

From: [Dent, Alan](#)
To: [Sam Ponniah](#)
Cc: 9(2)(a)
Subject: RE:InfraComm water sector state of play
Date: Tuesday, 23 February 2021 1:07:50 pm
Attachments: [ATT00001.png](#)
[ATT00002.png](#)
[ATT00003.png](#)
[ATT00004.png](#)
[ATT00005.png](#)

Thanks Sam

We are making good progress re getting interviews locked in and had a helpful conversation with Watercare last Friday.

Cheers

Alan

Get [Outlook for iOS](#)

From: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>

Sent: Tuesday, February 23, 2021 10:02:45 AM

To: Dent, Alan <9(2)(a)@deloitte.co.nz>

Cc: 9(2)(a) <9(2)(a)@deloitte.co.nz>

Subject: [EXT] InfraComm water sector state of play

Hi Alan

More grist for the mill in terms of the industry development study, and also ahead of your discussions with InfraComm. They've just released their water sector state of play report.

<https://infracom.govt.nz/assets/Uploads/State-of-Play-Water.pdf>

Cheers

Sam

Sam Ponniah | Senior Consultant

MartinJenkins

M 9(2)(a) T 9(2)(a)



Level 16, AIG Building, 41 Shortland St, **Auckland**
 Level 1, City Chambers, Cnr Johnston & Featherston Sts, **Wellington**

PLEASE NOTE: The information contained in this email message and any attached files may be confidential and subject to privilege. The views expressed may not necessarily be the official view of Martin, Jenkins and Associates Limited. If you are not the intended recipient, you are notified that any use, disclosure or copying of this email is unauthorised. If you have received this email in error, please notify us immediately by reply email and delete the original. Thank you.

Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be subject to legal privilege or copyright. If you have received this email in error, please advise the sender immediately and destroy the message and any attachments. If you are not the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest terms of engagement which we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures, no assurance or guarantee is implied or should be construed that this email message or its attachments are free from computer viruses. Deloitte assumes no responsibility for any such virus or any effects of such a virus on the recipient's systems or data.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai, Singapore, Sydney, Taipei and Tokyo.

Released Under the Official Information Act 1982

From: [Dent, Alan](#)
To: [Sam Ponniah](#)
Cc: [Tan, John](#)
Subject: RE:Interviews
Date: Wednesday, 24 February 2021 1:27:22 pm
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)

Hi Sam

Interviews undertaken/planned

9(2)(a) – completed

9(2)(a) – Today

9(2)(a) – Tomorrow

9(2)(a) – Tomorrow

9(2)(a) – Next Wednesday (9(2)(a) are partners with the Deloitte Economics Practice in Australia with a focus on the water sector)

9(2)(a) – CEO PowerCo looking to arrange an interview time

9(2)(a) – waiting to hear back – will follow up

In addition we had a session today with representatives of the Wellington Water Consultant and Contractor panels which was insightful

We will come back with thoughts re next round of interviews.

Cheers

Alan Dent

Partner | Corporate Finance

Deloitte

Level 12, 20 Customhouse Quay, PO Box 1990, Wellington 6140, New Zealand

D: 9(2)(a) | M: 9(2)(a) | O: 9(2)(a) | F: 9(2)(a)

9(2)(a)@deloitte.co.nz | www.deloitte.co.nz

Deloitte means Deloitte Limited (in its own capacity for assurance services, otherwise as trustee for the Deloitte Trading Trust)



[Navigating COVID-19: read the latest updates from our experts](#)

Deloitte 175



Please consider the environment before printing.

Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be subject to legal privilege or copyright. If you have received this email in error, please

advise the sender immediately and destroy the message and any attachments. If you are not the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest terms of engagement which we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures, no assurance or guarantee is implied or should be construed that this email message or its attachments are free from computer viruses. Deloitte assumes no responsibility for any such virus or any effects of such a virus on the recipient's systems or data.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai, Singapore, Sydney, Taipei and Tokyo.

Released Under the Official Information Act 1982

From: 9(2)(a)
To: [Sam Ponniah](#)
Subject: RE: Introductions: Deloitte / WICS
Date: Wednesday, 24 February 2021 3:25:17 pm
Attachments: [image007.png](#)
[image008.png](#)
[image009.png](#)
[image010.png](#)
[image011.png](#)
[image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)

Thank you Sam.

I'm happy to schedule a meeting for us on Friday.

Best,

9(2)(a)
9(2)(a)

Director | Corporate Finance

Deloitte

Level 12, 20 Customhouse Quay, PO Box 1990, Wellington 6140, New Zealand

D: 9(2)(a) | M: 9(2)(a) | O: 9(2)(a) | F: 9(2)(a)

9(2)(a)@deloitte.co.nz | www.deloitte.co.nz

Deloitte means Deloitte Limited (in its own capacity for assurance services, otherwise as trustee for the Deloitte Trading Trust)



[Navigating COVID-19: read the latest updates from our experts](#)

Deloitte 175



Please consider the environment before printing.

From: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>

Sent: Wednesday, 24 February 2021 3:14 PM

To: 9(2)(a) <9(2)(a)@deloitte.co.nz>

Subject: [EXT] FW: [EXT] RE: Introductions: Deloitte / WICS

9(2)(a)

I was going to send a follow up to Colin following on from our catch up earlier today but I see he's already come back with a suggestion to catch up this Friday. Did you still need me to send a follow up or are you happy to schedule something with him and Andrea to discuss their outputs?

Cheers

Sam

Sam Ponniah | Senior Consultant

MartinJenkins

M 9(2)(a) T 9(2)(a)

From: Colin McNaughton <9(2)(a)@watercommission.co.uk>

Sent: Tuesday, 23 February 2021 5:47 AM

To: 9(2)(a) <9(2)(a)@deloitte.co.nz>; Sam Ponniah

<9(2)(a)@martinjenkins.co.nz>; Andrea Mancini

<9(2)(a)@watercommission.co.uk>; Tan, John <9(2)(a)@deloitte.co.nz>; 9(2)(a)

9(2)(a) <9(2)(a)@deloitte.com.au>

Subject: RE: [EXT] RE: Introductions: Deloitte / WICS

9(2)(a)

Thanks for your email. Please could we schedule something for Friday 26th? We have a call with the DIA on our work on investment requirements tomorrow and will be sharing some materials with the DIA on future efficiencies later in the week – we will therefore be in a better place to update you on both areas at that stage

Thanks

Colin

From: 9(2)(a) <9(2)(a)@deloitte.co.nz>

Sent: 21 February 2021 00:35

To: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>; Colin McNaughton

<9(2)(a)@watercommission.co.uk>; Andrea Mancini

<9(2)(a)@watercommission.co.uk>; Tan, John <9(2)(a)@deloitte.co.nz>; 9(2)(a)

9(2)(a) <9(2)(a)@deloitte.com.au>

Subject: [EXT] RE: Introductions: Deloitte / WICS

CAUTION: This email originated from outside the organisation. Do not click links or open attachments unless you recognise the sender and know the content is safe.

Hi Colin and Andrea,

With reference to Sam's email below, can we please schedule a call to discuss this further? If possible on Monday (22nd) or Tuesday (23rd).

In particular, we are keen to discuss what the outputs of **Phase 2** will look like on future investment requirements and potential efficiencies. We are also keen to get an understanding of when the outputs for Phase 2 will be available for us to incorporate it into our economic impact assessment.

Can you please suggest some options that will work for you on Monday (22nd) or Tuesday (23rd)?

Best regards,

9(2)(a)

Director | Corporate Finance

Deloitte

Level 12, 20 Customhouse Quay, PO Box 1990, Wellington 6140, New Zealand

D: 9(2)(a) | M: 9(2)(a) | O: 9(2)(a) | F: 9(2)(a)

9(2)(a)@deloitte.co.nz | www.deloitte.co.nz

Deloitte means Deloitte Limited (in its own capacity for assurance services, otherwise as trustee for the Deloitte Trading Trust)



[Navigating COVID-19: read the latest updates from our experts](#)



Please consider the environment before printing.

From: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>

Sent: Friday, 12 February 2021 11:17 AM

To: Colin McNaughton <9(2)(a)@watercommission.co.uk>; Andrea Mancini <9(2)(a)@watercommission.co.uk>; Tan, John <9(2)(a)@deloitte.co.nz>; 9(2)(a) <9(2)(a)@deloitte.co.nz>; 9(2)(a) <9(2)(a)@deloitte.com.au>

Cc: Alan Sutherland <9(2)(a)@watercommission.co.uk>; Dent, Alan <9(2)(a)@deloitte.co.nz>

Subject: [EXT] Introductions: Deloitte / WICS

Hi Colin and Andrea

Just putting you in touch with the Deloitte team that will be helping us to model the broader economic impacts of the reform programme. The work will be a critical part of the case for change and to advise Ministers, Mayors, council elected representatives and the general public on what we anticipate the downstream economic impacts of reform could look like, in terms of employment, GDP, productivity etc at a national, regional and local level.

John, 9(2)(a) are keen to understand what the outputs of your work will look like so they can calibrate their models to extract what they need from your work. The interface will primarily be on the numbers you produce around the future investment requirements and the potential efficiencies available through scale.

I'll leave it to them to connect with you and find a time to discuss. Feel free to reach out if you have any questions.

Cheers

Sam

Sam Ponniah | Senior Consultant

MartinJenkins

M 9(2)(a) T 9(2)(a)



Level 16, AIG Building, 41 Shortland St. **Auckland**

Level 1, City Chambers, Cnr Johnston & Featherston Sts. **Wellington**

PLEASE NOTE: The information contained in this email message and any attached files may be confidential and subject to privilege. The views expressed may not necessarily be the official view of Martin, Jenkins and Associates Limited. If you are not the intended recipient, you are notified that any use, disclosure or copying of this email is unauthorised. If you have received this email in error, please notify us immediately by reply email and delete the original. Thank you.

Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be subject to legal privilege or copyright. If you have received this email in error, please advise the sender immediately and destroy the message and any attachments. If you are not the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest terms of engagement which we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures,

no assurance or guarantee is implied or should be construed that this email message or its attachments are free from computer viruses. Deloitte assumes no responsibility for any such virus or any effects of such a virus on the recipient's systems or data.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai, Singapore, Sydney, Taipei and Tokyo.

This email and any files transmitted with it are confidential and intended solely for the use of the individual or entity to whom they are addressed. Any views or opinions expressed in this e-mail are those of the sender and do not necessarily coincide with those of the Water Industry Commission for Scotland. If you have received this e-mail in error please remove from your computer and contact the sender. Liability cannot be accepted for statements made which are clearly the senders own and not made on behalf of the Water Industry Commission For Scotland.

Released Under the Official Information Act 1982

From: 9(2)(a)
To: Colin McNaughton; Sam Ponniah; Andrea Mancini; Tan, John; 9(2)(a)
Subject: RE: Introductions: Deloitte / WICS
Date: Wednesday, 24 February 2021 3:36:14 pm
Attachments: [image007.png](#)
[image008.png](#)
[image009.png](#)
[image010.png](#)
[image011.png](#)
[image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)

Colin,
Thank you for your email.
I've scheduled a meeting for us on Friday. Please let me know if the proposed time works for you.
Best,

9(2)(a)

Director | Corporate Finance
Deloitte
Level 12, 20 Customhouse Quay, PO Box 1990, Wellington 6140, New Zealand
D: 9(2)(a) | M: 9(2)(a) | O: 9(2)(a) | F: 9(2)(a)
9(2)(a)@deloitte.co.nz | www.deloitte.co.nz

Deloitte means Deloitte Limited (in its own capacity for assurance services, otherwise as trustee for the Deloitte Trading Trust)



[Navigating COVID-19: read the latest updates from our experts](#)



Please consider the environment before printing.

From: Colin McNaughton <9(2)(a)@watercommission.co.uk>
Sent: Tuesday, 23 February 2021 5:47 AM
To: 9(2)(a), 9(2)(a)@deloitte.co.nz; Sam Ponniah <9(2)(a)@martinjenkins.co.nz>; Andrea Mancini <9(2)(a)@watercommission.co.uk>; Tan, John <9(2)(a)@deloitte.co.nz>; 9(2)(a) <9(2)(a)@deloitte.com.au>
Subject: [EXT] RE: [EXT] RE: Introductions: Deloitte / WICS
Hi 9(2)(a)

Thanks for your email. Please could we schedule something for Friday 26th? We have a call with the DIA on our work on investment requirements tomorrow and will be sharing some materials with the DIA on future efficiencies later in the week – we will therefore be in a better place to update you on both areas at that stage

Thanks
Colin

From: 9(2)(a), 9(2)(a) <9(2)(a)@deloitte.co.nz>

Sent: 21 February 2021 00:35

To: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>; Colin McNaughton

<9(2)(a)@watercommission.co.uk>; Andrea Mancini

<9(2)(a)@watercommission.co.uk>; Tan, John <9(2)(a)@deloitte.co.nz>; 9(2)(a),

9(2)(a) <9(2)(a)@deloitte.com.au>

Subject: [EXT] RE: Introductions: Deloitte / WICS

CAUTION: This email originated from outside the organisation. Do not click links or open attachments unless you recognise the sender and know the content is safe.

Hi Colin and Andrea,

With reference to Sam's email below, can we please schedule a call to discuss this further? If possible on Monday (22nd) or Tuesday (23rd).

In particular, we are keen to discuss what the outputs of **Phase 2** will look like on future investment requirements and potential efficiencies. We are also keen to get an understanding of when the outputs for Phase 2 will be available for us to incorporate it into our economic impact assessment.

Can you please suggest some options that will work for you on Monday (22nd) or Tuesday (23rd)?

Best regards,

9(2)(a)

Director | Corporate Finance

Deloitte

Level 12, 20 Customhouse Quay, PO Box 1990, Wellington 6140, New Zealand

D: 9(2)(a) | M: 9(2)(a) | O: 9(2)(a) | F: 9(2)(a)

9(2)(a) <9(2)(a)@deloitte.co.nz> | www.deloitte.co.nz

Deloitte means Deloitte Limited (in its own capacity for assurance services, otherwise as trustee for the Deloitte Trading Trust)



[Navigating COVID-19: read the latest updates from our experts](#)

Deloitte 175



Please consider the environment before printing.

From: Sam Ponniah <[REDACTED]@martinjenkins.co.nz>

Sent: Friday, 12 February 2021 11:17 AM

To: Colin McNaughton <[REDACTED]@watercommission.co.uk>; Andrea Mancini <[REDACTED]@watercommission.co.uk>; Tan, John <[REDACTED]@deloitte.co.nz>; [REDACTED] <[REDACTED]@deloitte.co.nz>; [REDACTED] <[REDACTED]@deloitte.com.au>

Cc: Alan Sutherland <[REDACTED]@watercommission.co.uk>; Dent, Alan <[REDACTED]@deloitte.co.nz>

Subject: [EXT] Introductions: Deloitte / WICS

Hi Colin and Andrea

Just putting you in touch with the Deloitte team that will be helping us to model the broader economic impacts of the reform programme. The work will be a critical part of the case for change and to advise Ministers, Mayors, council elected representatives and the general public on what we anticipate the downstream economic impacts of reform could look like, in terms of employment, GDP, productivity etc at a national, regional and local level.

John, [REDACTED] are keen to understand what the outputs of your work will look like so they can calibrate their models to extract what they need from your work. The interface will primarily be on the numbers you produce around the future investment requirements and the potential efficiencies available through scale.

I'll leave it to them to connect with you and find a time to discuss. Feel free to reach out if you have any questions.

Cheers

Sam

Sam Ponniah | Senior Consultant

MartinJenkins

M [REDACTED] T [REDACTED]



[Level 16, AIG Building, 41 Shortland St, Auckland](#)

[Level 1, City Chambers, Cnr Johnston & Featherston Sts, Wellington](#)

PLEASE NOTE: The information contained in this email message and any attached files may be confidential and subject to privilege. The views expressed may not necessarily be the official view of Martin, Jenkins and Associates Limited. If you are not the intended recipient, you are notified that any use, disclosure or copying of this email is unauthorised. If you have received this email in error, please notify us immediately by reply email and delete the original. Thank you.

Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be subject to legal privilege or copyright. If you have received this email in error, please advise the sender immediately and destroy the message and any attachments. If you are not the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest terms of engagement which we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures, no assurance or guarantee is implied or should be construed that this email message or its attachments are free from computer viruses. Deloitte assumes no responsibility for any such virus or any effects of such a virus on the recipient's systems or data.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate

and independent legal entities, provide services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai, Singapore, Sydney, Taipei and Tokyo.

This email and any files transmitted with it are confidential and intended solely for the use of the individual or entity to whom they are addressed. Any views or opinions expressed in this e-mail are those of the sender and do not necessarily coincide with those of the Water Industry Commission for Scotland. If you have received this e-mail in error please remove from your computer and contact the sender. Liability cannot be accepted for statements made which are clearly the senders own and not made on behalf of the Water Industry Commission For Scotland.

Released Under the Official Information Act 1982

From: [Tan, John](#)
To: [Sam Ponniah](#)
Cc: 9(2)(a); 9(2)(a) [Dent, Alan](#)
Subject: Data from WICS
Date: Friday, 26 February 2021 4:05:03 pm
Attachments: [Three waters economic impact methodology - for WICS.pptx](#)

Hi Sam

Thanks for joining the call this morning and following up with WICS. We would like to send the attached to WICS which sets out what we are looking for from them, why we need it, and noting the caveats that they mentioned on the call.

We have also simplified the methodology slide a little and developed our thinking based on what is available from WICS. The updated methodology does place quite a bit of reliance on WICS so we would be keen to access some of this data asap next week and we would appreciate any help that you can in encouraging them along .. We don't need perfection at this stage, but the format and rough quantum will be fine

Please let us know if you have any comment on the attached before we share with WICS

John

Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be subject to legal privilege or copyright. If you have received this email in error, please advise the sender immediately and destroy the message and any attachments. If you are not the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest terms of engagement which we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures, no assurance or guarantee is implied or should be construed that this email message or its attachments are free from computer viruses. Deloitte assumes no responsibility for any such virus or any effects of such a virus on the recipient's systems or data.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai, Singapore, Sydney, Taipei and Tokyo.

From: [Tan, John](#)
To: [Colin McNaughton](#); [Sam Ponniah](#); 9(2)(a) [@watercommission.co.uk](#)
Cc: 9(2)(a) [Dent, Alan](#)
Subject: 3W data and methodology
Date: Friday, 26 February 2021 5:53:05 pm
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[Three waters economic impact methodology - for WICS.pptx](#)

Hi Colin & Andrea

Thanks again for your time and input this morning – it was tremendously useful. Based on our discussion, we have updated our proposed approach to take into account some of the data points that were discussed this morning. Please see attached a couple of slides that set out the data points that we would like to have a look at further and where we might incorporate this data into our analysis. I understand from Sam that you will prioritise H/M/L case data for your preferred methodologies – which is fine

Our analysis is at a regional level, so any analysis that you have at a local council level of granularity would be appreciated – as this is the level that we need to input into our CGE modelling

Can you please take a look at the attached and send us what you can (or via Sam at DIA). If any of the data files are too big to email, we have a secure Sharefile data transfer site that we can provide you with access to

It would be good if we could arrange a follow up chat next week when you are available to discuss any clarifications on the data

We note the caveats that you mentioned on the call in relation to data quality and completeness – and this data is mostly to refine our methodology and structure our modelling at present.

Kind Regards

John

John Tan

Partner | Corporate Finance

Deloitte

Level 12, 20 Customhouse Quay, PO Box 1990, Wellington 6140, New Zealand

Direct: 9(2)(a) | Main: 9(2)(a) | Fax: 9(2)(a) | Mobile: 9(2)(a)

9(2)(a) [@deloitte.co.nz](#) | [www.deloitte.co.nz](#)

Deloitte means Deloitte Limited (in its own capacity for assurance services, otherwise as trustee for the Deloitte Trading Trust)



Please consider the environment before printing.

Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be subject to legal privilege or copyright. If you have received this email in error, please advise the sender immediately and destroy the message and any attachments. If you are not the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest terms of engagement which we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures, no assurance or guarantee is implied or should be construed that this email message or its attachments are free from computer viruses. Deloitte assumes no responsibility for any such virus or any effects of such a virus on the recipient's systems or data.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global

network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai, Singapore, Sydney, Taipei and Tokyo.

Released Under the Official Information Act 1982

From: [Tan, John](#)
To: [Sam Ponniah](#)
Cc: 9(2)(a) [Dent, Alan](#)
Subject: RE:Data from WICS
Date: Friday, 26 February 2021 4:51:59 pm

Hi Sam

Thanks for the feedback. We can probably work with a H/M/L set of data for the two benchmarking approaches + presumably the aggregated RFI data. Regarding the Council unconstrained data, I appreciate the limitations/inconsistencies, although it is one useful data point that might feed into our counterfactual. Otherwise, it will revert back to judgement on what proportion of expenditure on the WICS unconstrained scenarios should be included in the counterfactual

John

From: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>
Sent: Friday, 26 February 2021 4:31 PM
To: Tan, John <9(2)(a)@deloitte.co.nz>
Cc: 9(2)(a) <9(2)(a)@deloitte.co.nz>; 9(2)(a) <9(2)(a)@deloitte.co.nz>; Dent, Alan <9(2)(a)@deloitte.co.nz>
Subject: [EXT] RE: Data from WICS

Thanks John, I think this looks good to share with WICS.

Note that where I got to with WICS was that rather than provide capex profiles for all four approaches they would send through low, medium and high profiles based on the asset values and Scottish benchmarking approaches primarily. They are fairly confident with these approaches to share them now, even though they are of the view the numbers may end up being higher still.

I'm not sure that the council unconstrained data will help you all that much given there are inconsistencies in approach, and not all councils have provided it. WICS have also had to apply their own adjustment to this to address the fact that many councils have not considered the future regulatory requirements – so the other approaches are probably more justifiable given they use established relationships between factors like density, coastline etc and water investment to forecast future requirements.

Cheers

Sam

Sam Ponniah | Senior Consultant

MartinJenkins

M 9(2)(a) T 9(2)(a)

From: Tan, John <9(2)(a)@deloitte.co.nz>
Sent: Friday, 26 February 2021 4:04 PM
To: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>
Cc: 9(2)(a) <9(2)(a)@deloitte.co.nz>; 9(2)(a) <9(2)(a)@deloitte.co.nz>; Dent, Alan <9(2)(a)@deloitte.co.nz>
Subject: Data from WICS

Hi Sam

Thanks for joining the call this morning and following up with WICS. We would like to send the attached to WICS which sets out what we are looking for from them, why we need it, and noting the caveats that they mentioned on the call.

We have also simplified the methodology slide a little and developed our thinking based on what is available from WICS. The updated methodology does place quite a bit of reliance on WICS so we would be keen to access some of this data asap next week and we would appreciate any help that you can in encouraging them along .. We don't need perfection at this stage, but the format and rough quantum will be fine

Please let us know if you have any comment on the attached before we share with WICS
John

Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be subject to legal privilege or copyright. If you have received this email in error, please advise the sender immediately and destroy the message and any attachments. If you are not the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest terms of engagement which we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures, no assurance or guarantee is implied or should be construed that this email message or its attachments are free from computer viruses. Deloitte assumes no responsibility for any such virus or any effects of such a virus on the recipient's systems or data.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai, Singapore, Sydney, Taipei and Tokyo.

Released Under the Official Information Act 1982

From: [Tan, John](#)
To: [Sam Ponniah](#)
Cc: [Dent, Alan](#); 9(2)(a)
Subject: Deloitte - three waters status update 260221
Date: Monday, 1 March 2021 6:39:38 pm
Attachments: [Deloitte - three waters status update 260221.pptx](#)

Hi Sam

Attached is our status update in advance of our catch up tomorrow. Keen to understand what/when WICS promised to share data – as this is on our critical path

John

Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be subject to legal privilege or copyright. If you have received this email in error, please advise the sender immediately and destroy the message and any attachments. If you are not the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest terms of engagement which we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures, no assurance or guarantee is implied or should be construed that this email message or its attachments are free from computer viruses. Deloitte assumes no responsibility for any such virus or any effects of such a virus on the recipient's systems or data.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai, Singapore, Sydney, Taipei and Tokyo.

From: [Tan, John](#)
To: [Sam Ponniah](#); 9(2)(a) [@nz.ey.com](#); 9(2)(a) [@dia.govt.nz](#); [Sarah Baddeley](#); 9(2)(a) [@dia.govt.nz](#); [Nick Davis](#); 9(2)(a) [@dia.govt.nz](#); [Sylvie Ots](#); 9(2)(a) [@dia.govt.nz](#)
Cc: [Dent, Alan](#); 9(2)(a) [@dia.govt.nz](#)
Subject: Economic Modelling Assumptions paper
Date: Wednesday, 24 February 2021 8:05:48 pm
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)
[Three waters economic impact methodology paper v1.1.pdf](#)

Dear all

Thanks for your participation at the workshop last week. Please find attached a summary of the notes from that workshop and our proposed approach. Can you please provide any feedback, before the end of the week, of any points that are inconsistent with your understanding of what was discussed or updates required. The assumption set will evolve with the project and we will endeavour to update those slides in due course if this is useful

P17 lists a number of data sources that we are expecting to interface with you on. Can you please let us know if there is anything unexpected in this list and when you will be able to provide the format of the dataset, and the data itself

Kind Regards

John

John Tan

Partner | Corporate Finance

Deloitte

Level 12, 20 Customhouse Quay, PO Box 1990, Wellington 6140, New Zealand

D: 9(2)(a) | M: 9(2)(a) | O: 9(2)(a) | F: 9(2)(a)

9(2)(a) [@deloitte.co.nz](#) | [www.deloitte.co.nz](#)

Deloitte means Deloitte Limited (in its own capacity for assurance services, otherwise as trustee for the Deloitte Trading Trust)



[Navigating COVID-19: read the latest updates from our experts](#)

Deloitte 175



Please consider the environment before printing.

Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be subject to legal privilege or copyright. If you have received this email in error, please advise the sender immediately and destroy the message and any attachments. If you are not

the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest terms of engagement which we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures, no assurance or guarantee is implied or should be construed that this email message or its attachments are free from computer viruses. Deloitte assumes no responsibility for any such virus or any effects of such a virus on the recipient's systems or data.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai, Singapore, Sydney, Taipei and Tokyo.

Released Under the Official Information Act 1982



Three Waters Reform Status Update

DEPARTMENT OF INTERNAL AFFAIRS
26 FEBRUARY 2021

Status update

Commentary

This week we have finalised the draft methodology paper, and begun to shape up our framework for estimating the urban/provincial/rural impacts of reform. We have also undertaken additional interviews and identified key themes to date.

Next week, we will complete our framework for estimating urban/provincial/rural impacts and continue to hold interviews with industry participants. We will also draft report sections where possible.

Receiving data from WICS is on our critical path to the 2 April deadline for the final report, as well as the dependent economic analysis milestones (in red). We have adapted our methodology which is dependent on receiving WICS data to enable us to complete model customisation, undertake the modelling itself (which takes three weeks from the time data is received), draft the commentary around results, and integrate this analysis with the affected industries workstream.

We would feel a lot more comfortable on the timeframes once we have seen some data from WICS.

Deliverables / Milestones	Status	Indicative Due Date
Project Inception Meeting	Complete	5 & 10 February
Draft methodology and key information requirements	Complete	17 February
Data collection and model design	In progress	22 February
Agreed methodology, scenario and sensitivity definition, and confirmation of key assumptions	Complete	22 February 23 February
Economic modelling	In progress	16 March
Draft economic impact analysis	In progress	19 March
Stakeholder consultation	In progress	Ongoing
Draft industry development study	In progress	22 March
Final report on economic impact analysis and industry development study	At risk without data	2 April

Status

Overall	On track, excluding milestones dependent on receiving data
Budget	On track. Planning to bill 30% in February

Work completed last fortnight

Work completed for 22 to 26 February

- Finalised the draft methodology paper.
- Developed an updated methodology and confirmed what data we need from WICS, based on what is currently available.
- Continue to develop a framework outside the CGE model to estimate the impact of the reform package across urban/provincial/rural areas.
- Customised the CGE model to the extent possible (i.e. regional and sectoral boundaries), noting we are waiting on data to complete customisation.
- Held interviews with Water New Zealand, Taituarā and Beca, and began to develop identify key themes.

Activities this week

Work planned for 01 to 05 March

- Receive data from, EY, WICS and Mafic.
- Complete customisation of CGE model.
- Once data is received, refine data for CGE shocks to reflect the counterfactual and policy scenarios. We will test these with you before we model the shocks.
- Complete draft framework to estimate the impact of the reform package across urban/provincial/rural areas.
- Develop narrative around scenarios to be modelled, including key policy parameters.
- Begin desktop research to understand the current state of affected industries.
- Continue to hold interviews with industry participants and pull together key themes.
- Populate the draft report with sections that can be drafted early.

From: [Dent, Alan](#)
To: [Sam Ponniah](#)
Cc: 9(2)(a) [Tan, John](#)
Subject: RE:Industry Engagement
Date: Monday, 1 March 2021 5:50:00 pm
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)

Thanks Sam

Happy to engage with some more of the labour entities and Taumata Arowai.

Will give you a call tomorrow

Cheers

Alan

From: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>

Sent: Monday, 1 March 2021 5:37 PM

To: Dent, Alan <9(2)(a)@deloitte.co.nz>

Cc: 9(2)(a) <9(2)(a)@deloitte.co.nz>; 9(2)(a) <9(2)(a)@deloitte.co.nz>; Tan, John <9(2)(a)@deloitte.co.nz>

Subject: [EXT] RE: RE:Industry Engagement

Hi Alan

Thanks for your email.

Be interested in rationale for that particular set of representatives, based on the emerging insights from the first round.

I know that there is likely to be interest in seeing some of the labour representative organisations too so interested also in your thoughts based on the interview with WaterNZ and their views on workforce issues. Taumata Arowai would be another one worth engaging with too.

In terms of next steps I can share this list and rationale with Nick and one or two others here to get the go ahead.

Interesting comments re: capex spend. Councils have generally had guidance that any immediate investment should be focused on better understanding asset condition and performance and customer service outcomes (given the pending reforms and likely transfer of asset ownership). There would be a concern if LTPs are signalling a significant uptick in capital programmes, given where we're at with the reform programme.

Cheers

Sam

Sam Ponniah | Senior Consultant

MartinJenkins

M +9(2)(a) T 9(2)(a)

From: Dent, Alan <9(2)(a)@deloitte.co.nz>

Sent: Monday, 1 March 2021 8:39 AM

To: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>

Cc: 9(2)(a) <9(2)(a)@deloitte.co.nz>; 9(2)(a) <9(2)(a)@deloitte.co.nz>; Tan, John <9(2)(a)@deloitte.co.nz>

Subject: RE:Industry Engagement

Hi Sam

By mid next week we will have largely finished our first round of industry engagement.

We are keen to set up the next round of conversations. Our thoughts are that we would want to talk to

- The 4 major service providers (Fulton Hogan, Veolia, Downer, City Care)
- At least a couple of additional engineering consultancies – ideally those with a small local

presence but who are part of large global networks and a focus on water

- Hynds and MD Filtration Technology

I will give you a call to discuss how we move this forward

One issue that has been raised relates to the step up in investment in water indicated by the latest council LTPs. Apart from concerns re capacity and the risk of a boom/bust cycle of investment there is also the potential for sub optimal investment decisions being made when viewed with a regional/super-regional lens. Given the long lived nature on much of the capex this has the risk of pushing out the potential for some capital efficiency for many years. Just wondering whether this has been flagged as an issue.

Cheers

Alan Dent

Partner | Corporate Finance

Deloitte

Level 12, 20 Customhouse Quay, PO Box 1990, Wellington 6140, New Zealand

D: 9(2)(a) | M: 9(2)(a) | O: 9(2)(a) | F: 9(2)(a)

9(2)(a)@deloitte.co.nz | www.deloitte.co.nz

Deloitte means Deloitte Limited (in its own capacity for assurance services, otherwise as trustee for the Deloitte Trading Trust)



[Navigating COVID-19: read the latest updates from our experts](#)



Please consider the environment before printing.

Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be subject to legal privilege or copyright. If you have received this email in error, please advise the sender immediately and destroy the message and any attachments. If you are not the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest terms of engagement which we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures, no assurance or guarantee is implied or should be construed that this email message or its attachments are free from computer viruses. Deloitte assumes no responsibility for any such virus or any effects of such a virus on the recipient's systems or data.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each

of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai, Singapore, Sydney, Taipei and Tokyo.

Released Under the Official Information Act 1982

From: 9(2)(a)
To: [Sam Ponniah](#)
Cc: 9(2)(a) [Tan, John](#)
Subject: RE:Three waters - TA mapping
Date: Tuesday, 2 March 2021 11:59:31 am
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)

Thanks for this Sam

From: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>
Sent: Tuesday, 2 March 2021 11:21 AM
To: 9(2)(a) <9(2)(a)@deloitte.co.nz>
Cc: 9(2)(a) <9(2)(a)@deloitte.co.nz>; Tan, John <9(2)(a)@deloitte.co.nz>
Subject: [EXT] RE: Three waters - TA mapping

Hi 9(2)(a)

We've generally been using the LGNZ sector groupings, which are available on their website <https://www.lgnz.co.nz/about/membership-representation/sector-groups/>

Cheers

Sam

Sam Ponniah | Senior Consultant

MartinJenkins

M 9(2)(a) T 9(2)(a)

From: 9(2)(a) <9(2)(a)@deloitte.co.nz>
Sent: Tuesday, 2 March 2021 10:21 AM
To: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>
Cc: 9(2)(a) <9(2)(a)@deloitte.co.nz>; Tan, John <9(2)(a)@deloitte.co.nz>
Subject: Three waters - TA mapping

Hi Sam

We understand DIA has a list which classifies each TA as urban, provincial or rural – would you be able to share this with us please?

Many thanks

9(2)(a)

Analyst | Corporate Finance

Deloitte

Level 12, 20 Customhouse Quay, PO Box 1990, Wellington 6140, New Zealand

D: 9(2)(a) | O: 9(2)(a) | F: 9(2)(a)

9(2)(a)@deloitte.co.nz | www.deloitte.co.nz

Deloitte means Deloitte Limited (in its own capacity for assurance services, otherwise as trustee for the Deloitte Trading Trust)



Please consider the environment before printing.

Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be subject

to legal privilege or copyright. If you have received this email in error, please advise the sender immediately and destroy the message and any attachments. If you are not the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest terms of engagement which we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures, no assurance or guarantee is implied or should be construed that this email message or its attachments are free from computer viruses. Deloitte assumes no responsibility for any such virus or any effects of such a virus on the recipient's systems or data.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai, Singapore, Sydney, Taipei and Tokyo.

Released Under the Official Information Act 1982

From: [Dent, Alan](#)
To: [Sam Ponniah](#)
Subject: RE Key material suppliers - water sector
Date: Thursday, 4 March 2021 10:06:34 am
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)

Hi Sam

I think we are waiting on you to come back re your comfort as to the focus on the next round of interviews? We are having a follow up discussion with WaterNZ on Monday.

Fyi set out below is a list of materials suppliers that we have been provided with as part of our **Out of Scope**

The list below provides us with contact details that we are happy to reach out to – but if there are other contacts (e.g. for Hynds) that you think are more appropriate then we will be guided by you. We would only look to reach out to a couple in the specific context of the DIA project – but we may gain further insight as a by-product of our **Out of Scope**

A key theme coming through is that labour is the overwhelming input across most dimensions of the supply chain.

Kind Regards

Alan Dent

Partner | Corporate Finance

Deloitte

Level 12, 20 Customhouse Quay, PO Box 1990, Wellington 6140, New Zealand

D: **9(2)(a)** | M: **9(2)(a)** | O: **9(2)(a)** | F: **9(2)(a)**

9(2)(a) @deloitte.co.nz | www.deloitte.co.nz

Deloitte means Deloitte Limited (in its own capacity for assurance services, otherwise as trustee for the Deloitte Trading Trust)



[Navigating COVID-19: read the latest updates from our experts](#)

Deloitte 175



Please consider the environment before printing

Asmuss	Pipework/Valves/Fittings etc	9(2)(a)
Hynds Pipe Systems Ltd	Pre-cast supplies	First call out number is 9(2)(a)
Humes	Pre-cast supplies	9(2)(a)
Fulton Hogan	Aggregates and Asphalt	Aggregates 9(2)(a)
		9(2)(a)

Winstones Cleanfill & Quarry	Aggregate Supply	9(2)(a)
Steel and Tube Ltd (Auckland Distribution)	Critical Supplier to Hynds and Humes	9(2)(a)
Marley Pipe	pipe supplies - critical supplier to Hynds and Humes	9(2)(a)
IPLEX pipeline systems	pipe supplies - critical supplier to Hynds and Humes	First Contact for product 9(2)(a)

Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be subject to legal privilege or copyright. If you have received this email in error, please advise the sender immediately and destroy the message and any attachments. If you are not the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest terms of engagement which we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures, no assurance or guarantee is implied or should be construed that this email message or its attachments are free from computer viruses. Deloitte assumes no responsibility for any such virus or any effects of such a virus on the recipient's systems or data.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai, Singapore, Sydney, Taipei and Tokyo.

Released Under the Official Information Act 1982

From: [Tan, John](#)
To: [Sam Ponniah](#)
Cc: 9(2)(a)
Subject: WICS data
Date: Friday, 5 March 2021 2:32:38 pm
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)

Hi Sam

Apologies to be a bit radio silent over the past day or so – have been in a few all day workshops.

