesday, 28 July 2020 9:37 AM
To: Erana Sitterle [TSY] <Erana.Sitterle@treasury.govt.nz>; Michael Lonergan [TSY] <Michael.Lonergan@treasury.govt.nz>; Morgan Dryburgh [TSY] <Morgan.Dryburgh@treasury.govt.nz>; Mark Hodge [TSY] <Mark.Hodge@treasury.govt.nz>; Andrew Hagan [TSY] <Andrew.Hagan@treasury.govt.nz>; Ben Wells [TSY] <Ben.Wells@treasury.govt.nz>
Subject: RE: Briefing: LG202000700 Local Government Briefing: Discussions with Auckland Council on the Three Waters Reform Programme and the separation of Watercare

Hi All,

Very much agreed re: proposal of Crown guarantees (which is a much bigger policy question) and other comments. Can I check on the following:

- Have we provided a no surprises inform to the MoF office?
- If not, can we, and seek commissioning for key points for the MoF to be aware of?
- Who might hold the pen on that piece of advice?

Thanks
Joe

From: Erana Sitterle [TSY] <Erana.Sitterle@treasury.govt.nz>
Sent: Tuesday, 28 July 2020 9:31 AM
To: Michael Lonergan [TSY] <Michael.Lonergan@treasury.govt.nz>; Morgan Dryburgh [TSY] <Morgan.Dryburgh@treasury.govt.nz>; Mark Hodge [TSY] <Mark.Hodge@treasury.govt.nz>; Andrew Hagan [TSY] <Andrew.Hagan@treasury.govt.nz>; Joseph Sant [TSY] <Joseph.Sant@treasury.govt.nz>; Ben Wells [TSY] <Ben.Wells@treasury.govt.nz>
Subject: RE: Briefing: LG202000700 Local Government Briefing: Discussions with Auckland Council on the Three Waters Reform Programme and the separation of Watercare

Hi Morgan,

As just discussed, I completely agree with Michael's comments below. A couple of other reflections:

- Shouldn't the idea of separation of Watercare (and the potential consequence of guarantee/other support by the Crown) be discussed amongst Ministers, including MoF, before it's discussed with Auckland Council? If this isn't a viable option there doesn't seem any point raising expectations with AC (and this should be informed by TSY advice to MoF I would have thought).
- The report talks about other housing and transport infrastructure priorities for CG in Auckland, and that these should be part of any discussion about separation of Watercare and freeing up of debt for AC. As per my email yesterday, there needs to be a much

clearer strategy here I think. **Ben** – is the Housing and Urban Growth Joint Work Programme an opportunity to clarify joint spatial/investment priorities if this is the path Ministers want to go down (i.e. leveraging CG investment in Auckland).

Cheers

Erana

Erana Sitterlé (she/her) **| Senior Analyst, National Infrastructure Unit | Te Tai Ōhanga – The Treasury**
s9(2)(k) | s9(2)(g)(ii) |Email/IM: Erana.Sitterle@treasury.govt.nz
Visit us online at https://treasury.govt.nz/ and follow us on Twitter, LinkedIn and Instagram

-
Curious about why I share my pronouns on my email signature? This article explains.

From: Michael Lonergan [TSY] <Michael.Lonergan@treasury.govt.nz>
Sent: Tuesday, 28 July 2020 9:14 am
To: Morgan Dryburgh [TSY] <Morgan.Dryburgh@treasury.govt.nz>; Mark Hodge [TSY] <Mark.Hodge@treasury.govt.nz>; Andrew Hagan [TSY] <Andrew.Hagan@treasury.govt.nz>; Joseph Sant [TSY] <Joseph.Sant@treasury.govt.nz>; Ben Wells [TSY] <Ben.Wells@treasury.govt.nz>; Erana Sitterle [TSY] <Erana.Sitterle@treasury.govt.nz>
Subject: RE: Briefing: LG202000700 Local Government Briefing: Discussions with Auckland Council on the Three Waters Reform Programme and the separation of Watercare

[IN-CONFIDENCE]

Hi Morgan

Thanks for sending this through. I've quickly gone through the briefing and had a few initial thoughts:

- I don't really have a clear idea of the benefits of the separation of Watercare as I'm not close enough to the work. However there is a huge precedent risk of DIA accelerating the Auckland work in that they basically determine the policy settings for new water entities ahead of the policy development process that councils will participate in.
- The potential for guarantee or other support by the Crown is particularly concerning – it looks like the Crown would be guaranteeing Watercare's debt (is it around $1.8 billion?), and if this is a precedent the Crown could become guarantor of several billion $ of debt from the new entities. This would become a huge contingent liability on the Crown's books.
- Would accelerating the Auckland work also carry risks in slowing the wider work programme if DIA has to do two major water service reforms concurrently? The programme has already slipped in its timeframes and the "aggressive timeline" for this work looks unrealistic.

Cheers
Michael

From: Morgan Dryburgh [TSY] <Morgan.Dryburgh@treasury.govt.nz>
Sent: Monday, 27 July 2020 5:22 pm
To: Michael Lonergan [TSY] <Michael.Lonergan@treasury.govt.nz>; Mark Hodge [TSY] <Mark.Hodge@treasury.govt.nz>; Andrew Hagan [TSY] <Andrew.Hagan@treasury.govt.nz>; Joseph Sant [TSY] <Joseph.Sant@treasury.govt.nz>; Ben Wells [TSY] <Ben.Wells@treasury.govt.nz>; Erana Sitterle [TSY] <Erana.Sitterle@treasury.govt.nz>
Subject: FW: Briefing: LG202000700 Local Government Briefing: Discussions with Auckland Council on the Three Waters Reform Programme and the separation of Watercare
Importance: High

FYI – the briefing that I mentioned earlier today.

From: Michael Chatterley <Michael.Chatterley@dia.govt.nz>
Sent: Monday, 27 July 2020 4:48 PM
To: Julia Minko <Julia.Minko@parliament.govt.nz>; Connie Hutchinson <Connie.Hutchinson@parliament.govt.nz>; Donna Boniface-Webb <Donna.Boniface-Webb@parliament.govt.nz>; Ministerial Correspondence <Minicorr@dia.govt.nz>
Cc: ^DIA: Allan Prangnell <allan.prangnell@dia.govt.nz>; Paul James <Paul.James@dia.govt.nz>; ^DIA: Richard Ward <richard.ward@dia.govt.nz>; Morgan Dryburgh [TSY] <Morgan.Dryburgh@treasury.govt.nz>; Andrew Hagan [TSY] <Andrew.Hagan@treasury.govt.nz>; Nick Davis <Nick.Davis2@dia.govt.nz>
Subject: Briefing: LG202000700 Local Government Briefing: Discussions with Auckland Council on the Three Waters Reform Programme and the separation of Watercare
Importance: High

Kia ora team

Please find **attached** an urgent briefing for Ministers Mahuta and Twyford regarding the three waters reform programme and Auckland Council.

Allan signalled to Minister Mahuta this morning that this briefing was pending, so hopefully no surprises but happy to take any questions.

@Ministerial Correspondence – this relates to LG202000700 (please amend the due date for the briefing to 27 July).

Ngā mihi nui,

Michael Chatterley | s9(2)(g)(ii)
Infrastructure Funding and Financing
Central Local Government Partnerships
Department of Internal Affairs

From:	Joseph Sant [TSY]
To:	Morgan Dryburgh [TSY]; Kate Le Quesne [TSY]; Oliver Martin [TSY]; Jennifer Xie [TSY]; Matthew Collin [TSY]; Kim Martin [TSY]
Cc:	Andrew Hagan [TSY]; Mark Hodge [TSY]; Michael Lonergan [TSY]
Subject:	RE: Briefing: LG202000767 Local Government Briefing Three Waters Reform Programme and the separation of Watercare Further advice 11 August 2020
Date:	Thursday, 13 August 2020 2:17:12 pm
Attachments:	image003.png image004.png RE Briefing LG202000767 Local Government Briefing Three Waters Reform Programme and the separation of Watercare Further advice 11 August 2020.msg

Hi Morgan,

I'm responding and also noting Ollie's comments (highlighting a couple of factual inaccuracies that, if accepted, would lead you down a clear path to action).

I think your bullets below present the pertinent information. It would be a risk to get into point by point discussion, and this would not be our intention. Andy has noted in separate conversations he sees this as significant work and something we should be aiming to influence. Therefore, our advice should aim to frame that:

- (per your 3rd bullet point) – shaping this work, with a common understanding, is the key next step. The work with AC/Watercare could influence the ownership/operating model for regional water management institutions nationally. The advice for temporary settings while fundamental solutions are developed could lead to long-run inefficiencies. The objective is for advice to be sufficiently ready for Ministerial decision, with appropriate assurance.
- (per your 1st/2nd bullet points) – Treasury, having not been consulted on this paper, wishes to work with DIA and AC to consider how to sequence this work to the best effect, with an overarching programme view.
- (per your other bullet and Kate's points) – to be able to do that, we need to consider how best to resource the programme. The programme is significant and complex and will likely require dedicated resource over and above what has already been allocated. We are reviewing the Capital Markets PLA to establish whether this is a possibility, but dedicated funding may unlock Treasury's ability to influence this important institution design.

I support strengthening the expectations for the report back in Oct/Nov as the key output of our short-form advice.

All the best,
Joe

From: Morgan Dryburgh [TSY] <Morgan.Dryburgh@treasury.govt.nz>
Sent: Thursday, 13 August 2020 11:28 AM
To: Kate Le Quesne [TSY] <Kate.LeQuesne@treasury.govt.nz>; Joseph Sant [TSY] <Joseph.Sant@treasury.govt.nz>; Oliver Martin [TSY] <Oliver.Martin@treasury.govt.nz>; Jennifer Xie [TSY] <Jennifer.Xie@treasury.govt.nz>; Matthew Collin [TSY] <Matthew.Collin@treasury.govt.nz>; Kim Martin [TSY] <Kim.Martin@treasury.govt.nz>
Cc: Andrew Hagan [TSY] <Andrew.Hagan@treasury.govt.nz>; Mark Hodge [TSY] <Mark.Hodge@treasury.govt.nz>; Michael Lonergan [TSY]

<Michael.Lonergan@treasury.govt.nz>
Subject: RE: Briefing: LG202000767 Local Government Briefing Three Waters Reform Programme and the separation of Watercare Further advice 11 August 2020

Thanks Kate, those are very useful points.

Unfortunately MoF's office have decided to include the briefing in his weekend bag, so the AM is back on a fast track. I'll start pulling some thoughts together based on the below. Based on how far this goes, I can discuss with the office getting an extension until tomorrow morning.

My thoughts so far on what we want to say (not necessarily in the order of importance):

- There is not enough information yet to know whether the size of the benefits, and the time this will apply (before wider 3 waters reforms kick in), to advise whether this work is the best course of action
- It is a very large piece of work that DIA wants to progress at pace, which is likely to put pressure on 1) the overall three waters programme and 2) Treasury resources
- There are a range of options for Crown support/how to separate Watercare and Treasury needs to explore these, both with DIA/Auckland Council and separately, to understand the potential fiscal impacts for the Crown
- The paper doesn't explicitly ask Ministers to agree to this work (and this is the first briefing MoF is actually receiving on this not as a refer), so we want it to be clear what is being agreed to now (doing work to determine the 'size of the prize' vs agreeing to progress this - Recommend that MoF amend rec f in the paper to explicitly note the Oct report-back will seek Ministers' approval to continue with the work

Happy to take other suggestions of important points. If anyone thinks a Teams discussion would be useful, let me know.

Cheers,
Morgan

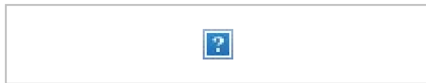
From: Kate Le Quesne [TSY] <Kate.LeQuesne@treasury.govt.nz>
Sent: Thursday, 13 August 2020 8:30 AM
To: Joseph Sant [TSY] <Joseph.Sant@treasury.govt.nz>; Oliver Martin [TSY] <Oliver.Martin@treasury.govt.nz>; Jennifer Xie [TSY] <Jennifer.Xie@treasury.govt.nz>; Matthew Collin [TSY] <Matthew.Collin@treasury.govt.nz>; Kim Martin [TSY] <Kim.Martin@treasury.govt.nz>
Cc: Morgan Dryburgh [TSY] <Morgan.Dryburgh@treasury.govt.nz>; Andrew Hagan [TSY] <Andrew.Hagan@treasury.govt.nz>
Subject: RE: Briefing: LG202000767 Local Government Briefing Three Waters Reform Programme and the separation of Watercare Further advice 11 August 2020

Hi Joe and Morgan,

Thanks for sharing this. A few points below:

- This is a large and complex work program. There is clearly a very wide spectrum of levels of support from the Crown, as well as options available to affect the separation and to independently fund Watercare. Treasury would need to have adequate resource to support this. The role itself sounds very similar to the Infrastructure Funding & Financing Government Support Package monitor role that Treasury was appointed to earlier in the year. For this role I believe we estimated around $500k per year for Treasury's costs relating to additional senior (principal) commercial staff, legal and commercial costs relating to due diligence negotiating and establishing a government support package around individual projects. (John Beaglehole and the HUG team are looking to establish this role shortly I understand, so there would likely be synergies with this).
- What costs is the 1 – 1.5mio operating expense intended to cover? What, if any cost will Auckland and Watercare be covering? Ratings agency assessments are quite expensive (I think we paid AUD$700k for first the IFF one), and Treasury will need to be able to seek legal and commercial advice independent from the 'partnership' with the council and Watercare.
- It sounds like you are intending to produce an AM, so not going to provide Minister any substantive advice in the time available. But what we as Treasury would need to flag would be the framing for thinking about future advice, and that is that we would need to undertake detailed examination related to where the risks lie under the various structural separation options, to determine the costs and benefits of the various approaches to separation and mechanisms for borrowing.

Thanks,



Kate Le Quesne | Acting Head of Funding Strategy and Engagement | **Te Tai Ōhanga – The Treasury**
New Zealand Debt Management
s9(2)(g)(ii) | Kate.LeQuesne@treasury.govt.nz
Website: https://debtmanagement.treasury.govt.nz

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From: Joseph Sant [TSY] <Joseph.Sant@treasury.govt.nz>
Sent: Wednesday, 12 August 2020 4:53 PM
To: Oliver Martin [TSY] <Oliver.Martin@treasury.govt.nz>; Jennifer Xie [TSY] <Jennifer.Xie@treasury.govt.nz>; Matthew Collin [TSY] <Matthew.Collin@treasury.govt.nz>; Kate Le Quesne [TSY] <Kate.LeQuesne@treasury.govt.nz>; Kim Martin [TSY] <Kim.Martin@treasury.govt.nz>
Cc: Morgan Dryburgh [TSY] <Morgan.Dryburgh@treasury.govt.nz>; Andrew Hagan [TSY] <Andrew.Hagan@treasury.govt.nz>

Subject: RE: Briefing: LG202000767 Local Government Briefing Three Waters Reform Programme and the separation of Watercare Further advice 11 August 2020

Matt/Kate, Kim,

Please see the attached for significant issues for DMO (and wider consideration of LGFA role for FI). Andy may know more about this and could have already discussed with you?

I note para 40: "*In light of this, officials recommend that you direct the Department and the Treasury (including the Debt Management Office) to jointly engage with Auckland Council and Watercare to establish baseline assumptions and data around the potential financial benefit. Officials and council officers will also need to jointly develop and undertake a work programme to identify the policy, commercial and legislative work needed to facilitate the separation of Watercare.*" – the paper notes that the Treasury has not been consulted

Ollie/Jennifer,

Keen to get your views on:

- What does separating Water assets the Auckland balance sheet actually do to the net debt calc? Does it impact both sides of the ledger (no asset but also no revenue) meaning the debt covenant would have to factor this in? Does the analysis in the paper stack up?
- Water companies are not determined whether they are CCOs yet or whether they are owned/underwritten by the Crown as regional companies. This seems premature and rushes through decision making that might fix the Crown to a position going forwards.
    - I note para 27 saying this is a temporary step – but lets not kid ourselves about the risk of the precedent.
    - Page 5 – is there really no precedent for a CCO borrowing from LGFA? I thought this was clarified last year, even if there hasn't been an instance to implement?
- I note the table on page 7 – Crown support for LGFA would be required?

Morgan,

Will try our best to support feedback but we may need to work with the offices to highlight how late in the day we received the report. What are your thoughts on the ability to collate feedback?

Cheers,
Joe

From: Morgan Dryburgh [TSY] <Morgan.Dryburgh@treasury.govt.nz>
Sent: Wednesday, 12 August 2020 4:23 PM
To: Joseph Sant [TSY] <Joseph.Sant@treasury.govt.nz>; Oliver Martin [TSY] <Oliver.Martin@treasury.govt.nz>; Jennifer Xie [TSY] <Jennifer.Xie@treasury.govt.nz>
Subject: FW: Briefing: LG202000767 Local Government Briefing Three Waters Reform Programme and the separation of Watercare Further advice 11 August 2020
Importance: High

Hi Joe, Ollie, Jennifer,

Apologies for sending this to you so late in the piece – I was off sick yesterday and have now only just had a chance to read through it properly.

I am intending to put up an AM to MoF on this briefing. It is likely that the office will request it by **COP tomorrow**. If possible, **I would like your input into this advice.**

Pages 5-7 in particular are likely to be of interest to you – they suggest options for a Crown guarantee of Watercare's borrowing, and suggest that borrowing could occur through DMO.

Ministers are not being asked to make decisions on those options at this point, but as with our previous AM, it will be good to give MoF our view on these options.

Would it be useful for us to set up a meeting tomorrow to discuss? My day is relatively free (so far) so I'll be focusing on this AM.

Cheers,
Morgan

From: Michael Chatterley <Michael.Chatterley@dia.govt.nz>
Sent: Tuesday, 11 August 2020 3:58 PM
To: Connie Hutchinson <Connie.Hutchinson@parliament.govt.nz>; Julia Minko <Julia.Minko@parliament.govt.nz>; Donna Boniface-Webb <Donna.Boniface-Webb@parliament.govt.nz>; ^Parliament: Daniel Cruden <Daniel.Cruden@parliament.govt.nz>
Cc: ^DIA: Allan Prangnell <allan.prangnell@dia.govt.nz>; ^DIA: Richard Ward <richard.ward@dia.govt.nz>; Morgan Dryburgh [TSY] <Morgan.Dryburgh@treasury.govt.nz>; Andrew Hagan [TSY] <Andrew.Hagan@treasury.govt.nz>; Nick Davis <Nick.Davis2@dia.govt.nz>; Ministerial Correspondence <Minicorr@dia.govt.nz>
Subject: Briefing: LG202000767 Local Government Briefing Three Waters Reform Programme and the separation of Watercare Further advice 11 August 2020

Kia ora colleagues

Please find **attached** a briefing for the Ministers of Local Government and Finance, and Minister for Urban Development.

@Daniel, Andy will be able to provide additional context, and I'm also happy to take a call.