9(2)(a) is going through the WICS info and the methodology feedback at the moment and will come back with a combined response on anything else that we need

From what I have seen so far, the WICS data looks good and certainly have given us enough data to keep going for now. We'll revert with any comments we have on what has been received so far before days end

John

John Tan

Partner | Corporate Finance

Deloitte

Level 12, 20 Customhouse Quay, PO Box 1990, Wellington 6140, New Zealand

D: 9(2)(a) | M: 9(2)(a) | O: 9(2)(a) | F: 9(2)(a)

9(2)(a)@deloitte.co.nz | www.deloitte.co.nz

Deloitte means Deloitte Limited (in its own capacity for assurance services, otherwise as trustee for the Deloitte Trading Trust)



[Navigating COVID-19: read the latest updates from our experts](#)



Please consider the environment before printing.

Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be subject to legal privilege or copyright. If you have received this email in error, please advise the sender immediately and destroy the message and any attachments. If you are not the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest terms of engagement which we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does

From: [Dent, Alan](#)
To: [Sam Ponniah](#)
Subject: RE:Interviews
Date: Friday, 5 March 2021 2:37:51 pm
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)

Thanks Sam

From: Sam Ponniah <[REDACTED]>@martinjenkins.co.nz>

Sent: Friday, 5 March 2021 2:31 PM

To: Dent, Alan <[REDACTED]>@deloitte.co.nz>

Cc: Tan, John <[REDACTED]>@deloitte.co.nz>

Subject: [EXT] RE: RE:Interviews

Thanks Alan, that sounds sensible.

Happy for you to get underway. Like I said I'll make the initial contact with Bill but for the others happy for you to reach out directly.

Cheers

Sam

Sam Ponniah | Senior Consultant

MartinJenkins

M [REDACTED] T [REDACTED]

From: Dent, Alan <[REDACTED]>@deloitte.co.nz>

Sent: Friday, 5 March 2021 10:13 AM

To: Sam Ponniah <[REDACTED]>@martinjenkins.co.nz>

Cc: Tan, John <[REDACTED]>@deloitte.co.nz>

Subject: RE:Interviews

Hi Sam

I've highlighted the entities that we will reach out to. We may not get around them all but will see how we get on.

Let us know if you are OK and we will get underway

Cheers

Alan

From: Sam Ponniah <[REDACTED]>@martinjenkins.co.nz>

Sent: Thursday, 4 March 2021 10:34 AM

To: Dent, Alan <[REDACTED]>@deloitte.co.nz>

Cc: Tan, John <[REDACTED]>@deloitte.co.nz>

Subject: [EXT] RE: RE:Interviews

Hi Alan

We've had some further suggestions from within DIA for you to think about. Note the expectation is not that you'll speak to all of these people - I would treat this as a long list. From my perspective I agree it would be useful to speak to some of the major NZ players as well as large international firms with a presence in NZ. I also wonder about some of the other affected industries (e.g. chemical, planning) and whether we need to canvas these to provide a good cross-section of views.

In terms of process, keen to get your thoughts on which firms you'd shortlist from the suggestions below. Then am comfortable if you want to reach out directly to these firms. I will reach out to Bill Bayfield (Taumata Arowai) to put you in touch and provide him with a bit more context to your work.

Suggestions

Two firms of interest as they are large, established players internationally, with some presence in NZ (and therefore presumably some familiarity with the NZ market). Will no doubt have views on potential for expansion resulting from water reform:

- Xylem Water Solutions - Australia / NZ arm of a large American water technology provider, in public utility, residential, commercial, agricultural and industrial settings. The company does business in more than 150 countries. Jim Athanas is Managing Director Oceania and is on the board of Australian Water Association.
- Trility - An Australia and NZ company that describes itself as a 'partner of choice' in the delivery of water, wastewater and environmental services. In 2018 they became 100% owned by Beijing Enterprises Water Group. Francois Gouws is Managing Director. He is a former past president of the Australian Water Association.

The following names were provided by Taituarā / Water NZ if you're looking for people within the 'big 4' contractors and major national suppliers:

- Tim Gibson, CE City Care Water
- Mark Cristison, Fulton Hogan
- Roger Dunn – Veolia
- Garth Mappedoram – Downer, GM water & automation
- Aaron Hynds - Hynds, major industry pipe, valve, etc supplier
- Chriss Wheeler - Humes, the other major supplier National sales and distribution manager
- Matt Ewen – MD Filtration Technology Ltd. technology provider, instrumentation, water treatment design build, small water systems
- Iain Rabbits – Lutra (but representative of consulting sector)
- Graham Colquhoun, General Manager Ixom NZ

One name provided by Taituarā was Jeremy Holman, currently with Crown Infrastructure Partners but an ex GM from within Downer and with significant UK experience also so has a view across the NZ construction landscape of current commitments and resource/supply pinch-points.

A few others you might want to consider (this is probably in the nice to have space but will leave that to your judgement):

- **Stantec formally MWH and probably the largest Water engineering company in NZ. David Hogg would be the contact (although we note that having spoken to Beca you may not get further value from another engineering firm)**
- WSP – presumably in a similar boat to Stantec. Philip McFarlane would be the contact
- Arup – for more of a planning perspective
- Waugh Infrastructure – more into the management space but some good thinkers. Contact Ross Waugh.
- Tonkin + Taylor – a bent towards the environmental but again, some good thinkers. I would start with Tim Fisher.
- Civil Contractors, although they are more heavily transport focussed but they do pick up a lot of the smaller regional and family firms

Cheers
Sam

Sam Ponniah | Senior Consultant

MartinJenkins

M 9(2)(a) T 9(2)(a)

From: Dent, Alan <9(2)(a)@deloitte.co.nz>

Sent: Tuesday, 2 March 2021 1:55 PM

To: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>

Cc: Tan, John <9(2)(a)@deloitte.co.nz>

Subject: RE:Interviews

Hi Sam

Further to our call before

- We will arrange to talk to Taumata Arowai

We are keen to talk to some labour representatives

- We think that we should add Fletchers to the list and Engineering NZ

Once you hear back from Allan/Nick we can circle back and agree best approach to reaching out/contact details etc

Cheers

Alan Dent

Partner | Corporate Finance

Deloitte

Level 12, 20 Customhouse Quay, PO Box 1990, Wellington 6140, New Zealand

D: 9(2)(a) | M: 9(2)(a) | O: 9(2)(a) | F: 9(2)(a)

9(2)(a) [@deloitte.co.nz](mailto:9(2)(a)@deloitte.co.nz) | www.deloitte.co.nz

Deloitte means Deloitte Limited (in its own capacity for assurance services, otherwise as trustee for the Deloitte Trading Trust)



[Navigating COVID-19: read the latest updates from our experts](#)



Please consider the environment before printing.

Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be subject to legal privilege or copyright. If you have received this email in error, please advise the sender immediately and destroy the message and any attachments. If you are not the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest terms of engagement which we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures, no assurance or guarantee is implied or should be construed that this email message or its attachments are free from computer viruses. Deloitte assumes no responsibility for any such virus or any effects of such a virus on the recipient's systems or data.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide services from more than 100 cities across the region,

including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai, Singapore, Sydney, Taipei and Tokyo.

Released Under the Official Information Act 1982

From: 9(2)(a)
To: [Sam Ponniah](#)
Subject: RE:DIA three waters - weekly catch up with Deloitte
Date: Friday, 5 March 2021 4:47:57 pm

Hi Sam

Calendars are a bit tricky for us on Tuesday, but we could do Monday 8th between 12 and 1 if that suits you? Otherwise 8:30am Monday, or 2:30pm Thursday would work.

Cheers

9(2)(a)

From: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>
Sent: Friday, 5 March 2021 4:11 PM
To: 9(2)(a) <9(2)(a)@deloitte.co.nz>
Subject: [EXT] RE: DIA three waters - weekly catch up with Deloitte

Hi 9(2)(a)

Is it possible to reschedule this for earlier before 10am or between 1.30 and 3pm that day?

Cheers

Sam

Sam Ponniah | Senior Consultant

MartinJenkins

M 9(2)(a) T 9(2)(a)

-----Original Appointment-----

From: 9(2)(a) <9(2)(a)@deloitte.co.nz>

Sent: Monday, 22 February 2021 1:25 PM

To: 9(2)(a) Tan, John; Dent, Alan; 9(2)(a)@martinjenkins.co.nz;

9(2)(a)

Subject: DIA three waters - weekly catch up with Deloitte

When: Monday, 8 March 2021 10:30 PM-11:00 PM .

Where: Microsoft Teams Meeting

Hi all

Some time for a weekly catch up with Sam and our team to discuss progress, dependencies, any roadblocks etc.

Cheers

9(2)(a)

Microsoft Teams meeting

Join on your computer or mobile app

[Click here to join the meeting](#)

[Learn More](#) | [Meeting options](#)

Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be subject to legal privilege or copyright. If you have received this email in error, please advise the sender immediately and destroy the message and any attachments. If you are not the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to

be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest terms of engagement which we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures, no assurance or guarantee is implied or should be construed that this email message or its attachments are free from computer viruses. Deloitte assumes no responsibility for any such virus or any effects of such a virus on the recipient's systems or data.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai, Singapore, Sydney, Taipei and Tokyo.

Released Under the Official Information Act 1982

From: [Tan, John](#)
To: [Sam Ponniah](#)
Cc: 9(2)(a)
Subject: RE:Update on WICS data
Date: Wednesday, 3 March 2021 5:55:05 pm
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)

Hi Sam

That's great. Thanks for following up and we'll wait with interest to see what turns up

Cheers John

From: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>
Sent: Wednesday, 3 March 2021 5:25 PM
To: Tan, John <9(2)(a)@deloitte.co.nz>
Cc: 9(2)(a) <9(2)(a)@deloitte.co.nz>
Subject: [EXT] RE: Update on WICS data

Hi John

Just got off a call with Alan – to recap

- They're comfortable sharing the status quo data and agreed to come back with this overnight
- They'll mock up what the output of their investment forecasts will look like and send this through as well – he said this would be a fairly simple spreadsheet (one thing we might need to check when this arrives is whether it breaks down the capex by type of spend). The actual data itself will be ready to share next Tuesday
- We should get the efficiency slide pack later this week documenting their initial analysis

Cheers

Sam

Sam Ponniah | Senior Consultant

MartinJenkins

M 9(2)(a) T 9(2)(a)

From: Tan, John <9(2)(a)@deloitte.co.nz>
Sent: Wednesday, 3 March 2021 2:43 PM
To: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>
Cc: 9(2)(a) <9(2)(a)@deloitte.co.nz>
Subject: RE:Update on WICS data

Hi Sam

Thanks for the update. I'll try to give you a call to follow up, but the key messages that I'd appreciate if you could pass on are:

- We appreciate WICS' concerns around data quality and completeness. We are using the data at this stage only to develop our model, confirm that the data format can be dragged and dropped in at the appropriate time. We fully expect that WICS to revise some of the data as they complete their checks and would not hold them in any way to the data that they provide in draft at this stage
- Receiving data on a staggered basis is better than perfect data a week late.

In terms of what you've already discussed with him, I have mapped the data points below to the 4 key data requests on the pack that I sent you, to make sure that we are talking about the same thing.

The two things that aren't covered in your note below, which are both pretty important are:

- #1 status quo data. I understood that this is WICS' aggregation of the RFI data, which

should be factual. I don't mind if they are still working on any 'adjustments from this', but access to the base data is critical to our model design – otherwise we either need to rely on EY's aggregation – which introduces a data consistency issue, or do it ourselves – which is painfully inefficient

- #4 efficiency savings estimates.

John

From: Sam Ponniah <[REDACTED]> [@martinjenkins.co.nz](mailto:[REDACTED]@martinjenkins.co.nz)

Sent: Wednesday, 3 March 2021 1:34 PM

To: Tan, John <[REDACTED]> [@deloitte.co.nz](mailto:[REDACTED]@deloitte.co.nz)

Cc: [REDACTED] <[REDACTED]> [@deloitte.co.nz](mailto:[REDACTED]@deloitte.co.nz)

Subject: [EXT] Update on WICS data

Hi John, just providing an update as I know this is on the critical path. Alan's come back overnight asking if they can supply the data to us early next week after they've sense checked the individual council data. I'm having a call with him later today to discuss.

I would like to get specific about what we need and why so we can manage any concerns he has. I'm going to push for the results based on the Scottish councils and asset values approaches given they seemed more confident in these numbers and had already agreed to share them with us last week [yes that would be great, this data forms part of the four approaches set out in #3 (unconstrained view)]. I'm guessing that if these were to change in any way that you will be able to easily update in your model but you need the initial results now to start building the model?

[conceptually, yes]

I know you also wanted the Rfl unconstrained data but this seems to be where the concern largely rests – how critical is this for the modelling at this stage? [moderately important, as this informs #2 (counterfactual). But for now, we could assume that the status quo = counterfactual for model testing purposes and then adjust this later when we see the results. Some feedback from the stakeholder sessions is that there may be less of an uplift for regulatory compliance than expected, or it might be very hard to meaningfully disaggregate this. What we really need is the aggregated RFI data (what I've termed #1 status quo)]

Lastly, in case I need to escalate this, could you advise what the impact on overall timeframes would be, including any impact on the modelling approach itself (if any), if you were to receive the WICS data next week? [Can you assume for now that a delay beyond this week might risk a 1:1 impact on the overall project delivery. In my mind, I had expected the WICS data at the start of last week – so the ~2 week or so delay is impacting our modelling/analysis/reporting time

Thanks for your help.

Cheers

Sam

Sam Ponniah | Senior Consultant

MartinJenkins

M [REDACTED] T [REDACTED]



Level 16, AIG Building, 41 Shortland St. **Auckland**

Level 1, City Chambers, Cnr Johnston & Featherston Sts. **Wellington**

PLEASE NOTE: The information contained in this email message and any attached files may be confidential and subject to privilege. The views expressed may not necessarily be the official view of Martin, Jenkins and Associates Limited. If you are not the intended recipient, you are notified that any use, disclosure or copying of this email is unauthorised. If you have received this email in error, please notify us immediately by reply email and delete the original. Thank you.

Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be subject to legal privilege or copyright. If you have received this email in error, please advise the sender immediately and destroy the message and any attachments. If you are not the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest terms of engagement which

we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures, no assurance or guarantee is implied or should be construed that this email message or its attachments are free from computer viruses. Deloitte assumes no responsibility for any such virus or any effects of such a virus on the recipient's systems or data.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai, Singapore, Sydney, Taipei and Tokyo.

Released Under the Official Information Act 1982

From: [Dent, Alan](#)
To: [Sam Ponniah](#)
Subject: RE:Interviews
Date: Monday, 8 March 2021 9:20:41 am
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)

Hi Sam

We will get underway today arranging the next round of interviews including with Bill Bayfield who we have touched base with. Going back over our email exchanges I note that you thought it would be useful to talk to a couple of labour organisations. We agree with that but I couldn't see any listed on the email that you sent through. Apologies if I have missed something. We are having a follow up call with 9(2)(a) this afternoon so can raise with her.

Kind Regards

Alan Dent

Partner | Corporate Finance

Deloitte

Level 12, 20 Customhouse Quay, PO Box 1990, Wellington 6140, New Zealand

D: 9(2)(a) | M: 9(2)(a) | O: 9(2)(a) | F: 9(2)(a)

9(2)(a)@deloitte.co.nz | www.deloitte.co.nz

Deloitte means Deloitte Limited (in its own capacity for assurance services, otherwise as trustee for the Deloitte Trading Trust)



[Navigating COVID-19: read the latest updates from our experts](#)

Deloitte 175



Please consider the environment before printing.

Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be subject to legal privilege or copyright. If you have received this email in error, please advise the sender immediately and destroy the message and any attachments. If you are not the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest terms of engagement which we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures, no assurance or guarantee is implied or should be construed that this email message or its attachments are free from computer viruses. Deloitte assumes

no responsibility for any such virus or any effects of such a virus on the recipient's systems or data.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai, Singapore, Sydney, Taipei and Tokyo.

Released Under the Official Information Act 1982

From: 9(2)(a)
To: [Sam Ponniah](#)
Cc: [Tan, John](#); [Dent, Alan](#); 9(2)(a)
Subject: Deloitte - three waters status update 080321
Date: Monday, 8 March 2021 4:08:29 pm
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[Deloitte - three waters status update 080321.pdf](#)

Hi Sam
Thanks for your time earlier today.
Please find attached our status update for last week.
Cheers

9(2)(a)

Analyst | Corporate Finance

Deloitte

Level 12, 20 Customhouse Quay, PO Box 1990, Wellington 6140, New Zealand

D: 9(2)(a) | O: 9(2)(a) | F: 9(2)(a)

9(2)(a) @deloitte.co.nz | www.deloitte.co.nz

Deloitte means Deloitte Limited (in its own capacity for assurance services, otherwise as trustee for the Deloitte Trading Trust)



Please consider the environment before printing.

Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be subject to legal privilege or copyright. If you have received this email in error, please advise the sender immediately and destroy the message and any attachments. If you are not the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest terms of engagement which we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures, no assurance or guarantee is implied or should be construed that this email message or its attachments are free from computer viruses. Deloitte assumes no responsibility for any such virus or any effects of such a virus on the recipient's systems or data.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide services from more than 100 cities across the region, including Auckland, Bangkok,

Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai, Singapore, Sydney, Taipei and Tokyo.

Released Under the Official Information Act 1982



Released Under the Official Information Act 1982

Three Waters Reform Status Update

DEPARTMENT OF INTERNAL AFFAIRS
08 MARCH 2021

Status update

Commentary

This week the economic impact workstream has finalised the methodology paper and progressed the area impact model. We have worked with DIA and WICS to obtain data for modelling, including shaping up specific requirements and coming back with questions. We appreciate your efforts in helping us get this data, as this will help us meet our 2 April deadline for the final report.

Next week, we will progress modelling by confirming the specific scenarios and shocks to be modelled in a workshop with you. We will also complete our area impact model and aim to get the full final dataset from WICS. It is critical that we receive the full dataset this week to meet the 2 April milestone.

The affected industries workstream has undertaken a number of additional interviews, and have second-order interviews scheduled for next week. We will continue to populate the draft report with key points from these interviews, and intend to draft as much of the report as possible next week.

Deliverables / Milestones	Status	Indicative Due Date
Project Inception Meeting	Complete	5 & 10 February
Draft methodology and key information requirements	Complete	17 February
Data collection and model design	In progress, awaiting remaining data	22 February 12 March
Agreed methodology, scenario and sensitivity definition, and confirmation of key assumptions	Complete	22 February 23 February
Economic modelling	In progress	16 March
Draft economic impact analysis	In progress	19 March
Stakeholder consultation	In progress	Ongoing
Draft industry development study	In progress	22 March
Final report on economic impact analysis and industry development study	In progress	2 April

45

Status

Overall	On track, providing we receive the full dataset from WICS this week
Budget	On track

Work completed last week

Work completed for 01 to 05 March

- Conducted test runs of shocks in our CGE model.
- Worked with DIA and WICS to source WICS data for modelling. Reviewed the WICS data and identified gaps and questions.
- Progressed our area impact model for estimating the impact of the reforms across urban/provincial/rural areas.
- Reviewed and incorporated comments on the methodology paper.
- Began desktop research to understand the current state of affected industries.
- Continued to hold interviews with industry participants.
- Identified organisations and individuals for second-order interviews.
- Began to shape up a schematic to summarise the structure of the water sector labour force, including capacity constraints and pressure points.
- Began to populate the draft report.

Activities this week

Work planned for 08 to 12 March

- Receive all remaining data and clarification on questions regarding WICS' data.
- Pull together a assumptions workbook, which will collate all data from WICS and provide an audit trail to data for the CGE model.
- Complete customisation of the CGE model based on this data.
- Refine data for CGE shocks to reflect the counterfactual and policy scenarios. We will confirm the scenarios and shocks to be modelled in a workshop with you.
- Develop narrative around scenarios to be modelled, including key policy parameters.
- Complete area impact model.
- Undertake desktop research to understand the current state of affected industries.
- Hold second-order interviews with industry participants.
- Progress labour force schematic.
- Continue to draft the report.

From: 9(2)(a)
To: 9(2)(a) @watercommission.co.uk
Cc: Sam Ponniah; 9(2)(a) @watercommission.co.uk; Tan, John
Subject: RE:WICS data
Date: Tuesday, 9 March 2021 6:50:04 am
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)

Colin,

Hope you had a nice weekend.

With reference to my email below, can we schedule a call to discuss our questions in more detail? Please let me know when would work for you.

Best,

9(2)(a)

Director | Corporate Finance

Deloitte

Level 12, 20 Customhouse Quay, PO Box 1990, Wellington 6140, New Zealand

D: 9(2)(a) | M: 9(2)(a) | O: 9(2)(a) | F: 9(2)(a)

9(2)(a) @deloitte.co.nz | www.deloitte.co.nz

Deloitte means Deloitte Limited (in its own capacity for assurance services, otherwise as trustee for the Deloitte Trading Trust)



[Navigating COVID-19: read the latest updates from our experts](#)

Deloitte 175



Please consider the environment before printing.

From: 9(2)(a)

Sent: Saturday, 6 March 2021 8:24 AM

To: 9(2)(a) @watercommission.co.uk' <9(2)(a) @watercommission.co.uk>

Cc: 9(2)(a) @martinjenkins.co.nz' <9(2)(a) @martinjenkins.co.nz>;

9(2)(a) @watercommission.co.uk' <9(2)(a) @watercommission.co.uk>; Tan,

John <9(2)(a) @deloitte.co.nz>

Subject: WICS data

Colin,

Thank you for sharing the following information to inform the economic impact assessment:

- Data on the investment totals mock-up
- Draft slides on the efficiency analysis

- Data on the consolidated RfI numbers.

On consideration, please see below our comments and/or clarification questions on each of the above.

Data on the consolidated RfI numbers

1. This is useful, but doesn't have an under and above ground expenditure split. It is possible to use the short and long-life asset ratios to the enhancement figures? Alternatively, it would be good to confirm what, if any, project level aggregation that WICS has completed
2. There is currently an aggregated capex value for 2030 to 2051. Would it be possible to provide a capex profile for each year over this period?
3. To ensure we interpret the data accurately- can you please provide a definition for "Growth" "Enhancement" and "Renewals" capex?

Data on the investment totals mock-up

We have a small number of clarification questions on the mock-up of investment data provided:

1. Are the values in NZD? Are the values in real or nominal terms? Does year 1 represent 2022?
2. The mock-up data includes two of the four options modelled by WICS. Do you intend to complete the analysis for either or both of the remaining two options?
3. For clarification- we are assuming that "Short" can be used as a proxy for "Above the ground capex" and "Long" as a proxy for "Below the ground capex"?

Draft slides on the efficiency analysis

Thank you for providing the draft slides. We find the draft analysis valuable in understanding your approach to assess required efficiency adjustment. We find the presentation of results on slide 23 particularly useful for our modelling purposes. We have some questions to ensure our interpretation and expectation of the forthcoming efficiency results are correct:

1. **Scenarios:** Will the scenarios referred to in the efficiency analysis reflect the size of the amalgamation entities (e.g. 3 entities vs 5 entities ect)?
2. **Time dimension:** Will the output of Phase II analysis provide an efficiency adjustment profile over time (i.e. different realisable efficiencies at 2040, 2045 and 2050), or an anchor point with inferences on how Deloitte can develop a profile to reflect how the efficiency adjustment could change over time?
3. **Relative efficiency adjustment:** From the analysis we understand that you are undertaking the efficiency analysis for each TA. Is the expectation that the efficiency adjustment for Auckland to be different relative to other areas due to the maturity and scale of WaterCare? Will the output of Phase II analysis provide separate efficiency adjustments by Metropolitan/Provincial/Rural area and/or TA level?
4. We note that your **classification of TAs under Metropolitan/Provincial/Rural** areas is the same classification we intend to use in our model. We note there are some TAs are missing in the classification, but we assume you are using a sample of TAs to derive the efficiency adjustments.
5. In what **format** will you provide the efficiency adjustments for Phase II? A table in the slides or in a table in an Excel workbook?

We are looking forward to your response, and please let us know if it will be easier to schedule a meeting early next week to discuss our questions.

Have a nice weekend.

Best,

9(2)(a)

Director | Corporate Finance

Deloitte

Level 12, 20 Customhouse Quay, PO Box 1990, Wellington 6140, New Zealand

D: 9(2)(a) | M: 9(2)(a) | O: 9(2)(a) | F: 9(2)(a)

9(2)(a) @deloitte.co.nz | www.deloitte.co.nz

Deloitte means Deloitte Limited (in its own capacity for assurance services, otherwise as trustee for the Deloitte Trading Trust)



[Navigating COVID-19: read the latest updates from our experts](#)

Deloitte 175



Please consider the environment before printing.

Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be subject to legal privilege or copyright. If you have received this email in error, please advise the sender immediately and destroy the message and any attachments. If you are not the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest terms of engagement which we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures, no assurance or guarantee is implied or should be construed that this email message or its attachments are free from computer viruses. Deloitte assumes no responsibility for any such virus or any effects of such a virus on the recipient's systems or data.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai, Singapore, Sydney, Taipei and Tokyo.

From: 9(2)(a)
To: [Sam Ponniah](#)
Subject: RE:Three waters workshop timing
Date: Tuesday, 9 March 2021 4:31:22 pm
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)

Thanks Sam. An invite should be on its way shortly.

Cheers

9(2)(a)

From: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>

Sent: Tuesday, 9 March 2021 1:09 PM

To: 9(2)(a) <9(2)(a)@deloitte.co.nz>

Subject: [EXT] RE: Three waters workshop timing

H 9(2)(a)

Yes I've narrowed it down now to 2pm to 3pm on Thursday. Grateful if you could send through an invite and zoom link for those in Auckland.

Cheers

Sam

Sam Ponniah | Senior Consultant

MartinJenkins

M 9(2)(a) T 9(2)(a)

From: 9(2)(a) <9(2)(a)@deloitte.co.nz>

Sent: Tuesday, 9 March 2021 12:58 PM

To: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>

Subject: Three waters workshop timing

Hi Sam

Just wanted to confirm a time for the workshop with you – was it 1 to 3pm Thursday that you and Nick were free?

If so we'll send out an hour long invite within that slot to the same group who attended the first workshop.

Cheers

9(2)(a)

Analyst | Corporate Finance

Deloitte

Level 12, 20 Customhouse Quay, PO Box 1990, Wellington 6140, New Zealand

D: 9(2)(a) | O: 9(2)(a) | F: 9(2)(a)

9(2)(a) @deloitte.co.nz | www.deloitte.co.nz

Deloitte means Deloitte Limited (in its own capacity for assurance services, otherwise as trustee for the Deloitte Trading Trust)



Please consider the environment before printing.

Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be subject to legal privilege or copyright. If you have received this email in error, please advise the sender immediately and destroy the message and any attachments. If you are not the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest terms of engagement which we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures, no assurance or guarantee is implied or should be construed that this email message or its attachments are free from computer viruses. Deloitte assumes no responsibility for any such virus or any effects of such a virus on the recipient's systems or data.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai, Singapore, Sydney, Taipei and Tokyo.

Released Under the Official Information Act 1982

From: 9(2)(a)
To: [Sam Ponniah](#)
Cc: [Tan, John](#); 9(2)(a)
Subject: RE:WICS data
Date: Friday, 5 March 2021 4:39:23 pm
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)
[Deloitte feedback tracker - methodology paper.xlsx](#)

Sam,

Thank you for sharing the following information to inform the economic impact assessment:

- Comments on Deloitte's methodology paper
- WICS' data on the investment totals mock-up
- WICS' draft slides on the efficiency analysis
- WICS' data on the consolidated RfI numbers.

On consideration, please see below our comments and/or clarification questions on each of the above.

Comments on Deloitte's methodology paper

Please see **attached** our responses related to the comments on the methodology paper.

We were thinking it might be worthwhile to schedule a short workshop next week? The purpose of the workshop is to discuss:

- The scenarios for modelling purposes
- How we propose to inform the CGE shock based on the data provided by WICS and key assumptions.

We'd like to invite Nick, yourself at a minimum and possibly some of the team from WICS, if they are available. EY and Mafic are optional, as their input is less critical to our methodology, but it does make sense to maintain alignment across the workstreams. How next Friday (12 March) work for you and Nick?

WICS' data on the consolidated RfI numbers

1. This is useful, but doesn't have an under and above ground expenditure split. It is possible to use the short and long-life asset ratios to the enhancement figures? Alternatively, it would be good to confirm what, if any, project level aggregation that WICS has completed
2. There is currently an aggregated capex value for 2030 to 2051. Would it be possible to provide a capex profile for each year over this period?
3. To ensure we interpret the data accurately- can you please provide a definition for "Growth" "Enhancement" and "Renewals" capex?

WICS' data on the investment totals mock-up

We have a small number of clarification questions on WICS' mock-up of investment data provided:

1. Are the values in NZD? Are the values in real or nominal terms? Does year 1 represent 2022?
2. The mock-up data includes two of the four options modelled by WICS. Does WICS intend to complete the analysis for either or both of the remaining two options?
3. For clarification- we are assuming that "Short" can be used as a proxy for "Above the ground capex" and "Long" as a proxy for "Below the ground capex"?

WICS' draft slides on the efficiency analysis

Thank you for providing the draft slides. We find the draft analysis valuable in understanding WICS approach to assess required efficiency adjustment. We find the presentation of results on slide 23 particularly useful for our modelling purposes. We have some questions to ensure our interpretation and expectation of the forthcoming efficiency results are correct:

1. **Scenarios:** Will the scenarios referred to in the efficiency analysis reflect the amalgamation scenarios (e.g. 3 entities vs 5 entities ect)?
2. **Time dimension:** Will the output of WICS analysis provide an efficiency adjustment profile over time (i.e. different realisable efficiencies at 2040, 2045 and 2050), or an anchor point with inferences on how Deloitte can develop a profile to reflect how the efficiency adjustment could change over time?
3. **Relative efficiency adjustment:** Is the expectation that the efficiency adjustment for Auckland to be different relative to other areas due to the maturity and scale of

WaterCare? Will the output of WICS analysis provide separate efficiency adjustments by Metropolitan/Provincial/Rural area and/or TA level?

4. We note that WICS' **classification of TAs under Metropolitan/Provincial/Rural** areas is the same classification we intend to use in our model. We note there are some TAs are missing in WICS' slides, but we assume WICS are using a sample of TAs to derive the efficiency adjustments.
5. In what **format** will WICS provide the efficiency adjustments? A table in the slides or in a table in an Excel workbook?

Best,

9(2)(a)

Director | Corporate Finance

Deloitte

Level 12, 20 Customhouse Quay, PO Box 1990, Wellington 6140, New Zealand

D: 9(2)(a) | M: 9(2)(a) | O: 9(2)(a) | F: 9(2)(a)

9(2)(a)@deloitte.co.nz | www.deloitte.co.nz

Deloitte means Deloitte Limited (in its own capacity for assurance services, otherwise as trustee for the Deloitte Trading Trust)



[Navigating COVID-19: read the latest updates from our experts](#)

Deloitte 175



Please consider the environment before printing.

From: Tan, John <9(2)(a)@deloitte.co.nz>

Sent: Friday, 5 March 2021 2:32 PM

To: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>

Cc: 9(2)(a) <9(2)(a)@deloitte.co.nz>

Subject: WICS data

Hi Sam

Apologies to be a bit radio silent over the past day or so – have been in a few all day workshops.

9(2)(a) is going through the WICS info and the methodology feedback at the moment and will come back with a combined response on anything else that we need

From what I have seen so far, the WICS data looks good and certainly have given us enough data to keep going for now. We'll revert with any comments we have on what has been received so far before days end

John

John Tan

Partner | Corporate Finance

Deloitte

Level 12, 20 Customhouse Quay, PO Box 1990, Wellington 6140, New Zealand

D: 9(2)(a) | M: 9(2)(a) | O: 9(2)(a) | F: 9(2)(a)

9(2)(a) @deloitte.co.nz | www.deloitte.co.nz

Deloitte means Deloitte Limited (in its own capacity for assurance services, otherwise as trustee for the Deloitte Trading Trust)



[Navigating COVID-19: read the latest updates from our experts](#)

Deloitte 175



Please consider the environment before printing.

Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be subject to legal privilege or copyright. If you have received this email in error, please advise the sender immediately and destroy the message and any attachments. If you are not the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest terms of engagement which we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures, no assurance or guarantee is implied or should be construed that this email message or its attachments are free from computer viruses. Deloitte assumes no responsibility for any such virus or any effects of such a virus on the recipient's systems or data.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai, Singapore, Sydney, Taipei and Tokyo.

Slide	Comment	How have we addressed this?
Slide 5	<i>Net economic impact</i> Would it be possible to also measure changes in input prices/wages of the reforms? If the 3W investment programme is ambitious (and it is) and the labour market is constrained (as expected) then this will place significant upwards pressure on input prices for capital inputs as well as labour. Understanding this impact is key.	We will assess the impact on employment and we can also include the impact on average wages.
Slide 5	<i>Net economic impact</i> As per the scope will the analysis be able to provide an estimate of downstream taxation implications (if any)?	We propose not to assess downstream taxation implications as part of the assessment. There are a number of additional considerations to assess the impact on tax.
Slides 8 9 and 10	<i>Levels of service</i> This requires a slight tweak in description. Given Deloitte will be using RFI data the counterfactual is that levels of service will be a function of investments proposed by TLAs. This is subtly different to 'No change in levels of service'.	Agree- we will make this change.
	<i>There is no voluntary participation / opt-out model</i> in the counterfactual	Agree- we will make this change.
	<i>Efficiency</i> could you clarify the difference between the two 'efficiency' rows? Is the first one about the starting point and the second one about the extent to which this changes over time?	Agree- we will make this change.
	<i>Efficiency</i> Also not sure whether this is referring to capital efficiency or labour efficiency or both (MFP).	In this case it is referring to capital efficiency.
Slide 15	Agree that non-council providers are out of scope but interested to understand what impact this assumption has if any on the underlying data for the water sector (9) identified in slide 14? i.e. presumably any 'shock' will be predominantly / exclusively (?) applied to water sector 9 and so is the starting base the total capital and labour formation or some subset to account for just the TLA part of the sector? Or is this a red herring?	This assumption should have no impact on the underlying data and might just be a red herring.
Comments from MAFIC	"Balance sheet or debt capacity constraints" are described as out of scope (page 15). This is important to defining the counterfactual. I note right now page 17 implies this will be provided by Mafic but is really just an output of our model once these assumptions are agreed. I could see there needing to be two "counterfactuals" - Conservative Hold current LTP borrowing leverage constant; More aggressive Allow councils to borrow up to 250% (or higher?)	This could be a consideration. We agree that funding constraints are a key factor in driving the deficit. Would it be a reasonable assumption for councils to borrow up to 250%? Overall we are now planning to use WICS data to inform the counterfactual rather than data from MAFIC at this stage.
	A key assumption will be what pricing is allowed to increase by for each of the scenarios. For example are there any affordability constraints applied? This would be another parameter we need to discuss (particular if we are assuming no economic regulation for the counterfactual i.e. what impact does this have)	Good point. We can discuss it at the next workshop (we will schedule another workshop soon).
	We presume specific assumptions above may not need to be nailed down at this point if Deloitte build their model appropriately to take the outputs from our model.	We now plan to use WICS data to inform the counterfactual.

Released Under the Official Information Act 1982

From: [Tan, John](#)
To: [Sam Ponniah](#)
Cc: 9(2)(a)
Subject: RFI Data
Date: Tuesday, 9 March 2021 6:19:57 pm
Attachments: [G Tables Draft Deloitte.xlsx](#)

Hi Sam

We are starting to compile the data set into the model. One of the things that I am keen to do as a crosscheck/audit trail is to tie back the Table G capex summary from WICS to the actual data files. I was planning on getting one of the team here to do this at the totals level to make sure that it ties reasonably closely to the RFI data. I remember seeing the blank RFI templates (workbooks I and II) but not sure if we have ever been sent the links to the raw submissions. Do you have access to this – or who can provide us with access to these

Thanks

John

From: Colin McNaughton <9(2)(a)@watercommission.co.uk>
Sent: Friday, 5 March 2021 6:43 AM
To: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>
Cc: Alan Sutherland <9(2)(a)@watercommission.co.uk>; Andrea Mancini <9(2)(a)@watercommission.co.uk>; Tan, John <9(2)(a)@deloitte.co.nz>
Subject: [EXT] RE: [EXT] RE: [EXT] RE: Deloitte

Hi Sam

Please find the draft consolidated G tables attached – just as a caveat, this was created before we had all resubmissions. We're just checking/updating these as we go with providing feedback to councils

Colin

From: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>
Sent: 03 March 2021 21:47
To: Colin McNaughton <9(2)(a)@watercommission.co.uk>
Cc: Alan Sutherland <9(2)(a)@watercommission.co.uk>; Andrea Mancini <9(2)(a)@watercommission.co.uk>; Tan, John <9(2)(a)@deloitte.co.nz>
Subject: [EXT] RE: [EXT] RE: Deloitte

CAUTION: This email originated from outside the organisation. Do not click links or open attachments unless you recognise the sender and know the content is safe.

Hi Colin

Thanks for sending this through, appreciate the effort on your end to pull this together for the Deloitte team.

Can I just check if we can also expect to receive the consolidated Rfl numbers today?

We talked previously about the split between under and above ground expenditure – what would be the best way for us to pull this out? Would it be through applying the short and long-life asset ratios to the enhancement figures?

I've also just copied John in case his team has any detailed questions to ensure they are interpreting the data correctly.