Ngā mihi nui,

Michael Chatterley | Commercial and Financial Lead – Three Waters Reform Programme | **Central Local Government Partnerships**
Department of Internal Affairs | Te Tari Taiwhenua
s9(2)(g)(ii) | www.dia.govt.nz

Logo-test

From: Andrew Hagan [TSY]
To: Morgan Dryburgh [TSY]; Richard O"Hara [TSY]; Diego Cardona [TSY]; Alistair Birchall [TSY]; Mark Hodge [TSY]
Subject: Watercare Discussion.pptx
Date: Tuesday, 25 August 2020 9:47:36 am
Attachments: Watercare Discussion.pptx

HI everyone,
Thanks for your time yesterday. I thought it might be useful to circulate the powerpoint for reference.
Andy

TE TAI ŌHANGA
THE TREASURY

Watercare Discussion

Andrew Hagan – Acting Deputy Secretary Financial and Commercial

24 August 2020

Watercare Questions

- What financial benefits accrue to Watercare and Auckland Council due to separation?
    - Separation must occur without sale
    - Ability to borrow
        - LGFA – LGFA covenants are council only
        - Credit rating
- Is it possible to achieve financial reporting separation?
    - Control test – difficult to see the council not retaining control
    - Is financial separation needed to get the ‘benefits’?
- How do we achieve economic separation?
    - i.e. A financial backstop
    - Options / Pros/ Cons
        - Guarantee
        - Callable capital
        - Liquidity facility

2018 Numbers

Figures in 000's

	Group	Auckland Council	Watercare		Group ex Watercare
Revenue	4543	2703	641		3902
Borrowings	8832	8313	1612		8689
Total Liabilities	12660	10301	3337		10792
Liquid Assets	890	2769	0		2359
Profit			54		
Equity			6749		
			Borrowings include intra group loan worth approx. 1400		
Net Total Debt	11770	7532	3337		8433
Net Borrowings	7942	5544	1612		6330
ND/R	2.590799	2.786533481	5.2059282		2.161199385
NB/R	1.748184	2.051054384	2.5148206		1.622245003

From: Michael Chatterley
To: Morgan Dryburgh [TSY]; Andrew Hagan [TSY]
Cc: Matthew Gilbert [TSY]; ^DIA: Allan Prangnell; Ben Wells [TSY]; Mark Hodge [TSY]
Subject: Three Waters / Watercare: S&P and Moody"s discussions - File note
Date: Wednesday, 4 November 2020 3:48:26 pm
Attachments: image001.png

Hi Morgan and Andy

In the last couple of weeks DIA and its advisors have undertaken some very preliminary discussions with both S&P and Moody's on the possibility of an 'early' separation of Watercare from Auckland Council.

The conclusions are relatively straightforward and as expected around an early separation of Watercare, however there are some interesting insights for the wider reform particularly in regard to Crown support. Below are some relatively comprehensive notes from our advisors. Grateful if you could limit circulation of these notes given the preliminary nature of conversations with the agencies. Please let me know if you'd like to have a conversation about the findings thus far.

File note of discussion with S&P: Discussion around the potential rating implications of an accelerated separation of Watercare from Auckland Council

Mafic, EY and DIA representatives had a discussion with S&P to understand how different options to separate Watercare from Auckland Council (under the accelerated separation workstream) impact the ratings treatment.

Key points from discussion:

- The provision of water is considered a basic human right and, if the water entities fail, responsibility ultimately sits with Government (Central or Local) to provide services. Therefore water assets are generally considered to be on balance sheet for Government (Central or Local).
    - Requiring public ownership (a bottom line of the water reform programme) limits responsibility to Central or Local Government.
    - Ownership however will not be solely determinative of ratings treatment.
- Currently there is a legal framework to provide support, a track record of providing support and special relationship between Auckland Council and Watercare which shows Auckland Council can and do provide support.
    - This leads to S&P assigning an almost certain likelihood of support.
    - S&P also mentioned incentive for local politicians to intervene and examples where councils have provided support despite not being required to (eg Australian councils supporting Universities / Virgin Australia).
- The scale of the entity impacts the likelihood of support. If a council is too small to provide support (eg LGFA, Port of Tauranga) then the GRE is excluded from the council's rating assessment.
- Entities with a higher stand alone credit profile (SACP) are less likely to require support and are treated differently in S&P's assessment (eg Kāinga Ora).
    - The GRE may be treated as off balance sheet, de-weighted in the contingent liability assessment or the parent may be allowed to have a higher debt to revenue ratio (without leading to a downgrade) than would otherwise be acceptable.

- Default is considered less likely as the size of the entity and number of regions serviced increases (ie the likelihood of needing to provide support is sufficiently low that S&P would not penalise a council's rating assessment).
- Providing liquidity and borrowing support was considered more important than addressing tail risks (eg CDEM Act).
- An implicit guarantee can shift the GRE to the Crown.
- S&P noted that their GRE view can change over time. Therefore if they consider an entity off balance sheet today, that may change if S&P's assessment of the likelihood of support changes.

Implications for accelerated Watercare workstream:

- Structure 1 – The Crown can potentially be interposed between Auckland Council and Watercare to change the rating treatment. S&P's focus will be on the ability of Watercare to meet its obligations in any circumstance (not just tail risk) therefore all-encompassing Crown support is highly likely to be required.
- Structures 2 and 3 – As per above comments, S&P's focus will be on Watercare's ability to meet its obligations and the nature of the ongoing relationship with Auckland Council (and the Crown). Less focus on tail risk support (eg CDEM Act) and more on the likes of liquidity support to reduce the likelihood of broader support being required.

Implications for the wider reform programme:

- The financial strength/sustainability of the water entities is very important – A strong SACP means water entities are less likely to require support.
- Larger water entities (covering multiple regions) are considered less likely to require support and individual councils will be considered too small to be able to provide support.
- The scale of Watercare and Auckland Council will mean achieving balance sheet separation may be more challenging than with other councils when assets are amalgamated into a multi-regional water entity.
- Need to remove requirement (and mechanisms) for councils to provide support to water entities.
- If water entities remain on council balance sheet, S&P may treat as a contingent liability if the risk of needing support is lessened and therefore can de-weight the impact on a councils ratings assessment.

File note of discussion with Moody's: Discussion around the potential rating implications of an accelerated separation of Watercare from Auckland Council

Auckland Council and Mafic (as DIA representative/advisor) had a discussion with Moody's to confirm what impact, if any, an accelerated separation of Watercare ahead of the main water reform programme would result in any benefit to Auckland Council on its overall rating or give it any further headroom in the debt to revenue calculation from a Moody's perspective.

Overall conclusion:

- Moody's already excludes Watercare from its assessment of the Auckland Council overall rating and in how it calculates the debt to revenue ratio for Auckland Council.
- The primary basis for Moody's exclusion is that Watercare is considered a "self-supporting" entity when applying its ratings methodology.

Therefore, any accelerated separation of Watercare would not have an impact on Auckland Council's overall rating or its current debt to revenue ratio from a Moody's perspective.

A further, relevant, point was whether the possibility of an adverse event or failure of Watercare was viewed as a contingency by Moody's on the current rating assessment of Auckland Council. Though Moody's periodically considers downside scenarios for the purposes of assessing whether Watercare continues to be a self-supporting entity or not, Moody's confirmed there is no current contingency on the current Auckland Council rating that might be improved (or upside gained) by an accelerated separation of Watercare from Auckland Council.

There was also clear interest from Moody's in relation to the wider reform programme:

- Moody's were interested in what institutional and regulatory setting might apply to new water entities e.g., legislative change to shift the obligation to provide water services to water entities, interest in the regulatory environment (both quality and economic) that water entities might operate in.
- Moody's noted that if separated, Watercare would be assessed under a different ratings methodology which would determine its ability to raise debt at various rating levels (Not stated but implied it would as expected allow Watercare to increase its leverage while maintaining an investment grade rating). Noted that Moody's currently rate the Sydney Water Corporation and they will send through the relevant rating assessment.

Ngā mihi nui,

Michael Chatterley | Commercial and Financial Lead – Three Waters Reform Programme
Department of Internal Affairs | Te Tari Taiwhenua
s9(2)(g)(ii) | www.dia.govt.nz

Logo-test

From: Alistair Birchall [TSY]
To: Morgan Dryburgh [TSY]; Mark Hodge [TSY]; Michael Lonergan [TSY]
Subject: FW: Assumptions - Consideration for Water Assets
Date: Wednesday, 10 February 2021 3:25:22 pm
Attachments: image001.png

FYI.

From: Alistair Birchall [TSY]
Sent: Tuesday, 9 February 2021 7:00 pm
To: Scott Priestley <Scott.Priestley@dia.govt.nz>; 'Scott Priestley' <scott.priestley@mafic.co.nz>
Cc: Chris Bishop <Chris.Bishop@dia.govt.nz>
Subject: RE: Assumptions - Consideration for Water Assets

Hi Scott,

A follow-up question on incentives.

As I understand it from DIA's most recent briefing, the scale of the incentives package is framed around Crown support, estimating a benefit of 0.2-0.3% in funding costs.

On first blush, Crown support is not necessarily a benefit as against a status quo where local authorities meet higher water quality and economic regulation standards in their existing structures (given local authorities already have access to the LGFA, 60:40 insurance, and the market prices a degree of implicit Crown support). The benefits seem to be more from operating and capital / financing efficiencies. Is that fair or am missing something?

Thanks,
Alistair

From: Scott Priestley <Scott.Priestley@dia.govt.nz>
Sent: Friday, 5 February 2021 3:11 pm
To: Alistair Birchall [TSY] <Alistair.Birchall@treasury.govt.nz>; 'Scott Priestley' <scott.priestley@mafic.co.nz>
Cc: Chris Bishop <Chris.Bishop@dia.govt.nz>
Subject: RE: Assumptions - Consideration for Water Assets

Hi Alistair

I'm very happy to chat on this (and any other questions you have). My cell phone number is below

However I have also provided brief responses below in red

Ngā mihi nui,
Scotty
s9(2)(g)(ii)

From: Alistair Birchall [TSY] <Alistair.Birchall@treasury.govt.nz>
Sent: Thursday, 4 February 2021 4:06 PM
To: Scott Priestley <Scott.Priestley@dia.govt.nz>; Scott Priestley <scott.priestley@mafic.co.nz>
Cc: Chris Bishop <Chris.Bishop@dia.govt.nz>
Subject: Assumptions - Consideration for Water Assets

Hi Scott,

Thank you for your time today.

When the new WES are stood-up, they will need to provide consideration for the water assets they are transferred. Agree – noting the "incentive" portion of consideration (if paid by the WSEs) may be paid in advance of the assets being transferred through the proposed Crown loan

My question was whether:

- DIA had an assumption about the nature of the consideration (i.e. novation of water-related debt versus cash payment from WES to council). The current preference (for administration and best practice for WSE) is for cash payment however the implications for LGFA and hedging arrangements needs to be worked through. This could result in some novation (although we will try keep this to a minimum)
- If the consideration was cash, was there an assumption about how it would be raised? I.e. did we consider entities would raise debt quickly after being stood-up to meet any cash payment? There are two pieces to this:
  - **Source of capital:** We have a strong preference to leave as much flexibility as possible for where WSE can source capital from. Our current thinking is that the WSE should be able to borrow from any of banks or capital markets (domestic or international) and potentially LGFA / DMO (both to be worked through with Treasury etc). WSE will be subject to appropriate financial prudential requirements to manage risk associated with different sources of capital
  - **Administration of capital raising:** We have planned for a circa three year transition phase from the voluntary decision of Councils to participate to when the assets are transferred and the WSE practically commence operations. There will be a lot of work that is undertaken during this three year period to ensure the WSE is ready to commence operations. One of the workstreams will be treasury / finance which will effectively undertake the first capital raising for the WSE with financial close aligned to the transfer date. This process will probably commence up to a year prior to the go live date. This is relatively standard for a transaction of this nature

I am new to the Three Waters work so am trying to understand how the sequencing is proposed to work on the financial / commercial side. Happy to provide early thinking on any other items

Regards,
Alistair

Alistair Birchall| Principal Advisor | **Te Tai Ōhanga – The Treasury**
s9(2)(k) | s9(2)(g)(ii) | Email/IM: alistair.birchall@treasury.govt.nz
Visit us online at https://treasury.govt.nz/ and follow us on Twitter, LinkedIn and Instagram

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From: Andrew Hagan [TSY]
To: ^DIA: Allan Prangnell
Cc: Alistair Birchall [TSY]; Matthew Gilbert [TSY]; Mark Hodge [TSY]; Morgan Dryburgh [TSY]
Subject: RE: Redrafted email for DIA - Three Waters
Date: Wednesday, 24 February 2021 10:30:05 am

Hi Allan,

Following our discussion last Friday, I wanted to check in on where you are at in terms of providing information about developing a 'no regrets' approach to setting funding aside for Three Waters in the Budget, and to let you know that while any additional information you have prepared will be useful for us to receive, you do not need to resubmit the Budget initiative today. Sorry for the late notice on this issue – we've only just had the opportunity to engage with our budget team on the issue.

We've discussed internally how to handle Three Waters in the context of the Budget, and have agreed that we will provide MoF with a report setting out our advice on the initiative alongside the Budget materials. We intend for this advice to set out that Ministers currently have insufficient information to fully assess the costs and benefits of the reform programme, or the need for financial incentives, and that the work required to make that assessment (the strategy / success advice, RFI process, credit rating agency engagement, engagement with the sector, review of regulatory options) is in train but will not be available to Ministers until April 2021 at the earliest. The report will also provide advice on options for funding the incentive package that is ultimately decided on.

As this advice will be part of the Budget process, unfortunately we won't be able to share the report with you, but I wanted to reiterate that we are supportive of the Reform Programme and our advice is about ensuring the right incentive package is in place to give the Programme the best chance of success.

To assist you in preparing your advice to Ministers in April, I thought it would be useful to summarise some of the points around the incentive package that we made last Friday. We consider that the advice to Ministers should:

- Set out the minimum Crown spend that DIA considers is required to deliver the reforms.
- Provide a scalable and contingent set of options above that minimum. The driver of the higher spend options will be the need to get local authorities to commit to the reforms, so the strategy / success advice should provide a view on how we test and calibrate that level (please note that this does not imply a need for individual negotiations with local authorities).
- Link decisions around the financial incentive to the reform timetable. For example, are decisions about the level of the financial incentive made at the same time as the choice to retain the voluntary approach? We agree with your assessment that a mandatory approach should not necessarily be seen as being predominantly made for fiscal reasons. A mandatory approach may nonetheless be (i) a way of avoiding a subset of local authorities dragging out the process to try and bid up the Crown support package at the margins, and (ii) a way to avoid the efficiency impact (in terms of economic regulation and capability) of having a rump of local authorities opting-out.

Be very clear as to the rationale for the structure of any package. Under the current proposal Crown support is being provided through a concessional loan. We think it would be useful to explain why the loan is required, and why it needs to be concessional. We can see the potential case for a loan from a timing perspective (allowing local authorities access to funds in advance of water service entities being established) but it is less clear why it should be concessional. The substantive value being received comes from the water service authorities, and if the argument is that having the Crown involved provides a perception of support, we think the current proposal risks being too cute (versus simply paying a grant towards a portion of transition costs). We do not see the funding and financing of the UFB roll-out (referenced in a previous meeting) as a relevant comparator.

I trust the above comments are helpful. Please do not hesitate to get in touch if you wish to discuss.

We have booked a catch-up meeting for next Wednesday to discuss progress and look forward to seeing you then.

Ngā mihi,
Andy

Andrew Hagan | Acting Deputy Secretary, Financial and Commercial | **Te Tai Ōhanga – The Treasury**
s9(2)(k) s9(2)(g)(ii) | Andrew.Hagan@treasury.govt.nz

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From: Alistair Birchall [TSY]
To: Morgan Dryburgh [TSY]; Mark Hodge [TSY]
Cc: Michael Lonergan [TSY]
Subject: FW: Follow-up from three waters RES/briefing this morning / Crown support option development
Date: Friday, 5 March 2021 1:50:13 pm
Attachments: Crown support optionsv3.pptx
image001.jpg

FYI team.

I will review at first instance.

From: Tim Walker <tim.walker@mafic.co.nz>
Sent: Friday, 5 March 2021 1:08 pm
To: Alistair Birchall [TSY] <Alistair.Birchall@treasury.govt.nz>
Cc: Campbell Will <campbell.will@mafic.co.nz>; ^DIA: Michael Chatterley <michael.chatterley@dia.govt.nz>
Subject: FW: Follow-up from three waters RES/briefing this morning / Crown support option development

Hi Alistair,

Following on from our discussion on the RES, we thought it would be helpful to pull together the range of potential Crown support, including those forms of support we are focussing on from a ratings agency perspective.

Just to note that the potential WSE credit rating impacts now picks up the recent NZ upgrade from S&P and the uplifts indicated in the IM from the Crown support options covered there were predicated off the previous S&P levels.

It would be good to get your perspective on both the slide attached slide pack and on the following other items:

- Type/extent of advice to MoF, to Treasury or any other processes needed to enable Crown support?
- Any other focus of Treasury in this space we should be aware of at this point in the process?

Let me know what time(s) might work for you early next week and we can circulate a meeting invite.

Cheers,

Tim

Tim Walker
Mafic Partners Limited
M s9(2)(g)(ii)

From: Tim Walker

Sent: Wednesday, 3 March 2021 1:21 PM
To: Alistair Birchall [TSY] <Alistair.Birchall@treasury.govt.nz>
Subject: Re: Follow-up from three waters RES/briefing this morning

At this point, local authority influence in the governance structure, economic regulation, charging mechanisms and security over borrowings.

On 3/03/2021, at 1:17 PM, Alistair Birchall [TSY] <Alistair.Birchall@treasury.govt.nz> wrote:

Thanks Tim – sounds good.

What have been the major areas of focus for S&P?

From: Tim Walker <tim.walker@mafic.co.nz>
Sent: Tuesday, 2 March 2021 8:59 am
To: Alistair Birchall [TSY] <Alistair.Birchall@treasury.govt.nz>
Subject: RE: Follow-up from three waters RES/briefing this morning

Hi Alistair,

Thanks for your email.

To update you:

- We have had kick-off calls and have been answering ad hoc questions received from S&P over the last couple of weeks. There have been no material questions to date on aspects of the RES that Treasury is interested in.
- I understand that the S&P team has also been busy with the recent assessment of the NZ sovereign rating (ultimately resulting in the ratings upgrade last week).
- The S&P team is still targeting mid-March for reverting with feedback so we expect that pre and post-RES calls will be occurring in the week of 15 March. However, we are still pushing S&P to confirm a time/date. We will update you when we have more information on this front.

Happy to discuss at any time.

Regards,

Tim

<image002.jpg> **Tim Walker**
Mafic Partners Limited
M: s9(2)(g)(ii)

From: Alistair Birchall [TSY] <Alistair.Birchall@treasury.govt.nz>
Sent: Monday, 1 March 2021 12:33 PM
To: Tim Walker <tim.walker@mafic.co.nz>
Subject: RE: Follow-up from three waters RES/briefing this morning

Hi Tim,

I am checking in on our potential engagement with the RES process.

Do you have indicative timings for the last couple of items:

- "DIA/Mafic to feed back to Treasury any issues being raised by S&P over the course of the RES process
- Treasury to be involved in both the pre-RES and post-RES calls with S&P.
  - The pre-RES call is usually undertaken by S&P to run through their likely RES conclusions immediately prior to S&P presenting to their internal ratings/RES committee.
  - The post-RES call is undertaken by S&P to run through the RES conclusions that have been formally approved by their internal ratings/RES committee."

Thanks,
Alistair

<image006.png>

Alistair Birchall | Manager, Capital Markets Policy | **Te Tai Ōhanga – The Treasury**
s9(2)(k) | s9(2)(g)(ii) | Email/IM:
alistair.birchall@treasury.govt.nz
Visit us online at https://treasury.govt.nz/ and follow us on Twitter, LinkedIn and Instagram

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From: Tim Walker <tim.walker@mafic.co.nz>
Sent: Wednesday, 27 January 2021 2:58 pm
To: Alistair Birchall [TSY] <Alistair.Birchall@treasury.govt.nz>
Cc: ^DIA: Michael Chatterley <michael.chatterley@dia.govt.nz>; Joseph Sant [TSY] <Joseph.Sant@treasury.govt.nz>; Matthew Collin [TSY] <Matthew.Collin@treasury.govt.nz>; Morgan Dryburgh [TSY] <Morgan.Dryburgh@treasury.govt.nz>; Scott Priestley <Scott.Priestley@dia.govt.nz>; Campbell Will <campbell.will@mafic.co.nz>
Subject: Follow-up from three waters RES/briefing this morning

Hi Alistair,

Good to talk on the call earlier today.

There were a couple of action items for me following on from the call:

1. **Specific areas of IM for Treasury's review/attention**

The front end/system and WSE overview section (Section 1) is helpful for context to the reform programme but others will be reviewing from a content perspective.

However, the areas of the Three Waters IM that I think it would be good to look at specifically are:

- Section 3 (Scenarios for RES)
- Section 6 (Base Case Scenario), in particular the summary of the Base Case and GRE assessment (linking through to Section 7.6)
- Section 7.6 (GRE assessment/Central Government Support
- Section 8 (Impacted parties), in particular the analysis of the Crown and LGFA position
- Section 9.5 (Ownership structure variant), noting that elaboration and supporting analysis of this section (if any) is to be inserted once comments received from reviewers on the Base Case

Other reviewers are passing any comments back by end of the week (Friday COB) so it would be good to touch base on any initial impressions on Friday and we can discuss further review and comments then. Let me know when would suit you for a discussion on Friday morning.

2. **Outline an approach whereby Treasury could be meaningfully involved in the RES process**

I have spoken to DIA post the call and there is support for the process I ran through when we spoke, specifically:

- Treasury to receive material work and correspondence around the RES process e.g., IM, advice from S&P
- DIA/Mafic to feed back to Treasury any issues being raised by S&P over the course of the RES process
- Treasury to be involved in both the pre-RES and post-RES calls with S&P.
  - The pre-RES call is usually undertaken by S&P to run through their likely RES conclusions immediately prior to S&P presenting to their internal ratings/RES committee.
  - The post-RES call is undertaken by S&P to run through the RES conclusions that have been formally approved by their internal ratings/RES committee.

I look forward to working with you.

Cheers,

Tim

<image007.jpg> **Tim Walker**
Mafic Partners Limited
s9(2)(k)

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Crown support options for water service entities

- As part of the three waters reform programme we are investigating Crown support options for the new Water Service Entities (WSEs).
- Key considerations include:
    - Ensuring there is balance sheet separation from Councils
    - Balancing risk to Crown (eg natural disaster, tail risks)
    - Recognising likely Crown response in event of distress
    - Improving financial outcomes for WSE
    - Improving incentive package for Local Authorities to support reform
    - Providing avenue for WSE risk mitigation
- Given timeframes of the reform programme, it is not proposed to undertake a full review of the Crown / Local Government financing and debt arrangements. Therefore, this work is being undertaken to support three water reform rather than the wider local government sector.
- Under the status quo, water services benefit from existing Crown support to local government, including:
    - Civil Defence Emergency Management Act 2002 (CDEM Act)
    - Liquidity facility provided to the Local Government Funding Agency (LGFA)
- Extending the coverage of these support mechanisms to continue to include water services following the three water reform programme does not represent a material change to the level of support that the Crown currently provides.
- In addition, we are interested in understanding the level of appetite for a greater Crown role in supporting WSE debt.

Crown support options

Forms of Crown support currently available to local government

Extending support to capture WSEs allows water assets to continue to be covered by existing Crown support to Local Government

Option	Codify CDEM	Liquidity facility
Description	• Legislative amendment to extend the CDEM arrangement to apply to WSEs, such that it continues to apply to three water assets once the assets are transferred to the water entities from local authorities	• A Crown liquidity facility that can be accessed if certain trigger events occur • WSE could make an annual payment to the Crown for the liquidity facility • Note: The LGFA has a Crown liquidity facility but the Crown does not guarantee obligations of either LGFA or council members
Repercussions for Crown	• Similar to status quo, transferring arrangement to WSE reflects transfer of assets (ie was LG, now WSE) • Water assets (and debt) expected to increase (purpose of reform is to enable investment)	• Do not know what will happen to existing LGFA facility, impact may be neutral if LGFA facility reduces
Impact on WSE borrowing / leverage	• Reinforces that it is Central Government that has the prominent link to the WSE and will be the most willing and able to support in a time of stress (rather than local authorities) • Assume high l kelihood of support under GRE methodology • We expect that S&P will want to see CDEM support for WSE to achieve B/S separation from local authorities	• Similar to LGFA, S&P to uplift WSE's credit rating • Assume extremely high likelihood of support under GRE methodology • We are testing with S&P whether the presence of a liquidity facility is required for WSE to achieve B/S separation from local authorities
Potential WSE credit rating	A	AA+
Reduction in financing costs[1]	75 bps	130 bps

[1] Reflects difference in financing costs relative to BBB (the WSEs stand alone credit profile)

Current state

Water services benefit from the CDEM Act and the LGFA's Crown liquidity facility through local government ownership.

Future state

Legislative amendment to extend the CDEM Act arrangements to WSEs - provides certainty to the WSEs in the case of a natural disaster.

Liquidity facility provided to WSEs (similar to facility provided to LGFA)

Rating agency treatment

Although there is a perception of an implicit guarantee for local government debt due to common interests of citizen wellbeing, there is no formal arrangement in place and the Crown is not obliged to bail out/provide support in relation to local government debt

Crown support options currently not available to local government

Is there appetite for the Crown to have a greater role in water entity debt?

Option	Debt Management Office on lending	Other form of support

Description	• WSE to access DMO for funding
	• Kainga Ora is an example of an entity benefiting from access to the DMO– S&P consider Kainga Ora to have exceptional access to external liquidity
		• For example:
		  • Central Government to guarantee (either in full or part) obligations of WSE
		  • Specific event driven guarantees

Repercussions for Crown	• DMO lending risks setting a precedent • DMO lending is included in core crown debt • Water assets and debt will increase • Greater risk to Crown if WSE defaults	• Risks setting a precedent • Other risks (depending on indemnity) • We expect these forms of support to require significant Crown control over the water entity
Impact on WSE borrowing / leverage	• Results in improved liquidity assessment • Potential to maintain higher leverage for the same credit rating • Assume almost certain support under GRE methodology • We are not testing this with S&P currently but expect that DMO lending to WSE would achieve B/S separation from local authorities	• Would likely result in S&P aligning the WSE's credit rating with the Crown • Assume a range of extremely high likelihood of/almost certain support under GRE methodology for these forms of support, l kely resulting in WSE achieving B/S separation from local authorities
Potential WSE credit rating	AAA	AA+ to AAA
Reduction in financing costs[1]	150 bps	130 - 150 bps

[1] Reflects difference in financing costs relative to BBB (the WSEs stand alone credit profile)

Current state

These options are not available to local government under current arrangements

Future state

We understand that work is being undertaken to test appetite for a greater Crown role in local government debt.

It is important to note that these options represent a substantial change in the Crown's signalled level of support for the local government sector.

These options are likely to have fiscal and balance sheet implications that will need further consideration.

From: Alistair Birchall [TSY]
To: Morgan Dryburgh [TSY]; Mark Hodge [TSY]
Subject: FW: Follow-up from three waters RES/briefing this morning / Crown support option development
Date: Tuesday, 30 March 2021 1:00:55 pm
Attachments: image001.png
image002.jpg
image003.png
image004.jpg

FYI including timing on the pre-RES call.

I will attend and update.

From: Tim Walker <tim.walker@mafic.co.nz>
Sent: Tuesday 30 March 2021 12 15 pm
To: Alistair Birchall [TSY] <Alistair.Birchall@treasury.govt.nz>
Cc: Campbell Will <campbell.will@mafic.co.nz>; ^DIA Michael Chatterley <michael.chatterley@dia.govt.nz>
Subject: RE Follow-up from three waters RES/briefing this morning / Crown support option development

Hi Alistair

Apologies for the delayed response. I was away for much of last week.

Thanks very much for the update on NEMA and the process you intend to follow in relation to MoF briefings.

On S&P we are looking to schedule a call on Thursday with S&P for the pre-RES committee call. It would be good if you were on that call (but if we could keep it to you that would be great as S&P usually wants to keep numbers tight on feedback prior to them going to committee.

S&P yet to revert with a time for that call but will let you know when they do.

In relation to your other questions set out below is a summary of the 'informal feedback received from S&P most recently. We expect that to be confirmed in the pre-RES call but will have to see.

"**Council scenarios (GRE assessment)**

- Under scenarios 1 (Base Case) 2 (Low LA influence) 4 (Higher Crown Support) and 6 (13 entity system) the GRE assessment is currently looking like

  (i) Importance of WSE to Local Government Very Important
  (ii) Link between WSE and Local Government Limited
  (iii) Overall assessment of Moderately High.

- Under scenario 3 (High LA influence)

  (i) Importance of WSE to Local Government Very Important
  (ii) Link between WSE and Local Government Very Strong OR Strong
  (iii) Overall assessment of Very High OR High.

- Under scenario 5

  - With small shareholding local authority as per scenarios 1 2 4 and 6 above.
  - With larger shareholding local authority

    (i) Importance of WSE to Local Government Very Important
    (ii) Link between WSE and Local Government Very Strong OR Strong
    (iii) Overall assessment of Very high OR High.

Goes without saying that the link between WSE and Local Government is assessed as such because of stronger likelihood of support from Central Government.

S&P probably looking at removing water infrastructure from balance sheets. So revenues expenses and debt pulled out of local councils. Only difference is that scenario 3 possibly different because the likelihood of support is potentially high. Larger shareholding also on the cusp. The outcome for those scenarios is that the overall assessment might be either status quo retained or liabilities assessed as being contingent liabilities.

When queried Anthony noted he was feeling fairly comfortable about off balance sheet. If these are investment grade entities (and he was hinting that this is how he saw them) then Local Government support/link needs to be Very Strong or Integral for debt to remain on balance sheet and given analysis above that is not the case. The Crown/Central Government is considered as standing in front in all scenarios except for Scenario 3 and potentially the larger shareholding council in Scenario 5.

Sovereign

Probably treat WSE debt as a contingent liability for Crown. Noted that plenty of headroom in the current rating assessment as net debt + contingent liabilities needs to be over 60% and currently at 37%.

May actually have a small net benefit to sovereign rating.

Scenario 1 & 4 – confirmed very little impact on sovereign rating.

LGFA

Probably similar assessment for LGFA as for Sovereign.

s9(2)(b)(ii)

May have some rating implications. Currently at bottom end of the ratings assessment already. Lesser room in the ratings to deal. Removing the water infra isn t improving the ratios as much as would have thought. Debt levels a bit lower. Operating deficits feel more entrenched than higher debt levels.

s6(b)(ii)

Might be some headroom in the ratings currently so likely to be unchanged.

Overall – was at pains to point out that individual council circumstances can affect the analysis materially.

Timing for S&P

Internal GRE assessments ticked off by Tuesday before Easter. Had to split this over four different committees.

Should have us official feedback on Rating officially by 1 April but we can get further feedback along the lines of the above to inform Cabinet Paper as it comes together."

In respect of the above I find it s often helpful to refer to the diagram below

Cheers

Tim

Tim Walker
Mafic Partners Limited
s9(2)(k)

From: Alistair Birchall [TSY] <Alistair.Birchall@treasury.govt.nz>
Sent: Thursday 25 March 2021 2 11 PM
To: Tim Walker <tim.walker@mafic.co.nz>
Cc: Campbell Will <campbell.will@mafic.co.nz>; ^DIA Michael Chatterley <michael.chatterley@dia.govt.nz>
Subject: RE Follow-up from three waters RES/briefing this morning / Crown support option development

Hi Tim

Thank you for your time earlier.

Two quick follow-ups
- We have contacted NEMA and are trying to prompt engagement from them on risk-sharing arrangements including any potential changes to the 60 40.
- In terms of advice to the MoF we will cover that off once we get closer to Cabinet decisions on Three Waters. As a general rule we handle as follows
  - MoF will see advice on the specific topic for example a DIA briefing or joint briefing on Three Waters.
  - MoF will receive a separate briefing relating to any Public Finance Act issues (such as the provision of Crown support). The role of that separate advice is to allow the Minister to focus solely on the particular financial management issue at hand (efficiency of the proposed approach precedent impact and so on). In this case engagement with LGFA will potentially be important. While these briefings are often provide solely to MoF we don t intend them to generate any surprises for DIA. We will be clear as we can on our views about Crown support so feel free to test us further if needed.

In terms of RES engagement where are you at in the process and did you have any updates that might be of relevance to the Treasury? How far away are you from the pre and post RES calls?

I would be keen to understand the broad nature of the feedback received from S&P (not just Crown support topics).

In addition I note that the draft Steering Committee slides included the comment that there was "Potential for some WSE debt to be treated as a contingent liability by S&P". What were S&P seeing as the likely scale and nature of that contingent liability? (for example was it related to residual risk around 60 40 or was it anticipating implicit Crown support in event of financial distress). Was that limited to a subset of the scenarios?

Regards
Alistair

Alistair Birchall | Manager Capital Markets Policy | **Te Tai Ōhanga – The Treasury**
s9(2)(k) s9(2)(g)(ii) | Email/IM alistair.birchall@treasury.govt.nz
Visit us online at https //treasury.govt.nz/ and follow us on Twitter LinkedIn and Instagram

From: Tim Walker <tim.walker@mafic.co.nz>
Sent: Friday 5 March 2021 1 08 pm
To: Alistair Birchall [TSY] <Alistair.Birchall@treasury.govt.nz>
Cc: Campbell Will <campbell.will@mafic.co.nz>; ^DIA Michael Chatterley <michael.chatterley@dia.govt.nz>
Subject: FW Follow-up from three waters RES/briefing this morning / Crown support option development

Hi Alistair

Following on from our discussion on the RES we thought it would be helpful to pull together the range of potential Crown support including those forms of support we are focussing on from a ratings agency perspective.

Just to note that the potential WSE credit rating impacts now picks up the recent NZ upgrade from S&P and the uplifts indicated in the IM from the Crown support options covered there were predicated off the previous S&P levels.

It would be good to get your perspective on both the slide attached slide pack and on the following other items

- Type/extent of advice to MoF to Treasury or any other processes needed to enable Crown support?
- Any other focus of Treasury in this space we should be aware of at this point in the process?

Let me know what time(s) might work for you early next week and we can circulate a meeting invite.

Cheers

Tim

Tim Walker
Mafic Partners Limited
s9(2)(g)

From: Tim Walker

Sent: Wednesday 3 March 2021 1 21 PM
To: Alistair Birchall [TSY] <Alistair.Birchall@treasury.govt.nz>
Subject: Re Follow-up from three waters RES/briefing this morning

At this point local authority influence in the governance structure economic regulation charging mechanisms and security over borrowings.

On 3/03/2021 at 1 17 PM Alistair Birchall [TSY] <Alistair.Birchall@treasury.govt.nz> wrote

Thanks Tim – sounds good.

What have been the major areas of focus for S&P?

From: Tim Walker <tim walker@mafic co nz>
Sent: Tuesday 2 March 2021 8 59 am
To: Alistair Birchall [TSY] <Alistair.Birchall@treasury.govt.nz>
Subject: RE Follow-up from three waters RES/briefing this morning

Hi Alistair

Thanks for your email.

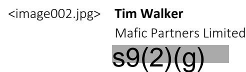
To update you

- We have had kick-off calls and have been answering ad hoc questions received from S&P over the last couple of weeks. There have been no material questions to date on aspects of the RES that Treasury is interested in.
- I understand that the S&P team has also been busy with the recent assessment of the NZ sovereign rating (ultimately resulting in the ratings upgrade last week).
- The S&P team is still targeting mid-March for reverting with feedback so we expect that pre and post-RES calls will be occurring in the week of 15 March. However we are still pushing S&P to confirm a time/date. We will update you when we have more information on this front.

Happy to discuss at any time.

Regards

Tim

<image002.jpg> **Tim Walker**

Mafic Partners Limited
s9(2)(g)

From: Alistair Birchall [TSY] <Alistair.Birchall@treasury.govt.nz>
Sent: Monday 1 March 2021 12 33 PM
To: Tim Walker <tim.walker@mafic.co.nz>
Subject: RE Follow-up from three waters RES/briefing this morning

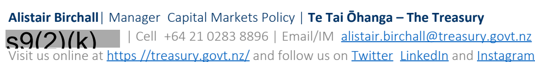
Hi Tim

I am checking in on our potential engagement with the RES process.

Do you have indicative timings for the last couple of items
- "DIA/Mafic to feed back to Treasury any issues being raised by S&P over the course of the RES process
- Treasury to be involved in both the pre-RES and post-RES calls with S&P.
  - The pre-RES call is usually undertaken by S&P to run through their likely RES conclusions immediately prior to S&P presenting to their internal ratings/RES committee.
  - The post-RES call is undertaken by S&P to run through the RES conclusions that have been formally approved by their internal ratings/RES committee."

Thanks
Alistair

<image006.png>

Alistair Birchall | Manager Capital Markets Policy | **Te Tai Ōhanga – The Treasury**

s9(2)(k) | Cell +64 21 0283 8896 | Email/IM alistair.birchall@treasury.govt.nz
Visit us online at https //treasury.govt.nz/ and follow us on Twitter LinkedIn and Instagram

From: Tim Walker <tim.walker@mafic.co.nz>
Sent: Wednesday 27 January 2021 2 58 pm
To: Alistair Birchall [TSY] <Alistair.Birchall@treasury.govt.nz>
Cc: ^DIA Michael Chatterley <michael chatterley@dia govt nz>; Joseph Sant [TSY] <Joseph Sant@treasury govt nz>; Matthew Collin [TSY] <Matthew Collin@treasury govt nz>; Morgan Dryburgh [TSY] <Morgan.Dryburgh@treasury.govt.nz>; Scott Priestley <Scott.Priestley@dia.govt.nz>; Campbell Will <campbell.will@mafic.co.nz>
Subject: Follow-up from three waters RES/briefing this morning

Hi Alistair

Good to talk on the call earlier today.

There were a couple of action items for me following on from the call

1. **Specific areas of IM for Treasury's review/attention**

The front end/system and WSE overview section (Section 1) is helpful for context to the reform programme but others will be reviewing from a content perspective.

However the areas of the Three Waters IM that I think it would be good to look at specifically are

- Section 3 (Scenarios for RES)
- Section 6 (Base Case Scenario) in particular the summary of the Base Case and GRE assessment (linking through to Section 7.6)
- Section 7.6 (GRE assessment/Central Government Support
- Section 8 (Impacted parties) in particular the analysis of the Crown and LGFA position
- Section 9.5 (Ownership structure variant) noting that elaboration and supporting analysis of this section (if any) is to be inserted once comments received from reviewers on the Base Case

Other reviewers are passing any comments back by end of the week (Friday COB) so it would be good to touch base on any initial impressions on Friday and we can discuss further review and comments then. Let me know when would suit you for a discussion on Friday morning.