Cheers

Sam

Sam Ponniah | Senior Consultant

MartinJenkins

M 9(2)(a) T 9(2)(a)

From: Colin McNaughton <[REDACTED]>@watercommission.co.uk>
Sent: Thursday, 4 March 2021 9:12 AM
To: Sam Ponniah <[REDACTED]>@martinjenkins.co.nz>; Alan Sutherland <[REDACTED]>@watercommission.co.uk>
Cc: Andrea Mancini <[REDACTED]>@watercommission.co.uk>
Subject: RE: [EXT] RE: Deloitte

Hi Sam

Here is the mock-up

The most material point to note is that these are pre-efficiency numbers at this stage

Colin

This email and any files transmitted with it are confidential and intended solely for the use of the individual or entity to whom they are addressed. Any views or opinions expressed in this e-mail are those of the sender and do not necessarily coincide with those of the Water Industry Commission for Scotland. If you have received this e-mail in error please remove from your computer and contact the sender. Liability cannot be accepted for statements made which are clearly the senders own and not made on behalf of the Water Industry Commission For Scotland.

Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be subject to legal privilege or copyright. If you have received this email in error, please advise the sender immediately and destroy the message and any attachments. If you are not the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest terms of engagement which we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures, no assurance or guarantee is implied or should be construed that this email message or its attachments are free from computer viruses. Deloitte assumes no responsibility for any such virus or any effects of such a virus on the recipient's systems or data.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com about to learn more. Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai, Singapore, Sydney, Taipei and Tokyo.

From: [Tan, John](#)
To: [Sam Ponniah](#)
Cc: 9(2)(a)
Subject: RE:RFI Data
Date: Tuesday, 9 March 2021 7:23:35 pm

Hi Sam

Thanks for confirming. There was some internal debate as to whether we had/were going to get access to these. The short answer is that we don't need full access to the underlying RFI data, but that will make us wholly reliant on the data that WICS has provided. The main purpose of looking at the underlying data was to (1) satisfy ourselves of the audit trail back to source, (2) see if there was any possibility of using project level data to inform the above/below ground, 3W or short/long term categorisations to feed into our sectoral analysis.

If EY can share their aggregation data, we can compare this against WICS to see if materially similar to cover point 1.

John

From: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>
Sent: Tuesday, 9 March 2021 6:39 PM
To: Tan, John <9(2)(a)@deloitte.co.nz>
Cc: 9(2)(a) <9(2)(a)@deloitte.co.nz>; 9(2)(a) <9(2)(a)@deloitte.co.nz>
Subject: [EXT] RE: RFI Data

Hi John

There's some sensitivity around the raw Rfi data and access to it (I don't have access to the raw submissions and you'll recall we had push back from DIA last month to the suggestion that you would have access to those). I recall that where we had got to was for 9(2)(a) from EY to share the consolidated information from the G tabs with you. I can follow up with her to see if she has got this.

Cheers

Sam

Sam Ponniah | Senior Consultant

MartinJenkins

M 9(2)(a) T 9(2)(a)

From: Tan, John <9(2)(a)@deloitte.co.nz>
Sent: Tuesday, 9 March 2021 6:19 PM
To: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>
Cc: 9(2)(a) <9(2)(a)@deloitte.co.nz>; 9(2)(a) <9(2)(a)@deloitte.co.nz>
Subject: RFI Data

Hi Sam

We are starting to compile the data set into the model. One of the things that I am keen to do as a crosscheck/audit trail is to tie back the Table G capex summary from WICS to the actual data files. I was planning on getting one of the team here to do this at the totals level to make sure that it ties reasonably closely to the RFI data. I remember seeing the blank RFI templates (workbooks I and II) but not sure if we have ever been sent the links to the raw submissions. Do you have access to this – or who can provide us with access to these

Thanks

John

From: Colin McNaughton <9(2)(a)@watercommission.co.uk>
Sent: Friday, 5 March 2021 6:43 AM
To: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>
Cc: Alan Sutherland <9(2)(a)@watercommission.co.uk>; Andrea Mancini

<9(2)(a)@watercommission.co.uk>; Tan, John <9(2)(a)@deloitte.co.nz>

Subject: [EXT] RE: [EXT] RE: [EXT] RE: Deloitte

Hi Sam

Please find the draft consolidated G tables attached – just as a caveat, this was created before we had all resubmissions. We’re just checking/updating these as we go with providing feedback to councils

Colin

From: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>

Sent: 03 March 2021 21:47

To: Colin McNaughton <9(2)(a)@watercommission.co.uk>

Cc: Alan Sutherland <9(2)(a)@watercommission.co.uk>; Andrea Mancini <9(2)(a)@watercommission.co.uk>; Tan, John <9(2)(a)@deloitte.co.nz>

Subject: [EXT] RE: [EXT] RE: Deloitte

CAUTION: This email originated from outside the organisation. Do not click links or open attachments unless you recognise the sender and know the content is safe.

Hi Colin

Thanks for sending this through, appreciate the effort on your end to pull this together for the Deloitte team.

Can I just check if we can also expect to receive the consolidated Rfl numbers today?

We talked previously about the split between under and above ground expenditure – what would be the best way for us to pull this out? Would it be through applying the short and long-life asset ratios to the enhancement figures?

I’ve also just copied John in case his team has any detailed questions to ensure they are interpreting the data correctly.

Cheers

Sam

Sam Ponniah | Senior Consultant

MartinJenkins

M 9(2)(a) T 9(2)(a)

From: Colin McNaughton <9(2)(a)@watercommission.co.uk>

Sent: Thursday, 4 March 2021 9:12 AM

To: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>; Alan Sutherland <9(2)(a)@watercommission.co.uk>

Cc: Andrea Mancini <9(2)(a)@watercommission.co.uk>

Subject: RE: [EXT] RE: Deloitte

Hi Sam

Here is the mock-up

The most material point to note is that these are pre-efficiency numbers at this stage

Colin

This email and any files transmitted with it are confidential and intended solely for the use of the individual or entity to whom they are addressed. Any views or opinions expressed in this e-mail are those of the sender and do not necessarily coincide with those of the Water Industry Commission for Scotland. If you have received this e-mail in error please remove from your computer and contact the sender. Liability cannot be accepted for statements made which are clearly the senders own and not made on behalf of the Water Industry Commission For Scotland.

Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be subject to legal privilege or copyright. If you have received this email in error, please advise the sender

immediately and destroy the message and any attachments. If you are not the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest terms of engagement which we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures, no assurance or guarantee is implied or should be construed that this email message or its attachments are free from computer viruses. Deloitte assumes no responsibility for any such virus or any effects of such a virus on the recipient's systems or data.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai, Singapore, Sydney, Taipei and Tokyo.

Released Under the Official Information Act 1982

From: 9(2)(a)
To: [Colin McNaughton](#)
Cc: [Sam Ponniah](#); [Andrea Mancini](#); [Tan, John](#)
Subject: RE:WICS data
Date: Tuesday, 9 March 2021 8:32:04 pm
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)

Colin,
Thank you for your responses to our questions.

Best,

9(2)(a)

Director | Corporate Finance

Deloitte

Level 12, 20 Customhouse Quay, PO Box 1990, Wellington 6140, New Zealand

D: 9(2)(a) | M: 9(2)(a) | O: 9(2)(a) | F: 9(2)(a)

9(2)(a)@deloitte.co.nz | www.deloitte.co.nz

Deloitte means Deloitte Limited (in its own capacity for assurance services, otherwise as trustee for the Deloitte Trading Trust)



[Navigating COVID-19: read the latest updates from our experts](#)

Deloitte 175



Please consider the environment before printing.

From: Colin McNaughton <9(2)(a)@watercommission.co.uk>

Sent: Tuesday, 9 March 2021 9:58 AM

To: 9(2)(a) <9(2)(a)@deloitte.co.nz>

Cc: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>; Andrea Mancini <9(2)(a)@watercommission.co.uk>; Tan, John <9(2)(a)@deloitte.co.nz>

Subject: [EXT] RE: [EXT] WICS data

9(2)(a)

Some thoughts embedded below.

Thanks

Colin

From: 9(2)(a) <9(2)(a)@deloitte.co.nz>

Sent: 05 March 2021 19:24

To: Colin McNaughton <[redacted]@watercommission.co.uk>
Cc: Sam Ponniah <[redacted]@martinjenkins.co.nz>; Andrea Mancini <[redacted]@watercommission.co.uk>; Tan, John <[redacted]@deloitte.co.nz>
Subject: [EXT] WICS data

CAUTION: This email originated from outside the organisation. Do not click links or open attachments unless you recognise the sender and know the content is safe.

Thank you for sharing the following information to inform the economic impact assessment:

- Data on the investment totals mock-up
- Draft slides on the efficiency analysis
- Data on the consolidated RfI numbers.

On consideration, please see below our comments and/or clarification questions on each of the above.

Data on the consolidated RfI numbers

1. This is useful, but doesn't have an under and above ground expenditure split. It is possible to use the short and long-life asset ratios to the enhancement figures? Alternatively, it would be good to confirm what, if any, project level aggregation that WICS has completed

Yes, the 60% / 40% split in favour of short to medium life assets could be applied to enhancement and growth investment. We have not collected the information for individual projects from the RfI. These could be found from Table G2, G3 and G4

2. There is currently an aggregated capex value for 2030 to 2051. Would it be possible to provide a capex profile for each year over this period?

Most councils provided a total over this period. A small number of councils provided planned investment in each year, but we have just collected the totals.

3. To ensure we interpret the data accurately- can you please provide a definition for "Growth" "Enhancement" and "Renewals" capex?

The guidance for the RfI provides the following definition.

Growth	To meet demand for services from new and existing customers by providing new assets or increasing the capacity of existing assets. This would include providing new distribution and wastewater assets to new customers, the provision of first-time water or wastewater services to existing housing, and the provision of new assets to meet the increased use of water by existing customers.
Quality Enhancement	This includes the provision of new assets or the enhancement of existing assets to achieve improvements in performance in line with new or enhanced legal requirements.
Base Service (Renewals)	This comprises the 'capital maintenance' expenditure necessary for the maintenance of existing service levels to customers including capitalised base expenditure, non-infrastructure and infrastructure asset renewal.

We have examined growth and enhancement together as some councils chose growth drivers for investment that other councils have classed as enhancement.

Data on the investment totals mock-up

We have a small number of clarification questions on the mock-up of investment data provided:

1. Are the values in NZD? **Yes** Are the values in real or nominal terms? **Real** Does year 1 represent 2022? **Yes**
2. The mock-up data includes two of the four options modelled by WICS. Do you intend to complete the analysis for either or both of the remaining two options? **We don't intend to - In terms of disaggregated investment for individual councils, we're focusing on these options.**
3. For clarification- we are assuming that "Short" can be used as a proxy for "Above the ground capex" and "Long" as a proxy for "Below the ground capex"? **'Short life' assets tends to relate to non-infrastructure assets such as MEICA (mechanical, electrical, instrumentation,**

control and automation) and 'long life' assets cover civills –would such a split work better?
I'm not sure of the purpose of the above and below ground split.

4. Draft slides on the efficiency analysis

Thank you for providing the draft slides. We find the draft analysis valuable in understanding your approach to assess required efficiency adjustment. We find the presentation of results on slide 23 particularly useful for our modelling purposes. We have some questions to ensure our interpretation and expectation of the forthcoming efficiency results are correct:

1. **Scenarios:** Will the scenarios referred to in the efficiency analysis reflect the size of the amalgamation entities (e.g. 3 entities vs 5 entities ect)?
2. **Time dimension:** Will the output of Phase II analysis provide an efficiency adjustment profile over time (i.e. different realisable efficiencies at 2040, 2045 and 2050), or an anchor point with inferences on how Deloitte can develop a profile to reflect how the efficiency adjustment could change over time? **There could be different scenarios for the period over which the operating cost reduction challenge is applied (e.g. 15 years, 25 years etc.). For the purposes of our modelling, we are likely to assume a straight line profile. We're also planning to start applying the efficiency challenge from year 5.**
3. **Relative efficiency adjustment:** From the analysis we understand that you are undertaking the efficiency analysis for each TA. Is the expectation that the efficiency adjustment for Auckland to be different relative to other areas due to the maturity and scale of WaterCare? Will the output of Phase II analysis provide separate efficiency adjustments by Metropolitan/Provincial/Rural area and/or TA level? **There are only 11 councils that would receive an operating cost reduction challenge (see slide 19) – of which 4 would receive a negligible challenge. The remaining councils would receive no cost reduction challenge. Each amalgamated entity will have their own efficiency challenge applied.**
4. We note that your **classification of TAs under Metropolitan/Provincial/Rural** areas is the same classification we intend to use in our model. We note there are some TAs are missing in the classification, but we assume you are using a sample of TAs to derive the efficiency adjustments. **Our list covers the 49 councils that completed Workbook 1 of the RFI. I suspect that you are using the full list (i.e. including councils that completed Workbook 2).**
5. In what **format** will you provide the efficiency adjustments for Phase II? A table in the slides or in a table in an Excel workbook? **We can provide a spreadsheet.**

We are looking forward to your response, and please let us know if it will be easier to schedule a meeting early next week to discuss our questions.
Have a nice weekend.

Best,

9(2)(a)

Best,

9(2)(a)

Director | Corporate Finance

Deloitte

Level 12, 20 Customhouse Quay, PO Box 1990, Wellington 6140, New Zealand

D: 9(2)(a) | M: 9(2)(a) | O: 9(2)(a) | F: 9(2)(a)

9(2)(a) @deloitte.co.nz | www.deloitte.co.nz

Deloitte means Deloitte Limited (in its own capacity for assurance services, otherwise as trustee for the Deloitte Trading Trust)



[Navigating COVID-19: read the latest updates from our experts](#)

Please consider the environment before printing.

Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be subject to legal privilege or copyright. If you have received this email in error, please advise the sender immediately and destroy the message and any attachments. If you are not the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest terms of engagement which we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures, no assurance or guarantee is implied or should be construed that this email message or its attachments are free from computer viruses. Deloitte assumes no responsibility for any such virus or any effects of such a virus on the recipient's systems or data.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai, Singapore, Sydney, Taipei and Tokyo.

This email and any files transmitted with it are confidential and intended solely for the use of the individual or entity to whom they are addressed. Any views or opinions expressed in this e-mail are those of the sender and do not necessarily coincide with those of the Water Industry Commission for Scotland. If you have received this e-mail in error please remove from your computer and contact the sender. Liability cannot be accepted for statements made which are clearly the senders own and not made on behalf of the Water Industry Commission For Scotland.

Released Under the Official Information Act 1982

From: 9(2)(a)
To: [Sam Ponniah](#)
Subject: Three waters workshop timing
Date: Tuesday, 9 March 2021 12:58:22 pm
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)

Hi Sam

Just wanted to confirm a time for the workshop with you – was it 1 to 3pm Thursday that you and Nick were free?

If so we'll send out an hour long invite within that slot to the same group who attended the first workshop.

Cheers

9(2)(a)

Analyst | Corporate Finance

Deloitte

Level 12, 20 Customhouse Quay, PO Box 1990, Wellington 6140, New Zealand

D: 9(2)(a) | O: 9(2)(a) | F: 9(2)(a)

9(2)(a) @deloitte.co.nz | www.deloitte.co.nz

Deloitte means Deloitte Limited (in its own capacity for assurance services, otherwise as trustee for the Deloitte Trading Trust)



Please consider the environment before printing.

Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be subject to legal privilege or copyright. If you have received this email in error, please advise the sender immediately and destroy the message and any attachments. If you are not the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest terms of engagement which we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures, no assurance or guarantee is implied or should be construed that this email message or its attachments are free from computer viruses. Deloitte assumes no responsibility for any such virus or any effects of such a virus on the recipient's systems or data.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide

services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai, Singapore, Sydney, Taipei and Tokyo.

Released Under the Official Information Act 1982

From: [Tan, John](#)
To: [Sam Ponniah](#)
Cc: 9(2)(a)
Subject: RE:RfI capex data
Date: Wednesday, 10 March 2021 6:30:59 pm
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)

Hi Sam

Thinking about this further, I think there are three key things that might be useful from EY, in order of priority:

1. The aggregate capex data from RFI from Councils. To validate against WICS aggregation
2. The aggregate asset value from Councils. As a potential measure to 'fill in the gaps' for Councils where there is data missing. WICS use population and land area as their measures, but I would have thought that asset value might be useful. This is 'actuals' data, and we could probably capture from the DIA Annual Report database – which is complete and doesn't need to come from the RFI process
3. Some kind of analysis of project spend by short/long asset life, asset categories, above/below ground. I am increasingly gravitating towards this being more trouble than its worth – as it might require a fair bit of analysis to inform a fairly rosey assumption that might not have that much variance in economic impact on the sector splits

Will include the above in the discussion for tomorrow

John

From: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>
Sent: Wednesday, 10 March 2021 6:19 PM
To: Tan, John <9(2)(a)@deloitte.co.nz>
Cc: 9(2)(a) <9(2)(a)@deloitte.co.nz>
Subject: [EXT] RfI capex data

Hi John,

Please see attached from 9(2)(a) the flat file for the G and J tabs, which will provide a breakdown of the types of investment.

I'm just checking when we can expect to have the final numbers for this in. Might be something we can raise tomorrow with 9(2)(a) in the meeting given the dependency with your modelling to see if there's any way to fast track that process.

Cheers

Sam

Sam Ponniah | Senior Consultant

MartinJenkins

M 9(2)(a) T 9(2)(a)



[Level 16, AIG Building, 41 Shortland St. Auckland](#)

[Level 1, City Chambers, Cnr Johnston & Featherston Sts. Wellington](#)

PLEASE NOTE: The information contained in this email message and any attached files may be confidential and subject to privilege. The views expressed may not necessarily be the official view of Martin, Jenkins and Associates Limited. If you are not the intended recipient, you are notified that any use, disclosure or copying of this email is unauthorised. If you have received this email in error, please notify us immediately by reply email and delete the original. Thank you.

Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be subject to legal privilege or copyright. If you have received this email in error, please advise the sender immediately and destroy the message and any attachments. If you are not

the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest terms of engagement which we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures, no assurance or guarantee is implied or should be construed that this email message or its attachments are free from computer viruses. Deloitte assumes no responsibility for any such virus or any effects of such a virus on the recipient's systems or data.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai, Singapore, Sydney, Taipei and Tokyo.

Released Under the Official Information Act 1982

From: [Tan, John](#)
To: [Dent, Alan](#); 9(2)(a); [Sam Ponniah](#); 9(2)(a) [@nz.ey.com](#);
9(2)(a) [@dia.govt.nz](#); 9(2)(a) [@dia.govt.nz](#); [Nick Davis](#); 9(2)(a) [@dia.govt.nz](#);
9(2)(a) [@dia.govt.nz](#)
Cc: [Scott Priestley](#)
Subject: RE:DIA Three Waters Scenarios Workshop
Date: Wednesday, 10 March 2021 6:41:24 pm
Attachments: [image002.png](#)
[Three_waters_economic_impact_methodology_paper_v2.0.pdf](#)

Hi All

In advance of tomorrow's second 3W economic impact analysis workshop, please find attached an updated methodology pack to inform the discussion. The key agenda items are to:

1. Reconfirm aspects of our proposed methodology, status update of key steps, and data that is outstanding
2. Discuss the key elements that make up the scenarios, and in particular how we will define the 'System Transformation' and 'Alternative, less ambitious' scenarios
3. Discuss any sensitivity analysis
4. There are a number of areas that we particularly wish to discuss/get consensus on – these are highlighted in red in the pack.

We will focus the discussion on the items highlighted in red. If you get a chance to review the pack in advance of the workshop, please note any areas that are not highlighted in red that you are unsure about or wish to discuss.

Thanks John

-----Original Appointment-----

From: 9(2)(a) <9(2)(a)@deloitte.co.nz>
Sent: Tuesday, 9 March 2021 4:31 PM
To: 9(2)(a) Dent, Alan; Tan, John; 9(2)(a) 9(2)(a)@martinjenkins.co.nz; 9(2)(a)@nz.ey.com; 9(2)(a)@dia.govt.nz; 9(2)(a)@dia.govt.nz; 9(2)(a)@martinjenkins.co.nz; 9(2)(a)@dia.govt.nz; 9(2)(a)@dia.govt.nz
Cc: Scott Priestley
Subject: DIA Three Waters Scenarios Workshop
When: Thursday, 11 March 2021 2:00 PM-3:00 PM (UTC+12:00) Auckland, Wellington.
Where: <https://deloitte.zoom.us/j/92345200215?pwd=UzZHT0NuT2F5Z25nZ3BCNFZkY2hPUT09>

Hi all

Putting in some time for a workshop to discuss/confirm scenarios for modelling and the nature of the CGE shock.

We've invited the same group who attended our first workshop to capture key dependencies – please feel free to join if you can.

Many thanks



[Join Meeting](#)

Password: 000957

Phone one-tap: US: [+13126266799.92345200215#.000957](tel:+13126266799.92345200215#.000957) or

Join by Telephone

Dial:

US: +1 312 626 6799 or +1 646 518 9805 or +1 720 928 9299 or +1
213 338 8477

Meeting ID: 923 4520 0215

Password: 000957

[International numbers](#)

Zoom technology includes options for recording a meeting. If a meeting is being recorded, an audio and/or visual warning will be provided when you join a recorded meeting. A warning will also be provided if recording commences after you have joined the meeting. If you continue to participate in the meeting following these warnings, your participation will serve as your express consent to such recording.

Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be subject to legal privilege or copyright. If you have received this email in error, please advise the sender immediately and destroy the message and any attachments. If you are not the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest terms of engagement which we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures, no assurance or guarantee is implied or should be construed that this email message or its attachments are free from computer viruses. Deloitte assumes no responsibility for any such virus or any effects of such a virus on the recipient's systems or data.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai, Singapore, Sydney, Taipei and Tokyo.

From: 9(2)(a)
To: [Sam Ponniah](#)
Cc: 9(2)(a) [Tan, John](#)
Subject: RE:DIA three waters - weekly catch up with Deloitte
Date: Thursday, 11 March 2021 8:23:37 pm

Hi Sam

No worries, thanks for letting me know. I'll reschedule for Monday.

Cheers

9(2)(a)

From: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>
Sent: Thursday, 11 March 2021 5:54 PM
To: 9(2)(a) <9(2)(a)@deloitte.co.nz>
Subject: [EXT] RE: DIA three waters - weekly catch up with Deloitte

Hi 9(2)(a)

Apologies but I have another clash with this time for our weekly catch up next week. I can do 9am, 1.30pm or 4pm on Tuesday. Otherwise Monday is looking reasonable free apart from 10.30 to 11.30 and 2 to 2.30

Cheers

Sam

Sam Ponniah | Senior Consultant

MartinJenkins

M 9(2)(a) T 9(2)(a)

-----Original Appointment-----

From: 9(2)(a) <9(2)(a)@deloitte.co.nz>
Sent: Monday, 22 February 2021 1:25 PM
To: 9(2)(a) Tan, John; Dent, Alan; 9(2)(a)@martinjenkins.co.nz;
9(2)(a)

Subject: DIA three waters - weekly catch up with Deloitte

When: Monday, 15 March 2021 10:30 PM-11:00 PM .

Where: Microsoft Teams Meeting

Hi all

Some time for a weekly catch up with Sam and our team to discuss progress, dependencies, any roadblocks etc.

Cheers

9(2)(a)

Microsoft Teams meeting

Join on your computer or mobile app

[Click here to join the meeting](#)

[Learn More](#) | [Meeting options](#)

Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be subject to legal privilege or copyright. If you have received this email in error, please advise the sender immediately and destroy the message and any attachments. If you are not the intended recipient

you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest terms of engagement which we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures, no assurance or guarantee is implied or should be construed that this email message or its attachments are free from computer viruses. Deloitte assumes no responsibility for any such virus or any effects of such a virus on the recipient's systems or data.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai, Singapore, Sydney, Taipei and Tokyo.

Released Under the Official Information Act 1982

From: [Dent, Alan](#)
To: [Sam Ponniah](#)
Cc: 9(2)(a)
Subject: RE:Affected Industries
Date: Thursday, 11 March 2021 10:19:22 am
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)
[Interview Contact List Master.docx](#)
[Interview Filtration Technology.pptx](#)

Hi Sam

I thought that I would give you an update re progress on this.

Attached is the master list of who we have reached out to. These fall into three categories

- Those we have contacted and arranged a time to talk
- Those we have contacted, have agreed to be interviewed and who we have sent the topics to discuss to – but have yet to lock down an interview time
- Those (in red) who we have contacted but have yet to hear back from

I have also attached an example of the topics we are looking to explore with the interviewees – accepting that we will vary to fit each entity as relevant

In addition to the attached we have already spoken to

- Watercare
- PowerCo
- WICS – we are keen to have a follow up conversation
- Water NZ
- Our Australian colleagues
- Beca

And have gathered additional insight from the parallel process we are running Out of Scope

We will make a concerted effort to run the outstanding interviews to ground over the next couple of days – the intention being 9(2)(a) will pick up a number of these.

While we wouldn't expect to have all completed by time we issue our draft report we expect to have sufficient coverage to be confident in where we are heading re conclusions.

Happy to discuss

Kind Regards

Alan Dent

Partner | Corporate Finance

Deloitte

Level 12, 20 Customhouse Quay, PO Box 1990, Wellington 6140, New Zealand

D: 9(2)(a) | M: 9(2)(a) | O: 9(2)(a) | F: 9(2)(a)

9(2)(a) @deloitte.co.nz | www.deloitte.co.nz

Deloitte means Deloitte Limited (in its own capacity for assurance services, otherwise as trustee for the Deloitte Trading Trust)



[Navigating COVID-19: read the latest updates from our experts](#)



Please consider the environment before printing.

Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be subject to legal privilege or copyright. If you have received this email in error, please advise the sender immediately and destroy the message and any attachments. If you are not the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest terms of engagement which we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures, no assurance or guarantee is implied or should be construed that this email message or its attachments are free from computer viruses. Deloitte assumes no responsibility for any such virus or any effects of such a virus on the recipient's systems or data.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai, Singapore, Sydney, Taipei and Tokyo.

Released Under the Official Information Act 1982



DIA Three Waters Reform
Organisations/contacts for stakeholder interviews

Interview Contact List

Organisation	Sector/role	Key contact	Contact details	Contacted?	Interview time	Interviewers	Key questions
Xylem Water Solutions	Water technology provider in public utility, residential, commercial, agricultural and industrial settings	Martin Bloem General Manager New Zealand		Yes			•
Trility	Delivery of water, wastewater and environmental services	Francois Gouws (Managing Director) – former past president of the Australian Water Association		Yes			•
							•
City Care Water	Water Services	Tim Gibson (CE)		Yes	9.00 am 17/3	Alan Dent, ⁹⁽²⁾ (a)	•
Fulton Hogan	Construction	Mark Cristison		Yes			•
Veolia	Water management, waste management and energy services	Alex Lagny NZ CEO		Yes	3.00 pm 17/3	Alan Dent, ⁹⁽²⁾ (a)	•

Organisation	Sector/role	Key contact	Contact details	Contacted?	Interview time	Interviewers	Key questions
Downer	Integrated services	Gareth Mappedoram (GM water and automation)		Yes			•
Hynds	Water supplier (pipes, valves etc)	Aaron Hynds Director		Yes			•
Humes	Major pipeline supplier	Chris Wheeler National Sales & Distribution Manager		Yes			•
Filtration Technology Ltd	Technology provider – instrumentation, water treatment design build, small water systems	Matt Ewen Managing Director		Yes			•
							•
Lutra	Consulting sector	Iain Rabbits Principle Process Engineer		Yes			•
Ixom NZ	Water treatment and chemical distributor	Graham Colquhoun (GM)		Yes			•
Crown Infrastructure	Construction, resource/supply pinch points	Jeremy Holman (currently with Crown, ex GM of		Yes			•

Organisation	Sector/role	Key contact	Contact details	Contacted?	Interview time	Interviewers	Key questions
Partners / Downer		Downer, significant UK experience)					
Stantec	Water engineering	David Hogg		Yes			•
							•
Arup	Water planning	N/A					•
Infracom		Rob Addison		Yes	2pm 12/3	Alan Dent, 9(2) (a)	•
Taumatī Arowai	Regulator	Bill Bayfield		Yes	10.30 am 16/3	Alan Dent, 9(2) (a), 9(2) (a)	•
Civil Contractors	Primarily transport focused, but focus on smaller regional and family firms	NA					•

Released Under the Official Information Act 1982



DIA Three Waters Reform

Organisations/contacts for stakeholder interviews

Interview schedule

Organisation	Sector/role	Key contact	Contact details	Key questions
Filtration Technology Ltd	Technology provider – instrumentation, water treatment design build, small water systems	Matt Ewen	9(2)(a) @filtec.co.nz	<ul style="list-style-type: none"> • What is your organisations presence in the NZ Water sector currently? • What are the core services provided? • Are those services provided locally/remotely? • How big is your business and NZ workforce currently? • What opportunities do you see the proposed water reforms could create for your organisation? • If demand for your services steps up – do you see challenges in meeting that demand – people? Materials? • Are you experiencing challenges meeting demand currently? Recruiting talent currently? Are there particular pain points? • Where do you see there are opportunities for productivity/performance gains in the NZ Water Sector? • What is limiting the ability to achieve those gains currently? • How do you see the proposed reforms could contribute to/accelerate those gains? • What could limit/slow down the ability to achieve gains under a reformed sector? • What could government do to address those potential impediments?

From: [Tan, John](#)
To: [Sam Ponniah](#)
Cc: 9(2)(a)
Subject: RE:RFI Data
Date: Thursday, 11 March 2021 1:51:10 pm
Importance: High

Sam

9(2)(a)
One important point that 9(2)(a) just raised with me. While WICS have provided an estimate of RFI capex for both the 2021-2031 and 2032-2051 periods, both periods have data missing. I don't have too much of a problem with the approach that WICS have taken to 'backfill' the missing 14 Councils for the first time period, but there are 51/67 Councils that have not provided data for the second 20 years. As EY are tracking down this data, the likelihood of a divergence between WICS assumptions and EY assumptions grows. I think the most sensible way through this is for someone from EY to 'sit down' with us (virtually or otherwise) to see what data they have, check off key figures and show us what is available / might be available and we can prioritise selectively anything that we need urgently.

John

From: Tan, John
Sent: Thursday, 11 March 2021 1:30 PM
To: 'Sam Ponniah' <9(2)(a)@martinjenkins.co.nz>
Cc: 9(2)(a) <9(2)(a)@deloitte.co.nz>
Subject: RE: RFI Data

Sam

I think we are after the following from EY from the G/I tables:

- Aggregate capex\$ by TA (should be easy) to cross check WICS aggregations
- Aggregate asset\$ by TA (should be easy) as a potential spreading mechanism, especially where there is missing data. WICS use people and area to do their spread and we wouldn't mind using asset values as well.
- Any analysis that they can provide of above/below the ground split (either by using medium/long term asset lives as a proxy, or by project expenditure characteristics). This doesn't need to be detailed, it can be at an aggregate level
- Any information that they can provide on phasing (esp across 10 years, and then the next 20 years)

9(2)(a) - are there any other gaps that we are looking to fill?

John

From: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>
Sent: Thursday, 11 March 2021 11:25 AM
To: Tan, John <9(2)(a)@deloitte.co.nz>
Cc: 9(2)(a) <9(2)(a)@deloitte.co.nz>
Subject: [EXT] FW: RFI Data

Hi John

Please see below for a bit more context around EY's process. If we can be more specific about which information we need for the EIA they can look at fast-tracking those for us.

Cheers

Sam

Sam Ponniah | Senior Consultant

MartinJenkins

M 9(2)(a) T 9(2)(a)

From: 9(2)(a) <9(2)(a)@nz.ey.com>

Sent: Thursday, 11 March 2021 11:21 AM

To: Sam Ponniah <[REDACTED]> [@martinjenkins.co.nz](mailto:[REDACTED]@martinjenkins.co.nz)

Subject: RE: RFI Data

Hi Sam,

We'll have a better indication of timing for G & J tabs once we have run through some of the G & J tabs. Worst case scenario is end of next week but I'm pushing for earlier. For AA to F we have 4 more RFIs to process, having received Auckland's on Tues and Carterton's yesterday, plus as well as an updated Waimate RFI yesterday who had identified an error.

There are a lot of structural changes to G & J with the ability to include additional rows and the constrained/unconstrained views from some but not all councils. Is there a specific part of G or J that Deloitte needs? If there is a section e.g. G1 or part of G1 that they are particularly interested in we could focus on that and if there are limited structural changes we could potentially run it through quite quickly.

Happy to discuss.

Regards,
Sophie

Sophie Dawson | Director | Infrastructure Advisory

Ernst & Young Limited

Mobile: [REDACTED] | [REDACTED] [@nz.ey.com](mailto:[REDACTED]@nz.ey.com)

From: Sam Ponniah <[REDACTED]> [@martinjenkins.co.nz](mailto:[REDACTED]@martinjenkins.co.nz)

Sent: Wednesday, March 10, 2021 6:17 PM

To: Sophie B Dawson <[REDACTED]> [@nz.ey.com](mailto:[REDACTED]@nz.ey.com)

Subject: RE: RFI Data

Thanks [REDACTED] when do you expect to have the consolidation complete for the G and J tables?

Cheers
Sam

Sam Ponniah | Senior Consultant

MartinJenkins

M [REDACTED] T [REDACTED]

From: [REDACTED] <[REDACTED]> [@nz.ey.com](mailto:[REDACTED]@nz.ey.com)

Sent: Wednesday, 10 March 2021 1:26 PM

To: Sam Ponniah <[REDACTED]> [@martinjenkins.co.nz](mailto:[REDACTED]@martinjenkins.co.nz)

Subject: RE: RFI Data

Hey Sam,

Sorry this did drop off the radar. Attached is the template format for G and J. We are on track to complete AA to F consolidation over the next couple of days and will then focus on G and J – this has taken a bit longer than expected given the large number of structural changes to the workbooks. The G and J tabs are more challenging as they have had the most structural changes made to the workbook.

Happy to discuss further.

Regards,
Sophie

Sophie Dawson | Director | Infrastructure Advisory

Ernst & Young Limited

Mobile: [REDACTED] | [REDACTED] [@nz.ey.com](mailto:[REDACTED]@nz.ey.com)

From: Sam Ponniah <[REDACTED]> [@martinjenkins.co.nz](mailto:[REDACTED]@martinjenkins.co.nz)

Sent: Tuesday, March 9, 2021 6:42 PM

To: [REDACTED] <[REDACTED]> [@nz.ey.com](mailto:[REDACTED]@nz.ey.com)

Subject: FW: RFI Data

H 9(2)(a)

This might have slipped off the radar but just checking in on where you're at with the consolidated G and J tabs and when this might be in a form that can be shared with John and team? They're needing the data this week to start running the scenarios for the economic impact analysis.

Cheers

Sam

Sam Ponniah | Senior Consultant

MartinJenkins

M 9(2)(a) T 9(2)(a)

From: Tan, John <9(2)(a)@deloitte.co.nz>

Sent: Tuesday, 9 March 2021 6:19 PM

To: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>

Cc: 9(2)(a) <9(2)(a)@deloitte.co.nz>; 9(2)(a) <9(2)(a)@deloitte.co.nz>

Subject: RFI Data

Hi Sam

We are starting to compile the data set into the model. One of the things that I am keen to do as a crosscheck/audit trail is to tie back the Table G capex summary from WICS to the actual data files. I was planning on getting one of the team here to do this at the totals level to make sure that it ties reasonably closely to the RFI data. I remember seeing the blank RFI templates (workbooks I and II) but not sure if we have ever been sent the links to the raw submissions. Do you have access to this – or who can provide us with access to these

Thanks

John

This email and any attachments are confidential and the copyright of Ernst & Young or a third party. This email is intended exclusively for the person to whom the email is addressed. If you are not the intended recipient, do not read, copy, disclose or use the contents in any way. Please notify us immediately by return email and destroy the email and attachments. Any views expressed in this communication are those of the individual sender, except where the sender specifically states them to be the views of Ernst & Young. Except as required by law, Ernst & Young does not represent, warrant and/or guarantee that the integrity of this communication has been maintained nor that the communication is free of errors, virus, interception or interference.

This email and any attachments are confidential and the copyright of Ernst & Young or a third party. This email is intended exclusively for the person to whom the email is addressed. If you are not the intended recipient, do not read, copy, disclose or use the contents in any way. Please notify us immediately by return email and destroy the email and attachments. Any views expressed in this communication are those of the individual sender, except where the sender specifically states them to be the views of Ernst & Young. Except as required by law, Ernst & Young does not represent, warrant and/or guarantee that the integrity of this communication has been maintained nor that the communication is free of errors, virus, interception or interference.

Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be subject to legal privilege or copyright. If you have received this email in error, please advise the sender immediately and destroy the message and any attachments. If you are not

the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest terms of engagement which we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures, no assurance or guarantee is implied or should be construed that this email message or its attachments are free from computer viruses. Deloitte assumes no responsibility for any such virus or any effects of such a virus on the recipient's systems or data.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai, Singapore, Sydney, Taipei and Tokyo.

Released Under the Official Information Act 1982

From: [Tan, John](#)
To: [Sam Ponniah](#)
Subject: RE:In-confidence - Farrierswier draft report
Date: Friday, 12 March 2021 5:27:12 pm
Attachments: [ATT00001.png](#)
[ATT00002.png](#)
[ATT00003.png](#)
[ATT00004.png](#)
[ATT00005.png](#)

Thanks Sam

Sent from my iPhone

On 12/03/2021, at 4:54 PM, Sam Ponniah
<[9\(2\)\(a\)](#)> @martinjenkins.co.nz wrote:

Hi John

As discussed, attached is the FS draft report on the WICS method. Most of it won't be relevant for your analysis but chapter 5 talks about the approach to modelling the investment requirement and is probably the most useful for you to take a look at. Chapter 2 might also be useful in outlining the general approach WICS is proposing to take to its analysis (again not all will be relevant save for the bits about modelling the investment requirement).