2. **Outline an approach whereby Treasury could be meaningfully involved in the RES process**

I have spoken to DIA post the call and there is support for the process I ran through when we spoke specifically

- Treasury to receive material work and correspondence around the RES process e.g. IM advice from S&P
- DIA/Mafic to feed back to Treasury any issues being raised by S&P over the course of the RES process
- Treasury to be involved in both the pre-RES and post-RES calls with S&P.
    - The pre-RES call is usually undertaken by S&P to run through their likely RES conclusions immediately prior to S&P presenting to their internal ratings/RES committee.
    - The post-RES call is undertaken by S&P to run through the RES conclusions that have been formally approved by their internal ratings/RES committee.

I look forward to working with you.

Cheers

Tim

<image007.jpg> **Tim Walker**
Mafic Partners Limited
s9(2)(g)

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From: Michael Chatterley
To: Alistair Birchall [TSY]; Morgan Dryburgh [TSY]
Cc: Andrew Hagan [TSY]; Nick Davis; ^DIA: Allan Prangnell
Subject: RE: RES Process - S&P Letters
Date: Monday, 12 April 2021 3:55:11 pm
Attachments: image001.png
NZ DIA 3 Waters Reform RES Letter.pdf
Memo to TSY RES outcome 210412.docx

Hi Alistair

Please find attached a copy of the RES letter from S&P and a covering memo outlining the findings and highlighting potential areas of discussion (mainly the proposition of a Crown liquidity facility). I do ask that the RES letter circulation is limited, and held as commercial-in-confidence.

I have not included any modelling around the price path and supported debt, as yet – we are very happy to share, but just need to know what you're after so we can share it.

Ngā mihi nui,

Mike Chatterley

Commercial and Financial Lead - Three Waters Reform Programme
s9(2)(g)(ii)

From: Michael Chatterley
Sent: Thursday, 8 April 2021 5:45 PM
To: Alistair Birchall [TSY] <Alistair.Birchall@treasury.govt.nz>
Cc: Tim Walker <tim.walker@mafic.co.nz>
Subject: Re: RES Process - S&P Letters

Hi Alistair

There are a few models - there is ultimately a choice about the price path and what might be politically acceptable. Of course, the debt supported will be a function of revenue.

Are you after the model that was shared with S&P for the RES or a model looking at alternative price paths?

Might be worth a quick chat tomorrow morning

Cheers

Ngā mihi nui,

Michael Chatterley

Commercial and Financial Lead - Three Waters Reform Programme
s9(2)(g)(ii)

From: Alistair Birchall [TSY] <Alistair.Birchall@treasury.govt.nz>
Sent: Thursday, April 8, 2021 4:43:16 PM
To: Michael Chatterley <Michael.Chatterley@dia.govt.nz>
Cc: Tim Walker <tim.walker@mafic.co.nz>
Subject: RE: RES Process - S&P Letters

Hi Michael,

Thanks – that is no problem. When you do, would you also be able to provide your analysis around price paths and ability to support additional borrowing?

Point noted re: correspondence, and I will ensure I CC you in future.

From: Michael Chatterley <Michael.Chatterley@dia.govt.nz>
Sent: Thursday, 8 April 2021 4:34 pm
To: Alistair Birchall [TSY] <Alistair.Birchall@treasury.govt.nz>
Cc: Tim Walker <tim.walker@mafic.co.nz>
Subject: RE: RES Process - S&P Letters

Hi Alistair

Tim has passed on the below message. I only received the RES letter yesterday afternoon and have not had a chance to review it. I saw Andy at the Ministers' meeting this afternoon and said that I'd share it late today or first thing next week after I've read it myself and also briefed by executive director. Andy seemed comfortable with the approach.

Do you mind CC'ing me in on your correspondence with our consultants please? Just provides me with visibility and saves them relaying back to me.

Ngā mihi nui,

Mike Chatterley

Commercial and Financial Lead - Three Waters Reform Programme
s9(2)(g)(ii)

From: Alistair Birchall [TSY] <Alistair.Birchall@treasury.govt.nz>
Sent: Thursday, 8 April 2021 2:22 PM
To: Tim Walker <tim.walker@mafic.co.nz>
Subject: RE: RES Process - S&P Letters

Hi Tim,

Following up on the below. Would you be able to send through the S&P letters?

I am happy to agree to conditions on their use (i.e. not to be distributed broadly within the

Treasury).

Thanks,
Alistair

From: Alistair Birchall [TSY]
Sent: Wednesday, 7 April 2021 3:54 pm
To: Tim Walker <tim.walker@mafic.co.nz>
Cc: Campbell Will <campbell.will@mafic.co.nz>; ^DIA: Michael Chatterley <michael.chatterley@dia.govt.nz>
Subject: RES Process - S&P Letters

Hi Tim,

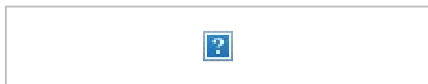
Thank you for the summary today.

Would you be able to send through the S&P letters? I was not able to make the call with Anthony Walker yesterday – if there was anything of interest from that call not covered in the letters could you please summarise?

I will start prepping an internal note and working with the team here on a timeline for any separate advice that we will provide to the MoF regarding Crown support. Once agreed we can share that timeline with you and also test any key points we will highlight in our advice.

Subject to receiving the S&P letters I have all the information I need, with one exception. I am also keen to see DIA's analysis around price paths and the ability of the new entities to support additional borrowing (including for incentives). Morgan noted our interest in this information today. Michael – can you and Scott send through when it is ready? As part of that I would be keen to see the modelling so I can understand your key inputs and assumptions.

Regards,
Alistair



Alistair Birchall | Manager, Capital Markets Policy | **Te Tai Ōhanga – The Treasury**
s9(2)(k) | s9(2)(g)(ii) | Email/IM: alistair.birchall@treasury.govt.nz
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Te Tari Taiwhenua
Department of Internal Affairs

Memo

To	Alistair Birchall (Capital Markets Policy, The Treasury); Morgan Dryburgh (NIU, The Treasury)
Cc	Andy Hagan (The Treasury)
From	Three Waters Reform Programme, DIA
Date	12 April 2021
Subject	S&P Ratings Engagement Service outcome

Background

1. In June 2020, Cabinet agreed 'in principle' that new entities – if established – would be asset-owning and have separation from local authorities to ensure the ability to borrow on similar terms to other utilities. The paper also acknowledged that independent, competency-based governance of water services entities is critical to achieve the governance and organisational capability improvements that will be required to realise the benefits from reform.

2. Achieving balance sheet separation and appropriate credit worthiness are crucial for ensuring the entities' long-term financial sustainability and the ability to fund current and future investment needs.

3. We have interacted with S&P to explore several potential structural, system and entity design options to achieve the objectives of the Reform Programme.

4. Specifically, S&P was asked to consider:

   4.1 the credit rating of entities; and

   4.2 any impact on the credit rating of the following entities resulting from the implementation of the Reform Programme:

      4.2.1 Large and small metro local authorities

      4.2.2 Provincial local authorities

      4.2.3 NZ Sovereign

      4.2.4 Local Government Funding Agency

5. The assessment by S&P of potential credit ratings associated with the Reform Programme was made across six different scenarios to ensure officials were fully informed about the implications of a number of potential structural, system and entity design choices.

6. The first, or 'Base Case', scenario is as described in the Information Memorandum – Three Waters Reform, provided to S&P in support of the RES, with entities established under statute, having a "no shareholding" ownership structure and a balance between entity autonomy and a level of input and influence by both local authorities and iwi/Māori.

7. The five other variations tested with S&P were:

   7.1 Scenario 2: Base Case, but with very low degree of Governor influence;

7.2 Scenario 3: Base Case, but with very high degree of Governor influence;

7.3 Scenario 4: Central Government support variant;

7.4 Scenario 5: ownership structure variant; and

7.5 Scenario 6: variant on the number of entities in the system.

8. A full summary of the features of each scenario and the differences compared to the Base Case are set out at in the Information Memorandum – Three Waters Reform, provided to S&P in support of the RES.

Results

9. S&P have confirmed that the 'base case' and scenarios 2, 4 and 6 will achieve balance sheet separation, resulting in S&P removing revenues, expenses and debt associated with three waters assets transferred to entities from local authorities.

10. The exception to this treatment is Scenario 3, where the level of influence over entities and the likelihood of support of entities by local authorities was assessed by S&P as being sufficiently high, with exposure to the WSEs classified as contingent liability within the debt burden assessment.

11. The same risk was present for Scenario 5.

12. The credit rating of entities has been assessed by S&P across all scenarios and is summarised below:

Table 1: Overview of the RES finding – WSE credit rating

	Business risk	Financial risk	Anchor	Modifiers	Stand-alone credit rating (SACP)	Govt support	Issuer credit rating (ICR)[1]
S1. Base case	Excellent	Aggressive	bbb	-1 Financial policy	bbb-	High	A-
S2. Low degree of Governor influence	Excellent	Aggressive	bbb	-1 Financial policy	bbb-	High	A-
S3. Very high degree of Governor influence	Excellent	Aggressive	bbb	-1 Financial policy	bbb-	High	A-
S4. Central Government support variant	Excellent	Aggressive	bbb	-1 Financial policy	bbb-	Extremely high	AA+
S5. Ownership structure variant	Excellent	Aggressive	bbb	-1 Financial policy	bbb-	High	A-
S6. Number of entities variant (13 entities)	Strong	Aggressive	bb+	-1 Financial policy +1 Comparable analysis	bb+	High	A-

Table 2: Overview of RES findings – Local Authority credit rating impact

	s9(2)(b)(ii)		
Current rating	**A+ / Stable**	**AA / Stable**	**AA+ / Stable**
S1. Base case	A+ / Negative	No change	No change
S2. Low degree of Governor influence	A+ / Negative	No change	No change

	s9(2)(b)(ii)		
S3. Very high degree of Governor influence	A / Stable	No change	No change
S4. Central Government support variant	A+ / Negative	No change	No change
S5. Ownership structure variant	A+ / Negative	No change	No change
S6. Number of entities variant (13 entities)	A+ / Negative	No change	No change

13. An investment grade stand-alone credit rating of bbb- reflects an excellent business risk profile but an entity that needs to access sufficient borrowings to meet its infrastructure and service obligations. Scenario 6 had a lower stand-alone credit rating given the smaller size of entities in the 13-entity scenario.
14. The final credit rating of entities reflects the link to, and importance of support from, the Crown, resulting in an increase to the final credit rating to A- for Scenarios 1, 2, 3, 5 and 6.
15. S&P considered local councils to have significant oversight over an entity in Scenario 3 and as such, there could be a likelihood of some political interference in setting tariffs to balance affordability to the end consumer. This could have an impact on both the business risk profile as well as the financial risk profile of an entity.
16. Under Scenario 3, S&P continue to exclude revenues, expenditure and debt of an entity from the Local Authorities financial forecasts. However, S&P lower the debt burden assessment to reflect the higher contingent liabilities compared to the other scenarios.
17. Contingent liabilities were determined to be higher because of the 'very high' likelihood of Local Authorities providing extraordinary support to the WSE during a stress scenario, particularly given the strong political involvement and much higher degree of influence and control. The amount of headroom for the relevant local authority will determine whether this treatment results in a rating downgrade.
18. Under scenario 5, S&P considered there to be a higher likelihood of Local Authorities with a large shareholding providing financial support during a stress scenario. There is a risk that this results in a similar contingent liability treatment to scenario 3.
19. Scenario 4, with increased Crown support in the form of a $500 million liquidity facility similar to that made available to LGFA, resulted in a material uplift to AA+, meaning that entities in that scenario will be able to achieve a very competitive cost of capital at a higher state of leverage. The spread between A- and AA+ could result in ~60 bps difference in borrowing costs, and with approximately $7b of starting debt, this reflects $42m per annum in additional borrowing costs.
20. S&P considered the liquidity facility provides more explicit Crown support for entities, as there is immediately available financial support that the WSEs can access in most circumstances (i.e. does not require legislation or the usual public benefit test in the Public Finance Act 1989).

21. It is important for the success of the reform that entities have the same (or higher) credit rating as councils to ensure borrowing costs are not higher under reform, and avoid public perceptions of financially weaker entities. The majority of Local Authorities currently maintain credit ratings of AA and AA+.

22. S&P have confirmed that the transfer of three waters assets to entities will not have any negative implications for its assessment of the current sovereign credit rating of New Zealand or that of the LGFA, with both continuing to be affirmed at AAA and AA+ in respect of local and foreign currency respectively. This assessment applies in all scenarios, including Scenario 4 where there is a higher degree of Crown support contemplated.

23. The assessment in respect of the sovereign rating is based on the size of the entities' borrowings, the likely investment grade stand-alone credit profile of the entities, and that all water-related debt associated with the entities is currently captured within New Zealand's general government net debt forecasts. S&P removes the entity related debt from their general government net debt forecasts and includes it within the contingent liability assessment in the debt burden assessment of the rating.

24. S&P has indicated that there could be some upside to the fiscal assessment of the sovereign if the change in general government net debt per year improves as a result of the local council sector's aggregated borrowing needs (as a percentage of GDP) being lower.

25. In relation to the potential impacts of the transfer of water assets from local authorities, the impacts will largely be a function of the individual position of each local authority.

26. As a general rule, we have observed that three waters assets are more highly leveraged than other parts of the council and a transfer of three waters assets will improve a local authority's debt to revenue ratio. However, there will be an offsetting decrease in operating revenue. As a result, S&P has noted that the current ratings of local authorities will be largely unchanged but will depend on the financial position of the relevant local authority and the headroom in their current rating. Further analysis by officials is required to ascertain impacts on the various local authorities currently rated by S&P.

Summary results

27. In summary, the water services entities achieve an investment grade stand-alone credit rating of bbb- (except for Scenario 6 given the smaller size of the entities). The final credit rating of entities reflects the likelihood of support from the Crown, resulting in an increase to the final credit rating to A- for Scenarios 1, 2, 3 5 and 6. The transfer of three waters assets to separate entities will not have any negative implications for S&P's assessment of the current sovereign credit rating of New Zealand or that of the LGFA (under any scenario).

28. Governors having a high degree of influence or Local Authorities having large shareholding ownership (Scenarios 3 and 5) restrict balance sheet separation, with S&P treating the water services entities as a contingent liability, lowering the debt burden assessment. These scenarios may negatively impact the credit ratings of Local Authorities and, if a Local Authority did provide support to an entity in a time of stress, then S&P would be likely to include revenues, expenses and debt associated with three waters assets back into their assessment.

29. Under scenario 4, S&P have indicated that a liquidity facility (provided by the Crown to water services entities) is required for water services entities to achieve a credit rating equal to Local Authorities. This equivalent to a five-notch ICR upgrade from A+ to AA+. The Crown providing a liquidity facility has no impact on the Crown's credit rating. We also understand that this would not impact the Crown's core debt metrics. There is a clear and material benefit (both financial and perception) of the Crown providing a liquidity facility to the water services entities.

Next steps

30. It would be good to engage with The Treasury as soon as possible on:

    30.1 the provision by the Crown of a liquidity facility to entities; and

    30.2 the type and extent of advice required (joint or singular), both to internal stakeholders within The Treasury and to the Minister of Finance (and other Ministers) in order to facilitate the provision of a liquidity facility.

From: Michael Chatterley
To: Alistair Birchall [TSY]; Tim Walker
Cc: Campbell Will; Morgan Dryburgh [TSY]
Subject: RE: RES Process - S&P Letters
Date: Friday, 16 April 2021 10:10:12 am
Attachments: image003.png

Hi Alistair

Thanks for the observations and comments. I think we'd all benefit from a couple of hours on zoom to get through the topics – we're moving at pace, and some of this may be best picked up in a discussion. I've provided some off the cuff comments to your queries below, but we will also provide some more material to you.

I've asked Campbell to pull together the modelling which went to S&P. Reading your comments on point one, I see you're looking at the RAB and net debt so understand the conclusions you're drawing, however the S&P metrics are FFO/debt and we antipoaching skirting between the aggressive and highly leveraged bands. You've also highlighted the political economy challenges around revenue during the transition period and early years of operation. We'll get some materials to you, but it would be great to have a further conversation next week.

Regarding our views on equity, this also warrants a conversation. Three Waters Ministers (including MoF) agreed to the no shareholding model. Allowing access to equity finance would require shareholding, dividends etc and - other things being equal - increase costs to consumers. Payment of dividends in the near term runs counter to catching up on investment and introduces a significant tension between shareholder interests and customer interests (particularly in the long run - future customers / generations). It would also lead to tensions between large and small local authority owners, and reopen debate about shareholder control etc. There are also a number of objectives which we need to manage that have informed entity form. I highlight protection against privatisation and co-governance with mana-whenua.

Finally, in regard to Crown support, I agree joint advice would be great. The draft Cabinet paper will be going to Ministers on 27 April, so if we can expedite this, that would be fantastic.

Ngā mihi nui,

Mike Chatterley

Commercial and Financial Lead - Three Waters Reform Programme
s9(2)(g)(ii)

From: Alistair Birchall [TSY] <Alistair.Birchall@treasury.govt.nz>
Sent: Thursday, 15 April 2021 1:58 PM
To: Tim Walker <tim.walker@mafic.co.nz>; Michael Chatterley <Michael.Chatterley@dia.govt.nz>
Cc: Campbell Will <campbell.will@mafic.co.nz>; Morgan Dryburgh <morgan.dryburgh@treasury.govt.nz>
Subject: RE: RES Process - S&P Letters

Hi Tim and Michael,

Thank you for preparing your note and sending the RES letter through – much appreciated.

I have noted my key areas of interest below and some potential actions below. Happy to discuss further if my thoughts are not clear.

-

1. Analysis around impact of incentives on WSEs. The draft Cabinet paper states that: "Current analysis indicates that funding more than $1 billion to $2 billion of financial incentives through the water service entities (in addition to the financial consideration they will likely pay for assets at the point of transfer) could potentially result in limited or no benefit being delivered in the first five years following reform". I wanted to understand how this analysis had been arrived at, and particularly how "benefits" were being defined. I understand that on a "water debt" approach, starting WSE balance sheets might include assets of ~$64bn and debt of $6bn. The RAB that is ultimately settled on by the economic regulator may not fully align with that $64bn figure, but we can assume it will be a large number in that broad ballpark. WSEs will be able to make a return against that RAB. In that context the starting balance sheets for the WSEs will be lightly geared, and I was interested to understand why an additional $2bn would have such an impact on benefits. I am not doubting the modelling, but while any increase in debt will have some increase in cost for debt repayment it seems a counterintuitive result as there is presumably ample capacity for WSEs to undertake capex (plus WSEs beginning to capture efficiency gains). I suspect part of the reason relates to assumptions around price paths and capex and how they are being modelled. Potential price paths seem a key area of tension for the reforms as scale and financing efficiencies will only do some of the lifting to close the investment deficit.

   Action: would it be possible to see the modelling you have done? I will then be in a position to ask any questions I might have, and would see this as preferable to having you prepare slides – I am looking to drill down to a slightly higher level of detail than what was shown on the previous pack I have seen.

2. What are your views on S&Ps feedback regarding the WSEs having access to equity? S&P treated scenario 1 and scenario 5 the same, and the use of a shareholding model did not have an impact on balance sheet separation. S&P also noted that "[W]e believe that lack of access to equity capital is one of the major weaknesses for the WSE and constrains it financial profile". This feedback would seem to be an argument for considering both access to equity and a shareholding model in more detail. Relatedly, we haven't really seen much analysis around the case for removing dividends – it would be useful for the case for that choice to be more fully made out. In the near and medium terms dividends are not likely to be overly relevant, but they remain a good discipline on the WSEs to use their capital efficiently. I appreciate the Minister likely has preferences here, but in reading the Cabinet paper I found the advantages ascribed to statutory body corporates were more reflective of choices around objectives than entity form (for example there is no specific barrier to statutory body corporates paying dividends – and entities like the Reserve Bank regularly do so). Use of a shareholding structure and dividends may also open up some new options for Ministers in relation to incentives.

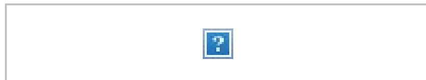
   Action: could we have a discussion on access to equity and dividends? I understand that

InfraComm also have a view that this issue warrants further exploration, and may wish to participate.

3. Crown support measures. S&P feedback showed a significant benefit from the provision of a liquidity facility. We would consider that S&P will primarily be placing weight on the signalling value from indicating a willingness to consider support (there would be no specific barrier to the Crown lending to WSEs under the PFA, and the provision in the Local Government Borrowing Act seen as the relevant comparator both (i) requires the Minister to apply the same public benefit test as the Public Finance Act 1989 (PFA), and is (ii) more restrictive than the Minister's standing powers under the PFA). Ministers are likely to find this implicitly attractive, but before committing to this form of Crown support in a Cabinet paper we consider it would be useful to put some advice relating to this specific point to the MoF, given WSEs will operate in a slightly different context than the LGFA. It would also be good to engage collectively with the LGFA themselves. We can work up our own thoughts to share with you but it would also be good to understand what engagement you have had with LGFA to date (and whether a further discussion is warranted).

Action: discuss engagement to date with LGFA, and potential timing of a paper to MoF on Crown support.

Regards,
Alistair



Alistair Birchall | Manager, Capital Markets Policy | **Te Tai Ōhanga – The Treasury**
s9(2)(k) | s9(2)(g)(ii) | Email/IM: alistair.birchall@treasury.govt.nz
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From: Tim Walker <tim.walker@mafic.co.nz>
Sent: Tuesday, 13 April 2021 10:15 am
To: Alistair Birchall [TSY] <Alistair.Birchall@treasury.govt.nz>; ^DIA: Michael Chatterley <michael.chatterley@dia.govt.nz>
Cc: Campbell Will <campbell.will@mafic.co.nz>
Subject: RE: RES Process - S&P Letters

Sounds good Alistair. Send something through and we can go from there.

From: Alistair Birchall [TSY] <Alistair.Birchall@treasury.govt.nz>
Sent: Tuesday, 13 April 2021 10:14 AM
To: Tim Walker <tim.walker@mafic.co.nz>; ^DIA: Michael Chatterley <michael.chatterley@dia.govt.nz>
Cc: Campbell Will <campbell.will@mafic.co.nz>
Subject: RE: RES Process - S&P Letters

Thanks Tim.

Apologies, I now have a conflict at 10:30am.

What might be easiest is if I send a summary of what we are keen to see and we can go from there.

From: Tim Walker <tim.walker@mafic.co.nz>
Sent: Tuesday, 13 April 2021 7:46 am
To: ^DIA: Michael Chatterley <michael.chatterley@dia.govt.nz>
Cc: Alistair Birchall [TSY] <Alistair.Birchall@treasury.govt.nz>; Campbell Will <campbell.will@mafic.co.nz>
Subject: Re: RES Process - S&P Letters

Hi Alistair,

Happy to meet at 10.30am if that works. Shoot both Campbell and I an invite.

Cheers,

Tim

> On 13/04/2021, at 7:36 AM, Michael Chatterley <Michael.Chatterley@dia.govt.nz> wrote:
>
> Thanks Alistair
>
> I can't make those times unfortunately, but @Tim Walker / @Campbell Will, could you meet with Alistair (I just have some immovable meetings in WGN today)
>
> Ngā mihi nui,
>
> Mike Chatterley
>
> Commercial and Financial Lead - Three Waters Reform Programme
> s9(2)(g)(ii)
>
> ---
>
> **From:** Alistair Birchall [TSY] <Alistair.Birchall@treasury.govt.nz>
> **Sent:** Monday, 12 April 2021 4:20 PM
> **To:** Michael Chatterley <Michael.Chatterley@dia.govt.nz>; Morgan Dryburgh <morgan.dryburgh@treasury.govt.nz>
> **Cc:** Andrew Hagan <Andrew.Hagan@treasury.govt.nz>; Nick Davis <Nick.Davis2@dia.govt.nz>; Allan Prangnell <Allan.Prangnell@dia.govt.nz>
> **Subject:** RE: RES Process - S&P Letters
>
> Thank you Michael. Conditions on sharing are noted.

If it would be helpful I am happy to talk you through our interest in the price path and supported debt info. Either 10:30am – 11:00am or 12:30-1:00pm?

From: Michael Chatterley <Michael.Chatterley@dia.govt.nz>
Sent: Monday, 12 April 2021 3:51 pm
To: Alistair Birchall [TSY] <Alistair.Birchall@treasury.govt.nz>; Morgan Dryburgh [TSY] <Morgan.Dryburgh@treasury.govt.nz>
Cc: Andrew Hagan [TSY] <Andrew.Hagan@treasury.govt.nz>; Nick Davis <Nick.Davis2@dia.govt.nz>; ^DIA: Allan Prangnell <allan.prangnell@dia.govt.nz>
Subject: RE: RES Process - S&P Letters

Hi Alistair

Please find attached a copy of the RES letter from S&P and a covering memo outlining the findings and highlighting potential areas of discussion (mainly the proposition of a Crown liquidity facility). I do ask that the RES letter circulation is limited, and held as.

I have not included any modelling around the price path and supported debt, as yet – we are very happy to share, but just need to know what you're after so we can share it.

Ngā mihi nui,

Mike Chatterley

Commercial and Financial Lead - Three Waters Reform Programme
s9(2)(g)(ii)

From: Michael Chatterley
Sent: Thursday, 8 April 2021 5:45 PM
To: Alistair Birchall [TSY] <Alistair.Birchall@treasury.govt.nz>
Cc: Tim Walker <tim.walker@mafic.co.nz>
Subject: Re: RES Process - S&P Letters

Hi Alistair

There are a few models - there is ultimately a choice about the price path and what might be politically acceptable. Of course, the debt supported will be a function of revenue.

Are you after the model that was shared with S&P for the RES or a model looking at alternative price paths?

Might be worth a quick chat tomorrow morning

Cheers

Ngā mihi nui,

Michael Chatterley

Commercial and Financial Lead - Three Waters Reform Programme
s9(2)(g)(ii)

From: Alistair Birchall [TSY] <Alistair.Birchall@treasury.govt.nz>
Sent: Thursday, April 8, 2021 4:43:16 PM
To: Michael Chatterley <Michael.Chatterley@dia.govt.nz>
Cc: Tim Walker <tim.walker@mafic.co.nz>
Subject: RE: RES Process - S&P Letters

Hi Michael,

Thanks – that is no problem. When you do, would you also be able to provide your analysis around price paths and ability to support additional borrowing?

Point noted re: correspondence, and I will ensure I CC you in future.

From: Michael Chatterley <Michael.Chatterley@dia.govt.nz>
Sent: Thursday, 8 April 2021 4:34 pm
To: Alistair Birchall [TSY] <Alistair.Birchall@treasury.govt.nz>
Cc: Tim Walker <tim.walker@mafic.co.nz>
Subject: RE: RES Process - S&P Letters

Hi Alistair

Tim has passed on the below message. I only received the RES letter yesterday afternoon and have not had a chance to review it. I saw Andy at the Ministers' meeting this afternoon and said that I'd share it late today or first thing next week after I've read it myself and also briefed by executive director. Andy seemed comfortable with the approach.

Do you mind CC'ing me in on your correspondence with our consultants please? Just provides me with visibility and saves them relaying back to me.

Ngā mihi nui,

Mike Chatterley

Commercial and Financial Lead - Three Waters Reform Programme
s9(2)(g)(ii)

From: Alistair Birchall [TSY] <Alistair.Birchall@treasury.govt.nz>
Sent: Thursday, 8 April 2021 2:22 PM
To: Tim Walker <tim.walker@mafic.co.nz>
Subject: RE: RES Process - S&P Letters

Hi Tim,

Following up on the below. Would you be able to send through the S&P letters?

I am happy to agree to conditions on their use (i.e. not to be distributed broadly within the Treasury).

Thanks,
Alistair

From: Alistair Birchall [TSY]
Sent: Wednesday, 7 April 2021 3:54 pm
To: Tim Walker <tim.walker@mafic.co.nz>
Cc: Campbell Will <campbell.will@mafic.co.nz>; ^DIA: Michael Chatterley <michael.chatterley@dia.govt.nz>
Subject: RES Process - S&P Letters

Hi Tim,

Thank you for the summary today.

Would you be able to send through the S&P letters? I was not able to make the call with Anthony Walker yesterday – if there was anything of interest from that call not covered in the letters could you please summarise?

I will start prepping an internal note and working with the team here on a timeline for any separate advice that we will provide to the MoF regarding Crown support. Once agreed we can share that timeline with you and also test any key points we will highlight in our advice.

Subject to receiving the S&P letters I have all the information I need, with one exception. I am also keen to see DIA's analysis around price paths and the ability of the new entities to support additional borrowing (including for incentives). Morgan noted our interest in this information today. Michael – can you and Scott send through when it is ready? As part of that I would be keen to see the modelling so I can understand your key inputs and assumptions.

Regards,
Alistair

<image001.png>

Alistair Birchall | Manager, Capital Markets Policy | **Te Tai Ōhanga – The Treasury**
s9(2)(k) | s9(2)(g)(ii) | Email/IM: alistair.birchall@treasury.govt.nz
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From: Alistair Birchall [TSY]
To: Morgan Dryburgh [TSY]
Cc: Mark Hodge [TSY]; Michael Lonergan [TSY]; Andrew Hagan [TSY]
Subject: Quick Notes on DIA RES - Crown Support and Credit Ratings
Date: Tuesday, 20 April 2021 1:42:56 pm
Attachments: image001.png

Hi

Andy has sent me an invite to the session at 3:00pm.

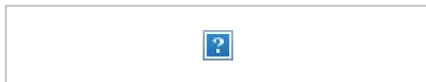
I am assembling my comments this week, but have noted the direction of travel below. In my assessment neither the draft Cabinet papers nor DIA's advice do a good job of highlighting the key judgements faced by Ministers – they dive straight into the detail. Our focus will need to be on lifting that advice up a level and making those judgements more accessible.

1. **The proposed governance structure achieves balance sheet separation in all of the six scenarios tested with S&P**. The initial case for Crown support was premised on some form of Crown step-in being needed to break that link. This means that the case for Crown support needs to rest on other rationales.
2. **S&P noted that the absence of access to equity capital weakened the SACP of the WSEs**. It may be worth testing with Ministers their willingness to further test a model that includes equity and dividends, but retains public ownership (dividends should not be seen as simply an additional cost as they are alternative to debt which requires servicing, and may have benefits in terms of financing costs and capital efficiency). [AB Note – This point is not drawn out in Michael's note. DIA's advice has been very directional on this topic and I think they will try and downplay this as an option].
3. **Ministers have a choice regarding a Crown support package similar to that currently applying to local authorities**. As this support is not required to achieve balance sheet separation, then the case is mainly that we see a policy reason to stand behind the WSEs in some circumstances. In short:
    a. The context for a facility is different than for LGFA (only LGFA has access to the facility, there are cross-guarantees, and there are alternative levers available to LGFA to reduce credit risk to the Crown that do not apply here). These should be highlighted in the advice.
    b. The liquidity facility provides a significant uplift in credit rating (with S&P mainly weighting the explicit signalling). A liquidity facility could be justified on the basis that it makes explicit a form of support the Crown would likely provide in a bad state of the world. This case for a facility is not compelling (for example we do not universally offer these type of facilities to providers of critical infrastructure), but becomes more relevant when Government policy decisions have restricted the ability of entities to access external equity (we would not offer this facility if the WSEs were privately owned). The case is also stronger given how heavily S&P weight this type of explicit commitment – but Ministers could reasonably choose not to provide one.
    c. The nature of what Ministers are committing to needs to be clearer. In our view it must be a "standby liquidity facility" (i.e. not accessible unless the WSEs lose market access, and lending on commercial terms).

   d. We would want to see consideration given to 60:40 given WSEs should have more capacity to self-insure.

4. **S&Ps ratings are indicative only – and are heavily contingent on the creation of an independent economic regulatory model that will allow for what may be sustained price rises**. Given large infrastructure deficits, financing and operating efficiencies will not be able to do all of the lifting. The WSEs will likely need a step-change in prices. If Ministers seek to limit the ability of the economic regulator to allow these increases, or load up WSEs with objectives beyond providing efficient water services they will (i) not be able to support the same level of leverage, and (ii) will not have the SACP S&P propose.
5. **Advice needs to take a more sophisticated approach to credit ratings.** In DIA's advice, paragraph 21 notes that "it is important for the success of the reform that entities have the same (or higher) credit rating as councils to ensure borrowing costs are not higher under reform, and to avoid public perceptions of financially weaker entities". This is not balanced advice and is more an issue of political saleability (particularly as it implicit recommends Crown support). Focusing on credit ratings rather than outcomes has caused problems in the local authority sector. The WSEs will gain financing efficiencies in a number of ways beyond just their credit rating – for example their ability to support much higher leverage – and are offering a very different proposition to lenders and the capital markets than local authorities. S&Ps proposed ICR of A- is investment grade and will support substantial balance sheet capacity. The case for options that might increase the ICR (such as Crown support) should be considered on their merits rather than targeting some form of credit rating relativity.

AB



Alistair Birchall | Manager, Capital Markets Policy | **Te Tai Ōhanga – The Treasury**
s9(2)(k) | s9(2)(g)(ii) | Email/IM: alistair.birchall@treasury.govt.nz
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From:	Morgan Dryburgh [TSY]
To:	Caralee McLiesh [TSY]
Cc:	Andrew Hagan [TSY]; Leilani Frew [TSY]; Alistair Birchall [TSY]; Mark Hodge [TSY]; Matthew Gilbert [TSY]; Michael Lonergan [TSY]
Subject:	Three Waters Reform Programme - additional information requested at 3PC
Date:	Friday, 28 May 2021 5:10:00 pm
Attachments:	image002.png image003.png

Hi Caralee,

As requested at 3PC this morning, please see below for further information on the amount of unfunded liabilities that the new water entities will be taking off councils, as well as some estimates of potential price rises.

DIA has reviewed this information and added to it in places where we weren't able to draw any conclusions about prices from the material that we already had.

In relation to future prices, DIA has noted:

- Current costs are not a great indicator of what costs should be as many local authorities set charges below the level of economic depreciation, which is partly why NZ has accumulated a significant three waters infrastructure deficit, and helps to explain the poor asset condition and network performance

We do not disagree with this assessment; for the reforms to be successful, prices should be allowed to rise to the level that they need to be to allow the water entities to sustainably invest in the infrastructure required. Our key point remains that Ministers should be aware of these price rises when making the decision to proceed with reform.

It is worth noting that some of the information below compares future costs under reform to the counterfactual – what prices would be if reform does not happen, but the same level of infrastructure investment occurs. In practice, without reform occurring councils are likely to continue to underinvest in water infrastructure, keeping costs low, and it is this expectation that any future price rises will be measured against in the mind of the average consumer.

Total unfunded liabilities the water entities will be taking off local authorities (this information has been taken from the Cabinet paper)

- Analysis by the Water Industry Commission for Scotland showed that significant levels of investment – in the order of $120 billion to $185 billion – will be required across the country to replace and refurbish existing infrastructure, upgrade three waters assets to meet drinking water and environmental standards, and provide for future population growth over the next 30 years. Of this amount:
  - $42 to $49 billion relates to 'catch-up' investment required to replace and refurbish the existing asset base
  - $57 to $100 billion relates to investment required to improve levels of service, including to meet new regulatory standards and respond to population growth
  - $22 to $37 billion relates to investment required to replace and refurbish the 'new' asset base introduced during the 30 year period

- In the last 5 years, Councils have invested on average around $1.4 billion on three waters capital expenditure. Forecasts in council draft 2021-31 long-term plans indicate their investment in three waters infrastructure is expected to increase to around $2.7 billion annually. Extending these figures over 30 years suggests a range of between $42 billion to $81 billion.

- This means the amount of investment under the status quo that is likely to be required, but remain unfunded by councils, could be between $78 and $143 billion.

Price rise estimates

- Current costs are not necessarily a good reflection of what costs should be since many local authorities, including Auckland Council, set charges below the level of economic depreciation (that is, to provide resources for asset maintenance and renewal). Over several decades, this has led to an ageing infrastructure base and a deterioration in asset condition and network performance.

- The following figures represent WICS' estimates of current average household costs, based on its analysis of council three waters related revenue:

  - For rural local authorities, average household costs in 2019 ranged from $213 to $2,581 per year, with a median of $1,337.

  - Average annual household costs in 2019 for provincial local authorities ranged from $609 to $2,553, with a median of $1,118.