Cheers

Sam

Sam Ponniah | Senior Consultant

MartinJenkins

M [9\(2\)\(a\)](#) T [9\(2\)\(a\)](#)

[<mime-attachment.png>](#) [<mime-attachment.png>](#) [<mime-attachment.png>](#)

[<mime-attachment.png>](#) Level 16, AIG Building, 41 Shortland St, **Auckland**

[<mime-attachment.png>](#) Level 1, City Chambers, Cnr Johnston & Featherston Sts, **Wellington**

PLEASE NOTE: The information contained in this email message and any attached files may be confidential and subject to privilege. The views expressed may not necessarily be the official view of Martin, Jenkins and Associates Limited. If you are not the intended recipient, you are notified that any use, disclosure or copying of this email is unauthorised. If you have received this email in error, please notify us immediately by reply email and delete the original. Thank you.

<Farrierswier - 3 Waters - Review of WICS methodology for assessing aggregation - DRAFT - 2 March 2021.docx>

Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be subject to legal privilege or copyright. If you have received this email in error, please advise the sender immediately and destroy the message and any attachments. If you are not the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest terms of engagement which we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures, no assurance or guarantee is implied or should be construed that this email message or its attachments are free from computer viruses. Deloitte assumes no responsibility for any such virus or any effects of such a virus on the recipient's systems or data.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai, Singapore, Sydney, Taipei and Tokyo.

Released Under the Official Information Act 1982

From: [Tan, John](#)
To: [Sam Ponniah](#)
Cc: 9(2)(a); [Dent, Alan](#); 9(2)(a)
Subject: DIA status update
Date: Monday, 15 March 2021 8:53:10 am
Attachments: [Deloitte - three waters status update 150321 v1.pptx](#)

Hi Sam

Attached is a current status update

John

Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be subject to legal privilege or copyright. If you have received this email in error, please advise the sender immediately and destroy the message and any attachments. If you are not the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest terms of engagement which we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures, no assurance or guarantee is implied or should be construed that this email message or its attachments are free from computer viruses. Deloitte assumes no responsibility for any such virus or any effects of such a virus on the recipient's systems or data.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai, Singapore, Sydney, Taipei and Tokyo.



Released Under the Official Information Act 1982

Three Waters Reform Status Update

DEPARTMENT OF INTERNAL AFFAIRS
15 MARCH 2021

Status update

Commentary

Last week the economic impact workstream focused on preparing for a workshop with DIA to finalise the CGE shocks and assumptions. As WICS' status quo data had several gaps, we will now use Mafic's data for our counterfactual scenario(s). Given we expect to receive Mafic's data on 16 March, we suggest pushing out the due dates for data collection, modelling, and the draft economic impact analysis, per the table below. We are still working towards a 1 April deadline for the final report.

We have also developed a first draft of the assumptions workbook and completed the area impact model. Providing we receive data on Tuesday, this week we will complete the draft the assumptions workbook and begin to undertake CGE modelling. For this, we will use the draft WICS data received to meet our timeframes. [Can we get confirmation on when we will receive the final WICS data and their efficiency adjustment worksheet?]

Last week, the affected industries workstream undertook several second-order interviews, and progressed the water sector labour force schematic. We will continue to undertake these activities this week. Both workstreams will also continue to pull together the draft report this week.

Deliverables / Milestones	Status	Indicative Due Date
Project Inception Meeting	Complete	5 & 10 February
Draft methodology and key information requirements	Complete	17 February
Data collection and model design	In progress, awaiting remaining data	22 February 16 March
Agreed methodology, scenario and sensitivity definition, and confirmation of key assumptions	Complete	22 February 23 February
Economic modelling	In progress	16 March 22 March
Draft economic impact analysis	In progress	19 March 29 March
Stakeholder consultation	In progress	Ongoing
Draft industry development study	In progress	22 March
Final report on economic impact analysis and industry development study	In progress	2 April 1 April, due to Good Friday

88

Status

Overall	On track for recast timeline
Budget	On track

Work completed last week

Work completed for 08 to 12 March

- Received clarification on our questions regarding WICS' data.
- Pulled together an assumptions workbook which collates relevant data received, and provides an audit trail to data for the CGE model.
- Prepared for and held a workshop to confirm the counterfactual and system transformation scenarios, and the conceptual CGE shock.
- Refined data and assumptions for the CGE shocks in a workshop with DIA, and updated our methodology to reflect this.
- Completed the draft area impact model.
- Began to shape up conceptual presentation of CGE results, including a heat map.
- Reviewed the Farrierswier draft report.
- Undertook desktop research to understand the current state of affected industries.
- Held second-order interviews with industry participants.
- Shaped up a schematic to summarise the structure of the water sector labour force.
- Began to populate the draft report.

Activities this week

Work planned for 15 to 19 March

- Receive data from Mafic, identify any gaps or questions, and incorporate this data into our assumptions workbook.
- Receive efficiency data in excel from WICS and incorporate this into our assumptions workbook.
- Undertake any further data cleaning and collation, and produce capex profiles for CGE modelling.
- Providing data is received on time, begin to undertake CGE modelling.
- Develop narrative around scenarios to be modelled, including key policy parameters.
- Continue to undertake desktop research to understand the current state of affected industries.
- Continue to hold second-order interviews with industry participants.
- Progress labour force schematic.
- Continue to draft the report and share our section of the report on the affected industries.

From: [Tan, John](#)
To: [Sam Ponniah](#); 9(2)(a)
Cc: [Dent, Alan](#)
Subject: RE:Meeting with Alan Sutherland/WICS
Date: Tuesday, 16 March 2021 1:41:19 pm
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)
[image007.png](#)
[image008.png](#)
[image009.png](#)
[image010.png](#)
[image011.png](#)

Hi Sam

That would be great, assuming it also comes with an estimate of the possible efficiency range
John

From: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>
Sent: Tuesday, 16 March 2021 1:37 PM
To: 9(2)(a) <9(2)(a)@deloitte.co.nz>
Cc: Tan, John <9(2)(a)@deloitte.co.nz>; Dent, Alan <9(2)(a)@deloitte.co.nz>
Subject: [EXT] RE: Meeting with Alan Sutherland/WICS
9(2)(a)

I've followed up with Alan – I've asked if he can get us the most up to date investment profiles in the next 24 hours and he'll revert on this.

On a meeting he's indicated that Monday morning will be the earliest he can do given his schedule with councils this week. Would that work for you?

Cheers
Sam

Sam Ponniah | Senior Consultant

MartinJenkins

M 9(2)(a) T 9(2)(a)

From: 9(2)(a) <9(2)(a)@deloitte.co.nz>
Sent: Monday, 15 March 2021 6:07 PM
To: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>
Cc: Tan, John <9(2)(a)@deloitte.co.nz>; Dent, Alan <9(2)(a)@deloitte.co.nz>
Subject: RE:Meeting with Alan Sutherland/WICS

Thanks Sam,

We emailed Colin this morning to request a meeting this week, but we would appreciate it if you could get in touch with Alan too.

Our proposed Agenda for the meeting is:

1. Efficiency adjustments- a discussion and agreement on the range of efficiencies adjustments we can apply for our modelling purposes.
2. Affected industries as per the attached email.
3. Status of investment profiles (i.e. can we use the mock-up profiles shared with Deloitte previously or is there a more recent version?)

Best,

9(2)(a)

Director | Corporate Finance
Deloitte

Level 12, 20 Customhouse Quay, PO Box 1990, Wellington 6140, New Zealand

D: 9(2)(a) | M: 9(2)(a) | O: 9(2)(a) | F: 9(2)(a)
9(2)(a) @deloitte.co.nz | www.deloitte.co.nz

Deloitte means Deloitte Limited (in its own capacity for assurance services, otherwise as trustee for the Deloitte Trading Trust)



[Navigating COVID-19: read the latest updates from our experts](#)



Please consider the environment before printing.

From: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>
Sent: Monday, 15 March 2021 2:54 PM
To: 9(2)(a) <9(2)(a)@deloitte.co.nz>
Cc: Tan, John <9(2)(a)@deloitte.co.nz>; Dent, Alan <9(2)(a)@deloitte.co.nz>
Subject: [EXT] Meeting with Alan Sutherland/WICS

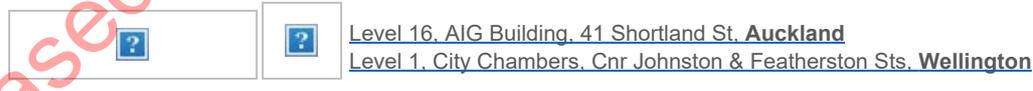
9(2)(a)
Just picking up from the call earlier today, I know Alan's schedule this week is taken up by calls with Councils but he may have some availability on Wednesday or Thursday morning our time so would suggest getting in touch with him early (if you haven't already) to schedule something so that we don't lose any more time on this. I'm happy to set something up if you can send me a few bullets on what you would like to cover.

Cheers
Sam

Sam Ponniah | Senior Consultant

MartinJenkins

M 9(2)(a) T 9(2)(a)



PLEASE NOTE: The information contained in this email message and any attached files may be confidential and subject to privilege. The views expressed may not necessarily be the official view of Martin, Jenkins and Associates Limited. If you are not the intended recipient, you are notified that any use, disclosure or copying of this email is unauthorised. If you have received this email in error, please notify us immediately by reply email and delete the original. Thank you.

Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be subject to legal privilege or copyright. If you have received this email in error, please advise the sender immediately and destroy the message and any attachments. If you are not the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an

existing client, this email is provided in accordance with the latest terms of engagement which we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures, no assurance or guarantee is implied or should be construed that this email message or its attachments are free from computer viruses. Deloitte assumes no responsibility for any such virus or any effects of such a virus on the recipient's systems or data.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai, Singapore, Sydney, Taipei and Tokyo.

Released Under the Official Information Act 1982

From: [Tan, John](#)
To: [Sam Ponniah](#)
Cc: 9(2)(a)
Subject: DIA colour palette
Date: Tuesday, 16 March 2021 12:34:00 am
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)

Sam

Minor point – but we are starting to pull together some of the charts and analysis that will feed into our report. Given that some of these might get dragged and dropped into a DIA format at some stage, it might make sense to put these into a DIA appropriate colour palette. Could you please cc: those copied with the DIA colour palette

Thanks John

John Tan

Partner | Corporate Finance

Deloitte

Level 12, 20 Customhouse Quay, PO Box 1990, Wellington 6140, New Zealand

D: 9(2)(a) | M: 9(2)(a) | O: 9(2)(a) | F: 9(2)(a) 1

9(2)(a) @deloitte.co.nz | www.deloitte.co.nz

Deloitte means Deloitte Limited (in its own capacity for assurance services, otherwise as trustee for the Deloitte Trading Trust)



[Navigating COVID-19: read the latest updates from our experts](#)



Please consider the environment before printing.

Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be subject to legal privilege or copyright. If you have received this email in error, please advise the sender immediately and destroy the message and any attachments. If you are not the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest terms of engagement which we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures, no assurance or guarantee is implied or should be construed that this email message or its attachments are free from computer viruses. Deloitte assumes

no responsibility for any such virus or any effects of such a virus on the recipient's systems or data.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai, Singapore, Sydney, Taipei and Tokyo.

Released Under the Official Information Act 1982

From: [Dent, Alan](#)
To: [Sam Ponniah](#)
Subject: Water Sector Workforce
Date: Wednesday, 17 March 2021 1:55:59 pm
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)

Hi Sam

We were wondering whether any of the various DIA workstreams had looked at the current water sector workforce? Water NZ publishes some analysis of the workforce as it sits within council but not in the wider eco system (consultants, contractors etc).

We can get some sense but thought we would ask in case there has been some more specific work done in this area.

Cheers

Alan Dent

Partner | Corporate Finance

Deloitte

Level 12, 20 Customhouse Quay, PO Box 1990, Wellington 6140, New Zealand

D: 9(2)(a) | M: 9(2)(a) | O: 9(2)(a) | F: 9(2)(a)

9(2)(a)@deloitte.co.nz | www.deloitte.co.nz

Deloitte means Deloitte Limited (in its own capacity for assurance services, otherwise as trustee for the Deloitte Trading Trust)



[Navigating COVID-19: read the latest updates from our experts](#)

Deloitte 175



Please consider the environment before printing.

Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be subject to legal privilege or copyright. If you have received this email in error, please advise the sender immediately and destroy the message and any attachments. If you are not the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest terms of engagement which we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures, no assurance or guarantee is implied or should be construed that this email message or its attachments are free from computer viruses. Deloitte assumes

no responsibility for any such virus or any effects of such a virus on the recipient's systems or data.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai, Singapore, Sydney, Taipei and Tokyo.

Released Under the Official Information Act 1982

From: 9(2)(a)
To: [Campbell Will](#); 9(2)(a)
Cc: [Tan, John](#); [Sam Ponniah](#)
Subject: RE:Three waters - counterfactual data for Deloitte
Date: Thursday, 18 March 2021 3:41:14 pm
Attachments: [image011.jpg](#)
[image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)
[image007.jpg](#)
Importance: High

Hi Campbell,

Thanks again for providing the updated Phase I counterfactual data. We have incorporated this into our data book and at this stage will use this to model our counterfactual scenario. However, as our system transformation scenario is based on WICS' Phase II data, which creates a disconnect in the source data for the counterfactual and system transformation scenarios. We understand the final Phase II data won't be available for another 2-3 weeks, which is after our report deadline – would it be possible for you to make an uplift adjustment to the counterfactual to bring this more in line with Phase 11 figures (noting Phase II investment is larger than estimated in Phase I)? Let us know what you think, and we can see what data we have that may help.

Best

9(2)(a)

Director | Corporate Finance
Deloitte

Level 12, 20 Customhouse Quay, PO Box 1990, Wellington 6140, New Zealand

D: 9(2)(a) | M: 9(2)(a) | O: 9(2)(a) | F: 9(2)(a)

9(2)(a)@deloitte.co.nz | www.deloitte.co.nz

Deloitte means Deloitte Limited (in its own capacity for assurance services, otherwise as trustee for the Deloitte Trading Trust)



[Navigating COVID-19: read the latest updates from our experts](#)

Deloitte 175



Please consider the environment before printing.

From: Campbell Will <9(2)(a)@mafic.co.nz>

Sent: Tuesday, 16 March 2021 1:00 PM

To: 9(2)(a) <9(2)(a)@deloitte.co.nz>
Cc: Tan, John <9(2)(a)@deloitte.co.nz>; 9(2)(a) <9(2)(a)@deloitte.co.nz>
Subject: [EXT] RE: Three waters - counterfactual data for Deloitte

Hi all,

See attached an updated counterfactual document with real numbers added underneath the opex/capex forecast (see row 81).

I have also attached a version of the WICS phase 1 model so that you can see how opex forecast has been derived.

- The opex forecast calculation is on the "Profit and loss" sheet
- The starting opex value is on the "Data" sheet. Remove the filter on row 3 to see data for the other councils.

Also, further to our discussion this morning it sounds like we will not have data based on WICS Phase 2 analysis for another 2-3 weeks.

Cheers,

Campbell



Campbell Will

Mafic Partners Limited

M: 9(2)(a)

From: Campbell Will

Sent: Monday, 15 March 2021 7:09 pm

To: 9(2)(a) <9(2)(a)@deloitte.co.nz>

Cc: Tan, John <9(2)(a)@deloitte.co.nz>; 9(2)(a) <9(2)(a)@deloitte.co.nz>;

Sam Ponniah <9(2)(a)@martinjenkins.co.nz>; Nick Davis <9(2)(a)@dia.govt.nz>;

Michael Chatterley <9(2)(a)@dia.govt.nz>; Scott Priestley

<9(2)(a)@dia.govt.nz>

Subject: RE: Three waters - counterfactual data for Deloitte

Hi 9(2)(a)

See attached workbook with a draft opex and capex forecast for the counterfactual scenario. The capex backlog is also included for reference.

This output assumes:

- Price increases in line with the 4 entity amalgamation scenario
- Debt to revenue profile based on WICS phase 1 analysis

A couple of things to note:

1. This forecast is based on the WICS phase 1 analysis and will need to be updated when we received the WICS phase 2 analysis
2. The above price and D/R assumptions result in some councils not having any capex in some periods. This is because under the WSE amalgamation scenario these councils benefit from material price decreases, and when we apply those price changes to the counterfactual, there is insufficient cash to fund capex. These assumptions will need to be refined.

Kind regards,

Campbell



Campbell Will

Mafic Partners Limited

M: 9(2)(a)

From: 9(2)(a) <9(2)(a)@deloitte.co.nz>

Sent: Sunday, 14 March 2021 10:09 pm

To: Campbell Will <9(2)(a)@mafic.co.nz>

Cc: Tan, John <9(2)(a)@deloitte.co.nz>; 9(2)(a) <9(2)(a)@deloitte.co.nz>

Subject: RE:Three waters - counterfactual data for Deloitte

Thanks Campbell

From: Campbell Will <9(2)(a)@mafic.co.nz>

Sent: Friday, 12 March 2021 11:03 AM

To: 9(2)(a) <9(2)(a)@deloitte.co.nz>

Cc: Tan, John <9(2)(a)@deloitte.co.nz>; 9(2)(a) <9(2)(a)@deloitte.co.nz>

Subject: [EXT] RE: Three waters - counterfactual data for Deloitte

Thanks. The information I provide next week will be based on phase 1 data.

If required, we can update for phase 2 when it's available, but I don't have the phase 2 data yet.



Campbell Will

Mafic Partners Limited

M: 9(2)(a)

From: 9(2)(a) <9(2)(a)@deloitte.co.nz>

Sent: Friday, 12 March 2021 10:54 am

To: Campbell Will <9(2)(a)@mafic.co.nz>

Cc: Tan, John <9(2)(a)@deloitte.co.nz>; 9(2)(a) <9(2)(a)@deloitte.co.nz>

Subject: RE:Three waters - counterfactual data for Deloitte

No worries Campbell, we can make 9am. I'll send through an invite shortly.

As an aside, is your analysis based on phase one or phase two data?

Cheers

9(2)(a)

From: Campbell Will <9(2)(a)@mafic.co.nz>

Sent: Thursday, 11 March 2021 8:27 PM

To: 9(2)(a) <9(2)(a)@deloitte.co.nz>

Cc: Tan, John <9(2)(a)@deloitte.co.nz>; 9(2)(a) <9(2)(a)@deloitte.co.nz>

Subject: [EXT] RE: Three waters - counterfactual data for Deloitte

H 9(2)(a)

Unfortunately my Tuesday is quite busy. I can do 9:00am-9:30am or 10:30am-1130am on Tuesday.

Alternatively I can do Wednesday before 11am or after 2pm

Cheers,

Campbell



Campbell Will

Mafic Partners Limited

M: 9(2)(a)

From: 9(2)(a) <9(2)(a)@deloitte.co.nz>

Sent: Thursday, 11 March 2021 4:03 pm

To: Campbell Will <9(2)(a)@mafic.co.nz>

Cc: Tan, John <9(2)(a)@deloitte.co.nz>; 9(2)(a) <9(2)(a)@deloitte.co.nz>

Subject: Three waters - counterfactual data for Deloitte

Hi Campbell

Thanks for making the workshop earlier today.

Just getting in touch to set up a time to walk through the counterfactual data Mafic will provide.

John, 9(2)(a) I are free between 1 and 3pm on Tuesday 16th – is there 30 mins within this slot that would suit you?

It would be good to have a quick look at the data before our call, if you're able to send this to us

on Tuesday morning.

Many thanks

9(2)(a)

Analyst | Corporate Finance

Deloitte

Level 12, 20 Customhouse Quay, PO Box 1990, Wellington 6140, New Zealand

D: 9(2)(a) | O: 9(2)(a) | F: 9(2)(a)

9(2)(a) @deloitte.co.nz | www.deloitte.co.nz

Deloitte means Deloitte Limited (in its own capacity for assurance services, otherwise as trustee for the Deloitte Trading Trust)



Please consider the environment before printing.

Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be subject to legal privilege or copyright. If you have received this email in error, please advise the sender immediately and destroy the message and any attachments. If you are not the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest terms of engagement which we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures, no assurance or guarantee is implied or should be construed that this email message or its attachments are free from computer viruses. Deloitte assumes no responsibility for any such virus or any effects of such a virus on the recipient's systems or data.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai, Singapore, Sydney, Taipei and Tokyo.

From: 9(2)(a)
To: [Sam Ponniah](#); [Tan, John](#)
Subject: RE:RfI consolidated G1 and J1 tables
Date: Thursday, 18 March 2021 3:46:16 pm
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)
[image007.png](#)
[image008.png](#)
[image009.png](#)
[image010.png](#)
[image011.png](#)

Thanks Sam.

The point related to nominal and real values is more that the nominal values are all equal to the real values- so it might be that the inflationary adjustment is not flowing through in calculations.

Many thanks,

9(2)(a)

From: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>

Sent: Thursday, 18 March 2021 3:33 PM

To: 9(2)(a) <9(2)(a)@deloitte.co.nz>; Tan, John <9(2)(a)@deloitte.co.nz>

Subject: [EXT] RE: RfI consolidated G1 and J1 tables

9(2)(a) I've shared these with 9(2)(a)

I know that on the question of inflation, where forecast dollar values have been provided by Local Authorities in real terms, inflation has been applied utilising the BERL total mid scenario inflation forecast. The original real data values and nominal inflated values are both presented in the flat file. The duplication of tables might be the constrained vs unconstrained views but will wait for 9(2)(a) to confirm.

Cheers

Sam

Sam Ponniah | Senior Consultant

MartinJenkins

M 9(2)(a) T 9(2)(a)

From: 9(2)(a) <9(2)(a)@deloitte.co.nz>

Sent: Thursday, 18 March 2021 11:37 AM

To: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>; Tan, John <9(2)(a)@deloitte.co.nz>

Subject: RE:RfI consolidated G1 and J1 tables

Sam,

Thanks again for sharing the RfI consolidated data for the first 56 councils. We are looking forward to receiving the full consolidated data later today.

We do have some clarification questions on the draft consolidated data. Can you please share the questions with EY:

- The data includes nominal values and an inflation index. However, it does seem that the inflation index is applied to the real values (the nominal values equates the real values in the data provided)
- Data was doubled up for some councils:
 - Thames-Coromandel District reported both G1 and G1Nth Summary Tables. Both of these tables had the same information source, but different amounts.
 - Tauranga City & Hurunui District both reported G1 and G1a Summary Tables. There was no difference in the data source for either of these.
 - Whangarei District reported a G1 and G1 LTP Summary Tables. These also had the same data source
- For these councils, which table should be used?
- Another question is that the data for Thames-Coromandel District is stated to be in \$000s,

but the data looks like it is just in \$ (if the units was \$000s then the cost for this district would be \$211b)

- Data is provided for Wellington City and Wellington Regional (which is significantly smaller). What is included in Wellington Regional?

Many thanks,

9(2)(a)

Director | Corporate Finance

Deloitte

Level 12, 20 Customhouse Quay, PO Box 1990, Wellington 6140, New Zealand

D: 9(2)(a) | M: 9(2)(a) | O: 9(2)(a) | F: 9(2)(a)

9(2)(a) @deloitte.co.nz | www.deloitte.co.nz

Deloitte means Deloitte Limited (in its own capacity for assurance services, otherwise as trustee for the Deloitte Trading Trust)



[Navigating COVID-19: read the latest updates from our experts](#)

Deloitte 175



Please consider the environment before printing.

From: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>

Sent: Wednesday, 17 March 2021 10:00 PM

To: 9(2)(a) <9(2)(a)@deloitte.co.nz>; Tan, John <9(2)(a)@deloitte.co.nz>

Subject: [EXT] Re: Rfl consolidated G1 and J1 tables

Hi Liza, this is phase II. Phase I was based on published information only

Sam Ponniah | Senior Consultant

MartinJenkins

M 9(2)(a) T 9(2)(a)

From: 9(2)(a) <9(2)(a)@deloitte.co.nz>

Sent: Wednesday, March 17, 2021 8:39:32 PM

To: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>; Tan, John <9(2)(a)@deloitte.co.nz>

Subject: RE:Rfl consolidated G1 and J1 tables

Thank you very much Sam.

Just to confirm- is the data based on Phase I or Phase II Rfl data?

Best,

9(2)(a)

Director | Corporate Finance

Deloitte

Level 12, 20 Customhouse Quay, PO Box 1990, Wellington 6140, New Zealand

D: 9(2)(a) | M: 9(2)(a) | O: 9(2)(a) | F: 9(2)(a)

9(2)(a) @deloitte.co.nz | www.deloitte.co.nz

Deloitte means Deloitte Limited (in its own capacity for assurance services, otherwise as trustee for the Deloitte Trading Trust)



[Navigating COVID-19: read the latest updates from our experts](#)

Deloitte 175



Please consider the environment before printing.

From: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>

Sent: Wednesday, 17 March 2021 8:28 PM

To: 9(2)(a) <9(2)(a)@deloitte.co.nz>; Tan, John <9(2)(a)@deloitte.co.nz>

Subject: [EXT] RE: Rfl consolidated G1 and J1 tables

Here you go.

I'm sure you don't need to be reminded but I am obliged to stress the sensitivity around this information and that it is to only be used for the purpose relating to the terms of your contract with DIA.

Sam Ponniah | Senior Consultant

MartinJenkins

M 9(2)(a) T 9(2)(a)

From: 9(2)(a) <9(2)(a)@deloitte.co.nz>

Sent: Wednesday, 17 March 2021 2:45 PM

To: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>; Tan, John <9(2)(a)@deloitte.co.nz>

Subject: RE:Rfl consolidated G1 and J1 tables

Thanks Sam,

Would be great if we could get the consolidated draft today, and the completed version tomorrow.

Best,

9(2)(a)

Director | Corporate Finance

Deloitte

Level 12, 20 Customhouse Quay, PO Box 1990, Wellington 6140, New Zealand

D: 9(2)(a) | M: 9(2)(a) | O: 9(2)(a) | F: 9(2)(a)

9(2)(a) @deloitte.co.nz | www.deloitte.co.nz

Deloitte means Deloitte Limited (in its own capacity for assurance services, otherwise as trustee

for the Deloitte Trading Trust)



[Navigating COVID-19: read the latest updates from our experts](#)



Please consider the environment before printing.

From: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>

Sent: Wednesday, 17 March 2021 2:29 PM

To: Tan, John <9(2)(a)@deloitte.co.nz>; 9(2)(a) <9(2)(a)@deloitte.co.nz>

Subject: [EXT] Rfl consolidated G1 and J1 tables

Hi John 9(2)(a)

EY have consolidated the G1 and J1 tables (which document the planned capex and asset replacement costs for each of the three waters, and in the case of the latter by sewers/mains/plants) for 56 of the 70 Rfl submissions. They can send a consolidated draft today followed by the complete one tomorrow or just send through the completed version tomorrow. Which would suit you?

Cheers

Sam

Sam Ponniah | Senior Consultant

MartinJenkins

M 9(2)(a) T 9(2)(a)



Level 16, AIG Building, 41 Shortland St, Auckland
Level 1, City Chambers, Cnr Johnston & Featherston Sts, Wellington

PLEASE NOTE: The information contained in this email message and any attached files may be confidential and subject to privilege. The views expressed may not necessarily be the official view of Martin, Jenkins and Associates Limited. If you are not the intended recipient, you are notified that any use, disclosure or copying of this email is unauthorised. If you have received this email in error, please notify us immediately by reply email and delete the original. Thank you.

*Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be subject to legal privilege or copyright. If you have received this email in error, please advise the sender immediately and destroy the message and any attachments. If you are not the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest terms of engagement which we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures, no assurance or guarantee is implied or should be construed that this email message or its attachments are free from computer viruses. Deloitte assumes no responsibility for any such virus or any effects of such a virus on the recipient's systems or data.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai, Singapore, Sydney, Taipei and Tokyo.

Released Under the Official Information Act 1982

From: [Dent, Alan](#)
To: [Sam Ponniah](#)
Subject: RE:Water Sector Workforce
Date: Friday, 19 March 2021 11:08:08 am
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)

Thanks Sam

We've spoken to Rob and have sourced some other material. The sector engagement and Wellington Water work is providing good insight also. The challenge is getting some reasonable sense of the scale/make-up of the workforce – or even how you define that.

We are still on track to produce a draft on Monday – it will be work in progress but hopefully a good start. What is best re setting up a time to discuss?

Cheers

Alan

From: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>

Sent: Friday, 19 March 2021 10:49 AM

To: Dent, Alan <9(2)(a)@deloitte.co.nz>

Subject: [EXT] RE: Water Sector Workforce

Hi Alan

I've asked internally and DIA has not done any specific work on this issue. Some suggestions came through of where it would be worth looking at other work that has been done, which you might already have included as part of your desktop research:

- there has been a lot of work on construction sector skills and workforce issues over the years, including under the Construction Accord and the Construction Sector Productivity Taskforce before that. BRANZ has also done work in this area. While this work is construction focused, rather than specified to water, it will nevertheless be highly relevant given the big focus on asset maintenance, renewal and enhancement.
- Have you had any further engagement from InfraComm? 9(2)(a) is another potential contact there who may be aware of general infrastructure sector related workforce research.
- DIA commissioned research into organisational and governance capability. Workforce was not a specific consideration but these might be worth looking at
 - [https://www.dia.govt.nz/diawebsite.nsf/Files/Three-waters-documents/\\$file/Castalia-ThreeWaters-Asset-Management-Maturity-in-NZ-\(final-report\)-Oct-2017.pdf](https://www.dia.govt.nz/diawebsite.nsf/Files/Three-waters-documents/$file/Castalia-ThreeWaters-Asset-Management-Maturity-in-NZ-(final-report)-Oct-2017.pdf)
 - [https://www.dia.govt.nz/diawebsite.nsf/Files/Three-waters-documents/\\$file/MJ-Three-Waters-Review-Governance-Final-Report-Dec-2017.pdf](https://www.dia.govt.nz/diawebsite.nsf/Files/Three-waters-documents/$file/MJ-Three-Waters-Review-Governance-Final-Report-Dec-2017.pdf)
- MBIE work on general labour market issues would also be worth considering
- To the extent work has been done in Australia on workforce issues, it's probably fairly relevant

here

Cheers

Sam

Sam Ponniah | Senior Consultant

MartinJenkins

M 9(2)(a) T 9(2)(a)

From: Dent, Alan <9(2)(a)@deloitte.co.nz>

Sent: Wednesday, 17 March 2021 1:55 PM

To: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>

Subject: Water Sector Workforce

Hi Sam

We were wondering whether any of the various DIA workstreams had looked at the current water sector workforce? Water NZ publishes some analysis of the workforce as it sits within council but not in the wider eco system (consultants, contractors etc).

We can get some sense but thought we would ask in case there has been some more specific work done in this area.

Cheers

Alan Dent

Partner | Corporate Finance

Deloitte

Level 12, 20 Customhouse Quay, PO Box 1990, Wellington 6140, New Zealand

D: 9(2)(a) | M: 9(2)(a) | O: 9(2)(a) | F: 9(2)(a)

9(2)(a) [@deloitte.co.nz](mailto:9(2)(a)@deloitte.co.nz) | www.deloitte.co.nz

Deloitte means Deloitte Limited (in its own capacity for assurance services, otherwise as trustee for the Deloitte Trading Trust)



[Navigating COVID-19: read the latest updates from our experts](#)



Please consider the environment before printing.

Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be subject to legal privilege or copyright. If you have received this email in error, please advise the sender immediately and destroy the message and any attachments. If you are not the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest terms of engagement which we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures, no assurance or guarantee is implied or should be construed that this email message or its attachments are free from computer viruses. Deloitte assumes no responsibility for any such virus or any effects of such a virus on the recipient's systems or data.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL.

Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai, Singapore, Sydney, Taipei and Tokyo.

Released Under the Official Information Act 1982

From: [Dent, Alan](#)
To: [Sam Ponniah](#)
Subject: RE:DIA Three Waters DRAFT Report
Date: Monday, 22 March 2021 4:27:36 pm
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)
[DIA Three Waters Stakeholder DRAFT Report 22.3.2021.pdf](#)

Hi Sam

Please see attached our draft report for your review and comment. Note we have a couple of interviews still to complete. We have covered a lot of ground through the interview process so have necessarily tried to focus on the key points. We are happy to elaborate where that would be helpful or dial back on topics where we have gone beyond what you were looking for – e.g. comments around debt/access to debt markets etc.

Once you have had a read come back with any comments that you have.

At this stage our intention is that this will form part of our overall report – but happy to discuss your preferences there.

Kind Regards

Alan Dent

Partner | Corporate Finance

Deloitte

Level 12, 20 Customhouse Quay, PO Box 1990, Wellington 6140, New Zealand

D: 9(2)(a) | M: 9(2)(a) | O: 9(2)(a) | F: 9(2)(a)

9(2)(a) @deloitte.co.nz | www.deloitte.co.nz

Deloitte means Deloitte Limited (in its own capacity for assurance services, otherwise as trustee for the Deloitte Trading Trust)



[Navigating COVID-19: read the latest updates from our experts](#)



Please consider the environment before printing.

Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be subject to legal privilege or copyright. If you have received this email in error, please advise the sender immediately and destroy the message and any attachments. If you are not the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest

terms of engagement which we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures, no assurance or guarantee is implied or should be construed that this email message or its attachments are free from computer viruses. Deloitte assumes no responsibility for any such virus or any effects of such a virus on the recipient's systems or data.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai, Singapore, Sydney, Taipei and Tokyo.

Released Under the Official Information Act 1982

From: 9(2)(a)
To: [Sam Ponniah](#)
Cc: [Tan, John](#)
Subject: RE:Full G1 and J1 tables
Date: Monday, 22 March 2021 8:27:38 pm
Attachments: [image007.png](#)
[image008.png](#)
[image009.png](#)
[image010.png](#)
[image011.png](#)
[image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)

Sam,

Thanks again for sharing the full G1 and J1 tables with us.

We have two follow-up questions on the data:

- As noted before, the data for Thames-Coromandel still appears to be in the wrong units – should this be adjusted?
- When total capex is broken down by stormwater, wastewater and water, these do not add to the total capital expenditure- can EY please verify this – The districts causing this difference are:
 - Renewals: Grey District, Marlborough
 - Growth: Thames-Coromandel
 - Enhancement: Grey District

Can you please share these questions with EY?

Many thanks,

9(2)(a)

Director | Corporate Finance

Deloitte

Level 12, 20 Customhouse Quay, PO Box 1990, Wellington 6140, New Zealand

D: 9(2)(a) | M: 9(2)(a) | O: 9(2)(a) | F: 9(2)(a)

9(2)(a)@deloitte.co.nz | www.deloitte.co.nz

Deloitte means Deloitte Limited (in its own capacity for assurance services, otherwise as trustee for the Deloitte Trading Trust)



[Navigating COVID-19: read the latest updates from our experts](#)

Deloitte 175



Please consider the environment before printing.

From: Sam Ponniah <[REDACTED]> @martinjenkins.co.nz>
Sent: Friday, 19 March 2021 10:11 AM
To: [REDACTED] <[REDACTED]> @deloitte.co.nz>
Cc: Tan, John <[REDACTED]> @deloitte.co.nz>
Subject: [EXT] Full G1 and J1 tables
[REDACTED]

Please see below responses to your questions. Have also attached the full consolidated set of G1 and J1 tables.

1. The data includes nominal values and an inflation index. However, it does seem that the inflation index is applied to the real values (the nominal values equates the real values in the data provided) **The inflation index is only applied to information that was provided in real terms in sections E, F and G. The 'values' column represents the value provided per the Rfl submission. The 'Inflated' column reflects the inflation inclusive value. Note that the values and inflated columns for councils who provide responses in nominal terms will be the same.**
2. Data was doubled up for some councils:
 - o Thames-Coromandel District reported both G1 and G1Nth Summary Tables. Both of these tables had the same information source, but different amounts. **The flat file replicates the data provided by the council in the Rfl submission. This was a section reviewed by WICS. During the Rfl process, WICS asked councils to provide a constrained and unconstrained G1 response. Without confirming with WICS, I expect the G1NTH represents the 'unconstrained' view.**
 - o Tauranga City & Hurunui District both reported G1 and G1a Summary Tables. There was no difference in the data source for either of these. **As above. We have checked the underlying Tauranga City Council Rfl submission and some of the data presented is different in G1 and G1 (a). Therefore, this is likely to relate to the constrained vs unconstrained view.**
 - o Whangarei District reported a G1 and G1 LTP Summary Tables. These also had the same data source **As above. We have checked the underlying Whangarei District Council workbook and some of the data presented is different in G1 and G1 LTP. Therefore, this is likely to relate to the constrained vs unconstrained view.**

For these councils, which table should be used? 'G1' tabs represent the constrained view of the investment plan. Any variation to tabs titled 'G1' this will likely relate to the unconstrained view that WICS requested from councils.
3. Another question is that the data for Thames-Coromandel District is stated to be in \$000s, but the data looks like it is just in \$ (if the units was \$000s then the cost for this district would be \$211b) **The flat file replicates the data provided in the Rfl submission from Thames-Coromandel. The formatting in the underlying template has been changed by the council e.g. the figure resembles \$194 when viewed in excel and the cell is not selected, but when selected the number populated in the cell/formula bar is \$194,000. I expect the data that has been provided by the council is in error due to the change in formatting. When the number is extracted into the flat file the formatting is disregarded and \$194,000 is presented. Sam – over to you and Joey to consider whether we follow this up with the council.**
4. Data is provided for Wellington City and Wellington Regional (which is significantly smaller). What is included in Wellington Regional? **Per our understanding, GWRC does not provide water supply, wastewater or stormwater services to customers directly. However GWRC owns assets involved in the supply of bulk water and provides bulk water exports to Wellington, Hutt City, Upper Hutt and Porirua City Councils.**

Sam Ponniah | Senior Consultant

MartinJenkins

M [REDACTED] T [REDACTED]



[Level 16, AIG Building, 41 Shortland St, Auckland](#)

[Level 1, City Chambers, Cnr Johnston & Featherston Sts, Wellington](#)

PLEASE NOTE: The information contained in this email message and any attached files may be confidential and subject to privilege. The views expressed may not necessarily be the official view of Martin, Jenkins and Associates Limited. If you are not the intended recipient, you are notified that any use, disclosure or copying of this email is unauthorised. If you have received this email in error, please notify us immediately by reply

email and delete the original. Thank you.

Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be subject to legal privilege or copyright. If you have received this email in error, please advise the sender immediately and destroy the message and any attachments. If you are not the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest terms of engagement which we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures, no assurance or guarantee is implied or should be construed that this email message or its attachments are free from computer viruses. Deloitte assumes no responsibility for any such virus or any effects of such a virus on the recipient's systems or data.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai, Singapore, Sydney, Taipei and Tokyo.

Released Under the Official Information Act 1982

From: Tan, John
 To: Sam Ponniah <9(2)(a)>
 Cc: Dent, Alan
 Subject: RE:Counterfactual
 Date: Monday, 22 March 2021 4:28:08 pm
 Attachments: image001.png
 image002.png
 image003.png
 image004.png
 image005.png

Sam

Can we pick this up at our discussion tomorrow. We need to update the modelling again for the changes in approach discussed with WICS today. While we might be able to look at some of the price change assumptions in the work done to date – such as the ML analysis, we are likely to be cautious around developing original pricing assumptions

John

From: Sam Ponniah <9(2)(a)> @martinjenkins.co.nz
 Sent: Monday, 22 March 2021 2:43 PM
 To: Tan, John <9(2)(a)> @deloitte.co.nz; 9(2)(a) <9(2)(a)> @deloitte.co.nz
 Cc: Campbell Will <9(2)(a)> @mafic.co.nz; Scott Priestley <9(2)(a)> @dia.govt.nz
 Subject: [EXT] Counterfactual
 Hi John and 9(2)(a)

We've had an internal discussion to come to a landing spot on the counterfactual for the purpose of the different modelling streams.

Where we've got to is that we would like you to model 2 counterfactual scenarios:

1. A scenario based on historic spending, which assumes Councils carry on spending based on historic amounts, with no regulatory pressure
2. A scenario that assumes Councils increase spending over and above historic amounts

It would be great if you could put some thought to scenario 2 and in particular the level of price increase that you would be prepared to assume for the counterfactual. MAFIC can run the numbers once you've confirmed the price constraint – see the table below for an indication of the potential capex backlog based on different combinations of price and debt assumptions.

It would be worthwhile noting in your report that this counterfactual is different to the WICS one that assumes Councils increase prices to meet the new investment required – the rationale for applying different approaches is that the WICS modelling seeks to answer the question of what efficiency gains new amalgamated entities might be in a position to realise over time, holding constant other factors including levels of service and investment. Whereas the economic impact modelling is seeking to quantify the impacts of reform, which requires us to consider the incremental investment that reform enables relative to the counterfactual.

Happy to discuss

Capex backlog after 30 years (nominal \$b) – for context, total capex is \$111b over 30 years (nominal \$b)

Pricing constraint	Debt to revenue constraint			
	Debt to revenue ratio based on WICS phase 1 assumption	Debt to revenue ratio set to max of current ratio or 250%	Debt to revenue ratio set to current ratio	Debt to revenue ratio set to 500%
Price increases for each council matched to WSE 4 entity scenario	49			
Price increases based on historical average rates increase (average specific to each council)	30	27	27	28
Price increases based on forecast LTP rates increase (thereafter, prices increase at historical average rates increase)	[TBC]	[TBC]	[TBC]	[TBC]
Price increases limited to an affordability measure (eg maximum percentage of average incomes)	[TBC]	[TBC]	[TBC]	[TBC]
Prices allowed to increase to meet infrastructure required*				
Prices allowed to increase to meet infrastructure required (but capped at 2%)	66	63	63	65
Prices allowed to increase to meet infrastructure required (but capped at 3%)	52	47	47	50
Prices allowed to increase to meet infrastructure required (but capped at 4%)	34	30	30	32
Prices allowed to increase to meet infrastructure required (but capped at 5%)	21	18	17	19

* This is the WICS counterfactual

Sam Ponniah Senior Consultant
 MartinJenkins
 M 9(2)(a) T 9(2)(a)

Level 16, AIG Building, 41 Shortland St, Auckland
 Level 1, City Chambers, Cnr Johnston & Featherston Sts, Wellington

PLEASE NOTE: The information contained in this email message and any attached files may be confidential and subject to privilege. The views expressed may not necessarily be the official view of Martin, Jenkins and Associates Limited. If you are not the intended recipient, you are notified that any use, disclosure or copying of this email is unauthorised. If you have received this email in error, please notify us immediately by reply email and delete the original. Thank you.

Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be subject to legal privilege or copyright. If you have received this email in error, please advise the sender immediately and destroy the message and any attachments. If you are not the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest terms of engagement which we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures, no assurance or guarantee is implied or should be construed that this email message or its attachments are free from computer viruses. Deloitte assumes no responsibility for any such virus or any effects of such a virus on the recipient's systems or data.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai, Singapore, Sydney, Taipei and Tokyo.

From: [Tan, John](#)
To: [Sam Ponniah](#); 9(2)(a)
Cc: [Dent, Alan](#)
Subject: RE:WICS \$110b figure
Date: Wednesday, 24 March 2021 9:07:40 pm

Hi Sam

I'm keen for us to progress with modelling the scenario that we discussed today with the ~170bn WICS figure as a starting point, so that we can start to calibrate the model. We will also reach out to our Australian colleagues about running a scaled version to ~\$110bn for now as a placeholder for final figure from WICS. We will send through the specific form that we expecting the data in tomorrow

Having an outline of the RIA will enable us to focus our narrative to allow an efficient drag and drop

John

From: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>

Sent: Wednesday, 24 March 2021 7:23 PM

To: Tan, John <9(2)(a)@deloitte.co.nz>; 9(2)(a) <9(2)(a)@deloitte.co.nz>

Subject: [EXT] RE: RE:WICS \$110b figure

Hi John 9(2)(a)

I've asked Colin about the detailed expenditure profile data and he's indicated they can pull this out for us next Mon/Tues.

I'm keen to understand what that means for your timing - if it comes down to us needing to push out the timeframes for your report so you can incorporate those inputs then I think that would be in the interests of getting a better product and am happy to seek approval internally if needed.

In terms of timing, I think we can still make it work in relation to the RIA if we were to have a draft report from you towards the end of the week beginning 5 April.

There are two risks as far as I can see it:

- integration with the RIA - by next week we should be able to share a developed draft of the RIA with placeholders for where the model results will go and in what form they will be needed for the narrative which should make for relatively smooth drafting of your report and for us to lift and shift into the RIA.

- data from WICS coming in the form required - I think to make that work, we will just need to be crystal clear with Colin what we need from him for the expenditure profile. I am almost tempted to provide a template for him so that we can be sure that what he provides next week will meet your modelling requirements. Or is all you need from him an update to the latest spreadsheet he sent?

Cheers

Sam

Sam Ponniah | Senior Consultant

MartinJenkins

M 9(2)(a) T 9(2)(a)

-----Original Message-----

From: Tan, John <9(2)(a)@deloitte.co.nz>

Sent: Wednesday, 24 March 2021 4:33 PM

To: 9(2)(a) <9(2)(a)@deloitte.co.nz>; Sam Ponniah <9(2)(a)@martinjenkins.co.nz>

Subject: RE:WICS \$110b figure

Hi 9(2)(a) Sam

I agree that it would be better to use the lower end of the range if the detailed analysis is available to allow us to run it through the model John

-----Original Message-----

From: 9(2)(a) <9(2)(a)@deloitte.co.nz>
Sent: Wednesday, 24 March 2021 4:30 PM
To: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>
Cc: Tan, John <9(2)(a)@deloitte.co.nz>
Subject: Re: [EXT] RE: WICS \$110b figure

Thanks Sam,

I understand this. Would you be able to get the WICS data for us based on the low end estimate and high end estimate? We currently only have the detailed data from WICS for the higher estimates of \$170+.

Best,

9(2)(a)

Sent from my iPhone

> On 24/03/2021, at 4:04 PM, Sam Ponniah <9(2)(a)@martinjenkins.co.nz> wrote:

>

> Hi 9(2)(a)

>

> See attached. Slide 91 is probably the easiest reference point as it
> outlines the numbers produced under the four different approaches. The
> total investment under approach 1 has a low end estimate of \$111bn and
> upper end of \$148bn. I understand these numbers have shifted since but
> as mentioned on the call we were anticipating using the more
> conservative end of the range for the economic modelling. I tried to
> ring John about this as I'm nervous about using the higher numbers.
> There is a risk it could undermine the analysis because of perceptions
> that the number is too high. I'll email you and John separately on
> this

>

> Cheers

> Sam

>

>

> Sam Ponniah | Senior Consultant

> MartinJenkins

> M 9(2)(a) T 9(2)(a)

>

> From: 9(2)(a) <9(2)(a)@deloitte.co.nz>

> Sent: Wednesday, 24 March 2021 1:42 PM

> To: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>

> Subject: WICS \$110b figure

>

> Hi Sam,

>

> I just had a look at the WICS report again and I can't find the \$110 bn figure you referenced during our call. Can you please share the source with me and/or explain the basis of the capex figure?

>

> Many thanks,

> 9(2)(a)

>

> Get Outlook for

> iOS<https://secure-web.cisco.com/1ZMB8vJiaP2z_Un11eXSkbS0CDWYyE3CXWwSan

> HfzyCaYytJEEpca9hmi8TfVPhXYh37apNUmfiQ8v2xJyJBXaybal0F43iUiwTMeZkXr-x9

> yfW9L9fMrUVGFA0aWiipF6bXQ63qpoc8aDxqGWim9xYuJmkt27bni_zgWvDCQDT7tmDZdE

> CwwYcuKRQGnJ8wNyfAZD1x2BiQCITWomC23msH2iL_9Fjw7v5M9tK8Nk8yU1jYfga2BE2O
> VzWXInPFCzusUfQWaVEdqxvXVi8g_GxPU2Bg0jM4E_TilqnUH75UX_81_7Td90s6yDX0e
> CyeE/https%3A%2F%2Faka.ms%2Fo0ukef>
> *Disclaimer:*

> CAUTION: This email message and attachments are confidential to Deloitte and may be subject to legal privilege or copyright. If you have received this email in error, please advise the sender immediately and destroy the message and any attachments. If you are not the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest terms of engagement which we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures, no assurance or guarantee is implied or should be construed that this email message or its attachments are free from computer viruses. Deloitte assumes no responsibility for any such virus or any effects of such a virus on the recipient's systems or data.

>
> Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai, Singapore, Sydney, Taipei and Tokyo.

Released Under the Official Information Act 1982

From: 9(2)(a)
To: [Sam Ponniah](#)
Cc: 9(2)(a) [Tan, John](#)
Subject: Three waters status update & 6 April working session
Date: Wednesday, 24 March 2021 7:38:23 pm
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[Deloitte - three waters status update 240321.pdf](#)

Hi Sam

Attached is our status update for this week. We've updated this to reflect the changes over the last few days.

I'll set up a call to discuss draft results & messaging for the RIA on 6 April – is there a particular time that suits you and Nathan best? Our calendars are pretty flexible at this stage.

Cheers

9(2)(a)

Analyst | Corporate Finance

Deloitte

Level 12, 20 Customhouse Quay, PO Box 1990, Wellington 6140, New Zealand

D: 9(2)(a) | O: 9(2)(a) | F: 9(2)(a)

9(2)(a) @deloitte.co.nz | www.deloitte.co.nz

Deloitte means Deloitte Limited (in its own capacity for assurance services, otherwise as trustee for the Deloitte Trading Trust)



Please consider the environment before printing.

Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be subject to legal privilege or copyright. If you have received this email in error, please advise the sender immediately and destroy the message and any attachments. If you are not the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest terms of engagement which we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures, no assurance or guarantee is implied or should be construed that this email message or its attachments are free from computer viruses. Deloitte assumes no responsibility for any such virus or any effects of such a virus on the recipient's systems or data.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. Deloitte Asia Pacific Limited is a company limited



Released Under the Official Information Act 1982

Three Waters Reform Status Update

DEPARTMENT OF INTERNAL AFFAIRS
24 MARCH 2021

Status update

Commentary

Last week the economic impact workstream completed the draft assumptions workbook, and developed capex profiles for CGE modelling. We have begun CGE modelling, and will develop draft results this week. We will use Mafic's counterfactual data for our baseline scenario, and WICS' unconstrained investment profile for our policy scenario (i.e. no separate efficiency adjustment/s will be made). **At this stage, we will undertake modelling based on data received by 23 March, and the report will be based on this output.** Model runs with new or additional data are possible at a later date, but we cannot guarantee these will be ready in time to be included in the RIA.

We will present the economic impact results in line with our discussion today. It would also be good to discuss any work DIA has completed on the likely transition path for the reforms, which we can build on.

The affected industries workstream has completed the draft industry development study – thank you for your feedback on this. We will action this feedback, and once modelling results are available, consider how the economic impact results align with the industry development study.

Deliverables / Milestones	Status	Indicative Due Date
Project Inception Meeting	Complete	5 & 10 February
Draft methodology and key information requirements	Complete	17 February
Data collection and model design	Complete	22 February 16 March
Agreed methodology, scenario and sensitivity definition, and confirmation of key assumptions	Complete	22 February 23 February
Economic modelling	In progress	16 March 26 March
Draft economic impact analysis	In progress	19 March 1 April
Stakeholder consultation	Complete	Ongoing
Draft industry development study	Complete	22 March
Final report on economic impact analysis and industry development study	In progress	2 April 9 April

Status

Overall	On track for recast timeline
Budget	On track

Work completed last week

Work completed for 15 to 19 March

- Received data from Mafic for our counterfactual scenario, and final WICS policy scenario data. Incorporated this into our assumptions workbook.
- Began CGE modelling.
- Developed narrative around scenarios to be modelled, and drafted our methodology.
- Continued to shape up the conceptual presentation of CGE results, including heat maps.
- Undertook additional interviews with industry participants.
- Completed the draft industry development study, building on desktop research and insights from interviews.

Activities this week

Work planned for 22 to 26 March

- Complete CGE modelling and develop draft results. Sense check results.
- Complete drafting of modelling scenarios; methodology; data collection and model design.
- Begin write up of results, identifying likely drivers of the impacts where possible.
- Consider how the economic impact results align with the findings from the industry development study.

From: [Tan, John](#)
To: [Campbell Will](#); 9(2)(a) <[redacted]@dia.govt.nz>
Cc: [Sam Ponniah](#); [Dent, Alan](#); 9(2)(a) <[redacted]>
Subject: RE:Counterfactuals
Date: Wednesday, 24 March 2021 10:39:10 pm
Attachments: [image001.jpg](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)
[image008.png](#)

Hi Will

How are you getting on with any 'updated debt/pricing constrained' or 'historic spend' versions of the counterfactual? Our modelling team really need to run at least the updated debt/pricing constrained version now to calibrate the model and to understand when the other version might be available?

Any narrative that you can provide around the assumptions would be very helpful as well

can you please include 9(2)(a) in on your response – as she is maintaining the data at our end
John

From: Campbell Will <9(2)(a)@mafic.co.nz>
Sent: Tuesday, 23 March 2021 5:50 PM
To: Tan, John <9(2)(a)@deloitte.co.nz>; 9(2)(a) <[redacted]@dia.govt.nz>
Cc: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>; Dent, Alan <9(2)(a)@deloitte.co.nz>; 9(2)(a) <[redacted]>
9(2)(a) <9(2)(a)@deloitte.co.nz>
Subject: [EXT] RE: Counterfactuals

Hi John

Debt and price constrained version - I can send through updated output that includes the price increases applied (and show how these have been calculated). I will send this through tomorrow.
Historical spend version - We have reached out to a contact at DIA to see if they have data on historical spend on three waters by council – we are still waiting to hear back but will let you know when we do.

Note that the assumptions for these scenarios will need to be explained/caveated clearly in the report. Especially given the uncertainty regarding future price increases. The assumptions shouldn't be described as a DIA (or Mafic) view. I can provide some text that describes the assumptions used.

Cheers,
Campbell



Campbell Will
Mafic Partners Limited
M: 9(2)(a) <[redacted]>

From: Tan, John <9(2)(a)@deloitte.co.nz>
Sent: Tuesday, 23 March 2021 12:44 pm
To: Campbell Will <9(2)(a)@mafic.co.nz>; 9(2)(a) <[redacted]@dia.govt.nz>
Cc: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>; Dent, Alan <9(2)(a)@deloitte.co.nz>; 9(2)(a) <[redacted]>
9(2)(a) <9(2)(a)@deloitte.co.nz>
Subject: Counterfactuals

Hi Scotty / Campbell

Speaking with Sam today, he has asked us to work with you on two versions of the counterfactual:

1. **The debt and price constrained version.** Can you please provide any update on what you have already provided, with a breakdown of the likely price uplift vis a vis the status quo for each Council. We are unlikely to second guess your analysis – but are interested in understanding the distribution of the uplifts and whether any caps have been applied
 2. **I understand that you are compiling a version based on historic spending.** In my view, the RFI data for spend beyond the LTP periods is too patch to be able to meaningfully extrapolate from. But Sam suggested that you might be able to compile something based on historic analysis. Can you let us know what you have in mind / what will be possible
- Our issue is one of timing. We need to pin down the final methodology today so that we can model these and really needed the data ‘last week’. But we do need the above in the next day or two to make it into the analysis. Can you let us know your timings on the above and what you are planning to pull together for #2.

I’m tied up in workshops til later in the afternoon – but can you please reach out to ⁹⁽²⁾(a) in the first instance if you have any questions or wish to discuss

Thanks

John

John Tan

Partner | Corporate Finance

Deloitte

Level 12, 20 Customhouse Quay, PO Box 1990, Wellington 6140, New Zealand

D: ⁹⁽²⁾(a) | M: ⁹⁽²⁾(a) | O: ⁹⁽²⁾(a) | F: ⁹⁽²⁾(a)

⁹⁽²⁾(a) [@deloitte.co.nz](mailto:9(2)(a)@deloitte.co.nz) | www.deloitte.co.nz

Deloitte means Deloitte Limited (in its own capacity for assurance services, otherwise as trustee for the Deloitte Trading Trust)



[Navigating COVID-19: read the latest updates from our experts](#)

Deloitte 175



Please consider the environment before printing.

Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be subject to legal privilege or copyright. If you have received this email in error, please advise the sender immediately and destroy the message and any attachments. If you are not the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest terms of engagement which we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures,

no assurance or guarantee is implied or should be construed that this email message or its attachments are free from computer viruses. Deloitte assumes no responsibility for any such virus or any effects of such a virus on the recipient's systems or data.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai, Singapore, Sydney, Taipei and Tokyo.

Released Under the Official Information Act 1982

From: [Tan, John](#)
To: [Campbell Will](#); 9(2)(a) <[redacted]@dia.govt.nz>
Cc: [Sam Ponniah](#); [Dent, Alan](#); 9(2)(a) <[redacted]>
Subject: RE:Counterfactuals
Date: Thursday, 25 March 2021 2:58:58 pm
Attachments: [image002.jpg](#)
[image004.jpg](#)
[image005.png](#)
[image006.png](#)
[image007.png](#)
[image008.png](#)
[image009.png](#)
[image010.png](#)

Hi Campbell

Thanks for sending us this information. Can I please clarify a couple of things:

1. For Counterfactual 2, can you confirm the basis for the 500% debt to revenue water vis a vis the current LGFA covenants
2. While probably won't use the Counterfactual 3, is it correct that WICS assume no limit to the price increase?
3. Do you have any kind of indication of how different the phase 2 expenditure forecasts are likely to be (or whether these will be up or down). How long will it take to update Counterfactual 1 (which I assume will be unchanged) and 2
4. Are you able to point us to the where the WICS narrative that supports CF #3. 9(2)(a) is going back through the various WICS reports, but if you have a specific reference – that would be useful

We will describe the Counterfactuals neutrally (ie. they aren't DIA or MAFIC profiles) but will describe the way they have been developed and the source of key assumptions when we describe the approach

John

From: Campbell Will <9(2)(a)@mafic.co.nz>
Sent: Thursday, 25 March 2021 10:09 AM
To: Tan, John <9(2)(a)@deloitte.co.nz>; 9(2)(a) <[redacted]@dia.govt.nz>
Cc: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>; Dent, Alan <9(2)(a)@deloitte.co.nz>; 9(2)(a) <[redacted]>
9(2)(a) <9(2)(a)@deloitte.co.nz>; 9(2)(a) <9(2)(a)@deloitte.co.nz>
Subject: [EXT] RE: Counterfactuals

Hi John

Please see attached output for the counterfactual scenarios and some text describing the counterfactuals.

Note that the counterfactuals are based on WICS phase 1. I think Sam spoke to you about this, but I understand we are supposed to receive phase 2 expenditure forecasts on Monday/Tuesday next week.

Spreadsheet includes:

- Calculation of historical rates increases
- Calculation of historical capex
- Output for the three scenarios (nominal in rows 21-87 and real in rows 94-160)

Again, just to reiterate, the counterfactuals should not be described as a DIA/MAFIC expectation of what councils will spend without reform.

Happy to talk through the analysis if needed.

Kind regards,

Campbell

Campbell Will



Mafic Partners Limited
M: 9(2)(a)

From: Tan, John <9(2)(a)@deloitte.co.nz>
Sent: Wednesday, 24 March 2021 10:37 pm
To: Campbell Will <9(2)(a)@mafic.co.nz>; 9(2)(a)@dia.govt.nz
Cc: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>; Dent, Alan <9(2)(a)@deloitte.co.nz>; 9(2)(a)@deloitte.co.nz <9(2)(a)@deloitte.co.nz>; 9(2)(a)@deloitte.co.nz <9(2)(a)@deloitte.co.nz>

Subject: RE:Counterfactuals

Hi Will

How are you getting on with any 'updated debt/pricing constrained' or 'historic spend' versions of the counterfactual? Our modelling team really need to run at least the updated debt/pricing constrained version now to calibrate the model and to understand when the other version might be available?

Any narrative that you can provide around the assumptions would be very helpful as well

can you please include 9(2)(a) in on your response – as she is maintaining the data at our end
John

From: Campbell Will <9(2)(a)@mafic.co.nz>
Sent: Tuesday, 23 March 2021 5:50 PM
To: Tan, John <9(2)(a)@deloitte.co.nz>; 9(2)(a)@dia.govt.nz
Cc: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>; Dent, Alan <9(2)(a)@deloitte.co.nz>; 9(2)(a)@deloitte.co.nz <9(2)(a)@deloitte.co.nz>

Subject: [EXT] RE: Counterfactuals

Hi John

Debt and price constrained version - I can send through updated output that includes the price increases applied (and show how these have been calculated). I will send this through tomorrow.
 Historical spend version - We have reached out to a contact at DIA to see if they have data on historical spend on three waters by council – we are still waiting to hear back but will let you know when we do.

Note that the assumptions for these scenarios will need to be explained/caveated clearly in the report. Especially given the uncertainty regarding future price increases. The assumptions shouldn't be described as a DIA (or Mafic) view. I can provide some text that describes the assumptions used.

Cheers,
Campbell



Campbell Will
Mafic Partners Limited
M: 9(2)(a)

From: Tan, John <9(2)(a)@deloitte.co.nz>
Sent: Tuesday, 23 March 2021 12:44 pm
To: Campbell Will <9(2)(a)@mafic.co.nz>; 9(2)(a)@dia.govt.nz
Cc: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>; Dent, Alan <9(2)(a)@deloitte.co.nz>; 9(2)(a)@deloitte.co.nz <9(2)(a)@deloitte.co.nz>

Subject: Counterfactuals

Hi Scotty / Campbell

Speaking with Sam today, he has asked us to work with you on two versions of the counterfactual:

1. **The debt and price constrained version.** Can you please provide any update on what you have already provided, with a breakdown of the likely price uplift vis a vis the status quo for each Council. We are unlikely to second guess your analysis – but are interested in understanding the distribution of the uplifts and whether any caps have been applied
 2. **I understand that you are compiling a version based on historic spending.** In my view, the RFI data for spend beyond the LTP periods is too patch to be able to meaningfully extrapolate from. But Sam suggested that you might be able to compile something based on historic analysis. Can you let us know what you have in mind / what will be possible
- Our issue is one of timing. We need to pin down the final methodology today so that we can model these and really needed the data ‘last week’. But we do need the above in the next day or two to make it into the analysis. Can you let us know your timings on the above and what you are planning to pull together for #2.

I’m tied up in workshops til later in the afternoon – but can you please reach out to [redacted] in the first instance if you have any questions or wish to discuss

Thanks

John

John Tan

Partner | Corporate Finance

Deloitte

Level 12, 20 Customhouse Quay, PO Box 1990, Wellington 6140, New Zealand

D: [redacted] | M: [redacted] | O: [redacted] | F: [redacted]

[redacted] [@deloitte.co.nz](mailto:[redacted]@deloitte.co.nz) | www.deloitte.co.nz

Deloitte means Deloitte Limited (in its own capacity for assurance services, otherwise as trustee for the Deloitte Trading Trust)



[Navigating COVID-19: read the latest updates from our experts](#)

Deloitte 175



Please consider the environment before printing.

Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be subject to legal privilege or copyright. If you have received this email in error, please advise the sender immediately and destroy the message and any attachments. If you are not the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest terms of engagement which we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures,

no assurance or guarantee is implied or should be construed that this email message or its attachments are free from computer viruses. Deloitte assumes no responsibility for any such virus or any effects of such a virus on the recipient's systems or data.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai, Singapore, Sydney, Taipei and Tokyo.

Released Under the Official Information Act 1982

From: [Dent, Alan](#)
To: [Sam Ponniah](#)
Subject: FW: Water Sector Workforce
Date: Friday, 26 March 2021 10:35:29 am
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)

Hi Sam

Working through your points – clearly workforce is a major issue and we will be able to provide some more insight/analysis around this. However, some of your questions relate to things such as workforce size, profile etc which is data we don't have hence the email below.

I don't think that you came back to me on this?

Cheers

Alan

From: Dent, Alan
Sent: Wednesday, 17 March 2021 1:55 PM
To: 'Sam Ponniah' <[redacted]> @martinjenkins.co.nz
Subject: Water Sector Workforce

Hi Sam

We were wondering whether any of the various DIA workstreams had looked at the current water sector workforce? Water NZ publishes some analysis of the workforce as it sits within council but not in the wider eco system (consultants, contractors etc).

We can get some sense but thought we would ask in case there has been some more specific work done in this area.

Cheers

Alan Dent

Partner | Corporate Finance

Deloitte

Level 12, 20 Customhouse Quay, PO Box 1990, Wellington 6140, New Zealand

D: [redacted] | M: [redacted] | O: [redacted] | F: [redacted]

[redacted]@deloitte.co.nz | www.deloitte.co.nz

Deloitte means Deloitte Limited (in its own capacity for assurance services, otherwise as trustee for the Deloitte Trading Trust)



[Navigating COVID-19: read the latest updates from our experts](#)

Deloitte 175



Please consider the environment before printing.

Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be subject to legal privilege or copyright. If you have received this email in error, please advise the sender immediately and destroy the message and any attachments. If you are not the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest terms of engagement which we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures, no assurance or guarantee is implied or should be construed that this email message or its attachments are free from computer viruses. Deloitte assumes no responsibility for any such virus or any effects of such a virus on the recipient's systems or data.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai, Singapore, Sydney, Taipei and Tokyo.

Released Under the Official Information Act 1982

From: [Dent, Alan](#)
To: [Sam Ponniah](#)
Subject: RE:Water Sector Workforce
Date: Friday, 26 March 2021 2:03:27 pm
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)

Hi Sam

Apologies – had missed this/not connected this.

The key point we are heading to is that the suggested marginal investment – even at the low end of the range (\$110 b) – is going to require a big step up in FTEs and a lot of those FTEs (say 50%) will be skilled labour/labour in an environment where that capacity is stretched now/likely to suggest that investment profiles signalled in LTPs may already be optimistic given the ability of the sector to meet demand today. The question then becomes what can be done to address. I'm having another conversation with 9(2)(a) on Monday on that.

We will have a better view over the next few days.

Cheers

Alan

From: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>

Sent: Friday, 19 March 2021 10:49 AM

To: Dent, Alan <9(2)(a)@deloitte.co.nz>

Subject: [EXT] RE: Water Sector Workforce

Hi Alan

I've asked internally and DIA has not done any specific work on this issue. Some suggestions came through of where it would be worth looking at other work that has been done, which you might already have included as part of your desktop research:

- there has been a lot of work on construction sector skills and workforce issues over the years, including under the Construction Accord and the Construction Sector Productivity Taskforce before that. BRANZ has also done work in this area. While this work is construction focused, rather than specified to water, it will nevertheless be highly relevant given the big focus on asset maintenance, renewal and enhancement.
- Have you had any further engagement from InfraComm? 9(2)(a) is another potential contact there who may be aware of general infrastructure sector related workforce research.
- DIA commissioned research into organisational and governance capability. Workforce was not a specific consideration but these might be worth looking at
 - [https://www.dia.govt.nz/diawebsite.nsf/Files/Three-waters-documents/\\$file/Castalia-ThreeWaters-Asset-Management-Maturity-in-NZ-\(final-report\)-Oct-2017.pdf](https://www.dia.govt.nz/diawebsite.nsf/Files/Three-waters-documents/$file/Castalia-ThreeWaters-Asset-Management-Maturity-in-NZ-(final-report)-Oct-2017.pdf)
 - [https://www.dia.govt.nz/diawebsite.nsf/Files/Three-waters-documents/\\$file/MJ-Three-Waters-Review-Governance-Final-Report-Dec-2017.pdf](https://www.dia.govt.nz/diawebsite.nsf/Files/Three-waters-documents/$file/MJ-Three-Waters-Review-Governance-Final-Report-Dec-2017.pdf)
- MBIE work on general labour market issues would also be worth considering
- To the extent work has been done in Australia on workforce issues, it's probably fairly relevant here

Cheers

Sam

Sam Ponniah | Senior Consultant

MartinJenkins

M 9(2)(a) T 9(2)(a)

From: Dent, Alan <9(2)(a)@deloitte.co.nz>

Sent: Wednesday, 17 March 2021 1:55 PM

To: Sam Ponniah <[redacted]@martinjenkins.co.nz>

Subject: Water Sector Workforce

Hi Sam

We were wondering whether any of the various DIA workstreams had looked at the current water sector workforce? Water NZ publishes some analysis of the workforce as it sits within council but not in the wider eco system (consultants, contractors etc).

We can get some sense but thought we would ask in case there has been some more specific work done in this area.

Cheers

Alan Dent

Partner | Corporate Finance

Deloitte

Level 12, 20 Customhouse Quay, PO Box 1990, Wellington 6140, New Zealand

D: [redacted] | M: [redacted] | O: [redacted] | F: [redacted]

[redacted]@deloitte.co.nz | www.deloitte.co.nz

Deloitte means Deloitte Limited (in its own capacity for assurance services, otherwise as trustee for the Deloitte Trading Trust)



[Navigating COVID-19: read the latest updates from our experts](#)



Please consider the environment before printing.

Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be subject to legal privilege or copyright. If you have received this email in error, please advise the sender immediately and destroy the message and any attachments. If you are not the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest terms of engagement which we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures, no assurance or guarantee is implied or should be construed that this email message or its attachments are free from computer viruses. Deloitte assumes no responsibility for any such virus or any effects of such a virus on the recipient's systems or data.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each

of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai, Singapore, Sydney, Taipei and Tokyo.

Released Under the Official Information Act 1982

From: 9(2)(a)
To: Colin McNaughton
Cc: Sam Ponniah; Andrea Mancini; Tan, John; 9(2)(a); Dent, Alan; Alan Sutherland
Subject: RE:WICS data
Date: Friday, 26 March 2021 2:01:10 pm
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)
[Investment_totals_draft_2.xlsx](#)

Hi Colin

Thanks for your email.

Can we please confirm a few things:

- Is the low figure for scenario 1 still \$111bn? In this case we've applied a scaling factor of 63% (\$111bn/\$177bn) to get down to this more conservative figure, where the \$177bn is the average of scenarios 1 and 2 in the attached.
- Is the scenario 2 you refer to below \$172bn of capex (per scenario 2)?
- Similarly, is scenario 1 in the attached (\$181bn) an updated version of scenario 1 (high) in the table below (\$148bn)?

Best

9(2)(a)

Director | Corporate Finance

Deloitte

Level 12, 20 Customhouse Quay, PO Box 1990, Wellington 6140, New Zealand

D: 9(2)(a) | M: 9(2)(a) | O: 9(2)(a) | F: 9(2)(a)

9(2)(a) @deloitte.co.nz | www.deloitte.co.nz

Deloitte means Deloitte Limited (in its own capacity for assurance services, otherwise as trustee for the Deloitte Trading Trust)



[Navigating COVID-19: read the latest updates from our experts](#)

Deloitte 175



Please consider the environment before printing.

From: Colin McNaughton <9(2)(a)@watercommission.co.uk>

Sent: Friday, 26 March 2021 11:41 AM

To: 9(2)(a); 9(2)(a) @deloitte.co.nz

Cc: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>; Andrea Mancini <9(2)(a)@watercommission.co.uk>; Tan, John

<9(2)(a)@deloitte.co.nz>; 9(2)(a) @deloitte.co.nz>; Dent, Alan 9(2) @deloitte.co.nz>; Alan Sutherland

<9(2)(a)@watercommission.co.uk>

Subject: [EXT] RE: [EXT] RE:WICS data

9(2)(a)

Short answer is that we are not using the numbers for approach 1 at a council level – we are using the scenario 2 high investment numbers that I sent to you previously and an additional sensitivity of 75% x scenario 2 high investment. It's fairly straightforward (75%) to calculate this if you want to use this as your lower estimate

Thanks

Colin

From: 9(2)(a) <9(2)(a)@deloitte.co.nz>

Sent: 25 March 2021 01:25

To: Colin McNaughton <9(2)(a)@watercommission.co.uk>

Cc: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>; Andrea Mancini <9(2)(a)@watercommission.co.uk>; Tan, John

<9(2)(a)@deloitte.co.nz>; 9(2)(a) @deloitte.co.nz>; Dent, Alan 9(2) @deloitte.co.nz>

Subject: [EXT] RE:WICS data

Importance: High

CAUTION: This email originated from outside the organisation. Do not click links or open attachments unless you recognise the sender and know the content is safe.

Hi Colin,

We understand you'll be providing the WICS approach 1 investment profile data this coming **Monday, 29 March 2021**, (NZ time). To be clear, this is Approach 1 referred to in your table below from WICS' document, *What is the investment need for New Zealand's Three Waters?*, dated February 2021- slide 91.

Approach	Enhancement and Growth		Asset replacement and refurbishment		Total investment	
	Low	High	Low	High	Low	High

1. Revised approach used in Phase 1	NZ\$57bn	NZ\$76bn	NZ\$54bn	NZ\$72bn	NZ\$111bn	NZ\$148bn
2. Modelling based on regional investment levels observed in Scotland	NZ\$77bn	NZ\$93bn	NZ\$62bn	NZ\$78bn	NZ\$139bn	NZ\$172bn
3. Asset value approach	NZ\$78bn	NZ\$81bn	NZ\$62bn	NZ\$74bn	NZ\$140bn	NZ\$155bn
4. Council G tables	NZ\$54bn	NZ\$54bn	NZ\$53bn	NZ\$64bn	NZ\$107bn	NZ\$118bn

Can you please provide this data in the same format as the Investment_totals_draft_2 file we received on 17 March? I've attached this for reference. (i.e. the annual, TA and short/long breakdown of the \$111b and \$148b figures on slide 91 of 'Required Investment'). We need the data for both the low scenario (\$111bn) and the high scenario (\$148bn).

Best,

9(2)(a)

Director | Corporate Finance

Deloitte

Level 12, 20 Customhouse Quay, PO Box 1990, Wellington 6140, New Zealand

D: 9(2)(a) | M: 9(2)(a) | O: 9(2)(a) | F: 9(2)(a)

9(2)(a) @deloitte.co.nz | www.deloitte.co.nz

Deloitte means Deloitte Limited (in its own capacity for assurance services, otherwise as trustee for the Deloitte Trading Trust)



[Navigating COVID-19: read the latest updates from our experts](#)

Deloitte 175



Please consider the environment before printing.

From: Colin McNaughton <9(2)(a)@watercommission.co.uk>

Sent: Tuesday, 9 March 2021 9:58 AM

To: 9(2)(a) <9(2)(a)@deloitte.co.nz>

Cc: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>; Andrea Mancini <9(2)(a)@watercommission.co.uk>; Tan, John

<9(2)(a)@deloitte.co.nz>

Subject: [EXT] RE: [EXT] WICS data

9(2)(a)

Some thoughts embedded below.

Thanks

Colin

From: 9(2)(a) <9(2)(a)@deloitte.co.nz>

Sent: 05 March 2021 19:24

To: Colin McNaughton <9(2)(a)@watercommission.co.uk>

Cc: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>; Andrea Mancini <9(2)(a)@watercommission.co.uk>; Tan, John

9(2)(a) @deloitte.co.nz

Subject: [EXT] WICS data

CAUTION: This email originated from outside the organisation. Do not click links or open attachments unless you recognise the sender and know the content is safe.

Thank you for sharing the following information to inform the economic impact assessment:

- Data on the investment totals mock-up
- Draft slides on the efficiency analysis
- Data on the consolidated RfI numbers.

On consideration, please see below our comments and/or clarification on questions on each of the above.