  - For metropolitan local authorities, average household costs in 2019 ranged from $494 to $1,922 with a median of $1,050

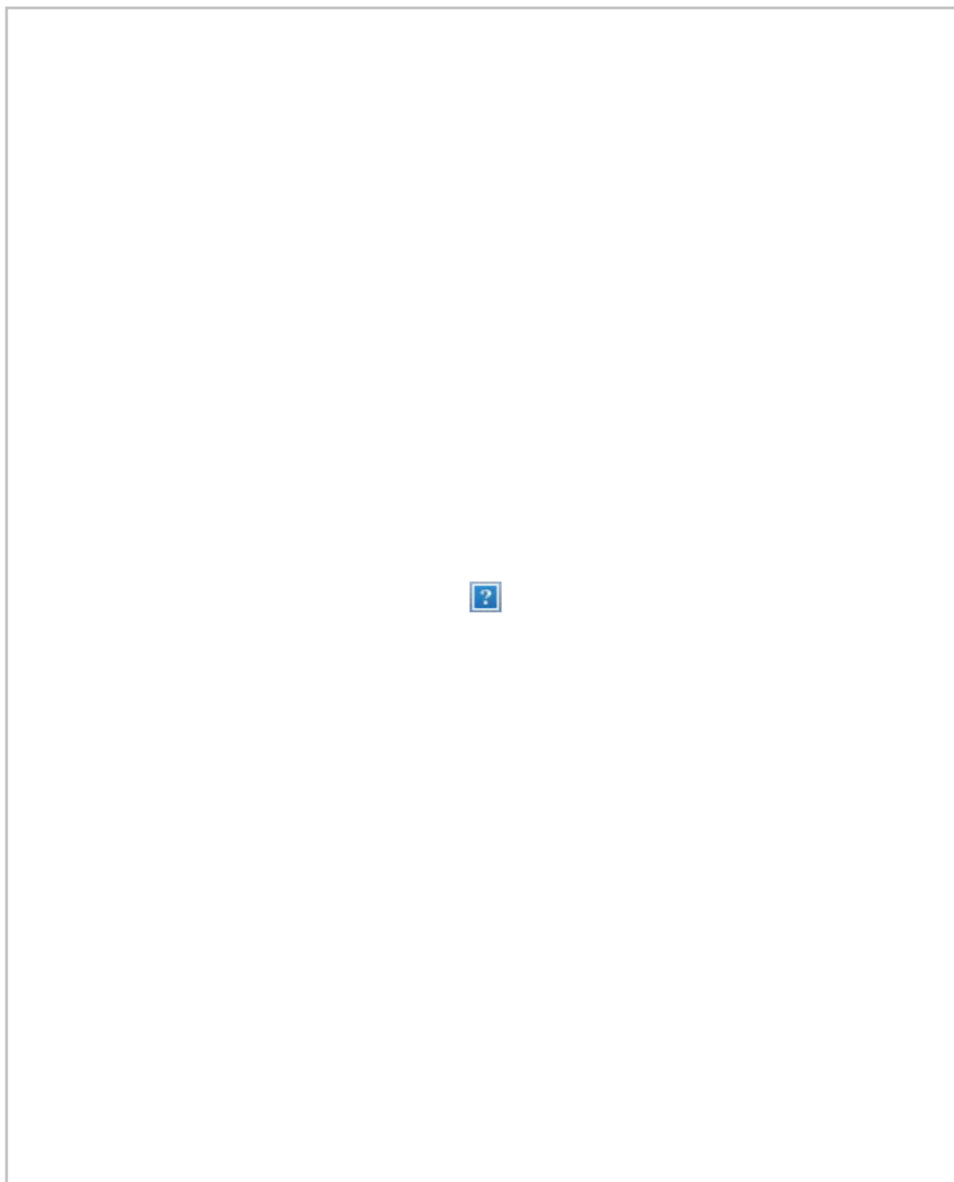
- Due to the large accumulated investment deficit, price rises won't be avoidable in some areas under a reform scenario. However, expected price increases would be far less than would otherwise be necessary without reform.

- Projected average household costs in 2051 for the preferred number and boundaries scenario are set out in the table and diagram below.

Entity	Population served	Projected (weighted)* average household cost 2051 without reform	Projected average household cost 2051 with reform
A (Auckland and Northland)	1,725,850	$2,170	$800
B (Waikato/Bay of Plenty)	799,610	$4,300	$1,220
C (Lower North Island and top of South)	955,150	$3,730	$1,260
D (rest of the	864,350	$4,970	$1,640

South Island)			

Projected household costs 2051 – with and without reform



Morgan Dryburgh (she/her) **| Senior Analyst, National Infrastructure Unit | Te Tai Ōhanga – The Treasury**
s9(2)(k) | s9(2)(g)(ii) | Email/IM: morgan.dryburgh@treasury.govt.nz
Visit us online at https://treasury.govt.nz/ and follow us on Twitter, LinkedIn and Instagram

From: Michael Lonergan [TSY]
To: ^Parliament: Scott Russell
Cc: Morgan Dryburgh [TSY]; Awhi Fleming [TSY]; Andrew Hagan [TSY]; Leilani Frew [TSY]
Subject: Three Waters - Crown lending fiscal impacts
Date: Friday, 11 June 2021 11:45:12 am

Hi Scott

Morgan mentioned that you had asked for some additional information on the fiscal impacts of the lending outlined in the Cabinet paper *A New System for Three Waters Service Delivery: Paper One.* I've worked with our fiscal reporting team to develop the below – let me know if you have any further questions on this.

- The Cabinet paper outlines that the need for any lending by the Crown to the future water service entities will be determined as part of the negotiation process, and if needed up to $1.5 billion could be lent out once approved by MoF. Any loans would be considered fiscally neutral for fiscal management purposes because they would be repayable within 10 years and would be charged a market interest rate.
- An appropriation (non-departmental capital) will need to be established in future for any lending. It would be most efficient to agree the establishment of an appropriation at the time the Minister of Finance agrees to lend money in accordance with the Public Finance Act. At this time the Department of Internal Affairs would not need to recognise any expenses to reflect MoF's decision to allow lending and therefore no expenditure needs to be incurred against the appropriation.
- Once a loan agreement is in place with the borrower and lending commences this is recognised as an asset by the Crown and is incurred against the non-departmental capital appropriation established. If there is sufficient certainty that the loans will be repaid within 10 years, the fiscal implications would not be charged against the multi-year capital allowance under the current fiscal management approach. While the loans would be fiscally neutral in respect of the Budget allowances, there would be a short term impact on net core Crown debt to reflect the loan being made, which would be offset as the loan is repaid over time.
- If the loans are not considered fiscally neutral for fiscal management purposes-– for example, if they are not likely to be fully repaid within 10 years, or there is a concessionary interest rate-– then there would need to be a charge against the Budget allowances in order to manage the fiscal impacts to OBEGAL and net core Crown debt.
- The Department of Internal Affairs would be responsible for the financial management of any lending, and should consider whether:
  - there needs to be a disclosure to the Treasury during the preparation of HYEFU or BEFU of a specific fiscal risk in relation to any lending; the Treasury will consider whether or not it meets the thresholds for publication as part of HYEFU/BEFU
  - the value of any undrawn loans should be recorded as a commitment as issues progress.

Hei konā
Michael

Michael Lonergan (he/him) **|** Senior Analyst, Justice, Security and Government Services **| Te Tai Ōhanga – The Treasury**
s9(2)(k) | Email: Michael.Lonergan@treasury.govt.nz
Visit us online at https://treasury.govt.nz/ and follow us on Twitter, LinkedIn and Instagram

Why do I say "he/him" on my email signature? This article explains.

From:	Amir Mehta [TSY]
To:	Michael Thomson [TSY]
Cc:	Leona Feng [TSY]; Mary Llewellyn-Fowler [TSY]; Siobhan Duncan [TSY]; Alistair Birchall [TSY]; Morgan Dryburgh [TSY]
Subject:	Three waters economic regulation - response to 3PC question
Date:	Friday, 1 October 2021 4:41:46 pm
Attachments:	image001.png

Kia ora Michael,

Here is our response to Caralee's question from this morning. If there are further questions, it would be best to also loop in Morgan Dryburgh and Alistair Birchall, who are across the overall package of reforms from the infrastructure and capital markets perspectives. We could also engage with MBIE, who are leading the economic regulation work.

At P3C this morning, you asked us the below question in our discussion of the economic regulation proposals (release of the discussion document) for the three waters reforms. We understand that you have spoken to Alistair Birchall and Fiscal Reporting, with the latter indicating that it is difficult to provide a view without further detail. We note that the economic regulation proposals are still subject to consultation, further policy decisions, and detailed design of the regime and so we cannot provide this further detail.

We have also discussed the below question with Alistair and FR.

Would setting standards through an economic regulatory regime increase the odds of liabilities crystallising?

The introduction of new water quality standards and economic regulation may result in new liabilities coming on to the balance sheets of the water services entities (WSE). At this stage it is difficult to provide any more detail about the extent of any liabilities, given (i) water quality standards are still being developed, (ii) key decisions have yet to be made about economic regulation, and (iii) we have a relatively limited view on overall asset quality across the water sector. It is also unclear to us that having new liabilities crystallise would significantly alter the investment behaviour of the WSEs. Judgement would be required whether the regulation creates a reliably measurable obligation that the entities have little discretion to avoid.

An economic regulatory regime is more likely to bring liabilities onto entity balance sheets if it is relatively prescriptive around price-quality standards and price paths. One benefit of this type of approach is that it provides certainty to capital markets around the revenue and investment profile of entities. This certainty tends to support the entities being able to borrow from capital markets at higher leverage and lower cost. The current proposal before Cabinet assumes that entities will have access to financing. We understand that Ministers may be seeking greater flexibility from the regulatory model, and consider this to be a risk factor.

Ngā mihi,

Amir Mehta | Senior Analyst, Financial Markets | Te Tai Ōhanga – The Treasury
s9(2)(k) | Email/IM: amir.mehta@treasury.govt.nz
Visit us online at https://treasury.govt.nz/ and follow us on Twitter, LinkedIn and Instagram
[SEEMail]

From: Alistair Birchall [TSY]
To: ^Parliament: Scott Russell
Cc: Morgan Dryburgh [TSY]
Subject: Three Waters - Comments ahead of CBC
Date: Tuesday, 5 October 2021 12:51:32 pm
Attachments: image001.png

Kia ora Scott.

Please see below from me. At a high-level, our view is that:

- If Ministers are going to establish a technical working group to consider representation, governance, and accountability, it should be clear whether the working group is empowered to (i) consider material change to the proposed model, or is (ii) limited to modifications at the margin. This clarity will help to manage expectations in the sector – particularly if Ministers are committed to progressing with the current proposed model
- If a technical working group is established that is able to consider material changes, Ministers should provide greater flexibility around the balance sheet separation 'bottom line'.

For completeness, we also note our view that the treatment of residual equity risk is important in considering financial independence and capacity. While the proposed model may not result in debt being consolidated onto either the balance sheet of the Crown or local authorities, we consider the Crown currently carries this residual risk should entities get into distress.

In our view, the working group on representation, governance, and accountability will have limited scope to depart from the proposed model

The working group is subject to a clear bottom line around balance sheet separation. The Cabinet paper defines that bottom line as follows (para 19.4):

Balance sheet separation – that the entity, governance and accountability arrangements, when taken together with other aspects of the proposed reforms (including the introduction of economic regulation of three waters related charges), will provide the entity with the financial capacity to borrow to meet the future three waters service delivery investment needs (including any existing infrastructure deficit) of the area it serves without the need for financial support from (or otherwise giving rise to an actual or contingent financial liability for):

- *the Crown (additional to what the Crown has already agreed to provide); or*
- *local authorities, following the transfer of assets and responsibilities to the new water services entity.*

This bottom line will close out most alternative options being considered, other than the proposed model. If Ministers are willing to entertain a shift from the proposed model to address the governance and ownership concerns raised by the sector, they would need to be prepared to relax this bottom line to some degree. This is a judgement for Ministers to make, but we note that in our view balance sheet separation is a tool that provides financial capacity to invest. We see this as a better way of thinking about the Crown's objectives. We are also far more sanguine about the creation of contingent financial liabilities as in many cases these do not substantively reduce the ability of an entity to borrow. Our recent A-M noted that "we consider entities have

'balance sheet separation' when their debt is not consolidated on to local authority balance sheets. A stronger definition of balance sheet separation requires that the local authorities do not hold contingent liabilities for the water services entities. While contingent liabilities do create a degree of risk, we do not consider this stronger definition to be as instructive. Consolidated debt more substantively reduces the ability of water services entities to borrow, due to the way it flows directly through to debt covenants and credit ratings."

In our view, and as signalled in our A-M, it would be open to Ministers to address concerns from local authorities about ownership and control by shifting towards a more standard corporate structure (subject to providing a role for Iwi/Mana Whenua). This approach does not perform as strongly from a financial capacity perspective, but the sector would perceive the approach as providing benefits. It would not preclude balance sheet separation, beyond entity A:

- Debt would not be consolidated where entities had dispersed ownership (entities B and C, potentially also D depending on ratings agency views regarding Christchurch)
- Entity A would still be likely to face a borrowing constraint, as its debt would be consolidated on to Auckland's balance sheet. While we have advised against the use of guarantees or indemnities to address this challenge, there are two alternative routes available to address Entity A's financial capacity to invest:
    - Broader LGFA covenant reform to open up borrowing headroom. Given broader infrastructure pressures, the Treasury has considered this option at a high-level outside the context of water reform.
    - The Crown taking a control position in Entity A (given your earlier feedback, we have discounted this as an option).

As noted in our call yesterday, we wouldn't propose to raise these options with the Minister should he remain supportive of implementing the proposed model. However in our view there are alternative pathways that are viable should the Minister consider change is required (a view we very much support), but have doubts that that he can get the proposed model over the line.

Residual risk remains important

In Cabinet papers, the financial support provided by the Crown is framed as being limited to a liquidity facility and 60:40 NDEM arrangements.

We also consider assessment of any proposed model should factor in arrangements should the WSEs get into distress. Given local authorities do not have a conventional ownership interest under the proposed model, we consider the Crown is also acting as the residual equity provider should the entities get into financial distress (i.e. we would be asked to step in and provide or guarantee debt). In our view this residual equity supports the high shadow credit ratings provided by S&P. In a recent letter to shareholders, the LGFA similarly noted that they wish to see "[r]esolution of the residual equity equivalent. Transparency of the circumstances under which the Government would intervene to support the water entities is important. The size and nature of this support is important for both the water entities' higher credit rating relative to Councils and their proposed higher level of gearing".

Ngā mihi,
Alistair

Alistair Birchall| Manager, Capital Markets Policy | **Te Tai Ōhanga – The Treasury**
s9(2)(k) | s9(2)(g)(ii) | Email/IM: alistair.birchall@treasury.govt.nz
Visit us online at https://treasury.govt.nz/ and follow us on Twitter, LinkedIn and Instagram

From: Alistair Birchall [TSY]
To: Morgan Dryburgh [TSY]
Subject: FW: Three -waters reform - Ownership and Accountability
Date: Tuesday, 5 October 2021 2:49:52 pm

FYI.

From: Ken Warren [TSY] <Ken.Warren@treasury.govt.nz>
Sent: Tuesday, 5 October 2021 2:40 pm
To: Alistair Birchall [TSY] <Alistair.Birchall@treasury.govt.nz>
Subject: FW: Three -waters reform - Ownership and Accountability

Hi Alistair

Below is my email I referred to in our discussion yesterday.   Would still be interested in an answer.

Cheers
Ken

From: Ken Warren [TSY]
Sent: Monday, 13 September 2021 3:11 pm
To: David Taylor [TSY] <David.Taylor@treasury.govt.nz>; Sam King [TSY] <Sam.King@treasury.govt.nz>
Cc: Paul Helm [TSY] <Paul.Helm@treasury.govt.nz>; Jayne Winfield [TSY] <Jayne.Winfield@treasury.govt.nz>; Angela Ryan [TSY] <Angela.Ryan@treasury.govt.nz>; Kamlesh Patel [TSY] <Kamlesh.Patel@treasury.govt.nz>
Subject: Three -waters reform - Ownership and Accountability

Hi David/Sam

Sparked by recent media commentary, I've had a very quick look at the three -waters reform proposals from the somewhat strange accounting perspective I take, and just wated to check in about whether any advice had been received or consideration given as to who controls these entities for financial reporting purposes.

I've noted:

- The new entities would be asset-owning and be operationally and financially separate from local authorities to ensure their ability to borrow on similar terms to other utilities.
- Local authorities are the 'owners' of the entities, on behalf of their communities; they and mana whenua have ability to influence key decisions that affect them
- Mana whenua have a joint oversight role
- Each entity will have a Regional Representative Group that provides for representation of the local authority 'owners' of the entity and of mana whenua, with mana whenua and local authorities represented on a 50:50 basis. This Group will issue a Statement of

Strategic and Performance Expectations to inform the entity's direction
- Entities will be governed by independent boards, with the relevant competencies in delivering and managing three waters or similar network infrastructure and other appropriate skills
- An independent selection panel will appoint board members, the Regional Representative Group will appoint members to the Independent Selection Panel
- Entities have financial capacity to meet the infrastructure deficit and future investment needs, through a range of charging instruments, many of which are already used by local authorities currently, including fixed and, volumetric charges

That all reassures me that there is no increased Crown interest, guarantee or appointment rights of the Crown that raises the spectre of central government rather than local government control.

However, the question arises for me about whether or how local government should report their "ownership rights" in these new entities.

There doesn't look as if there will (or should) be any requirements for unanimous consent on operational policy and therefore the definition of "joint control" is not met, and these entities should not be reported as jointly controlled. Therefore, the two main possibilities seem to be that:
- local authorities could account for "significant influence" of these entities by reporting an equity share, and share of net/gains losses of these entities, based on their share of voting rights.
- the new entities could be considered a new form of local authority that, although not directly controlled by local electors, have such diffuse channels whereby control and the ownership interest are exercised, that they are not accounted as being controlled by anyone.

If pursuing the first option, that would be facilitated with the use of ownership interests (like shares). If pursuing the second option, it seems to me that constitutional democratic issues (taxation without representation, poor public accountability etc.) rather than accounting ones would come to the fore.

Have these issues been discussed/debated?

Cheers
Ken

Ken Warren | Chief Accounting Advisor **| Te Tai Ōhanga - The Treasury**
s9(2)(k) | ken.warren@treasury.govt.nz

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a. please immediately delete this email and notify the Treasury by return email or telephone (64 4 472 2733);
b. any use, dissemination or copying of this email is strictly prohibited and may be unlawful.

From: Mike Chatterley
To: Morgan Dryburgh [TSY]
Subject: FW: S&P RES draft letter - Auckland Council
Date: Monday, 22 November 2021 9:25:25 am
Attachments: image001.png
RES Letter Nov 2021.pdf

Just realised I wrote down to send this to you but forgot! Sorry

Ngā mihi nui,

Mike Chatterley (he/him) | Three Waters Reform Programme
s9(2)(g)(ii)

From: Mike Chatterley
Sent: Friday, 19 November 2021 11:00 AM
To: Alastair Cameron <Alastair.Cameron@aucklandcouncil.govt.nz>; Jason Isherwood <jason.isherwood@aucklandcouncil.govt.nz>; Alistair Birchall [TSY] <Alistair.Birchall@treasury.govt.nz>
Cc: 'Megan Tyler' <Megan.Tyler@aucklandcouncil.govt.nz>; Phillip Eyles <Phillip.Eyles@dia.govt.nz>; Michael Mills <Michael.Mills@dia.govt.nz>; Nick Davis <Nick.Davis2@dia.govt.nz>; Tim Walker <tim.walker@mafic.co.nz>; 'John Bishop' <John.Bishop@aucklandcouncil.govt.nz>; Campbell Will <campbell.will@mafic.co.nz>
Subject: S&P RES draft letter - Auckland Council

Mōrena Jason, Alastair and Alistair

Trust you're all well. Sorry I haven't been in touch for a couple of weeks. I was unwell for a bit. Last week while I was off sick the draft RES letter came through from S&P for the alternative scenarios we were testing with you. I have attached a copy of the RES letter and provided a summary below.

However, there are a couple of errors in the draft letter which need rectifying –namely special majority voting decisions and that WSEs must be consistent with spatial/land use plans (rather than give effect to). In terms of next steps, I am keen to get together next Wednesday to discuss the findings with you and then jointly engage with S&P on Thursday to raise any questions, comments or concerns. **How are you placed on Wednesday at 9.30am?**

Summary note

In October DIA engaged S&P to test three additional entity design scenarios. This included an updated base case, as well as a variation on the governance structure to provide Auckland Council with additional influence at the RRG level. Auckland Council was consulted and engaged throughout the process.

Scenario one (updated base case):

The first scenario we asked S&P to evaluate was an updated "base case" which reflected various changes to the original base case. It also included additional details that were unable to be provided during the initial RES process in March 2021. This included:

- Increased levels of reporting by the WSE Board to the RRG (biannual)
- Ability for RRG to provide direction to ISP in relation to board appointments (e.g.

additional skills)
- Ability for RRG to develop its own charter pertaining to RRG matters (voting procedures, chair / deputy chair appointment, rotation policies etc.)
- Requirement for WSEs to be "consistent with" council land use and growth strategies (n.b. RES letter talks about "give effect to" – I will revert to S&P and have this updated)
- RRG representation split between mana whenua and local authorities (6 each)

Outcome:
- Water related revenues and debt are separated from Auckland Council's balance sheet
- Auckland's rating remains at AA, but the outlook is revised from 'stable' to 'positive' due to improved budgetary performance compared with the LTP

Scenario two (alternative Auckland governance arrangements):
The second scenario tested alternative governance arrangements that provide Auckland Council with additional influence compared with the current reform proposals (refer updated based case above). Specifically, we increased the size of the RRG from 12-14 and sought to provide Auckland with 5 of 7 local authority positions on the RRG while retaining a 50:50 split with mana whenua overall. We also included a non-voting board liaison to ensure that transport and urban planning functions can be aligned with WSE activities.
Outcome:
- Water related revenues and debt are separated from Auckland Council's balance sheet
- Auckland's rating remains at AA, but the outlook is revised from 'stable' to 'positive' due to improved budgetary performance compared with the LTP
- During the feedback session, S&P did comment that the evaluation panel did note that while Auckland council did not have a formal veto, it did have an effective veto as it held ~36% of all voting rights at the RRG level. This gave it an effective ability to 'block' decisions. The feedback indicated that providing further powers / ability to influence the WSEs to the RRG with this effective veto may mean that they would revise their view on balance sheet separation. *Note – we will explore this further in a feedback/follow-up session*.

Scenario three (accelerated investment proposal):
The final scenario evaluated included a $350m indemnity (to WSL) for 10-years to enable additional borrowings and capital investment *ahead* of the reforms taking effect on 1 July 2024. This was considered using the 'updated base case'.
Outcome:
- S&P separated the revenues, expenditure and debt from Auckland Council's balance sheet as with other scenarios, and also revised the outlook from stable, to positive.
- However, the separation and revised outlook were provided on the promise of reform and there is not short-term 'look through' of the additional $350m of debt. This (and other water debt / revenue / expenses) would remain within their financial assessment of Auckland Council until 1 July 2024.

Ngā mihi nui,

Mike Chatterley (he/him) | Three Waters Reform Programme
Department of Internal Affairs | Te Tari Taiwhenua
Phone: s9(2)(g)(ii) | www.dia.govt.nz

Logo-test

S&P Global Ratings
Level 45, 120 Collins St
Melbourne VIC 3000

Nov. 8, 2021

Michael Chatterley
The Department of Internal Affairs
45 Pipitea Street
Thorndon
Wellington NZ 6011

Dear Mr. Chatterley:

Thank you for requesting that S&P Global Ratings provide you with feedback through its Rating Evaluation Service (RES) on the indicative credit rating implications to Auckland Council of implementing the proposed scenarios described below. S&P Global Ratings has reviewed the scenarios you provided and the following is a summary analysis of our outcomes.

Scenarios Presented

You presented three scenarios to S&P Global Ratings involving the proposed implementation of the Three Waters Reforms. The reforms involve the creation four water service entities (WSEs) to provide water services throughout the country. The scenarios propose that the WSEs are structurally separated from local councils and the Crown, have financial and operational autonomy, borrow in their own rights, and have independent governance arrangements.

Scenario 1 – Updated Base Case
Scenario 1 is the same as the base case outlined in the February 2021 Information Memorandum, with the following refinements:

- Additional reporting (twice annually reporting to local authority owners, requirement to consult local authority owners on board performance);
- Ability to provide direction to the appointments panel on additional matters to consider when appointing the board;
- WSEs must give effect to council plans (such as land use, growth, and development strategies);
- WSE have access to a Crown-provided liquidity facility (as per scenario 4 in February 2021 IM);
- The Regional Representative Group comprises 12 members, split equally between local authorities and mana whenua; and
- Ability of representative group to develop charter that sets out appointment of chair and deputy chair.

Scenario 2 – Alternative governance arrangements

Scenario 2 will be similar to the scenario 1 updated base case. Key differences are as follows:

- Increase number of regional representatives to 14.
- Auckland Council provided with five of seven local authority positions on the regional representative group;
- The three remaining councils rotate membership for the remaining two local authority positions on the regional representative group; and
- Councils will have the ability to appoint a non-voting board liaison to ensure that transport and urban planning functions can be aligned with WSE activities.

Scenario 3 – Medium-Term Indemnity to Watercare

Scenario 3 will be similar to the scenario 1 updated base case. The key areas of differentiation are:

- The Crown provides an indemnity to Watercare (an Auckland Council-controlled organization). Compared with the 2021-31 long-term plan, the indemnity would cover an additional NZ$350 million of borrowings and capital expenditure before the reforms take place. The indemnity would be in place for 10 years. Watercare continues to undertake the three waters activities until the reforms commence on July 1, 2024; and
- All other parameters related to the reform program are unchanged from the base case.

Summary of Indicative Rating Conclusion

	Auckland Council
Existing rating	AA/Stable/A-1+
Scenario 1	AA/Positive/A-1+
Scenario 2	AA/Positive/A-1+
Scenario 3	AA/Positive/A-1+

Scenario 1 – Updated Base Case

We determined that scenario 1 would result in the outlook on our 'AA' long-term rating on Auckland Council being revised to positive from stable. Our short-term rating would remain unchanged at 'A-1+'.

We consider the structure proposed in scenario 1 would separate the water-related activities from Auckland when determining Auckland's credit rating under our methodology. Therefore, we exclude the water-related revenues, expenditures, assets and liabilities from Auckland's financial analysis. As a result, we believe Auckland's budgetary performance would improve to '3' from '4' under scenario 1 compared with the 2021-2031 long term plan (LTP). We expect after-capital deficits will decrease to less than 10% of total revenues from 13.2% in the LTP during 2020-2024. Auckland's average operating balance will fall to an average 13.5% of operating revenues across 2020-2024 compared with the LTP projection of 22.1%.

We believe Auckland's debt burden assessment would remain unchanged. We forecast total tax-supported debt would be lower under scenario 1, at about 245% of operating revenues in 2024 compared with 278% under the LTP. Interest expenses would average 9.6% of operating revenues between 2021 and 2023 under scenario 1 compared with more than 10% in the LTP.

We believe financial management, the economic, and liquidity assessments would be unaffected by scenario 1. Further, the liquidity assessment would depend on how the council manages its new financial position.

Scenario 2 – Alternative governance arrangements

We determined that scenario 1 would result in the outlook on our 'AA' long-term rating on Auckland Council being revised to positive from stable. Our short-term rating would remain unchanged at 'A-1+'. The rationale behind the revised outlook is the same as that under scenario 1.

Scenario 3 – Medium term indemnity to Watercare

We determined that scenario 3 would result in us revising the outlook on our 'AA' long-term rating on Auckland Council to positive from stable. Our short-term rating would remain unchanged at 'A-1+'.

Once the reforms are enacted, we believe Auckland's budgetary performance and debt burden will be in a similar position to scenario 1 as water-related activities are transferred to a newly established WSE. Before July 1, 2024, all water-related revenues, expenditures, assets, and liabilities (including indemnified debt) will remain within our financial analysis of Auckland. We note that the additional NZ$350 million of capital expenditure would result in larger after-capital deficits and higher debt levels compared with the LTP until 2024.

Outlook for all three scenarios:

The positive outlook reflects the council's improving budgetary performance and downward debt trajectory.

Upside scenario

We could raise our ratings on Auckland over the next two years if we saw continued improvement in the council's budgetary performance, with debt structurally declining to less than 240% of operating revenues.

Downside scenario

We could revise our outlook on Auckland to stable if after-capital account deficits remain more than 10% of total revenues and debt levels persist above 240% of operating revenues.

We could also revise the outlook to stable if we were to downgrade the New Zealand sovereign to 'AA/Stable'. This is because we don't believe any local council in New Zealand can maintain stronger credit characteristics than the sovereign in a stress scenario.

General Assumptions:

Key assumptions you have provided to us include:

- The proposed changes in the August 2021 Information Memorandum to governance arrangements, including changes to the Regional Representative Group, have no effect on decision making or influence of the WSE.
- That the Local Government Act 2002 will be amended to remove the obligation that local councils are responsible to provide water services.
- That the WSEs will own all relevant water assets.
- That there will be no shareholding ownership of WSEs under all scenarios.
- That no one council will hold veto rights.
- That the Regional Representative Group will not have approval rights or the power to direct the WSE on pricing or investment decisions. WSE management will make these decisions independently. The Regional Representative Group may remove an Independent Selection Panel (ISP) member via a special majority vote (i.e., 75%). The ISP is responsible for appointing and removing board members.
- That the WSE will have its own independent treasury function. The WSEs will borrow in their own names. These borrowings will be from capital markets, not the LGFA.
- That to assess the potential effect on Auckland's credit ratings for scenarios 1 and 2, we should assume the transfer of water-related revenues, expenditures, assets, and liabilities occurred in the 2020 fiscal year. For forecast years, the amount of water-related revenues and expenditure should be taken from the 2021-31 long-term plan.
- That total tax-supported debt is decreased by the amount of debt related to water infrastructure provided by you. This amount was NZ$3,312 billion as of June 30, 2021.
- Auckland will not receive the additional NZ$508 million of funding as proposed in the "better-off" package.
- That in scenario 3, the indemnity applies to only NZ$350 million of debt issued in Watercare's name for a period of 10 years. This will fund capital expenditure brought forward relative to the 2021-31 long-term plan. Total capital expenditure over the 2021-2031 LTP remains unchanged.

S&P Global Ratings' analytical judgements and assumptions include:

- That there would be no change to liquidity and treasury management policies including use of short-term paper, pre-funding strategy, and bank facilities. We assume future borrowing requirements and debt repayments are unchanged from our previously published base case for local councils.
- That the Institutional Framework Assessment remains a '1' because the local council sector's aggregated operating balances and after-capital account deficits remain reasonably consistent with our expectations outlined in "Public Finance System Overview: New Zealand's Institutional Framework For Local And Regional Governments," published on Oct. 29, 2020.

- That there are no water-related capital revenues in the 2021-2031 LTP. All operating revenues and expenditures as well as water-related capital expenditure are taken from the 2021-2031 LTP three waters funding impact statements.
- That Auckland will novate all debt and swaps to the WSE with no cost or future liabilities to itself.
- That in scenario 3, we assume all water-related revenues, expenditure, assets, and liabilities are moved to the WSE from Watercare without any recourse to Auckland once the reforms take place on July 1, 2024.
- That the Regional Representative Group's special majority voting only applies to removing ISP members.

Appendix

Auckland

Key Financial Statistics

TBA

Rating Score Snapshot

	Updated base case	Scenario 2	Scenario 3
Institutional framework	1	1	1
Economy	1	1	1
Financial management	1	1	1
Budgetary performance	3	3	4
Liquidity	1	1	1
Debt burden	5	5	5
ICP	2.2	2.2	2.4
ICR	AA	AA	AA
Outlook	Positive	Positive	Positive

This evaluation is both preliminary and confidential. It is preliminary in that it is based on hypothetical information presented to us by you. You understand that S&P Global Ratings will not review, modify or surveil this evaluation. Subsequent information or changes to the information previously provided could result in final conclusions that differ from the preliminary proposed conclusions. Please note the conclusions provided herein are based on assumptions you and your team have provided to us. To the extent that these assumptions, our criteria or other factors change, the rating implications could also change. You understand and agree that we are not financial advisors to you and that in performing the RES, S&P Global Ratings is providing indicative rating opinions on the scenarios presented; it is not endorsing or advocating any particular course of action. Nothing in this report is intended to create, or should be construed as creating, a fiduciary relationship between you and us and recipients of the indicative rating opinions. We have not consented to and will not consent to being named an

"expert" under applicable securities laws. Neither S&P Global Ratings' RES or any indicative rating set out herein is a credit rating, nor is it a recommendation to buy, hold or sell any financial obligation of an issuer. This letter is subject to the Terms and Conditions attached to the Engagement Letter applicable to the RES (the "applicable T&Cs").

Confidential Dissemination of the Evaluation. The evaluation, including this letter, is provided by S&P Global Ratings to you on a confidential basis. You may not disclose the evaluation (or for the avoidance of doubt, any indicative rating set out therein) or this letter, to third parties except: (i) as required by law or regulation, or for regulatory purposes, or (ii) to third parties that are bound by confidentiality obligations; and in each case, only in accordance with law and in its entirety without any changes (and provided a copy of the applicable T&Cs are attached thereto). If the evaluation is disclosed other than in accordance with the Engagement Letter, including the applicable T&Cs, S&P Global Ratings reserves the right to publicly comment on the evaluation and/or publish this letter.

Should you have questions, please do not hesitate to contact me.

Sincerely,

/s/
S&P Global Ratings, acting through
Standard & Poor's Financial Services LLC

cc:

From:	Kyle Berryman [TSY]
To:	^DIA: Michael Chatterley; Alistair Birchall [TSY]; Ken Warren [TSY]
Cc:	Morgan Dryburgh [TSY]; Nick Davis; Hamiora Bowkett; Joseph Lundberg; Francesca Algie
Subject:	RE: RES briefing
Date:	Tuesday, 3 May 2022 2:13:14 pm
Attachments:	image001.png

Hi Mike,

Ahead of receiving the latest iteration and the RES here's some thoughts on key messages are below, starting with what is achieved with this RES and clarifying those matters on what Ministers need to await further guidance.

- S&P provided guidance in 2021 that our model of the reform programme would sever interdependencies, from a financing perspective, between local government and WSE, i.e. achieve balance sheet separation from the perspective of credit rating agencies/investors. This RES reconfirmed this guidance.
  - Ministers are now in a position to announce that the reforms will achieve balance sheet separation between local government and WSEs from the perspective of credit rating agencies/investors
  - S&P has retested Governance changes since its 2021 assessment and has reconfirmed its prior advice that the reforms achieve balance sheet separation from the perspective of credit rating agencies/investors. It has also retested the impacts on the reform on representative local authorities with higher and lower levels of associated water entity debt with satisfactory outcomes. S&P noted to us that one point of discussion in reaching this latest conclusion was whether appointment committees could be stacked by a council for control, which they ultimately decided was a possible risk but highly unlikely. S&P also made assumptions on the "overall institutional framework in NZ for local government" being no worse off from the transfer of water assets and debt, which DIA analysis supports, that if not the case could lower S&P's credit rating assessment for all of NZ's local government entities. To enable S&P to expedite this RES it continued to make strong assumptions about "pricing" and the "form of regulation". These assumptions have never exactly mapped to the evolution of the proposed reforms but, in the absence of these developed frameworks, were used to inform S&P's 2021 and this RES view of the WSE standalone credit ratings.
- From this latest S&P RES there are still some out of scope items for which we are still to achieve comfort: accounting separation (currently testing "control" criteria with OAG) and WSE credit ratings (still to retest with S&P for the current iterations of "pricing" and "form of regulation").
- Ministers need to wait completion of additional workstreams before making statements on:
  - Accounting separation between central and local governments and WSEs. This form of separation is desirable for disentangling the entities but should not impinge on any entity's ability to raise financing, noting the credit rating assessment is the critical assessment here. Of note is that the passing of legislation may trigger a deemed sale of water assets and liabilities from local government for accounting purposes. This will see a transfer of water assets

and liabilities into discontinued operations and realise an associated loss (or profit). OAG is in the process of considering whether the reforms achieve accounting separation from both levels of government, with Treasury providing DIA with support on central government and EY assisting DIA on local government. Indicative timeframe is [mid-June] noting OAG is loathe to advise until the passage of legislation.

- WSE Credit Ratings: DIA needs to commission S&P to test the proposed reform for "pricing" and the "form of regulation" which inform the WSE credit ratings. The stronger the regulatory framework the greater our confidence of the WSE entity credit ratings being in line with the 2021 guidance, whereby WSE credit ratings are in line with or stronger than current local authority credit ratings. An negative outcome here, with WSE credit ratings below councils, could require amendments to the proposed forms of 1) pricing and regulation, and 2) the amount and form of central government support, currently a liquidity facility, that provides a credit rating uplift. Indicative timeframe is mid-June.

Best regards,

Kyle

From: Mike Chatterley <Michael.Chatterley@dia.govt.nz>
Sent: Tuesday, 3 May 2022 8:05 am
To: Alistair Birchall [TSY] <Alistair.Birchall@treasury.govt.nz>; Kyle Berryman [TSY] <Kyle.Berryman@treasury.govt.nz>; Ken Warren [TSY] <Ken.Warren@treasury.govt.nz>
Cc: Morgan Dryburgh [TSY] <Morgan.Dryburgh@treasury.govt.nz>; Nick Davis <Nick.Davis2@dia.govt.nz>; Hamiora Bowkett <Hamiora.Bowkett@dia.govt.nz>; Joseph Lundberg <Joseph.Lundberg@dia.govt.nz>; Francesca Algie <Francesca.Algie@dia.govt.nz>
Subject: RES briefing
Importance: High

Ata māire Treasury whanau

Hope you've had a pleasant start to the week. We're due to hear back from S&P today, and following this brief our Ministers and the Prime Minister on the outcome of the RES.

I briefly discussed the approach to the briefing with Kyle yesterday, noting the incredibly tight timeframes we're working to. In light of this, I have pulled together the bones of a briefing that covers the background and context and leaves space for the outcome today. It needs to be made a bit punchier, but just trying to get the content right first. Can you please review and let me know at our 12pm your thoughts?

@Ken Warren [TSY] – can you please review the accounting section and make sure your happy with the representations put forward?

Ngā mihi nui,

Mike Chatterley (he/him) | Three Waters Reform Programme
Department of Internal Affairs | Te Tari Taiwhenua
Phone s9(2)(g)(ii) | www.dia.govt.nz

Logo-test

From: Morgan Dryburgh [TSY]
To: Leilani Frew [TSY]
Cc: Alistair Birchall [TSY]; Kyle Berryman [TSY]
Subject: Three Waters - draft DIA briefing on S&P engagement and accounting
Date: Wednesday, 4 May 2022 11:50:00 am
Attachments: image001.png
LG202200446 (Briefing) Three Waters Reform Standard Poor s Ratings Evaluation Service (002) - TSY comments.docx

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Hi Leilani,

Attached is the latest version of DIA's report to Ministers advising on the outcomes of the S&P RES, as well as providing an update on the work that DIA is doing to confirm the accounting treatment for the WSEs. DIA intends to send this advice to Ministers today at 3pm.

Accounting treatment

The briefing notes for Ministers the recent engagement between DIA and OAG. Engagement is at its early stages but suggests an initial view that WSE assets and liabilities will not be consolidated onto either Crown or local authority balance sheets (Ken Warren supports this view, although his assessment is primarily from a Crown perspective). A meeting with OAG this week (which we were present at) identified the information gaps to be filled for them to contemplate the appropriate treatment. DIA is to provide OAG with a draft Bill noting OAG's assessments normally begin on the passage of legislation. Changing personnel at OAG poses a risk so we are keen for OAG's assessment to be prioritised.