Data on the consolidated RfI numbers

1. This is useful, but doesn't have an under and above ground expenditure split. It is possible to use the short and long-life asset ratios to the enhancement figures? Alternatively, it would be good to confirm what, if any, project level aggregation that WICS has completed

Yes, the 60% / 40% split in favour of short to medium life assets could be applied to enhancement and growth investment. We have not collected the information for individual projects from the RfI. These could be found from Table G2, G3 and G4

2. There is currently an aggregated capex value for 2030 to 2051. Would it be possible to provide a capex profile for each year over this period?

Most councils provided a total over this period. A small number of councils provided planned investment in each year, but we have just

collected the totals.

3. To ensure we interpret the data accurately- can you please provide a definition for "Growth" "Enhancement" and "Renewals" capex?

The guidance for the RFI provides the following definition.

Growth	To meet demand for services from new and existing customers by providing new assets or increasing the capacity of existing assets. This would include providing new distribution and wastewater assets to new customers, the provision of first-time water or wastewater services to existing housing, and the provision of new assets to meet the increased use of water by existing customers.
Quality Enhancement	This includes the provision of new assets or the enhancement of existing assets to achieve improvements in performance in line with new or enhanced legal requirements.
Base Service (Renewals)	This comprises the 'capital maintenance' expenditure necessary for the maintenance of existing service levels to customers including capitalised base expenditure, non-infrastructure and infrastructure asset renewal.

We have examined growth and enhancement together as some councils chose growth drivers for investment that other councils have classed as enhancement.

Data on the investment totals mock-up

We have a small number of clarification questions on the mock-up of investment data provided:

1. Are the values in NZD? **Yes** Are the values in real or nominal terms? **Real** Does year 1 represent 2022? **Yes**
2. The mock-up data includes two of the four options modelled by WICS. Do you intend to complete the analysis for either or both of the remaining two options? **We don't intend to - In terms of disaggregated investment for individual councils, we're focusing on these options.**
3. For clarification- we are assuming that "Short" can be used as a proxy for "Above the ground capex" and "Long" as a proxy for "Below the ground capex"? 'Short life' assets tends to relate to non-infrastructure assets such as MEICA (mechanical, electrical, instrumentation, control and automation) and 'long life' assets cover civils - would such a split work better? I'm not sure of the purpose of the above and below ground split.
4. **Draft slides on the efficiency analysis**

Thank you for providing the draft slides. We find the draft analysis valuable in understanding your approach to assess required efficiency adjustment. We find the presentation of results on slide 23 particularly useful for our modelling purposes. We have some questions to ensure our interpretation and expectation of the forthcoming efficiency results are correct:

1. **Scenarios:** Will the scenarios referred to in the efficiency analysis reflect the size of the amalgamation entities (e.g. 3 entities vs 5 entities etc)?
2. **Time dimension:** Will the output of Phase II analysis provide an efficiency adjustment profile over time (i.e. different realisable efficiencies at 2040, 2045 and 2050), or an anchor point with inferences on how Deloitte can develop a profile to reflect how the efficiency adjustment could change over time? **There could be different scenarios for the period over which the operating cost reduction challenge is applied (e.g. 15 years, 25 years etc.). For the purposes of our modelling, we are likely to assume a straight line profile. We're also planning to start applying the efficiency challenge from year 5.**
3. **Relative efficiency adjustment:** From the analysis we understand that you are undertaking the efficiency analysis for each TA. Is the expectation that the efficiency adjustment for Auckland to be different relative to other areas due to the maturity and scale of WaterCare? Will the output of Phase II analysis provide separate efficiency adjustments by Metropolitan/Provincial/Rural area and/or TA level? **There are only 11 councils that would receive an operating cost reduction challenge (see slide 19) - of which 4 would receive a negligible challenge. The remaining councils would receive no cost reduction challenge. Each amalgamated entity will have their own efficiency challenge applied.**
4. We note that your **classification of TAs under Metropolitan/Provincial/Rural** areas is the same classification we intend to use in our model. We note there are some TAs are missing in the classification, but we assume you are using a sample of TAs to derive the efficiency adjustments. **Our list covers the 49 councils that completed Workbook 1 of the RFI. I suspect that you are using the full list (i.e. including councils that completed Workbook 2).**
5. In what **format** will you provide the efficiency adjustments for Phase II? A table in the slides or in a table in an Excel workbook? **We can provide a spreadsheet.**

We are looking forward to your response, and please let us know if it will be easier to schedule a meeting early next week to discuss our questions. Have a nice weekend.

Best,

9(2)(a)

Best,

9(2)(a)

Director | Corporate Finance
 Deloitte
 Level 12, 20 Customhouse Quay, PO Box 1990, Wellington 6140, New Zealand
 D: 9(2)(a) | M: 9(2)(a) | O: 9(2)(a) | F 9(2)(a)
 9(2)(a) @deloitte.co.nz | www.deloitte.co.nz

Deloitte means Deloitte Limited (in its own capacity for assurance services, otherwise as trustee for the Deloitte Trading Trust)



[Navigating COVID-19: read the latest updates from our experts](#)



Please consider the environment before printing.

Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be subject to legal privilege or copyright. If you have

received this email in error, please advise the sender immediately and destroy the message and any attachments. If you are not the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest terms of engagement which we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures, no assurance or guarantee is implied or should be construed that this email message or its attachments are free from computer viruses. Deloitte assumes no responsibility for any such virus or any effects of such a virus on the recipient's systems or data.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai, Singapore, Sydney, Taipei and Tokyo.

This email and any files transmitted with it are confidential and intended solely for the use of the individual or entity to whom they are addressed. Any views or opinions expressed in this e-mail are those of the sender and do not necessarily coincide with those of the Water Industry Commission for Scotland. If you have received this e-mail in error please remove from your computer and contact the sender. Liability cannot be accepted for statements made which are clearly the senders own and not made on behalf of the Water Industry Commission For Scotland.

Released Under the Official Information Act 1982

From: 9(2)(a)
To: Sam Ponniah
Cc: Tan, John
Subject: RE:WICS data
Date: Sunday, 28 March 2021 12:27:37 pm
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)

Thank you for this update Sam.

Best,

9(2)(a)

Director | Corporate Finance
Deloitte

Level 12, 20 Customhouse Quay, PO Box 1990, Wellington 6140, New Zealand

D: 9(2)(a) | M: 9(2)(a) | O: 9(2)(a) | F: 9(2)(a)

9(2)(a) @deloitte.co.nz | www.deloitte.co.nz

Deloitte means Deloitte Limited (in its own capacity for assurance services, otherwise as trustee for the Deloitte Trading Trust)



[Navigating COVID-19: read the latest updates from our experts](#)

Deloitte 175



Please consider the environment before printing.

From: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>
Sent: Saturday, 27 March 2021 11:06 PM
To: 9(2)(a) <9(2)(a)@deloitte.co.nz>
Cc: Tan, John <9(2)(a)@deloitte.co.nz>
Subject: [EXT] RE: RE:WICS data

9(2)(a)

Just FYI, I've gone back to Alan to ask for the council breakdown for approach 1 – this will have less of a link back to NZ council characteristics than their second approach so will have to think about whether we use this as a sensitivity or vice versa.

Alan indicated they can provide those numbers in a day or so

Cheers

Sam

Sam Ponniah | Senior Consultant

Mar inJenkins

M 9(2)(a) T 9(2)(a)

From: 9(2)(a) <9(2)(a)@deloitte.co.nz>

Sent: Friday, 26 March 2021 2:00 PM

To: Colin McNaughton <9(2)(a)@watercommission.co.uk>

Cc: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>; Andrea Mancini <9(2)(a)@watercommission.co.uk>; Tan, John <9(2)(a)@deloitte.co.nz>; 9(2)(a) <9(2)(a)@deloitte.co.nz>; Dent, Alan <9(2)(a)@deloitte.co.nz>; Alan Sutherland <9(2)(a)@watercommission.co.uk>

Subject: RE:WICS data

Hi Colin

Thanks for your email.

Can we please confirm a few things:

- Is the low figure for scenario 1 still \$111bn? In this case we've applied a scaling factor of 63% (\$111bn/\$177bn) to get down to this more conservative figure, where the \$177bn is the average of scenarios 1 and 2 in the attached.
- Is the scenario 2 you refer to below \$172bn of capex (per scenario 2)?
- Similarly, is scenario 1 in the attached (\$181bn) an updated version of scenario 1 (high) in the table below (\$148bn)?

Best

9(2)(a)

Director | Corporate Finance
Deloitte

Level 12, 20 Customhouse Quay, PO Box 1990, Wellington 6140, New Zealand

D: 9(2)(a) | M: 9(2)(a) | O: 9(2)(a) | F: 9(2)(a)

9(2)(a) @deloitte.co.nz | www.deloitte.co.nz

Deloitte means Deloitte Limited (in its own capacity for assurance services, otherwise as trustee for the Deloitte Trading Trust)



[Navigating COVID-19: read the latest updates from our experts](#)



Please consider the environment before printing.

From: Colin McNaughton <9(2)(a)@watercommission.co.uk>
Sent: Friday, 26 March 2021 11:41 AM
To: 9(2)(a) <9(2)(a)@deloitte.co.nz>
Cc: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>; Andrea Mancini <9(2)(a)@watercommission.co.uk>; Tan, John <9(2)(a)@deloitte.co.nz>; 9(2)(a) <9(2)(a)@deloitte.co.nz>; Dent, Alan <9(2)(a)@deloitte.co.nz>; Alan Sutherland <9(2)(a)@watercommission.co.uk>
Subject: [EXT] RE: [EXT] RE: WICS data

Short answer is that we are not using the numbers for approach 1 at a council level – we are using the scenario 2 high investment numbers that I sent to you previously and an additional sensitivity of 75% x scenario 2 high investment. It's fairly straightforward (75%) to calculate this if you want to use this as your lower estimate

Thanks
Colin

From: 9(2)(a) <9(2)(a)@deloitte.co.nz>
Sent: 25 March 2021 01:25
To: Colin McNaughton <9(2)(a)@watercommission.co.uk>
Cc: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>; Andrea Mancini <9(2)(a)@watercommission.co.uk>; Tan, John <9(2)(a)@deloitte.co.nz>; 9(2)(a) <9(2)(a)@deloitte.co.nz>; Dent, Alan <9(2)(a)@deloitte.co.nz>
Subject: [EXT] RE: WICS data

Importance: High

CAUTION: This email originated from outside the organisation. Do not click links or open attachments unless you recognise the sender and know the content is safe.

Hi Colin,
We understand you'll be providing the WICS approach 1 investment profile data this coming **Monday, 29 March 2021**, (NZ time). To be clear, this is Approach 1 referred to in your table below from WICS' document, *What is the investment need for New Zealand's Three Waters?*, dated February 2021- slide 91.

Approach	Enhancement and Growth		Asset replacement and refurbishment		Total investment	
	Low	High	Low	High	Low	High
1. Revised approach used in Phase 1	NZ\$57bn	NZ\$76bn	NZ\$54bn	NZ\$72bn	NZ\$111bn	NZ\$148bn
2. Modelling based on regional investment levels observed in Scotland	NZ\$77bn	NZ\$93bn	NZ\$62bn	NZ\$78bn	NZ\$139bn	NZ\$172bn
3. Asset value approach	NZ\$78bn	NZ\$81bn	NZ\$62bn	NZ\$74bn	NZ\$140bn	NZ\$155bn
4. Council G tables	NZ\$54bn	NZ\$54bn	NZ\$53bn	NZ\$64bn	NZ\$107bn	NZ\$118bn

Can you please provide this data in the same format as the Investment_totals_draft_2 file we received on 17 March? I've attached this for reference. (i.e. the annual, TA and short/long breakdown of the \$111b and \$148b figures on slide 91 of 'Required Investment'). We need the data for both the low scenario (\$111bn) and the high scenario (\$148bn).

Best,
9(2)(a)

Director | Corporate Finance
 Deloitte
 Level 12, 20 Customhouse Quay, PO Box 1990, Wellington 6140, New Zealand
 D: 9(2)(a) | M: 9(2)(a) | O: 9(2)(a) | F: 9(2)(a)
 9(2)(a)@deloitte.co.nz | www.deloitte.co.nz

Deloitte means Deloitte Limited (in its own capacity for assurance services, otherwise as trustee for the Deloitte Trading Trust)



[Navigating COVID-19: read the latest updates from our experts](#)



Please consider the environment before printing.

From: Colin McNaughton <9(2)(a)@watercommission.co.uk>
Sent: Tuesday, 9 March 2021 9:58 AM
To: 9(2)(a) <9(2)(a)@deloitte.co.nz>
Cc: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>; Andrea Mancini <9(2)(a)@watercommission.co.uk>; Tan, John <9(2)(a)@deloitte.co.nz>
Subject: [EXT] RE: [EXT] WICS data

9(2)(a)

Some thoughts embedded below.
Thanks
Colin

From: 9(2)(a) <9(2)(a)@deloitte.co.nz>
Sent: 05 March 2021 19:24
To: Colin McNaughton <9(2)(a)@watercommission.co.uk>
Cc: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>; Andrea Mancini <9(2)(a)@watercommission.co.uk>; Tan, John <9(2)(a)@deloitte.co.nz>
Subject: [EXT] WICS data

CAUTION: This email originated from outside the organisation. Do not click links or open attachments unless you recognise the sender and know the content is safe.

Thank you for sharing the following information to inform the economic impact assessment:

- Data on the investment totals mock-up
- Draft slides on the efficiency analysis
- Data on the consolidated RfI numbers.

On consideration, please see below our comments and/or clarification questions on each of the above.

Data on the consolidated RfI numbers

1. This is useful, but doesn't have an under and above ground expenditure split. It is possible to use the short and long-life asset ratios to the enhancement figures? Alternatively, it would be good to confirm what, if any, project level aggregation that WICS has completed

Yes, the 60% / 40% split in favour of short to medium life assets could be applied to enhancement and growth investment. We have not collected the information for individual projects from the RfI. These could be found from Table G2, G3 and G4

2. There is currently an aggregated capex value for 2030 to 2051. Would it be possible to provide a capex profile for each year over this period?

Most councils provided a total over this period. A small number of councils provided planned investment in each year, but we have just collected the totals.

3. To ensure we interpret the data accurately- can you please provide a definition for "Growth" "Enhancement" and "Renewals" capex?

The guidance for the RfI provides the following definition.

Growth	To meet demand for services from new and existing customers by providing new assets or increasing the capacity of existing assets. This would include providing new distribution and wastewater assets to new customers, the provision of first-time water or wastewater services to existing housing, and the provision of new assets to meet the increased use of water by existing customers.
Quality Enhancement	This includes the provision of new assets or the enhancement of existing assets to achieve improvements in performance in line with new or enhanced legal requirements.
Base Service (Renewals)	This comprises the 'capital maintenance' expenditure necessary for the maintenance of existing service levels to customers including capitalised base expenditure, non-infrastructure and infrastructure asset renewal.

We have examined growth and enhancement together as some councils chose growth drivers for investment that other councils have classed as enhancement.

Data on the investment totals mock-up

We have a small number of clarification questions on the mock-up of investment data provided:

1. Are the values in NZD? **Yes** Are the values in real or nominal terms? **Real** Does year 1 represent 2022? **Yes**
2. The mock-up data includes two of the four options modelled by WICS. Do you intend to complete the analysis for either or both of the remaining two options? **We don't intend to - In terms of disaggregated investment for individual councils, we're focusing on these options.**
3. For clarification- we are assuming that "Short" can be used as a proxy for "Above the ground capex" and "Long" as a proxy for "Below the ground capex"? 'Short life' assets tends to relate to non-infrastructure assets such as MEICA (mechanical, electrical, instrumentation, control and automation) and 'long life' assets cover civils -would such a split work better? I'm not sure of the purpose of the above and below ground split.
4. **Draft slides on the efficiency analysis**

Thank you for providing the draft slides. We find the draft analysis valuable in understanding your approach to assess required efficiency adjustment. We find the presentation of results on slide 23 particularly useful for our modelling purposes. We have some questions to ensure our interpretation and expectation of the forthcoming efficiency results are correct:

1. **Scenarios:** Will the scenarios referred to in the efficiency analysis reflect the size of the amalgamation entities (e.g. 3 entities vs 5 entities etc)?
2. **Time dimension:** Will the output of Phase II analysis provide an efficiency adjustment profile over time (i.e. different realisable efficiencies at 2040, 2045 and 2050), or an anchor point with inferences on how Deloitte can develop a profile to reflect how the efficiency adjustment could change over time? **There could be different scenarios for the period over which the operating cost reduction challenge is applied (e.g. 15 years, 25 years etc.). For the purposes of our modelling, we are likely to assume a straight line profile. We're also planning to start applying the efficiency challenge from year 5.**
3. **Relative efficiency adjustment:** From the analysis we understand that you are undertaking the efficiency analysis for each TA. Is the expectation that the efficiency adjustment for Auckland to be different relative to other areas due to the maturity and scale of WaterCare? Will the output of Phase II analysis provide separate efficiency adjustments by Metropolitan/Provincial/Rural area and/or TA level? **There are only 11 councils that would receive an operating cost reduction challenge (see slide 19) – of which 4 would receive a negligible challenge. The remaining councils would receive no cost reduction challenge. Each amalgamated entity will have their own efficiency challenge applied.**
4. We note that your **classification of TAs under Metropolitan/Provincial/Rural** areas is the same classification we intend to use in our model. We note there are some TAs missing in the classification, but we assume you are using a sample of TAs to derive the efficiency adjustments. **Our list covers the 49 councils that completed Workbook 1 of the RFI. I suspect that you are using the full list (i.e. including councils that completed Workbook 2).**
5. In what **format** will you provide the efficiency adjustments for Phase II? A table in the slides or in a table in an Excel workbook? **We can provide a spreadsheet.**

We are looking forward to your response, and please let us know if it will be easier to schedule a meeting early next week to discuss our questions.

Have a nice weekend.

Best,

9(2)(a)

Best,

9(2)(a)

Director | Corporate Finance

Deloitte

Level 12, 20 Customhouse Quay, PO Box 1990, Wellington 6140, New Zealand

D: 9(2)(a) | M: 9(2)(a) | O: 9(2)(a) | F: 9(2)(a)

9(2)(a) @deloitte.co.nz | www.deloitte.co.nz

Deloitte means Deloitte Limited (in its own capacity for assurance services, otherwise as trustee for the Deloitte Trading Trust)



[Navigating COVID-19: read the latest updates from our experts](#)

Deloitte 175



Please consider the environment before printing.

*Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be subject to legal privilege or copyright. If you have received this email in error, please advise the sender immediately and destroy the message and any attachments. If you are not the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest terms of engagement which we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures, no assurance or guarantee is implied or should be construed that this email message or its attachments are free from computer viruses. Deloitte assumes no responsibility for any such virus or any effects of such a virus on the recipient's systems or data.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai, Singapore, Sydney, Taipei and Tokyo.

This email and any files transmitted with it are confidential and intended solely for the use of the individual or entity to whom they are addressed. Any views or opinions expressed in this e-mail are those of the sender and do not necessarily coincide with those of the Water Industry Commission for Scotland. If you have received this e-mail in error please remove from your computer and contact the sender. Liability cannot be accepted for statements made which are clearly the senders own and not made on behalf of the Water Industry Commission For Scotland

From: 9(2)(a)
To: Sam Ponniah: 9(2)(a)
Cc: Tan, John; Dent, Alan
Subject: RE: WICS data
Date: Tuesday, 30 March 2021 10:31:15 am
Attachments: [image009.jpg](#)
[image010.png](#)
[image011.png](#)
[image012.png](#)
[image013.png](#)
[image014.png](#)
[image015.png](#)

Hi Sam

Based on Colin's email below, can we confirm you are comfortable with us using:

- \$120b per approach 1
 - Average of \$178b (low estimate) and \$185b (high estimate) per approach 2.
- We will not model the \$171b in the green tab, or approaches 3 and 4 (per slide 91 of 'Required Investment').
Cheers

9(2)(a)

From: Colin McNaughton <9(2)(a)@watercommission.co.uk>
Sent: Tuesday, 30 March 2021 10:11 AM
To: 9(2)(a)@deloitte.co.nz; Sam Ponniah <9(2)(a)@martinjenkins.co.nz>; 9(2)(a) <9(2)(a)@deloitte.co.nz>
Cc: Tan, John <9(2)(a)@deloitte.co.nz>; Dent, Alan <9(2)(a)@deloitte.co.nz>
Subject: [EXT] RE: [EXT] RE: WICS data

9(2)(a)

No problem

- The 178 in the green tab uses the low end of our range for asset replacement on existing assets, the 185 uses the high end of our range for asset replacement on existing assets

In terms of concise descriptions

- **Approach 1** is based upon relationships between historical enhancement and growth investment in Great Britain and various geographical indicators.
- **Approach 2** is based upon relationships between regional enhancement and growth investment in Scotland and various geographical indicators.

Colin

From: 9(2)(a)@deloitte.co.nz
Sent: 29 March 2021 22:04
To: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>; 9(2)(a) <9(2)(a)@deloitte.co.nz>
Cc: Tan, John <9(2)(a)@deloitte.co.nz>; Dent, Alan <9(2)(a)@deloitte.co.nz>; Colin McNaughton <9(2)(a)@watercommission.co.uk>
Subject: [EXT] RE: WICS data
Importance: High

CAUTION: This email originated from outside the organisation. Do not click links or open attachments unless you recognise the sender and know the content is safe.

Hi Colin

Are you able to clarify what the difference is between the \$178b (approach 2) in the green tab, and the \$185b (also approach 2) in the Approach 2 high tab?
Could you please also provide a concise description of the modelling undertaken for approaches 1 and 2 for us to include in our report?
We'd be really grateful if you are able to get back to us today.

Many thanks

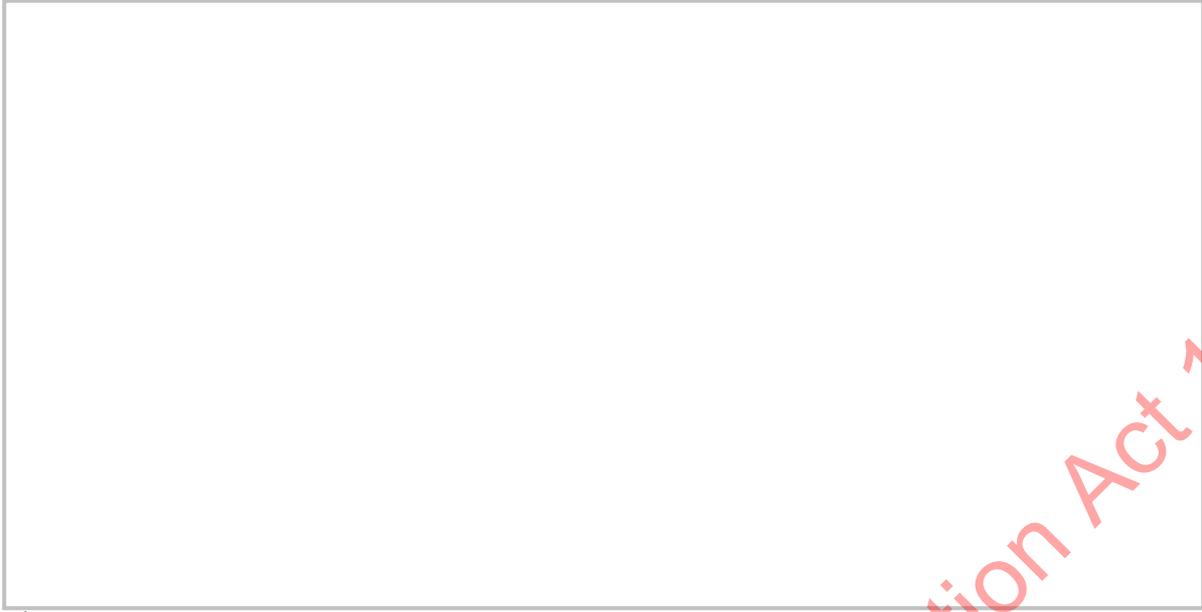
9(2)(a)

From: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>
Sent: Tuesday, 30 March 2021 9:29 AM
To: 9(2)(a) <9(2)(a)@deloitte.co.nz>
Cc: Tan, John <9(2)(a)@deloitte.co.nz>; 9(2)(a) <9(2)(a)@deloitte.co.nz>; Dent, Alan <9(2)(a)@deloitte.co.nz>
Subject: [EXT] FW: [EXT] RE: [EXT] RE: WICS data
Hot off the press – the latest and (hopefully) final numbers from WICS
Sam Ponniah Senior Consultant
MartinJenkins
M 9(2)(a) T 9(2)(a)

From: Colin McNaughton <9(2)(a)@watercommission.co.uk>
Sent: Tuesday, 30 March 2021 9:25 AM
To: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>
Cc: Andrea Mancini <9(2)(a)@watercommission.co.uk>; Alan Sutherland <9(2)(a)@watercommission.co.uk>
Subject: RE: [EXT] RE: [EXT] RE: WICS data

Sam,

Please see the approach 1 low investment numbers (highlighted yellow below) in the attached spreadsheet. I've also provided approach 2 high numbers (highlighted yellow below) and the investment numbers that we are using in our models (the tab highlighted green)



Colin

From: Sam Ponniah <[redacted]@martinjenkins.co.nz>
Sent: 27 March 2021 06:27
To: Colin McNaughton <[redacted]@watercommission.co.uk>
Cc: Andrea Mancini <[redacted]@watercommission.co.uk>; Alan Sutherland <[redacted]@watercommission.co.uk>
Subject: [EXT] RE: [EXT] RE: WICS data

CAUTION: This email originated from outside the organisation. Do not click links or open attachments unless you recognise the sender and know the content is safe.

Hi Colin

Just wanted to clarify if the numbers for approach 1 are available at a council level? Is the reason for using approach 2 that you can more directly map NZ councils to their Scottish comparators based on similar characteristics? We are drawn to using the numbers for approach 1 for the economic impact analysis so that we can take a conservative approach to the CGE modelling. The risk being we might be seen to be adopting the highest possible figure to mimic a large "sugar hit" to the economy. However, if this is not available perhaps we can apply a scaling factor to the council numbers to bring these within range of the figures for approach 1? Welcome your thoughts on this approach.

Cheers

Sam

Sam Ponniah Senior Consultant
MartinJenkins

M[redacted] T[redacted]

From: Colin McNaughton <[redacted]@watercommission.co.uk>
Sent: Friday, 26 March 2021 11:41 AM
To: [redacted] <[redacted]@deloitte.co.nz>
Cc: Sam Ponniah <[redacted]@martinjenkins.co.nz>; Andrea Mancini <[redacted]@watercommission.co.uk>; Tan, Johr <[redacted]@deloitte.co.nz>; Allan, [redacted] <[redacted]@deloitte.co.nz>; Dent, Alar <[redacted]@deloitte.co.nz>; Alan Sutherland <[redacted]@watercommission.co.uk>
Subject: RE: [EXT] RE: WICS data

[redacted]

Short answer is that we are not using the numbers for approach 1 at a council level – we are using the scenario 2 high investment numbers that I sent to you previously and an additional sensitivity of 75% x scenario 2 high investment. It's fairly straightforward (75%) to calculate this if you want to use this as your lower estimate

Thanks

Colin

From: [redacted] <[redacted]@deloitte.co.nz>
Sent: 25 March 2021 01:25
To: Colin McNaughton <[redacted]@watercommission.co.uk>
Cc: Sam Ponniah <[redacted]@martinjenkins.co.nz>; Andrea Mancini <[redacted]@watercommission.co.uk>; Tan, Johr <[redacted]@deloitte.co.nz>; Allan, Lian <[redacted]@deloitte.co.nz>; Dent, Alar <[redacted]@deloitte.co.nz>
Subject: [EXT] RE: WICS data

Importance: High

CAUTION: This email originated from outside the organisation. Do not click links or open attachments unless you recognise the sender and know the content is safe.

Hi Colin,

We understand you'll be providing the WICS approach 1 investment profile data this coming **Monday, 29 March 2021**, (NZ time). To be clear, this is Approach 1 referred to in your table below from WICS' document, *What is the investment need for New Zealand's Three Waters?*, dated February 2021- slide 91.

Approach	Enhancement and Growth		Asset replacement and refurbishment		Total investment	
	Low	High	Low	High	Low	High
1. Revised approach used in Phase 1	NZ\$57bn	NZ\$76bn	NZ\$54bn	NZ\$72bn	NZ\$111bn	NZ\$148bn
2. Modelling based on regional investment levels observed in Scotland	NZ\$77bn	NZ\$93bn	NZ\$62bn	NZ\$78bn	NZ\$139bn	NZ\$172bn

3. Asset value approach	NZ\$78bn	NZ\$81bn	NZ\$62bn	NZ\$74bn	NZ\$140bn	NZ\$155bn
4. Council G tables	NZ\$54bn	NZ\$54bn	NZ\$53bn	NZ\$64bn	NZ\$107bn	NZ\$118bn

Can you please provide this data in the same format as the Investment_totals_draft_2 file we received on 17 March? I've attached this for reference. (i.e. the annual, TA and short/long breakdown of the \$111b and \$148b figures on slide 91 of 'Required Investment'). We need the data for both the low scenario (\$111bn) and the high scenario (\$148bn).

Best

9(2)(a)

Director | Corporate Finance

Deloitte

Level 12, 20 Customhouse Quay, PO Box 1990, Wellington 6140, New Zealand

D: 9(2)(a) | M: 9(2)(a) | O: 9(2)(a) | F: 9(2)(a)

9(2)(a) @deloitte.co.nz | www.deloitte.co.nz

Deloitte means Deloitte Limited (in its own capacity for assurance services, otherwise as trustee for the Deloitte Trading Trust)



[Navigating COVID-19: read the latest updates from our experts](#)

Deloitte 175



Please consider the environment before printing

From: Colin McNaughton <9(2)(a)@watercommission.co.uk>

Sent: Tuesday, 9 March 2021 9:58 AM

To: 9(2)(a) <9(2)(a)@deloitte.co.nz>

Cc: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>; Andrea Mancini <9(2)(a)@watercommission.co.uk>; Tan, John <9(2)(a)@deloitte.co.nz>

Subject: [EXT] RE: [EXT] WICS data

9(2)(a)

Some thoughts embedded below.

Thanks

Colin

From: 9(2)(a) <9(2)(a)@deloitte.co.nz>

Sent: 05 March 2021 19:24

To: Colin McNaughton <9(2)(a)@watercommission.co.uk>

Cc: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>; Andrea Mancini <9(2)(a)@watercommission.co.uk>; Tan, John <9(2)(a)@deloitte.co.nz>

Subject: [EXT] WICS data

CAUTION: This email originated from outside the organisation. Do not click links or open attachments unless you recognise the sender and know the content is safe.

Thank you for sharing the following information to inform the economic impact assessment:

- Data on the investment totals mock-up
- Draft slides on the efficiency analysis
- Data on the consolidated RFI numbers.

On consideration, please see below our comments and/or clarification questions on each of the above.

Data on the consolidated RFI numbers

1. This is useful, but doesn't have an under and above ground expenditure split. It is possible to use the short and long-life asset ratios to the enhancement figures? Alternatively, it would be good to confirm what, if any, project level aggregation that WICS has completed

Yes, the 60% / 40% split in favour of short to medium life assets could be applied to enhancement and growth investment. We have not collected the information for individual projects from the RFI. These could be found from Table G2, G3 and G4

2. There is currently an aggregated capex value for 2030 to 2051. Would it be possible to provide a capex profile for each year over this period?

Most councils provided a total over this period. A small number of councils provided planned investment in each year, but we have just collected the totals.

3. To ensure we interpret the data accurately- can you please provide a definition for "Growth" "Enhancement" and "Renewals" capex?

The guidance for the RFI provides the following definition.

Growth	To meet demand for services from new and existing customers by providing new assets or increasing the capacity of existing assets This would include providing new distribution and wastewater assets to new customers, the provision of first-time water or wastewater services to existing housing, and the provision of new assets to meet the increased use of water by existing customers
Quality Enhancement	This includes the provision of new assets or the enhancement of existing assets to achieve improvements in performance in line with new or enhanced legal requirements
Base Service (Renewals)	This comprises the capital maintenance expenditure necessary for the maintenance of existing service levels to customers including capitalised base expenditure, non-infrastructure and infrastructure asset renewal

We have examined growth and enhancement together as some councils chose growth drivers for investment that other councils have classed as enhancement.

Data on the investment totals mock-up

We have a small number of clarification questions on the mock-up of investment data provided:

1. Are the values in NZD? **Yes** Are the values in real or nominal terms? **Real** Does year 1 represent 2022? **Yes**

2. The mock-up data includes two of the four options modelled by WICS. Do you intend to complete the analysis for either or both of the remaining two options?
We don't intend to - In terms of disaggregated investment for individual councils, we're focusing on these options.
3. For clarification- we are assuming that "Short" can be used as a proxy for "Above the ground capex" and "Long" as a proxy for "Below the ground capex"?
'Short life' assets tends to relate to non-infrastructure assets such as MEICA (mechanical, electrical, instrumentation, control and automation) and 'long life' assets cover civils -would such a split work better? I'm not sure of the purpose of the above and below ground split.
4. **Draft slides on the efficiency analysis**

Thank you for providing the draft slides. We find the draft analysis valuable in understanding your approach to assess required efficiency adjustment. We find the presentation of results on slide 23 particularly useful for our modelling purposes. We have some questions to ensure our interpretation and expectation of the forthcoming efficiency results are correct:

1. **Scenarios:** Will the scenarios referred to in the efficiency analysis reflect the size of the amalgamation entities (e.g. 3 entities vs 5 entities etc)?
2. **Time dimension:** Will the output of Phase II analysis provide an efficiency adjustment profile over time (i.e. different realisable efficiencies at 2040, 2045 and 2050), or an anchor point with inferences on how Deloitte can develop a profile to reflect how the efficiency adjustment could change over time? There could be different scenarios for the period over which the operating cost reduction challenge is applied (e.g. 15 years, 25 years etc.). For the purposes of our modelling, we are likely to assume a straight line profile. We're also planning to start applying the efficiency challenge from year 5.
3. **Relative efficiency adjustment:** From the analysis we understand that you are undertaking the efficiency analysis for each TA. Is the expectation that the efficiency adjustment for Auckland to be different relative to other areas due to the maturity and scale of WaterCare? Will the output of Phase II analysis provide separate efficiency adjustments by Metropolitan/Provincial/Rural area and/or TA level? There are only 11 councils that would receive an operating cost reduction challenge (see slide 19) - of which 4 would receive a negligible challenge. The remaining councils would receive no cost reduction challenge. Each amalgamated entity will have their own efficiency challenge applied.
4. We note that your **classification of TAs under Metropolitan/Provincial/Rural** areas is the same classification we intend to use in our model. We note there are some TAs are missing in the classification, but we assume you are using a sample of TAs to derive the efficiency adjustments. Our list covers the 49 councils that completed Workbook 1 of the RFI. I suspect that you are using the full list (i.e. including councils that completed Workbook 2).
5. In what **format** will you provide the efficiency adjustments for Phase II? A table in the slides or in a table in an Excel workbook? We can provide a spreadsheet.

We are looking forward to your response, and please let us know if it will be easier to schedule a meeting early next week to discuss our questions. Have a nice weekend.

9(2)(a)

Best

9(2)(a)

Director | Corporate Finance

Deloitte

Level 12, 20 Customhouse Quay, PO Box 1990, Wellington 6140, New Zealand

D: 9(2)(a) | M: 9(2)(a) | O: 9(2)(a) | F: 9(2)(a)

9(2)(a) @deloitte.co.nz | www.deloitte.co.nz

Deloitte means Deloitte Limited (in its own capacity for assurance services, otherwise as trustee for the Deloitte Trading Trust)



[Navigating COVID-19: read the latest updates from our experts](#)

Deloitte 175



Please consider the environment before printing

Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be subject to legal privilege or copyright. If you have received this email in error, please advise the sender immediately and destroy the message and any attachments. If you are not the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest terms of engagement which we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures, no assurance or guarantee is implied or should be construed that this email message or its attachments are free from computer viruses. Deloitte assumes no responsibility for any such virus or any effects of such a virus on the recipient's systems or data.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai, Singapore, Sydney, Taipei and Tokyo.

This email and any files transmitted with it are confidential and intended solely for the use of the individual or entity to whom they are addressed. Any views or opinions expressed in this e-mail are those of the sender and do not necessarily coincide with those of the Water Industry Commission for Scotland. If you have received this e-mail in error please remove from your computer and contact the sender. Liability cannot be accepted for statements made which are clearly the senders own and not made on behalf of the Water Industry Commission For Scotland.

From: 9(2)(a)
To: [Sam Ponniah](#); [Tan, John](#)
Cc: [Dent, Alan](#); 9(2)(a)
Subject: RE:Impact analysis structure for three waters RIA
Date: Tuesday, 30 March 2021 6:27:16 pm
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)
[image007.png](#)
[image008.png](#)
[image009.png](#)
[image010.png](#)
[image011.png](#)

Thanks Sam,

No problem- we can include MAFIC constrained (high) counterfactual and WICS (high) as an additional simulation.

We can describe the counterfactual neutrally, but will reference the source of the data is MAFIC. Best,

9(2)(a)

From: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>

Sent: Tuesday, 30 March 2021 5:08 PM

To: 9(2)(a) <9(2)(a)@deloitte.co.nz>; Tan, John 9(2)(a)@deloitte.co.nz>

Cc: Dent, Alan 9(2)(a)@deloitte.co.nz>; 9(2)(a) 9(2)(a)@deloitte.co.nz>

Subject: [EXT] RE: Impact analysis structure for three waters RIA

9(2)(a)

My only thought is whether the MAFIC constrained (high) counterfactual would map better to the WICS high estimate? This would provide a better sense of the incremental expenditure that can be attributed to the reforms over and above what Councils are likely to be able to spend.