DIA ae engaging EY and will continue to engage with OAG. While we think the risks around consolidation are low, we also do not want briefings to overstate how much work has been done (local authorities in particular we consider more work is desirable for completeness).

We do not see accounting treatment driving a ratings outcome, in the potential case where assets and liabilities are consolidated (S&P have indicated they will look through such treatment). We nonetheless consider it important to be very clear on accounting outcomes:

- There may be consequential impacts of assets and liabilities remaining on balance sheet (a clear example is that it will impact on LGFA and local authority covenants)
- Clarity and transparency is important given the nature of the reforms. We note here that if assets and liabilities are deconsolidated local authorities may incur large accounting losses. These do not carry economic impacts but will need to be explained to investors/capital markets and other stakeholders.

Further RES work

The briefing also notes the further work DIA is proposing to do to test the likely standalone credit profiles of the WSEs once established. Previous S&P advice was that resultant WSE credit ratings provide an uplift over councils for lower financing costs – but in providing this assessment S&P assumed a strong form of regulation as a placeholder whilst the approach developed.

The timing of this next RES does not align with the upcoming Cabinet decisions on economic regulation – Ministers will once again be making Cabinet policy decisions without S&P's advice,

which we will need to raise in our advice to MoF when Cabinet considers economic regulation (anticipated late May/early June). We believe an unfavourable outcome from S&P is unlikely but remains both possible and recoverable. If the outcomes are timely Ministers/Cabinet can still make additional decisions to inform the drafting of the legislation, and the proposed financial support/liquidity facility arrangements can be strengthened if required.

Regards,
Morgan

Morgan Dryburgh (she/her) **| Kaitātari Matua, Rōpū Take Whenua - Senior Analyst, National Infrastructure Unit | Te Tai Ōhanga – The Treasury**
Mobile: s9(2)(g)(ii) Email/IM: morgan.dryburgh@treasury.govt.nz
Visit us online at https://treasury.govt.nz/ and follow us on Twitter, LinkedIn and Instagram

From: Ken Warren [TSY]
To: ^DIA: Michael Chatterley; Alistair Birchall [TSY]; Kyle Berryman [TSY]; Jayne Winfield [TSY]
Cc: Morgan Dryburgh [TSY]; Nick Davis; Hamiora Bowkett; Joseph Lundberg; Francesca Algie
Subject: WSEs and the FSG Consolidation
Date: Wednesday, 4 May 2022 2:48:00 pm
Attachments: Document1.docx
image001.png

Hi Mike

Following on from Thinus' email, I've further updated the FSG analysis. The final conclusion does not change.

Note this sits in of our global assessment document explaining why all the entities we consolidated are included (e.g. the independent Reserve Bank) , and some entities that are not consolidated are not included (e.g. Local Government). Unless you want anything further from me, my intention is to leave this as is until the legislation is passed, at which point I'll finalise it.

Cheers
Ken

From: Ken Warren [TSY]
Sent: Tuesday, 3 May 2022 10:55 am
To: Mike Chatterley <Michael.Chatterley@dia.govt.nz>; Alistair Birchall [TSY] <Alistair.Birchall@treasury.govt.nz>; Kyle Berryman [TSY] <Kyle.Berryman@treasury.govt.nz>
Cc: Morgan Dryburgh [TSY] <Morgan.Dryburgh@treasury.govt.nz>; Nick Davis <Nick.Davis2@dia.govt.nz>; Hamiora Bowkett <Hamiora.Bowkett@dia.govt.nz>; Joseph Lundberg <Joseph.Lundberg@dia.govt.nz>; Francesca Algie <Francesca.Algie@dia.govt.nz>
Subject: RE: RES briefing

Kia ora Mike

Suggested changes to the accounting section attached. I think it is important to note that we're working off current expectations and making a balanced judgement, but happy to buttress our advice with a view that the risk of an adverse outcome should be able to be mitigated. Could I get a copy of the final paper?

Cheers
Ken

From: Mike Chatterley <Michael.Chatterley@dia.govt.nz>
Sent: Tuesday, 3 May 2022 8:05 am
To: Alistair Birchall [TSY] <Alistair.Birchall@treasury.govt.nz>; Kyle Berryman [TSY] <Kyle.Berryman@treasury.govt.nz>; Ken Warren [TSY] <Ken.Warren@treasury.govt.nz>
Cc: Morgan Dryburgh [TSY] <Morgan.Dryburgh@treasury.govt.nz>; Nick Davis <Nick.Davis2@dia.govt.nz>; Hamiora Bowkett <Hamiora.Bowkett@dia.govt.nz>; Joseph

Lundberg <Joseph.Lundberg@dia.govt.nz>; Francesca Algie <Francesca.Algie@dia.govt.nz>
Subject: RES briefing
Importance: High

Ata māire Treasury whanau

Hope you've had a pleasant start to the week. We're due to hear back from S&P today, and following this brief our Ministers and the Prime Minister on the outcome of the RES.

I briefly discussed the approach to the briefing with Kyle yesterday, noting the incredibly tight timeframes we're working to. In light of this, I have pulled together the bones of a briefing that covers the background and context and leaves space for the outcome today. It needs to be made a bit punchier, but just trying to get the content right first. Can you please review and let me know at our 12pm your thoughts?

@Ken Warren [TSY] – can you please review the accounting section and make sure your happy with the representations put forward?

Ngā mihi nui,

Mike Chatterley (he/him) | Three Waters Reform Programme
Department of Internal Affairs | Te Tari Taiwhenua
Phone s9(2)(g)(ii) | www.dia.govt.nz
Logo-test

Water Service Entities (WSEs)** **preliminary analysis** **update when legislated

Purpose and design

The WSE entities will be established by legislation. The Crown is exercising sovereign rights in the establishment of these entities, but there has been significant negotiation with affected parties in the development and design, in piacular with local authorities. The purpose of the four water services entities is intended to be the provision of safe, reliable, and efficient water services in place of local authorities. A draft Water Services Entities Bill has been provided for consultation, and this has been used in this analysis, updated where appropriate for the recommendations (yet to be agreed) of the Working Group on Representation, Governance and Accountability of New Water Service Entities. Clause 10 sets out the objectives of WSEs, which are to:

a) deliver water services and related infrastructure in an efficient and financially sustainable manner:
b) protect and promote public health and the environment:
c) support and enable housing and urban development:
d) operate in accordance with best commercial and business practices:
e) act in the best interests of present and future consumers and communities:
f) give effect to Te Mana o te Wai to the extent that it applies to the duties and functions of the entity:
g) deliver water services in a sustainable and resilient manner that seeks to mitigate the effects of climate change and natural hazards.

Clause 12 sets out the operating principles of WSEs to:

a) develop and share capability and technical expertise with other water services entities and throughout the water services sector
b) be innovative in the design and delivery of water services and water services infrastructure
c) be open and transparent, including in relation to the calculation and setting of prices, the levels of service delivery to communities and consumers and reporting on performance
d) partner and engage early and meaningfully with Māori, including to inform how the water services entity can give effect to Te Mana o te Wai and understand, support, and enable the exercise of mātauranga Māori, tikanga Māori, and kaitiakitanga
e) give effect to Treaty settlement obligations to the extent that the obligations apply to the duties and functions of the entity
f) partner and engage early and meaningfully with territorial authorities and their communities
g) co-operate with and support other water services entities, infrastructure providers, local authorities, and the transport sector

Clause 13 establishes that a WSE is a body corporate and is accordingly a legal entity separate from the entity's board members, the entity's employees, the Crown, the entity's regional representative group, and the entity's territorial authority owners; and continues in existence until it is dissolved by an Act. It can therefore contract in its own name. It states that a water services entity is owned collectively by its territorial

authority owners but is not a council organisation or a council-controlled organisation as defined in s.6 of the Local Government Act 2002 or a local government organisation as defined in s.124 of the Local Government Act 2002.

Relevant activities and direction of relevant activities

Clause 11 states that the functions of each WSE are to provide safe, reliable, and efficient water services in its area including any incidental, related or consequential functions.

Clause 47 states that the Board is the governing body of a WSE, with the authority, in the entity's name, to exercise the powers and perform the functions of the entity. The Board consists of no fewer than 6 and no more than 1o members, appointed by the board appointment committee.

Clause 94 states that this Act does not authorise the Minister, a territorial authority owner, a territorial authority representative, a mana whenua representative, or a regional representative group to direct a water services entity, or a board member or an employee of a water services entity in relation to a statutorily independent function; or to require the performance or non-performance of a particular act, or to bring about of a particular result, in respect of a particular person or persons. This applies to all Government policy statements and statements of strategic and performance expectations issued under this Act.

Clause 49 provides that the Board is accountable to the entity's regional representative group (RRG). The Board must prepare and publish at least once in every 3-year period a statement of intent, an asset management plan, funding and pricing plan, and an infrastructure strategy, and provide these to the entity's RRG. An annual report containing information on operations, a statement of service delivery performance, and audited financial statements must be prepared as soon as possible and provided to the RRG.

Clause 24 provides that each RRG consists of no fewer than 6 regional representatives; and no more than twice the number of territorial authority owners of the entity. Each entity's RRG must include an equal number of territorial authority representatives; and mana whenua representatives. This group is responsible for appointing and removing the entity's board members, participating in the process of setting the entity's strategic direction and performance expectations, reviewing the performance of the entity and approving the appointment and remuneration policy prepared by its board appointment committee. The bill sets out requirements for the constitution of each RRG. Regulations will provide a model constitution. The RRG may propose amendments to the constitutions that must be approved by the Minister before taking effect.

The Three Waters Working Group on Representation, Governance and Accountability has recommended strengthening community ownership of assets through a public shareholding structure, where councils hold shares on behalf of their communities. This

is envisaged as a protection against privatisation. They have recommended also that the RRG approve he statement of intent, sub-RRG committees be established to give local communities a clear and guiding voice on development

Clause 23 establishes that the role of the Minister is to oversee and manage the Crown's interests in and relationship with, the water services entities and to fulfil any statutory responsibilities given to the Minister, including:

a) to issue a Government policy statement on water services to state the Government's overall direction and priorities for water services and inform and guide agencies involved in, and the activities necessary or desirable for, water services that a WSE must give effect to when performing its functions..
b) to appoint a Crown review team to investigate and make recommendations if there are reasonable grounds that a problem relating to the water services entity may exist
c) to appoint if necessary a Crown observer to assist the water services entity to address problems, to monitor progress and make recommendations whether the Minister should take further action
d) to appoint if necessary a Crown manager to direct the water services entity, or the board of the water services entity to act to address problems and make recommendations whether the Minister should take further action, including whether the Minister should appoint any other ministerial body in relation to the entity.
e) to appoint a department to be the monitor, to act as a steward to provide oversight of the water services system from a whole of government perspective; and to assist the Minister to carry out the Minister's role (described above)

The Ministers intervention powers are subject to requirements to consult, to provide notice, and to publish problems.

Mana whenua whose rohe or takiwā includes a freshwater body in the service area of a water services entity may provide the entity with a Te Mana o te Wai statement for water services. The statement may be amended at any time. As soon as practicable after receiving a Te Mana o te Wai statement, the board of a WSE must acknowledge receipt and engage with the mana whenua who provided the statement. A response to a Te Mana o te Wai statement for water services must include a plan that sets out how the water services entity intends to fulfil its objective of giving effect to Te Mana o te Wai to the extent that it applies to the duties and functions of the entity in response to the statement.

The Three Waters Working Group on Representation, Governance and Accountability has recommended extending Te Mana o te Wai into all aspects of the reforms to underpin the WSE framework. The objective is to ensure that tikanga, mātauranga and in-depth knowledge of water, local conditions, history, and geology, and the importance of the wider environment and its communities, are all properly integrated into the governance and management approach to water services.

Rights that provide the current ability to direct relevant activities

Indicators for	Indicators against
› Government policy statement on water services must be complied with › Funding (pricing) set by a controlled central government entity › Intervention powers if there is a problem › The Crown predetermines the constitution of the RRG, and any amendments to the constitution must be agreed by the Minister	› Crown does not appoint, nor have rights to dismiss Governing Board › Governing Board is accountable to the Regional Representative Group rather than the Crown › The Regional Representative Group and not the Crown has responsibility/power to approve Statement of Intent (if Governance proposals accepted) › The constitution of the RRG sets out how the group will perform its functions, powers, and duties, its meeting arrangements and procedures. It does not predetermine relevant activities of the WSE, nor who benefits from those activities.

Exposure or rights, to variable benefits from involvement

Indicators for	Indicators against
› Government's overall direction and priorities for water services are furthered as WSEs give effect to the Government policy statement on water services › Central government public health, environmental, housing and development goals and policies are impacted by delivery of water services	› Delivery of water services and related infrastructure is intended to be in the best interests of present and future consumers and communities › Giving effect to Te Mana o te Wai benefits mana whenua whose rohe or takiwā includes a freshwater body in the service area of a water services entity › There is no provision for the Crown to underwrite or guarantee the performance of a WSE › Ownership shares representing the ownership interest are held by local authorities rather than the Crown (if Governance proposals accepted) › The Crown receives no distributions from WSEs, nor is it exposed to

	increases or decreases in the value of WSEs › There are few if any synergies to be gained by combining the operations or assets of the WSEs with the Crown's own operations or assets

Ability to use power to affect the nature or amount of the benefits

Indicators for	Indicators against
› The Minister oversees and manage the Crown's interests in and relationship with the water services entities through powers to appoint a review team, Crown observer, or Crown manager if required. › A Government Department is the monitor, acting as a steward to provide oversight of the water services system from a whole of government perspective	› The Crown has no power to affect the statement of intent, asset management plan, funding and pricing plan, and infrastructure strategy of the WSE. › As it is the implementation of the statement of intent, asset management plan, funding and pricing plan, and infrastructure strategy of the WSE that impacts on the nature or amount of the benefits, rather than the constitution of the WWG, or the specification of the objectives and functions of the WSE in legislation, the Crown has not predetermined relevant activities, the way in which those relevant activities can be directed and who benefits from those activities › There is no provision for Parliamentary scrutiny of the WSEs › The WSE is accountable to the RRG rather than the Crown. › WSEs are economically independent from the Crown.

Conclusion

WSEs are not controlled by the government reporting entity. They should not be consolidated into the financial statements of government.

From:	Kyle Berryman [TSY]
To:	Morgan Dryburgh [TSY]
Subject:	FW: 3W - capital structure pack
Date:	Monday, 23 May 2022 2:48:32 pm
Attachments:	Capital structure summary May 22 2022 .pdf image002.jpg

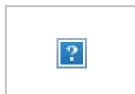
From: Louise Marsden <louise.marsden@mafic.co.nz>
Sent: Monday, 23 May 2022 2:47 pm
To: Alistair Birchall [TSY] <Alistair.Birchall@treasury.govt.nz>; Kyle Berryman [TSY] <Kyle.Berryman@treasury.govt.nz>
Cc: Scott.Priestley <Scott.Priestley@dia.govt.nz>; Tim Walker <tim.walker@mafic.co.nz>; Campbell Will <campbell.will@mafic.co.nz>
Subject: 3W - capital structure pack

Ahead of our 3pm meeting, please see attached a pack on 3W capital structure, noting particularly p6 which sets out the ratings scenarios we're currently working on.

Talk soon,
Louise

Kind Regards
Louise Marsden

Mafic Partners Limited
Mobile: s9(2)(g)(ii)
Email: louise.marsden@mafic.co.nz
www.mafic.co.nz



Key Themes

We consider it prudent to understand the likely treatment of the proposed 3-year Government regulation prior to bill 2 being introduced

Guidance for policy decisions

Ministerial discussion of the economic regulation and pricing Cabinet papers have considered capping revenue levels for a period of three years (prior to economic regulation).

Given the political sentiment that could see revenue/price path constraints imposed, we think it important to obtain a firmer view (via a RES) on how S&P assess 'book end' scenarios under their Corporate Methodology

Importance of reg. assessment

The regulatory assessment is critical to the ultimate credit rating of water service entities (and the associated standalone credit profile).

Shadow rating analysis

RES process will be undertaken in conjunction with shadow rating analysis (we have undertaken preliminary shadow rating analysis and had an informal discussion with S&P).

Methodology is not prescriptive, giving significant discretion to S&P with a bespoke entity like a WSE. Therefore, risk that shadow rating analysis is inconsistent with ultimate rating outcome

Impact on capital raising

Preferred capital raising option will dictate to what extent we need to engage with rating agencies during 2023/2024

Final WSE credit ratings will be required to support any private capital raising (and S&P can change its mind). We could also 'shop' the ratings around

If a DMO lend in early years then a formal credit rating process will not be required

RES scenarios hypothetical

We are comfortable that any pricing scenarios with S&P will be viewed as hypotheticals and there will not be a broader impact on the Crown's credit rating through that engagement

Consistency of approach

RES processes have been used by DIA and the reform programme to date to confirm shawdow rating advice and provide advice to Ministers, in relation to areas of ratings methodologies that relate to fundamental aspects of the programme and/or involve areas of the credit rating methodology where S&P have wide discretion

RES proposed scenarios

If a RES is to be undertaken to understand the WSE SACP, then a five scenario RES could create and test 'bookends' of potential variables with regard to revenue regulation and financial metrics

- We consider it likely that S&P will consider both (i) the existence of a 3 year Government revenue / pricing regulation tool **and** (ii) the impact of any regulation applied before making a "regulatory assessment"
- This means that reasonably permissive regulation (for example capping revenue increases at a level that provides for cost recovery in a wide range of scenarios) should still support a "strong/adequate" assessment, in line with the previous RES

Scenario	Summary description	Economic regulation & approach to revenue	FFO to debt	Indicative shadow rating
1	**Amended Base Case** • Updated starting financial position and forecasts reflecting latest information (including council long term plans and better off and no worse off funding packages) • WSE financials presented reflects an illustrative WSE • Starting debt assumed to be lower than forecast in LTPs • Crown liquidity facility included (as per scenario 4 in previous RES)	• Legislation does not include a regulatory making power with revenue capping powers • WSEs set prices to maintain a 12% FFO/debt over time • PQ in 2030 • Agreed protection (in 2024) from PQ revenue shocks	12% flat	SACP: a- ICR: AA+
2	**Scenario 1 above, with higher starting leverage and revenue capped at LTP**	Scenario 1 + regulation making power used to cap revenue for first three years at LTP forecasts until 2030	8% flat	SACP: bbb ICR: AA+
3	**Scenario 2 above, with interim price increases capped at inflation**	• Scenario 2 + regulation making power used to cap revenue at inflation for first three years • WSE Board then transitions to 8% FFO/debt (requires 9% revenue increases p.a.)	4% increasing to 8%	SACP: bb ICR: AA
4	**Scenario 3 above, without additional Crown support (Operating grants provided by Crown to offset the reduction in revenue due to the price restrictions imposed under Scenario 3) and earlier regulatory track**	Scenario 3 but PQ in 2027 and key IMs from 2024. Crown revenue grants to protect FFO to debt ratio	6% flat	SACP: bbb-/bb+ ICR: AA+
5	**Scenario 2 above, without LTP price cap and requirement to smooth revenue removed**	• Scenario 2 but no agreed protection (in 2024) from PQ revenue shocks • Regulation making power-includes revenue capping powers for first three years (but this power not utilised)	8% increasing to 10%	SACP: bbb+ ICR: AA+