As a separate point which is more for the drafting of the report and representation of the data, we just need to ensure we are describing the counterfactual neutrally – i.e. MAFIC have not provided a view on what the counterfactual is likely to be (nor is it their role). All they've done is run a set of calculations based on the parameters we have discussed in the workshops to date.

Cheers

Sam

Sam Ponniah | Senior Consultant

MartinJenkins

M 9(2)(a) T 9(2)(a)

From: 9(2)(a) <9(2)(a)@deloitte.co.nz>

Sent: Tuesday, 30 March 2021 5:00 PM

To: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>; Tan, John 9(2)(a)@deloitte.co.nz>

Cc: Dent, Alan 9(2)(a)@deloitte.co.nz>; 9(2)(a) 9(2)(a)@deloitte.co.nz>

Subject: RE:Impact analysis structure for three waters RIA

Importance: High

Thanks Sam.

The draft structure of the impact analysis section that the economic impact analysis and industry development study will feed into is really helpful.

Thanks for sending through the updated MAFIC data. Yes, we will be able to incorporate the updated data in our final model. Just to ensure that are modelling the right capex profiles, below is a summary of the simulations that we will consider in our CGE simulations:

Simulation	System Transformation	Counterfactual	Incremental (Difference between System Transformation and the Counterfactual)

Sim 1	WICS low estimate= \$120b	MAFIC constrained (low) = \$78b	Incremental Capex = \$42b
Sim 2	WICS high estimate = \$185b	MAFIC constrained (low) = \$78b	Incremental Capex = \$107b
Sim 3	WICS low estimate = \$120b	MAFIC historic = \$44b	Incremental Capex = \$76b

Best,

9(2)(a)

Director | Corporate Finance

Deloitte

Level 12, 20 Customhouse Quay, PO Box 1990, Wellington 6140, New Zealand

D: 9(2)(a) | M: 9(2)(a) | O: 9(2)(a) | F: 9(2)(a)

9(2)(a) @deloitte.co.nz | www.deloitte.co.nz

Deloitte means Deloitte Limited (in its own capacity for assurance services, otherwise as trustee for the Deloitte Trading Trust)



[Navigating COVID-19: read the latest updates from our experts](#)

Deloitte 175



Please consider the environment before printing.

From: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>

Sent: Tuesday, 30 March 2021 3:51 PM

To: Tan, John <9(2)(a)@deloitte.co.nz>

Cc: 9(2)(a) <9(2)(a)@deloitte.co.nz>; Dent, Alan <9(2)(a)@deloitte.co.nz>

Subject: [EXT] Impact analysis structure for three waters RIA

Hi John

As promised, here is the draft structure of the impact analysis section that the economic impact analysis and industry development study will feed into. There are also a couple of places in the counterfactual section where we will draw on your analysis, largely related to the impacts and industry/workforce constraints.

The second attachment, very much work in progress, is the current working draft of the RIS so you can see the broader context within which the impacts analysis will sit. I wouldn't recommend reading this in any great detail but if you are minded to, a skim through the problem definition and counterfactual sections will probably give you a sense of the story we are aiming to tell around the case for change.

You'll have seen that Campbell has provided updated calculations to inform the counterfactual scenarios for your modelling. Trust that these can be incorporated for the final model run.

Cheers

Sam

Sam Ponniah | Senior Consultant

MartinJenkins

M 9(2)(a) T 9(2)(a)



Level 16, AIG Building, 41 Shortland St, Auckland

Level 1, City Chambers, Cnr Johnston & Featherston Sts, Wellington

PLEASE NOTE: The information contained in this email message and any attached files may be confidential and subject to privilege. The views expressed may not necessarily be the official view of Martin, Jenkins and Associates Limited. If you are not the intended recipient, you are notified that any use, disclosure or copying of this email is unauthorised. If you have received this email in error, please notify us immediately by reply email and delete the original. Thank you.

Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be subject to legal privilege or copyright. If you have received this email in error, please advise the sender immediately and destroy the message and any attachments. If you are not the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest terms of engagement which we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures, no assurance or guarantee is implied or should be construed that this email message or its attachments are free from computer viruses. Deloitte assumes no responsibility for any such virus or any effects of such a virus on the recipient's systems or data.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai, Singapore, Sydney, Taipei and Tokyo.

From: 9(2)(a)
To: [Sam Ponniah](#)
Subject: RE:DIA three waters - weekly catch up with Deloitte
Date: Thursday, 1 April 2021 2:41:50 pm

All good – I'll reschedule for later that afternoon.

Cheers

9(2)(a)

From: Sam Ponniah <xxx.xxxxxx@xxxxxxxxxxxxxx.xx.xx>
Sent: Thursday, 1 April 2021 2:37 PM
To: 9(2)(a) <@deloitte.co.nz>
Subject: [EXT] RE: DIA three waters - weekly catch up with Deloitte

9(2)(a)

I've got a clash next week but am free after 12 if that works for you and the others?

Sam Ponniah | Senior Consultant

MartinJenkins

M 9(2)(a) T 9(2)(a)

-----Original Appointment-----

From: 9(2)(a) <9(2)(a)@deloitte.co.nz>

Sent: Thursday, 1 April 2021 2:36 PM

To: 9(2)(a) Tan, John; Dent, Alan; Sam Ponniah

Subject: DIA three waters - weekly catch up with Deloitte

When: Tuesday, 6 April 2021 11:30 AM-12:00 PM (UTC+12:00) Auckland, Wellington.

Where: Microsoft Teams Meeting

Extending this series as the draft and final report deadlines have been pushed out

Hi all

Some time for a weekly catch up with Sam and our team to discuss progress, dependencies, any roadblocks etc.

Cheers

9(2)(a)

Microsoft Teams meeting

Join on your computer or mobile app

[Click here to join the meeting](#)

[Learn More](#) | [Meeting options](#)

Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be subject to legal privilege or copyright. If you have received this email in error, please advise the sender immediately and destroy the message and any attachments. If you are not the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest terms of engagement which we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures, no assurance

or guarantee is implied or should be construed that this email message or its attachments are free from computer viruses. Deloitte assumes no responsibility for any such virus or any effects of such a virus on the recipient's systems or data.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai, Singapore, Sydney, Taipei and Tokyo.

Released Under the Official Information Act 1982

From: [Dent, Alan](#)
To: [Scott Priestley](#); [Sam Ponniah](#)
Subject: RE:Industry transformation strategy
Date: Wednesday, 31 March 2021 9:22:56 am
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)

Thanks Sam

Will give you a call later today Scotty

Regards

Alan

Get [Outlook for iOS](#)

From: Scott Priestley <[REDACTED]@dia.govt.nz>
Sent: Wednesday, March 31, 2021 9:17:58 AM
To: Sam Ponniah <[REDACTED]@martinjenkins.co.nz>; Dent, Alan <[REDACTED]@deloitte.co.nz>
Subject: [EXT] RE: Industry transformation strategy

Thanks Sam! Alan could you give me a call on the below number when you get a chance? Ideally today after 1pm would be great!

Ngā mihi nui,

Scotty

+64 [REDACTED]

From: Sam Ponniah <[REDACTED]@martinjenkins.co.nz>
Sent: Wednesday, 31 March 2021 9:15 AM
To: Dent, Alan <[REDACTED]@deloitte.co.nz>
Cc: Scott Priestley <[REDACTED]@dia.govt.nz>

Subject: Industry transformation strategy

Hi Alan, just connecting you with Scotty who is leading the transition workstream and as part of that is thinking about the industry transformation strategy that will need to sit alongside the proposed reforms. Some obvious links there with the work you are doing and he will have a particular interest in the draft report for the industry development workstream. Scotty will follow-up to line up a conversation around some of the insights from the work and the interviews conducted to date

Cheers

Sam

Sam Ponniah | Senior Consultant

MartinJenkins

M [REDACTED] T [REDACTED]



[Level 16, AIG Building, 41 Shortland St, Auckland](#)
[Level 1, City Chambers, Cnr Johnston & Featherston Sts, Wellington](#)

PLEASE NOTE: The information contained in this email message and any attached files may be confidential and subject to privilege. The views expressed may not necessarily be the official view of Martin, Jenkins and Associates Limited. If you are not the intended recipient, you are notified that any use, disclosure or copying of this email is unauthorised. If you have received this email in error, please notify us immediately by reply email and delete the original. Thank you.

Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be

subject to legal privilege or copyright. If you have received this email in error, please advise the sender immediately and destroy the message and any attachments. If you are not the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest terms of engagement which we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures, no assurance or guarantee is implied or should be construed that this email message or its attachments are free from computer viruses. Deloitte assumes no responsibility for any such virus or any effects of such a virus on the recipient's systems or data.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai, Singapore, Sydney, Taipei and Tokyo.

Released Under the Official Information Act 1982

From: [Dent, Alan](#)
To: [Sam Ponniah](#)
Cc: [Tan, John](#)
Subject: RE:Updated Draft - Affected Industries
Date: Thursday, 1 April 2021 4:38:07 pm
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)
[DIA Three Waters Stakeholder DRAFT Report 22.3.2021 v4.pdf](#)

Hi Sam

Please find attached an updated draft of our Affected Industries component of our economic analysis. This is still a work in progress but we were keen to get you something this week. Once you have had a chance to review we can arrange a time to discuss questions, next steps etc.

Kind Regards

Alan Dent

Partner | Corporate Finance

Deloitte

Level 12, 20 Customhouse Quay, PO Box 1990, Wellington 6140, New Zealand

D: 9(2)(a) | M: 9(2)(a) | O: 9(2)(a) | F: 9(2)(a)

9(2)(a)@deloitte.co.nz | www.deloitte.co.nz

Deloitte means Deloitte Limited (in its own capacity for assurance services, otherwise as trustee for the Deloitte Trading Trust)



[Navigating COVID-19: read the latest updates from our experts](#)

Deloitte 175



Please consider the environment before printing.

Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be subject to legal privilege or copyright. If you have received this email in error, please advise the sender immediately and destroy the message and any attachments. If you are not the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest terms of engagement which we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures, no assurance or guarantee is implied or should be construed that this email message or its attachments are free from computer viruses. Deloitte assumes

no responsibility for any such virus or any effects of such a virus on the recipient's systems or data.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai, Singapore, Sydney, Taipei and Tokyo.

Released Under the Official Information Act 1982

From: [Dent, Alan](#)
To: [Sam Ponniah](#)
Subject: RE:Updated RIA documents
Date: Thursday, 1 April 2021 4:41:49 pm
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)

Hi Sam

I sent you something an hour or so ago re the update to the Affected Industries draft – did you receive this?

Regards

Alan

From: Sam Ponniah <[REDACTED]>@martinjenkins.co.nz>

Sent: Thursday, 1 April 2021 4:28 PM

To: Tan, John <[REDACTED]>@deloitte.co.nz>; [REDACTED] <[REDACTED]>
<[REDACTED]>@deloitte.co.nz>; Dent, Alan <[REDACTED]>@deloitte.co.nz>; [REDACTED] <[REDACTED]>
<[REDACTED]>@deloitte.co.nz>

Subject: [EXT] Updated RIA documents

Hi all,

Attached are updated drafts of the RIA documents so you can see how this is shaping up. The main RIA document has been tidied up considerably so the narrative should be clearer but this remains very much WIP.

Just checking that you're still planning to send us something today to take a look at over the Easter break?

Cheers

Sam

Sam Ponniah | Senior Consultant

MartinJenkins

M [REDACTED] T [REDACTED]



PLEASE NOTE: The information contained in this email message and any attached files may be confidential and subject to privilege. The views expressed may not necessarily be the official view of Martin, Jenkins and Associates Limited. If you are not the intended recipient, you are notified that any use, disclosure or copying of this email is unauthorised. If you have received this email in error, please notify us immediately by reply email and delete the original. Thank you.

Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be subject to legal privilege or copyright. If you have received this email in error, please advise the sender immediately and destroy the message and any attachments. If you are not the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest terms of engagement which we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures, no assurance or guarantee is implied or should be construed that this email message or its attachments are free from computer viruses. Deloitte assumes no responsibility for any such virus or any effects of such a virus on the recipient's systems or data.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai, Singapore, Sydney, Taipei and Tokyo.

Released Under the Official Information Act 1982

From: [Tan, John](#)
To: [Sam Ponniah](#); 9(2)(a); [Dent, Alan](#); 9(2)(a)
Subject: Draft Economic Impact Analysis
Date: Thursday, 1 April 2021 5:41:49 pm
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[Draft Economic Impact Assessment Report - 1 April sent.pdf](#)

Hi Sam

Attached is a 'preliminary draft' of our economic impact analysis. Given the timeframes that we have received the data, the modelling has only come together over the past day or so, so is subject to internal review and may change. We haven't had a chance to look at the format of the updated RIA – but will do this next week

Please let me know when suits you for a chat next week and we can take you through the key points

Apologies that this is a bit rough – but the team have been working pretty hard to get this out to you today as the data have become available to us

Kind Regards

John

From: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>

Sent: Thursday, 1 April 2021 4:28 PM

To: Tan, John 9(2)(a)@deloitte.co.nz; 9(2)(a) <9(2)(a)@deloitte.co.nz>; Dent, Alan 9(2)(a)@deloitte.co.nz; 9(2)(a) 9(2)(a)@deloitte.co.nz

Subject: [EXT] Updated RIA documents

Hi all,

Attached are updated drafts of the RIA documents so you can see how this is shaping up. The main RIA document has been tidied up considerably so the narrative should be clearer but this remains very much WIP.

Just checking that you're still planning to send us something today to take a look at over the Easter break?

Cheers

Sam

Sam Ponniah | Senior Consultant

MartinJenkins

M 9(2)(a) T 9(2)(a)



Level 16, AIG Building, 41 Shortland St. **Auckland**
Level 1, City Chambers, Cnr Johnston & Featherston Sts. **Wellington**

PLEASE NOTE: The information contained in this email message and any attached files may be confidential and subject to privilege. The views expressed may not necessarily be the official view of Martin, Jenkins and Associates Limited. If you are not the intended recipient, you are notified that any use, disclosure or copying of this email is unauthorised. If you have received this email in error, please notify us immediately by reply email and delete the original. Thank you.

Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be subject to legal privilege or copyright. If you have received this email in error, please advise the sender immediately and destroy the message and any attachments. If you are not the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest

terms of engagement which we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures, no assurance or guarantee is implied or should be construed that this email message or its attachments are free from computer viruses. Deloitte assumes no responsibility for any such virus or any effects of such a virus on the recipient's systems or data.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai, Singapore, Sydney, Taipei and Tokyo.

Released Under the Official Information Act 1982

From: 9(2)(a)
To: [Sam Ponniah](#)
Cc: 9(2)(a); [Tan, John](#); [Dent, Alan](#)
Subject: DIA three waters status update
Date: Tuesday, 6 April 2021 6:11:32 pm
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[Deloitte - three waters status update 060421.pdf](#)

Hi Sam

Attached is our status update for last week.

Cheers

9(2)(a)

Analyst | Corporate Finance

Deloitte

Level 12, 20 Customhouse Quay, PO Box 1990, Wellington 6140, New Zealand

D: 9(2)(a) | O: 9(2)(a) | F: 9(2)(a)

9(2)(a) @deloitte.co.nz | www.deloitte.co.nz

Deloitte means Deloitte Limited (in its own capacity for assurance services, otherwise as trustee for the Deloitte Trading Trust)



Please consider the environment before printing.

Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be subject to legal privilege or copyright. If you have received this email in error, please advise the sender immediately and destroy the message and any attachments. If you are not the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest terms of engagement which we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures, no assurance or guarantee is implied or should be construed that this email message or its attachments are free from computer viruses. Deloitte assumes no responsibility for any such virus or any effects of such a virus on the recipient's systems or data.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai,

Singapore, Sydney, Taipei and Tokyo.

Released Under the Official Information Act 1982



Released Under the Official Information Act 1982

Three Waters Reform Status Update

DEPARTMENT OF INTERNAL AFFAIRS
06 APRIL 2021

Status update

Commentary

Last week we shared a working draft of our economic impact assessment, which we appreciate your feedback on. We will incorporate this feedback, refine our presentation and analysis of results, and continue to develop the rest of the draft report. We will share the draft report with you by 12 April.

We have also shared an updated version of the draft industry development study, which we will incorporate your feedback on once you have reviewed.

Deliverables / Milestones	Status	Indicative Due Date
Project Inception Meeting	Complete	5 & 10 February
Draft methodology and key information requirements	Complete	17 February
Data collection and model design	Complete	22 February 16 March
Agreed methodology, scenario and sensitivity definition, and confirmation of key assumptions	Complete	22 February 23 February
Economic modelling	Complete	16 March 1 April
Draft economic impact analysis	In progress	19 March 12 April
Stakeholder consultation	Complete	Ongoing
Draft industry development study	Complete	22 March
Final report on economic impact analysis and industry development study	In progress	2 April 16 April

Status	
Overall	On track for recast timeline
Budget	On track

Work completed last week	Activities this week
<p>Work completed for 29 March to 1 April</p> <ul style="list-style-type: none"> Received final data from WICS and Mafic, and incorporated this into our assumptions workbook. Undertook CGE modelling for four scenarios, and one sensitivity. Began to analyse these results. Shared a working draft of the economic impact assessment, focusing on the CGE results. Shared an updated version of the industry development study with you, incorporating DIA's feedback on the first draft. 	<p>Work planned for 6 to 9 April</p> <ul style="list-style-type: none"> Incorporate feedback on the working draft of the economic impact assessment. Discuss preliminary results with DIA. Continue to analyse modelling results and refine presentation of results. QA and sense test CGE results. Draft the other sections of the economic impact analysis, including our methodology, data inputs, and appendices. Continue to undertake data visualisation to effectively present results. Consider how the economic impact results align with the findings from the industry development study. Incorporate any feedback on the most recent industry development study. Combine the economic impact assessment and industry development study into one, cohesive report. Review the most recent version of the RIA and ensure our analysis is well-aligned.

From: [Dent, Alan](#)
To: [Sam Ponniah](#)
Subject: RE: Developments in the non-household sector
Date: Tuesday, 6 April 2021 3:41:26 pm
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)
[image006.png](#)
[deloitte-uk-er-retail-water.pdf](#)

Hi Sam

This is a research piece performed by our UK firm a couple of years ago. Note that this is focussed on the development of a retail market for non-household customers and references the earlier experience in Scotland from introducing competition for non-household customers. In our Industry study we have steered clear of any further evolution of the market/market structures – or the potential gains that could arise as a consequence of any such evolution. Cheers

Alan Dent

Partner | Corporate Finance

Deloitte

Level 12, 20 Customhouse Quay, PO Box 1990, Wellington 6140, New Zealand

D: 9(2)(a) | M: 9(2)(a) | O: 9(2)(a) | F: 9(2)(a)

9(2)(a) @deloitte.co.nz | www.deloitte.co.nz

Deloitte means Deloitte Limited (in its own capacity for assurance services, otherwise as trustee for the Deloitte Trading Trust)



[Navigating COVID-19: read the latest updates from our experts](#)

Deloitte 175



Please consider the environment before printing.

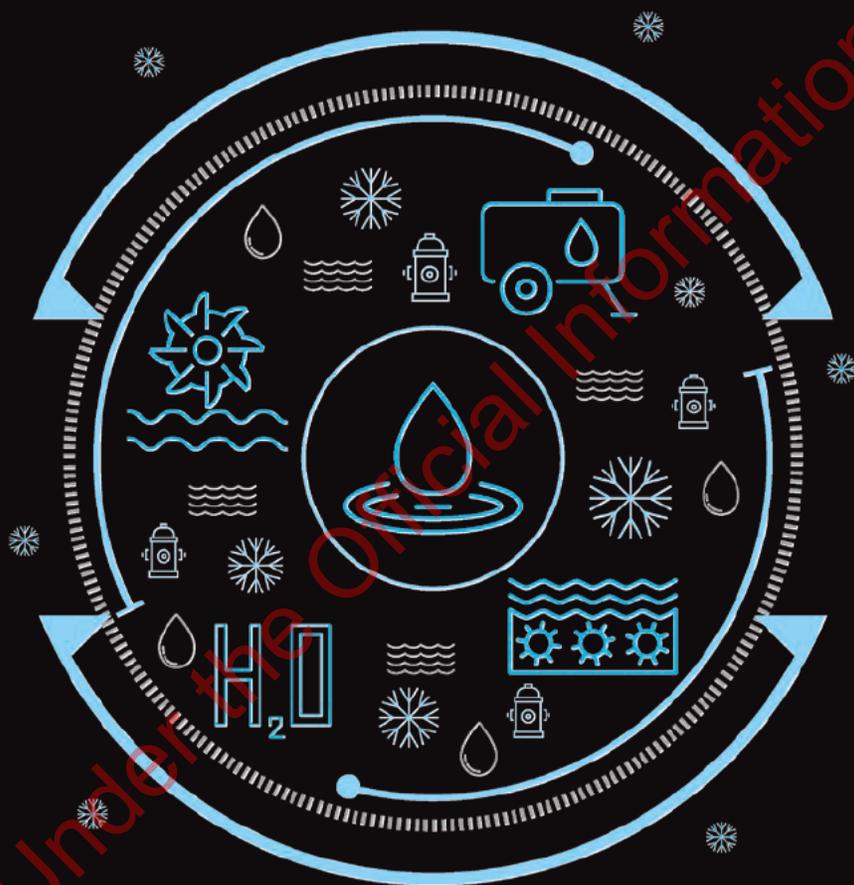
Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be subject to legal privilege or copyright. If you have received this email in error, please advise the sender immediately and destroy the message and any attachments. If you are not the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest terms of engagement which we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures, no assurance or guarantee is implied or should be construed

that this email message or its attachments are free from computer viruses. Deloitte assumes no responsibility for any such virus or any effects of such a virus on the recipient's systems or data.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai, Singapore, Sydney, Taipei and Tokyo.

Released Under the Official Information Act 1982



The non-household retail water market

First impressions and future developments

July 2017

Released Under the Official Information Act 1982

About this report

This report is based on analysis of publicly available information and confidential interviews with market participants, both retailers and wholesalers.

The aim of this report is to discuss the initial experiences of a handful of retail and wholesale businesses, and to offer our views on the future of the market. While it is based on initial interviews conducted in a short timeframe, we intend to publish a further assessment after the market has been operating for over a year.

Contents

Introduction	02
Background	03
Getting to the starting line	04
First impressions of the non-household retail market	08
Future market developments	10
Conclusions	12
Contacts	13

Released Under the Official Information Act 1982



Introduction

The largest competitive retail water market in the world has now been formed. What does the market look like currently? What are the companies' first impressions of the market and the likely future developments?

The retail market for non-household water customers in England opened on 1 April 2017. This marked the most significant development in reforming the water sector in England and Wales since privatisation in 1989.

The market opening followed years of extensive preparation and structural change in response to the Water Act 2014, which included measures to enable all non-household customers in England to switch their water and sewage supplier. Most companies have responded by separating their retail/customer facing operations from their wholesale operations, with a focus on business and non-household customers. All water companies completed the complex – and costly – exercise by 1 April 2017 and entered the market as planned. While the retail arms of most incumbent water companies remain in the market, a handful chose to exit. Along with new entrants, the shape of the new non-household retail market has started to emerge.

This report looks at the dynamic market developments over the past two years: the emergence of a number of larger retailers (through joint ventures and acquisitions) and the longer list of retail businesses of smaller incumbents, self-suppliers and niche operators. We also look at the strategic choices and decisions water companies had to make to get to the starting line.

The report then considers company experiences in the first few weeks of the new market based on discussions with a number of retailers and wholesalers. While these discussions confirmed a successful but relatively subdued start, there are numerous system, data and consistency issues still to resolve. Companies also highlighted a number of challenges from the collective readiness approaches adopted, notably a primary focus on compliance, rather than on the customer. In addition, there was limited overall customer awareness combined with perceived low margins available for retailers.

Finally, the report considers future market developments. Our view is that there will be further consolidation in the retail market in 12-to-18 months' time. A number of retailers are currently considering divestment and are likely to exit when they find the right buyer. The current low retail margin environment does not leave much room for substantial price reductions or offer attractive returns for new entrants. Therefore, companies that balance economies of scale and cost efficiencies with a focus on value-added services are more likely to succeed in the long term. Companies that are not able to build a sufficient customer base face greater challenges and may consider their long-term options for participating in the retail market.

Background

The England and Wales water industry is going through a gradual process of regulatory reforms over the next five to ten years. These reforms are removing the integrated regional monopoly model, which has barely changed since privatisation in 1989.

Essentially, water companies across England and Wales provided similar, integrated services with no or very limited opportunity for customers to switch provider. These services include providing water from source to tap and, for the majority of customers, wastewater services too.

In the years after privatisation, water utilities focused on operational efficiencies and new investments, with efficiency incentivised through economic regulation and the periodic price controls of the regulatory framework. The industry has also invested £108 billion in maintaining and improving assets, and meeting new regulations since 1989.¹

However, the increased investment came at a cost to the customer: household charges increased 42 per cent in real terms between 1989 and 2009.² The industry was also facing new challenges from rising demand, increasing customer expectations, adverse effects of climate change, as well as affordability and sustainability issues.

The need to find new sources of efficiency became apparent. But questions were raised whether regulation alone was able to sufficiently incentivise companies to address efficiency concerns and enable them to tackle multiple industry challenges.

Recommendations for wider structural reforms were first put forward by the 2009 Cave review. Professor Cave argued that the limited competition that existed in the market – introduced by the Water Act 2003 for non-household customer using 50 mega litres or more water per year – offered few benefits to customers and was hindering efficiency and innovation. The Cave review therefore proposed the introduction of retail competition for all non-household customers.

The Water Act 2014 (Act) adopted the majority of the recommendations of the Cave review and set out the framework for wide-ranging industry reforms. The successful introduction of retail competition for non-household customers in Scotland in 2008 undoubtedly helped convince politicians and regulators that a similar structure could also work in England and benefit customers.

The Act allows all non-household customers – 1.2 million businesses, public sector bodies and charities – to switch their water retail supplier. Incumbent water companies are able to exit the retail market services for non-household customers (subject to an agreed approval process), while new suppliers should find it easier to enter the market.

The overarching objective of the retail market is to encourage retailers to compete for business by providing better customer service, lower prices and/or extra services that would help save water. This should not only lower customer bills, but also reduce the impact on the environment.

The next phase of water market reforms in England and Wales will likely be the introduction of upstream water competition and, at a later stage, there remains the option to extend the retail market to household customers.

¹ <http://www.ofwat.gov.uk/regulated-companies/ofwat-industry-overview/>

² https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/69462/cave-review-final-report.pdf

Getting to the starting line

Introducing the non-household retail market has led to restructuring of water and sewerage businesses in England prior to market opening. Companies were aware that the reforms were coming: the Cave report was published in 2009 and the 'Water for Life' white paper proposing a package of reforms to increase competition came two years later. But what made preparation for the retail market a great challenge was that it happened in parallel with a number of other important industry events. According to wholesale businesses, some of these events such as AMP6 and the associated price reviews, PR14 and PR16 – were resource intensive and had to take precedence over preparations for the retail market, especially in the early part of the competition programme lifecycle.

Nevertheless, all water companies got to the starting line. All incumbents have now, as a minimum, separated their non-household retail arms from their wholesale operations and have decided whether to stay in, or exit, the market.

Based on the strategic nature of the decision, water companies have gone through varying degrees of internal restructuring. Those that considered the new market an opportunity to build and expand their business initiated significant structural and cultural changes. Others decided to stay, but focused on protecting their existing 'in area' customer base. Leaving at a later stage is still a possibility for these companies, but is dependent on how the market develops and the potential offers they receive. A smaller proportion, however, decided to exit upfront. They have either already done so – as will be discussed – or are currently preparing to exit. A difficulty highlighted in our discussions with companies was the requirement that all companies demonstrate their readiness for market opening to the same standard, regardless of their intention to remain in the market or exit. To meet the 'level playing field' requirements, companies chose to separate their wholesale and retail businesses and set each up as separate operations. This allowed for the option of a potential future exit through the sale of the retail business.

However, in their preparations, some companies carefully weighed up the level of resources and investment required/committed against their corporate, longer-term objectives.

Separating the wholesale and retail businesses and then further dividing the retail businesses into household and non-household retail were complex and resource intensive activities. In particular, separating the back office functions (such as IT systems and billing) to create the necessary 'level playing field' required significant effort – either in terms of investing in new systems and/or segregating existing ones. Cleaning and preparing the data for uploading on the central system was another resource intensive area.

Retail arms of incumbents, along with the new entrants, went through a period of strategic thinking to define their target operating models and design requirements for supporting systems, data, processes and their workforce. Wholesale businesses also had to make some significant changes: building capabilities to be able to interact with a wide range of retailers – including their own retail operations, but at arm's length.

Retailers are now shifting their strategic focus to developing more innovative offerings. The next evolutionary stage will be to invest in further operational capabilities (such as additional digital, workforce and technical infrastructure) and potentially build alliances to support their customer propositions.

What made preparation for the retail market a great challenge was it happened in parallel with a number of important industry events.

Who are the new retailers?

At the time of the official market opening on 1 April 2017, a small number of businesses serving around 100,000 and above non-household customers were active in the market. Four of these were joint ventures formed by the retail arms of incumbent regional water utilities; two were experienced Scottish retailers that acquired sizeable non-household customer lists from exiting water companies in England and one was the rebranded non-household retail arm of the Kelda Group.

Table 1. The largest non-household retailers

Organisation type	Joint ventures	New entrants in the England market	Retail arms of incumbents
No. of customers			
>300,000	Water Plus (400,000)	Castle Water (330,000)	
300,000 – 200,000	Wave (250,000)	Scottish Water Business Stream (200,000)	
200,000 – 100,000	Pennon Water (180,000)		Three Sixty (130,000)
100,000 <	Water2business (90,000)		

Source: Deloitte analysis, company and news websites

Joint Ventures (JVs) – currently, nearly two-thirds of non-household customers are served by JVs of incumbent water companies:

- Water Plus – formed by United Utilities and Severn Trent. It is currently the largest non-household retail organisation with a portfolio of 400,000 business customers
- Wave – formed by Anglian Water Business and NWG Business and supports over 250,000 business customers in England and Scotland
- Pennon Water Services – formed by Pennon Group (owner of Bournemouth Water) and South Staffordshire Group (incorporating Cambridge Water). Serving some 180,000 customers, the JV accounts for approximately eight per cent of the market
- Water2business – formed by Bristol Water and Wessex Water Service and is based on a long-standing billing JV operating between the two companies since 2000.

New entrants in the England market acquiring customers from incumbents – two Scottish retailers with experience in serving business customers north of the border acquired large customer portfolios from three water companies, which decided to exit the market:

- Castle Water acquired the non-household customer lists of Portsmouth Water and Thames Water, and is currently the second largest retailer with 330,000 customers
- Business Stream acquired the portfolio of Southern Water's 200,000 non-household customers.

Retail arms of incumbent water and sewerage companies

– so far, nearly half of the incumbent water only companies and water and sewerage companies have chosen to offer retail services to non-household customers in their geographical area.

- Three Sixty is currently the largest retail arm of an incumbent – Yorkshire Water (part of the Kelda Group) – serving 130,000 non-household customers in its geographical area.

Smaller retailers – in addition to the largest retailers, a longer list of smaller organisations also obtained water retail and sewerage licences leading up to the market opening. These smaller retailers include:

- water only companies which have chosen to continue providing retail services to non-household customers. Having been rebranded, these include Affinity for Business (Affinity Water), South East Water Limited and Sutton and East Surrey Water Services Ltd (Sutton and East Surrey Water customers)
- self-suppliers, such as Greene King, the pub retailer and brewer, which was the first company to apply for a licence to provide its own water supply and sewerage services
- Scottish retailers, which have been operating for a few years and spotted an attractive market in England. Those receiving licences include Cobalt Water (subsequently acquired by Castle Water), Clear Business Water and Everflow
- new-to-water businesses, such as the Water Retail Company, Waterscan and Regent Water, the commercial gas supplier.

Market strategy: lower costs and/or value-added services

Considering the relatively modest c. 2.5 per cent net retail margin available for companies operating wholly or mainly in England, suppliers have a strategic choice of how best to provide value to customers. Prior to market opening two main strategic approaches emerged:

- lowering costs through economies of scale – gaining scale to reduce retail unit costs and offering some price reductions to customers
- focusing on value-added services – concentrating the offer on providing additional services to attract new customers, rather than targeting the cheapest tariff proposition

Some retailers have adopted one of the two approaches while others, typically the larger companies, are combining the two.

Lower unit cost

One way of attracting customers in the new market is by offering them competitive unit prices. This, however, requires a customer base of a reasonable size. A number of the larger retailers are looking to increase in scale, either by forming a JV or by directly acquiring a competitor and hence a customer 'book of business'.

Having a large enough customer base is also crucial for justifying investment in establishing or improving retail capabilities. Portsmouth Water, Thames Water and Southern Water decided that the most cost-effective solution for both their customers and wider stakeholders was to work with specialist retailers and exit the market.

Value-added services

Instead of focusing on the cheapest unit prices, the majority of retailers have chosen to offer a range of associated, value-added services. These services are designed to help customers manage their own water consumption (subsequently reducing cost and impact on the environment) and simplify the management of utility services.

While most retailers offer all customers an automated water reading, timely billing and support to increase water usage efficiency, regardless of their size, a number of products have appeared on the market that are targeting specific customer groups:

- small and medium enterprises (SMEs) – Water Plus, for example, offers a new digital service for SMEs to make it easier to manage their water bills and help them switch quickly and effortlessly
- large customers – most retailers have invested, or are considering investing, in additional IT infrastructure and more focused customer services for large non-household customers in water-intensive sectors such as the food industry, manufacturing, supermarkets or public sector. The retailers are building teams of dedicated account managers and offering flexible payment options, and tailored and consolidated billing across multiple sites, which could save customers money by reducing administrative costs. Most retailers also offer leak detection and repair, smart meters, water efficiency audits and consultancy services to manage trade effluent. These products are all aimed at helping customers lower their water usage and reduce the environmental impact

Bundled services – combining the provision of water and waste water with the supply of gas and electricity – are the next step for the retail market. These could provide one clear, itemised utility bill for multiple sites as well as offering further price reductions and more ancillary services to manage energy and water consumption better. This would be a natural progression as customers of water and wastewater companies overlap greatly with those of the gas and electricity markets

In fact, we are already starting to see the first signs of this in the market; Regent Water, a division of Regent Gas, which already supplies bundled multi-utility services in Scotland, entered the English water market in April 2017. Wave, the JV created by Northumbrian Water and Anglian Water, has also announced its intention to become a multi-utility retailer. Bundled offerings such as these could become common in the future and, with the addition of broadband services, the ‘super-utility’ could also emerge.

Instead of focusing on the cheapest unit prices, the majority of retailers have chosen to offer a range of associated, value-added services.

First impressions of the non-household retail market

While it is still early days to assess the success of the non-household retail market, a number of companies – both retailers and wholesalers – have shared their initial experiences of the first couple of months with us.

First, there was wide acknowledgment and appreciation of the fact that the market opened without any major technical issues – thanks to the joint efforts of MOSL, the market operator, market participants, Ofwat, Defra and other key stakeholders.

However, our discussions with market players revealed that the start was slower than many would have expected and preferred (e.g. the level of customer engagement and switches). This is likely due in part to a number of internal issues outstanding which require immediate attention. There are also other areas to focus on and improve:

- **systems, data and consistency challenges** – a number of retailers and wholesalers noted that some of their IT and billing systems were not yet fully operational. Some companies experienced unexpected technical faults and there were also outstanding data integrity/disaggregation issues to resolve. Some argued that this should not be considered unusual as a number of data-related issues were discovered in Scotland before and after the launch of their retail market. In addition, retailers mentioned the lack of consistency across a number of areas – such as wholesaler information portals or pricing mechanisms – that make simple tasks complex and time consuming

- **focus on compliance meant a slower commercial start** – a number of companies have commented on the focus on compliance rather than the customer journey during the preparatory phase. It is inevitably more challenging and costly to add customer-related functionalities retrospectively to systems already in place and focus on operational compliance. However, companies had a good reason for such a strong focus on compliance: the principles that underpin the Wholesale and Retail Code, combined with the Open Water Assurance Framework, required companies to demonstrate market readiness on a consistent and regular basis. From the companies' perspectives, this involved working with external assurance providers and submitting three formal letters of assurance – planning, interim and final – to MOSL. Ofwat also inserted a modification clause in supply licences requiring licensees to undertake a number of market readiness activities. Non-compliance with these requirements would have risked potential penalties amounting to ten per cent of their first year revenues

While there was wide acknowledgment and appreciation of the fact that the market opened without any major technical issues, the start was slower than many would have expected and preferred.

- **lack of customer switching** – despite the technically successful launch, most companies have viewed the level of switching and customer enquiries in the first few weeks of the market as low. A few large customers, who were expected to switch suppliers, have not yet done so. A number of factors could contribute to this apparently low level of initial customer interest, for example the limited savings currently on offer from retailers. Customers – perhaps those with multiple sites and numerous supply entry points – may wonder if the modest benefits will be worth the effort switching entails
- **lack of customer awareness** – some linked this to the relatively ‘soft’ market launch. While some retailers argued that they would have liked to see more activity from the regulator, others preferred to do their own marketing
- **low margins threatening ability to operate** – the true costs of the business will become clear over the coming months. Some of these costs have already been higher than initially thought, but there have been other unexpected expenses that are cutting into the slim margins retailers can make. While retailers understand the pressure on the regulator to keep margins low, the question arises as to whether a market with margins at this level can actually succeed.

While the focus on compliance prior to the market opening added costs and increased the level of stress on the incumbent operators, our interviews also highlighted a number of benefits the companies observed in this period. Those engaged in shadow market activities, which were open to businesses from October 2016, commented on its usefulness as it gave both retailers and wholesalers an opportunity to test their systems and processes in a safe and secure environment, making adjustments before the official opening. Wholesalers also found the ongoing support through a wholesaler focus group, where technical and operational issues can be discussed, helpful.



Future market developments

The next 12-to-18 months will likely define the longer-term shape of the market. Based on what we have seen in other de-regulated utility and cross-industry markets, during this period retailers will slowly settle in to their new roles, work their way through technical issues and identify areas for efficiency improvements. The market will test the robustness of their strategies and quality of execution, and many will make a decision on whether to stay or divest. Our view is that the modest net retail margin is unlikely to be able to support the current number of retailers, leading to further consolidation in the market.

Recipe for success in the retail market

Economies of scale are important because of the limited net retail margin available for suppliers. Initially, low unit prices and a large customer base will certainly be helpful, but experience in the gas and electricity markets suggests that scale does not always translate into higher profitability. To attract further customers, retailers need to differentiate.

- **Value-added services and superior customer care** – many SMEs [low volume, single site users] in the energy market do not engage in switching. Those that do often buy services through third parties such as brokers. Their actions as energy customers will likely indicate how they will behave as water customers. Most large users, however, actively manage suppliers and can regularly put contracts out for tender just to test the market. With limited opportunities for offering lower unit prices, water retailers will need to provide more value-added services and superior customer service
- **Bundled utility offerings** – the promise of more competitive prices and even less paperwork will be difficult to beat. Energy utilities are monitoring the market and are likely to enter quickly as soon as opportunities arise. Alliances between water and waste water retailers and energy suppliers, such as the one between Business Stream and Utilitywise in Scotland, may also become more common. Some energy utilities may even decide to undercut competitors and make a loss on water retail to attract new customers for their gas and electricity offerings
- **Effective and cost-efficient structure and governance** – with the majority of technical work to build systems and processes completed, fixed operational costs are becoming apparent. Some retailers are facing increased costs that are outside of their control. Therefore, the more retailers are able to innovate, automate and use data effectively to reduce costs under their control, the better they will be able to retain margins
- **Close and effective working relationships with wholesalers** – the market has only just opened and there are still a number of issues to be resolved. From the retailers' perspective these include data quality problems, the difficulty of dealing with multiple information portals and the thousands of combinations of differing price mechanisms across the various wholesalers and geographical regions. Ultimately, the new market will benefit from retailers working closely with the wholesaler to promote shared, consistent interfaces, simplify complex tariff structures and improve data quality where possible.

The next 12-to-18 months will likely define the longer-term shape of the market.

Reasons for re-evaluating market options

Currently, the water retail market appears to be a low margin-high resource business and could remain so until further efficiencies are found. Some incumbents may therefore decide to adjust their operating model and reallocate their workforce from non-household retail operations to focus on other parts of their business. Other retailers, which stayed just to 'test the water' without a clear focus on a viable customer segment, or are less able to invest in supporting infrastructure, may also decide to exit.

Ofwat has highlighted that having previously opposed consolidation in the sector it now envisages further consolidation as the market develops.

Lessons for the household retail market

Developments and experiences in the non-household market will prove helpful for the next phase of potential deregulation: the extension of the retail market to household customers.

In theory, establishing the household retail market should be easier because most of the 'heavy lifting' (for example separation of systems and disaggregation of customer accounts) has already been done.

Retailers also report learning a great deal about cost allocation and implementation of billing solutions, both of which turned out to be significantly more complex than previously thought. Lessons learned in these areas should make preparation for the household market more efficient and also benefit companies as they consider cost allocations before other types of competition are introduced in the sector. Some companies built their programmes with a view to scaling up in future, while others built them in isolation aiming to do the minimum to comply. Those who are furthest ahead in the non-household retail segment are likely to prosper in the household market segment.

However, given the current political and macro-economic environment, household competition, whilst still being discussed, looks less likely to happen and indeed unlikely before 2020.

Threats to the effectiveness of the non-household retail market

The modest net margin and the potential for cost escalation mean that the savings on offer will be limited and may not meet customer expectations for switching – especially if the switching is seen as a time consuming, complicated procedure.

Switching in itself, however, should not be considered the only or even the main measure of market effectiveness. The market's success should be measured by improvements in efficiency, services and lower bills over the medium and long term.

So far the actual number of customers switching has been low. But the Scottish water retail market, which is considered a success by the Scottish water industry, also had a slow start with switching levels only increasing after a number of years following the market opening in 2008. In addition, the lack of customer switching does not mean that those customers who do not switch are not seeing benefits from the market.

Significant threat to the market would be the inability of retailers to function in the tight margin environment, leading to major consolidation and ultimately a reduction in customer choice. This, coupled with potential negative news in the market in the future, could have a damaging impact on the market's reputation and the companies' confidence.

Conclusions

Whilst it is still early days for the new market, much progress has already been made. All water companies have successfully separated their retail operations from their wholesale activities and the market has opened without major problems.

Both retailers and wholesalers have learned a great deal in the process – lessons that will be helpful when preparing for the opening of further competition across the value chain.

In many respects, however, the work is only beginning. All market participants, retailers, wholesalers and MOSL are focusing on a prioritised set of continuous improvement activities – a number of which have already been discussed in this paper.

The non-household retail market will undoubtedly continue to evolve. There will be winners that quickly find their ‘sweet spot’ through competitive prices and value-added services, and there will be those that find market success a step too far and exit. We expect some further consolidation as the rewards currently available in the market are unlikely to be able to support the existing number of suppliers.

Both customers and Ofwat hope that the reforms will bring a renewed focus on the customer and supporting behaviours in the market: more proactive retailers who take time to listen and respond quickly to changing customer needs and who offer more cost-effective solutions, striving to bring new and innovative ways of working in a vibrant and competitive marketplace.

Both customers and Ofwat hope that the reforms will bring a renewed focus on the customer and supporting behaviours in the market.

Contacts



James Leigh
Partner – Audit
jleigh@deloitte.co.uk



Andrew Durrant
Partner – Financial Advisory
adurrant@deloitte.co.uk



Kate Hadley
Partner – Audit
khadley@deloitte.co.uk



Marc Burns
Director – Risk Advisory
maburns@deloitte.co.uk



Walter Carlton
Partner – Risk Advisory
wcarlton@deloitte.co.uk



Andrew Barroso
Director – Economic Consulting
abarroso@deloitte.co.uk



Mark Lillie
Partner – Consulting
mlillie@deloitte.co.uk



Netti Farkas-Mills (author)
Senior Manager – Insight
nfarkasmill@deloitte.co.uk

Deloitte.

This publication has been written in general terms and we recommend that you obtain professional advice before acting or refraining from action on any of the contents of this publication. Deloitte LLP accepts no liability for any loss occasioned to any person acting or refraining from action as a result of any material in this publication.

Deloitte LLP is a limited liability partnership registered in England and Wales with registered number OC303675 and its registered office at 2 New Street Square, London EC4A 3BZ, United Kingdom.

Deloitte LLP is the United Kingdom affiliate of Deloitte NWE LLP, a member firm of Deloitte Touche Tohmatsu Limited, a UK private company limited by guarantee ("DTTL"). DTTL and each of its member firms are legally separate and independent entities. DTTL and Deloitte NWE LLP do not provide services to clients. Please see www.deloitte.com/about to learn more about our global network of member firms.

© 2017 Deloitte LLP. All rights reserved.

Designed and produced by The Creative Studio at Deloitte, London J12675

From: [Dent, Alan](#)
To: [Sam Ponniah](#)
Cc: 9(2)(a); [Tan, John](#)
Subject: RE:Draft Economic Impact Analysis
Date: Tuesday, 6 April 2021 1:13:41 pm
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)

Sam

I may not be able to join the call this afternoon depending on when another call finishes. One question though around the size of the workforce and wondering where the 4,000 comes from. Our understanding is that is the Council workforce but not the total sector workforce – i.e. it excludes Watercare, Wellington Water and providers such as Fulton Hogan etc? Happy to be corrected on that.

Cheers

Alan

From: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>

Sent: Tuesday, 6 April 2021 1:01 PM

To: Tan, John 9(2)(a)@deloitte.co.nz; 9(2)(a)
<9(2)(a)@deloitte.co.nz>; Dent, Alan 9(2)(a)@deloitte.co.nz; 9(2)(a)
9(2)(a)@deloitte.co.nz

Subject: [EXT] RE: Draft Economic Impact Analysis

Hi John

In advance of our catch up this afternoon, below are some preliminary observations on the modelling results. Not expecting that you'll have answers to all necessarily but sending now so we can discuss initial thoughts and agree next steps. For one, Nick and I would like to have a session tomorrow to go over the results in more detail – at the moment we are both free after 2pm so would be good to get something in the diary before it fills up.

- The aggregate numbers at an NZ-inc level look reasonable although can I check are these just the direct and indirect impacts (i.e. excluding induced)? It might be worth reporting the total impacts as well as the breakdown in the final report
- My main concern relates to the workforce numbers, which are confusing, and don't seem plausible given the experience of reforms overseas. Neither does it seem to tally with the current size of the **water sector workforce of around 4,000**. We will need to unpick this especially as it relates to the insights from the industry study. You'll know better than me given its your model but it strikes me this might be driven by one or a combination of:
 - the way the model substitutes capital for labour as a result of the investment shock
 - what the model assumes about population growth, productivity and the expansion of labour supply
 - the way the water sector is defined
- To what extent has the investment been broken down by the nature of spend associated with enhancement and renewals (i.e. as a proxy for above/below ground infrastructure)? This will impact particularly on the regional impacts as noted in the industry study but also on the distributional impacts on different sectors, given differences in the types of inputs required for above and below ground expenditure
- The discount rate applied seems quite high and at the very least there should be a sensitivity modelled with a rate closer to the social rate of time preference of ~ 3.5%
- It would be good to understand what's driving the regional differences, for example Gisborne experiencing a 10% increase in GDP on slide 24. Appreciate this might be something you were already intending to delve into further

- The impacts on “other services” is significant and would be worth breaking this down further. As above, appreciate this might be another area that your team was planning to interrogate further.
- On the regional maps it might be more intuitive to show the % change relative to each region’s previous position rather than absolute numbers or % as a proportion of the national figure. Although for the employment figures the % change figures don’t look quite right
- There are some drafting notes / language issues that we can pick up through more detailed comments – happy to send these now in relation to the preliminary draft or if you’d prefer for us to do that through the next iteration?

On the industry study, I have some further comments on this too, particularly in terms of drawing from overseas experience and linking the insights back to the modelling. But I will share this internally first and send you a consolidated set of feedback, probably before the end of the week.

Cheers

Sam

Sam Ponniah | Senior Consultant

MartinJenkins

M 9(2)(a) T 9(2)(a)

From: Tan, John 9(2)(a) @deloitte.co.nz>

Sent: Thursday, 1 April 2021 5:41 PM

To: Sam Ponniah <9(2)(a) @martinjenkins.co.nz>; 9(2)(a) <9(2)(a) @deloitte.co.nz>; Dent, Alan 9(2)(a) @deloitte.co.nz>; 9(2)(a) 9(2)(a) @deloitte.co.nz>

Subject: Draft Economic Impact Analysis

Hi Sam

Attached is a ‘preliminary draft’ of our economic impact analysis. Given the timeframes that we have received the data, the modelling has only come together over the past day or so, so is subject to internal review and may change. We haven’t had a chance to look at the format of the updated RIA – but will do this next week

Please let me know when suits you for a chat next week and we can take you through the key points

Apologies that this is a bit rough – but the team have been working pretty hard to get this out to you today as the data have become available to us

Kind Regards

John

From: Sam Ponniah <9(2)(a) @martinjenkins.co.nz>

Sent: Thursday, 1 April 2021 4:28 PM

To: Tan, John 9(2)(a) @deloitte.co.nz>; Van Der Merwe, Liza 9(2)(a) @deloitte.co.nz>; Dent, Alan 9(2)(a) @deloitte.co.nz>; Allan, Liana 9(2)(a) @deloitte.co.nz>

Subject: [EXT] Updated RIA documents

Hi all,

Attached are updated drafts of the RIA documents so you can see how this is shaping up. The main RIA document has been tidied up considerably so the narrative should be clearer but this remains very much WIP.

Just checking that you’re still planning to send us something today to take a look at over the Easter break?

Cheers

Sam

Sam Ponniah | Senior Consultant

MartinJenkins

M 9(2)(a) T 9(2)(a)



  [Level 16, AIG Building, 41 Shortland St. Auckland](#)
[Level 1, City Chambers, Cnr Johnston & Featherston Sts. Wellington](#)

PLEASE NOTE: The information contained in this email message and any attached files may be confidential and subject to privilege. The views expressed may not necessarily be the official view of Martin, Jenkins and Associates Limited. If you are not the intended recipient, you are notified that any use, disclosure or copying of this email is unauthorised. If you have received this email in error, please notify us immediately by reply email and delete the original. Thank you.

Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be subject to legal privilege or copyright. If you have received this email in error, please advise the sender immediately and destroy the message and any attachments. If you are not the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest terms of engagement which we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures, no assurance or guarantee is implied or should be construed that this email message or its attachments are free from computer viruses. Deloitte assumes no responsibility for any such virus or any effects of such a virus on the recipient's systems or data.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai, Singapore, Sydney, Taipei and Tokyo.

Released Under the Official Information Act 1982

From: 9(2)(a)
To: [Sam Ponniah](#); 9(2)(a) [Tan, John](#); 9(2)(a)
Cc: 9(2)(a) [@dia.govt.nz](#); [Dent, Alan](#)
Subject: RE:Economic impact assessment - language / terminology changes
Date: Wednesday, 7 April 2021 9:51:09 pm
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)

Thanks Sam.

These comments all look relatively straightforward – we'll incorporate these into the draft report.

I'd note we probably don't need to document historic expenditure (page 8), as the go forward investment is the focus here.

Cheers

9(2)(a)

From: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>
Sent: Wednesday, 7 April 2021 5:07 PM
To: 9(2)(a) 9(2)(a)@deloitte.co.nz>; Tan, John 9(2)(a)@deloitte.co.nz>; 9(2)(a) 9(2)(a)@deloitte.com.au>; 9(2)(a) 9(2)(a)@deloitte.co.nz>
Cc: 9(2)(a)@dia.govt.nz; Dent, Alan 9(2)(a)@deloitte.co.nz>
Subject: [EXT] Economic impact assessment - language / terminology changes

Hi all

As promised, attached are the terminology changes to be reflected in the final report. Have included some clarifying comments as well in terms of setting out the approach to determining incremental investment.

Cheers

Sam

Sam Ponniah | Senior Consultant

MartinJenkins

M 9(2)(a) T 9(2)(a)



		Level 16, AIG Building, 41 Shortland St. Auckland Level 1, City Chambers, Cnr Johnston & Featherston Sts. Wellington
--	--	---

PLEASE NOTE: The information contained in this email message and any attached files may be confidential and subject to privilege. The views expressed may not necessarily be the official view of Martin, Jenkins and Associates Limited. If you are not the intended recipient, you are notified that any use, disclosure or copying of this email is unauthorised. If you have received this email in error, please notify us immediately by reply email and delete the original. Thank you.

Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be subject to legal privilege or copyright. If you have received this email in error, please advise the sender immediately and destroy the message and any attachments. If you are not the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest terms of engagement which we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures, no assurance or guarantee is implied or should be construed that this email message or its attachments are free from computer viruses. Deloitte assumes no responsibility for any such virus or any effects of such a virus on the recipient's systems

or data.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai, Singapore, Sydney, Taipei and Tokyo.

Released Under the Official Information Act 1982

From: 9(2)(a)
To: Sam Ponniah; 9(2)(a) Tan, John; Dent, Alan
Subject: RE:Deloitte / DIA three waters results discussion - next steps
Date: Thursday, 8 April 2021 9:51:47 pm
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)

Thanks – we'll refer to these papers and mention the impact a 3.5% rate could have on the main scenarios at a national level. Just confirming we'll focus on the 5% rate only in the rest of the report, for clarity's sake.

Cheers

9(2)(a)

From: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>
Sent: Thursday, 8 April 2021 3:31 PM
To: 9(2)(a) 9(2)(a)@deloitte.co.nz; 9(2)(a) 9(2)(a)@deloitte.com.au; 9(2)(a) 9(2)(a)@deloitte.co.nz; Tan, John 9(2)(a)@deloitte.co.nz; Dent, Alan 9(2)(a)@deloitte.co.nz
Cc: 9(2)(a)@dia.govt.nz
Subject: [EXT] RE: Deloitte / DIA three waters results discussion - next steps

Thanks 9(2)(a)

Yes that paper and [this one](#) which discusses different approaches based on the type of project/activity being assessed – the main point being to reflect the inter-generational nature of benefits that are unlikely to be reflected in a market-based SOC.

Cheers

Sam

Sam Ponniah | Senior Consultant

MartinJenkins

M 9(2)(a) T 9(2)(a)

From: 9(2)(a) 9(2)(a)@deloitte.co.nz
Sent: Thursday, 8 April 2021 2:23 PM
To: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>; 9(2)(a) 9(2)(a)@deloitte.com.au; 9(2)(a) 9(2)(a)@deloitte.co.nz; Tan, John 9(2)(a)@deloitte.co.nz; Dent, Alan 9(2)(a)@deloitte.co.nz
Cc: 9(2)(a)@dia.govt.nz
Subject: RE:Deloitte / DIA three waters results discussion - next steps

Hi Sam

We'll run a range on the discount rate of 3.5% to 5%. Are you happy for us to use [this](#) Treasury paper to support a 3.5% rate, or could you please point us in the direction of another NZ source? We can look at addressing your second point through the narrative, and thanks for sending the WICS report.

Cheers

9(2)(a)

From: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>
Sent: Thursday, 8 April 2021 12:41 PM
To: 9(2)(a) 9(2)(a)@deloitte.co.nz; 9(2)(a) <9(2)(a)@deloitte.com.au>; 9(2)(a) 9(2)(a) <9(2)(a)@deloitte.co.nz>; Tan, John <9(2)(a)@deloitte.co.nz>; Dent, Alan 9(2)(a)@deloitte.co.nz
Cc: 9(2)(a)@dia.govt.nz

Subject: [EXT] RE: Deloitte / DIA three waters results discussion - next steps

Thanks^{9(2)(a)}

On the discount rate, we do think a social rate of time preference is more appropriate for assessing the net benefits or welfare improvements associated with a reform programme – given we are not evaluating a specific project or water investment. We're comfortable with you modelling 5% if you still believe this is appropriate but we would expect a sensitivity using a lower discount rate and some comment on why a social rate of time preference may be more appropriate given the intergenerational nature of benefits.

On the direct/indirect breakdown this was more about understanding how the water industry is defined in terms of which industries are directly versus indirectly associated with the water sector.

On your question about the different impacts of above and below ground investment, the attached draft report from WICS has some information on slide 40 about the Scottish experience.

Cheers

Sam

Sam Ponniah | Senior Consultant

MartinJenkins

M ^{9(2)(a)} T ^{9(2)(a)}

From: ^{9(2)(a)} ^{9(2)(a)} <[9\(2\)\(a\)@deloitte.co.nz](mailto:9(2)(a)@deloitte.co.nz)>

Sent: Wednesday, 7 April 2021 10:12 PM

To: Sam Ponniah <^{9(2)(a)}<[9\(2\)\(a\)@martinjenkins.co.nz](mailto:9(2)(a)@martinjenkins.co.nz)>; ^{9(2)(a)}<[9\(2\)\(a\)@deloitte.com.au](mailto:9(2)(a)@deloitte.com.au)>; ^{9(2)(a)}<[9\(2\)\(a\)@deloitte.co.nz](mailto:9(2)(a)@deloitte.co.nz)>; Tan, John ^{9(2)(a)}<[9\(2\)\(a\)@deloitte.co.nz](mailto:9(2)(a)@deloitte.co.nz)>; Dent, Alan ^{9(2)(a)}<[9\(2\)\(a\)@deloitte.co.nz](mailto:9(2)(a)@deloitte.co.nz)>

Cc: ^{9(2)(a)}<[9\(2\)\(a\)@dia.govt.nz](mailto:9(2)(a)@dia.govt.nz)>

Subject: RE:Deloitte / DIA three waters results discussion - next steps

Thanks for pulling this together Sam. I've added some comments in below to confirm our understanding of where we landed.

Cheers

^{9(2)(a)}

From: Sam Ponniah <^{9(2)(a)}<[9\(2\)\(a\)@martinjenkins.co.nz](mailto:9(2)(a)@martinjenkins.co.nz)>

Sent: Wednesday, 7 April 2021 4:29 PM

To: ^{9(2)(a)}<[9\(2\)\(a\)@deloitte.com.au](mailto:9(2)(a)@deloitte.com.au)>; ^{9(2)(a)}<[9\(2\)\(a\)@deloitte.co.nz](mailto:9(2)(a)@deloitte.co.nz)>; Tan, John ^{9(2)(a)}<[9\(2\)\(a\)@deloitte.co.nz](mailto:9(2)(a)@deloitte.co.nz)>; Dent, Alan ^{9(2)(a)}<[9\(2\)\(a\)@deloitte.co.nz](mailto:9(2)(a)@deloitte.co.nz)>; ^{9(2)(a)}<[9\(2\)\(a\)@deloitte.co.nz](mailto:9(2)(a)@deloitte.co.nz)>; ^{9(2)(a)}<[9\(2\)\(a\)@deloitte.co.nz](mailto:9(2)(a)@deloitte.co.nz)>

Cc: ^{9(2)(a)}<[9\(2\)\(a\)@dia.govt.nz](mailto:9(2)(a)@dia.govt.nz)>

Subject: [EXT] Deloitte / DIA three waters results discussion - next steps

Hi all,

Thanks for your time just now.

Below are the next steps that I have noted following our discussion of the initial modelling results. Be good to confirm that this is your understanding of where we got to as well.

1. **Definition of water sector.** You were going to take another look at how the water sector is defined with a view to aligning with the rough 4,000 figure in the Water NZ NPR (noting this is not a precise figure but provides an order of magnitude estimate of direct employment). ~~You were also going to provide us with a breakdown of the direct and indirect employment associated with the water sector.~~ **This breakdown relates more to IO modelling, which isn't our focus here.**
2. **Capital substitution for labour.** You were going to look at adjusting the capital substitution factor in the modelling to reflect both the labour-intensive nature of the sector and the fact that much of the investment represents a catch-up on historic underinvestment and to meet future

health and environmental standards as opposed to improving the efficiency of capital stock and labour (albeit there will undoubtedly be an element of the latter) **We'll focus on the substitution between capital and labour, and test these assumptions.**

3. **Differential impacts between enhancement and renewals spend.** Look at describing this qualitatively in the report **based on the system transformation scenario** and **identifying explain what** the different nature of the impacts **could be** and local multipliers in relation to each category of spend. **Did WICS share anything additional with you in relation to the region/sector impacts of above vs below ground capex?**
 4. **Labour supply.** You were going to share the **labour supply** assumptions with us, including around **population growth rates, migration, real wage growth** and the induced migration and labour supply changes the model makes
 5. **Sensitivity on the labour supply constraint.** Look at running a sensitivity on the labour supply constraint – the exact nature of the assumptions is to be determined but will be lower than the extreme scenario presented in the report
 6. **Presentation of regional impacts.** Look at how these are presented, focusing on deviations at a regional level rather than as a proportion of the national figures.
 7. **Terminology.** I will send through annotated comments in the preliminary draft with suggested terminology changes to align with how we are describing the policy proposals
- We didn't cover the following which we had agreed yesterday but for completeness:
8. **Discount rate.** Model a rate closer to the Treasury's social rate of time preference of ~ 3.5%. **We intend to use Treasury's 5% real discount rate. This is the default rate, which is also the same as the recommended rate for water sector projects.**
 9. **Understanding drivers of regional differences.** Narrative in the report will provide more insight into the factors that either enable or constrain the economic impacts i.e. based on the underlying characteristics of regions that see a greater benefit / disbenefit
 10. **The impacts on "other services".** Break this down further in the report to provide a better understanding of how the impacts are distributed. **We'll provide qualitative commentary, but at this stage can't disaggregate other services in the modelling itself.**

Alan, I'll send through a final consolidated set of comments on the industry development study on Friday. **Note we'll send updated employment figures on slide 9 of the industry development study.**

Cheers
Sam

Sam Ponniah | Senior Consultant

MartinJenkins

M 9(2)(a) T 9(2)(a)



[Level 16, AIG Building, 41 Shortland St. Auckland](#)
[Level 1, City Chambers, Cnr Johnston & Featherston Sts. Wellington](#)

PLEASE NOTE: The information contained in this email message and any attached files may be confidential and subject to privilege. The views expressed may not necessarily be the official view of Martin, Jenkins and Associates Limited. If you are not the intended recipient, you are notified that any use, disclosure or copying of this email is unauthorised. If you have received this email in error, please notify us immediately by reply email and delete the original. Thank you.

Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be subject to legal privilege or copyright. If you have received this email in error, please advise the sender immediately and destroy the message and any attachments. If you are not the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest terms of engagement which

we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures, no assurance or guarantee is implied or should be construed that this email message or its attachments are free from computer viruses. Deloitte assumes no responsibility for any such virus or any effects of such a virus on the recipient's systems or data.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai, Singapore, Sydney, Taipei and Tokyo.

Released Under the Official Information Act 1982

From: 9(2)(a)
To: Sam Ponniah; 9(2)(a) Tan, John; Dent, Alan
Cc: 9(2)(a) @dia.govt.nz
Subject: RE:Deloitte / DIA three waters results discussion - next steps
Date: Wednesday, 7 April 2021 10:12:32 pm
Attachments: [image001.png](#)
[image002.png](#)
[image003.png](#)
[image004.png](#)
[image005.png](#)

Thanks for pulling this together Sam. I've added some comments in below to confirm our understanding of where we landed.

Cheers

9(2)(a)

From: Sam Ponniah <9(2)(a)@martinjenkins.co.nz>
Sent: Wednesday, 7 April 2021 4:29 PM
To: 9(2)(a) 9(2)(a) @deloitte.com.au; 9(2)(a) <9(2)(a)@deloitte.co.nz>; Tan, John 9(2)(a) @deloitte.co.nz; Dent, Alan 9(2)(a) @deloitte.co.nz; 9(2)(a) 9(2)(a) @deloitte.co.nz
Cc: 9(2)(a) @dia.govt.nz
Subject: [EXT] Deloitte / DIA three waters results discussion - next steps

Hi all,

Thanks for your time just now.

Below are the next steps that I have noted following our discussion of the initial modelling results. Be good to confirm that this is your understanding of where we got to as well.

1. **Definition of water sector.** You were going to take another look at how the water sector is defined with a view to aligning with the rough 4,000 figure in the Water NZ NPR (noting this is not a precise figure but provides an order of magnitude estimate of direct employment). ~~You were also going to provide us with a breakdown of the direct and indirect employment associated with the water sector.~~ **This breakdown relates more to IO modelling, which isn't our focus here.**
2. **Capital substitution for labour.** You were going to look at adjusting the capital substitution factor in the modelling to reflect both the labour-intensive nature of the sector and the fact that much of the investment represents a catch-up on historic underinvestment and to meet future health and environmental standards as opposed to improving the efficiency of capital stock and labour (albeit there will undoubtedly be an element of the latter) **We'll focus on the substitution between capital and labour, and test these assumptions.**
3. **Differential impacts between enhancement and renewals spend.** Look at describing this qualitatively in the report **based on the system transformation scenario** and **identifying explain what the different nature of the impacts could be** and local multipliers in relation to each category of spend. **Did WICS share anything additional with you in relation to the region/sector impacts of above vs below ground capex?**
4. **Labour supply.** You were going to share the ~~labour supply~~ assumptions with us, including around ~~population growth rates, migration, real wage growth~~ and the induced migration and labour supply changes the model makes
5. **Sensitivity on the labour supply constraint.** Look at running a sensitivity on the labour supply constraint – the exact nature of the assumptions is to be determined but will be lower than the extreme scenario presented in the report
6. **Presentation of regional impacts.** Look at how these are presented, focusing on deviations at a regional level rather than as a proportion of the national figures.
7. **Terminology.** I will send through annotated comments in the preliminary draft with suggested

terminology changes to align with how we are describing the policy proposals
We didn't cover the following which we had agreed yesterday but for completeness:

8. **Discount rate.** Model a rate closer to the Treasury's social rate of time preference of ~ 3.5%.
We intend to use Treasury's 5% real discount rate. This is the default rate, which is also the same as the recommended rate for water sector projects.
9. **Understanding drivers of regional differences.** Narrative in the report will provide more insight into the factors that either enable or constrain the economic impacts i.e. based on the underlying characteristics of regions that see a greater benefit / disbenefit
10. **The impacts on "other services".** Break this down further in the report to provide a better understanding of how the impacts are distributed. **We'll provide qualitative commentary, but at this stage can't disaggregate other services in the modelling itself.**

Alan, I'll send through a final consolidated set of comments on the industry development study on Friday. **Note we'll send updated employment figures on slide 9 of the industry development study.**

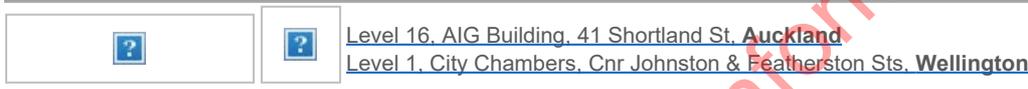
Cheers

Sam

Sam Ponniah | Senior Consultant

MartinJenkins

M 9(2)(a) T 9(2)(a)



PLEASE NOTE: The information contained in this email message and any attached files may be confidential and subject to privilege. The views expressed may not necessarily be the official view of Martin, Jenkins and Associates Limited. If you are not the intended recipient, you are notified that any use, disclosure or copying of this email is unauthorised. If you have received this email in error, please notify us immediately by reply email and delete the original. Thank you.

Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be subject to legal privilege or copyright. If you have received this email in error, please advise the sender immediately and destroy the message and any attachments. If you are not the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest terms of engagement which we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures, no assurance or guarantee is implied or should be construed that this email message or its attachments are free from computer viruses. Deloitte assumes no responsibility for any such virus or any effects of such a virus on the recipient's systems or data.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai, Singapore, Sydney, Taipei and Tokyo.

From: [Dent Alan](#)
To: [Sam Ponniah](#)
Cc: [9\(2\)\(a\) @dia.govt.nz](#); [Tan John](#)
Subject: RE: Feedback on the industry study
Date: Friday, 9 April 2021 6:12:54 pm
Attachments: [ATT00001.png](#)
[ATT00002.png](#)
[ATT00003.png](#)
[ATT00004.png](#)
[ATT00005.png](#)

Thanks Sam

I'll review over the weekend and fire through any comments by Monday morning and then set up a call.

Cheers

Alan

Sent from my iPad

On 9/04/2021, at 5:45 PM, Sam Ponniah <[9\(2\)\(a\) @martinjenkins.co.nz](#)> wrote:

Hi Alan

Thanks for providing us with the draft of the industry study.

As noted, I've shared this internally and with a selected group of stakeholders (Taituarā, LGNZ and Treasury) and below is the consolidated set of feedback. Also attached are our embedded comments in the report. Happy to discuss next steps once you've had a chance to consider the feedback. I've also attached WICS efficiency slides, which document the efficiency gains in Scotland and how these have been achieved.

1. **More extensive use of the readily available literature.** As a general comment, we think there are some broader trends and insights from the readily available literature that could be reflected in the study, for example:
 - o Labour shortages in the sector internationally and what governments are doing about it:
 - <https://www.epa.gov/sustainable-water-infrastructure/water-sector-workforce>
 - <https://www.brookings.edu/wp-content/uploads/2018/06/Brookings-Metro-Renewing-the-Water-Workforce-June-2018.pdf>
 - https://www.waternz.org.nz/Attachment?Action=Download&Attachment_id=973
 - <https://iwa-network.org/addressing-talent-shortages-in-the-water-sector-is-pivotal-for-utility-operational-reliability/>
 - https://www.epa.gov/sites/production/files/2020-11/documents/americas_water_sector_workforce_initiative_final.pdf
 - o Broader trends impacting the sector / workforce globally
 - https://www.wsaa.asn.au/sites/default/files/publication/download/WSAA%20Workforce%20Skills%20of%20the%20Future_0.pdf
 - <https://www.idrica.com/blog/trends-for-the-water-industry-in-2021/>
 - https://www2.deloitte.com/content/dam/Deloitte/pl/Documents/Reports/pl_Water-Tight-2-0-The-top-trends-in-the-global-water-sector.pdf
 - o Water NZ efforts to develop a workforce strategy
 - https://www.waternz.org.nz/Category?Action=View&Category_id=1060
 - o Digital transformation - mentioned in the above articles but also specific examples here:
 - <https://www.scottishwater.co.uk/about-us/news-and-views/220719-blog-john-cairney-digital-transformation>
 - <https://www.smart-energy.com/industry-sectors/iot/scottish-water-atos-capgemini/>
 - <https://hesolujournal.com/2020/05/14/future-water-digital/>
 - o Customer focus
 - https://www.waternz.org.nz/Attachment?Action=Download&Attachment_id=2621

Would be good to reflect these in the final report to provide a better understanding of how the sector has changed, is changing or is likely to change, and what implications this has in thinking about implications for the supply chain.

2. **The risk of loss of skilled labour** to Australia was questioned (see embedded comments in the report but is it worth a wider look at the differences between the water sector in Australia and NZ e.g. why is the labour market more highly valued? This could extend to better understanding the maturity and effect of regulation within their sector)
3. **Workforce transition risks and how these should be mitigated (linked to the above point about looking internationally).** On the presentation relating to workforce, there seems to be a major gap in terms of the training and development pathway – there are (still) obstacles in NZ, and bodies such as Water NZ has previously submitted on the current system. Slides 9 & 10 don't include contributions to workforce by Training Providers and Training Specifiers within the system. There also appear to be gaps in terms of science staff e.g. labs, monitoring, compliance. In upsizing the sector workforce to the estimated 8,444, these institutions will be critical, as will recruitment and certainty around regulation (especially relating to wastewater and freshwater management regimes). When you interrogate the pathways required for specifying and development of training, undertaking the training, and ongoing CPD/competency assessment it is more likely to take 5-10 years to scale up, rather than the 2-5 stated. The short to medium term timeframe coupled with transition risks appear at face value to have a reasonable chance to catch implementation of reform off-guard and lead to stifling supply, which puts implementation objectives of the reform at risk. This reinforces the need for a workforce strategy to begin as early as possible. Is there more detail from the interviews or the literature on key features or principles for a strong transition pathway? Maybe drawing on the case studies? The language here should be focused on opportunities as much as risk – what are the policy settings and other actions required to support the transition? The studies / articles above provide some useful examples to help.
4. **Innovation.** The section on innovation and productivity provides some useful insights into the drivers of productivity. Would be interested to know if there were more specific views on innovation (e.g. some water distribution companies are considering options to build renewable energy functions into their water systems – given climate goals etc. Reform is likely to enable opportunities for greater innovation within the sector but what are the drivers for this (e.g. scale, clarity of policy, longer-term focus?).
5. **Medium to longer-term implications of COVID.** There was some discussion about short-term implications but is this likely to be material over the longer term?

Cheers
Sam

Sam Ponniah | Senior Consultant

MartinJenkins

M9(2)(a) T9(2)(a)

[<mime-attachment.png>](#) [<mime-attachment.png>](#) [<mime-attachment.png>](#)

[<mime-attachment.png>](#) Level 16, AIG Building, 41 Shortland St, Auckland

[<mime-attachment.png>](#) Level 1, City Chambers, Cnr Johnston & Featherston Sts, Wellington

PLEASE NOTE: The information contained in this email message and any attached files may be confidential and subject to privilege. The views expressed may not necessarily be the official view of Martin, Jenkins and Associates Limited. If you are not the intended recipient, you are notified that any use, disclosure or copying of this email is unauthorised. If you have received this email in error, please notify us immediately by reply email and delete the original. Thank you.

<DIA Three Waters Stakeholder DRAFT Report 22.3.2021 DIA comments.pdf>

<Supporting_Material_2_scope_for_efficiency_010421.pdf>

Disclaimer:

CAUTION: This email message and attachments are confidential to Deloitte and may be subject to legal privilege or copyright. If you have received this email in error, please advise the sender immediately and destroy the message and any attachments. If you are not the intended recipient you are notified that any use, distribution, amendment, copying or any action taken or omitted to be taken in reliance of this message or attachments is strictly prohibited. If you are an existing client, this email is provided in accordance with the latest terms of engagement which we have agreed with you. Email is inherently subject to delay or fault in transmission, interception, alteration and computer viruses. While Deloitte does employ anti-virus measures, no assurance or guarantee is implied or should be construed that this email message or its attachments are free from computer viruses. Deloitte assumes no responsibility for any such virus or any effects of such a virus on the recipient's systems or data.

Deloitte refers to one or more of Deloitte Touche Tohmatsu Limited ("DTTL"), its global network of member firms, and their related entities. DTTL (also referred to as "Deloitte Global") and each of its member firms and their affiliated entities are legally separate and independent entities. DTTL does not provide services to clients. Please see www.deloitte.com/about to learn more. Deloitte Asia Pacific Limited is a company limited by guarantee and a member firm of DTTL. Members of Deloitte Asia Pacific Limited and their related entities, each of which are separate and independent legal entities, provide services from more than 100 cities across the region, including Auckland, Bangkok, Beijing, Hanoi, Hong Kong, Jakarta, Kuala Lumpur, Manila, Melbourne, Osaka, Shanghai, Singapore, Sydney, Taipei and Tokyo.

Released Under the Official Information Act 1982