From:	Nigel Paragreen <nparagreen@fishandgame.org.nz></nparagreen@fishandgame.org.nz>
Sent:	Tuesday, 24 May 2022 12:14 p.m.
То:	Natasha Pritchard; Tony Jack; Will Nicolson
Cc:	Jayde Couper; Helen maisuria
Subject:	RE: Onslow agreement on data to use at hearing
Attachments:	220519_Onslow_Level_analysis_agreed_hearing_data.xlsx

Kia ora folks,

Thanks also Tony for the corrections to the dataset. As promised, I've used this dataset to recreate the statistical exercise in the F&G submission. I've attached a spreadsheet which also contains my working. I've not made notes within that spreadsheet as I thought the calculations could be easily traced through the sheets. Happy to have a call to provide a walk through, if that'd be useful.

Cheers,

Nigel

From: Natasha Pritchard <<u>natasha.pritchard@orc.govt.nz</u>>
Sent: Wednesday, 4 May 2022 3:39 pm
To: Tony Jack <<u>tony.jack@pioneerenergy.co.nz</u>>; Will Nicolson <<u>will@landpro.co.nz</u>>
Cc: Jayde Couper <<u>jcouper@fishandgame.org.nz</u>>; Helen maisuria <<u>rajuhelen@hotmail.com</u>>; Nigel
Paragreen <<u>nparagreen@fishandgame.org.nz</u>>
Subject: RE: Onslow agreement on data to use at hearing

Hi Tony,

Thank you for that update and correction.

This will be the data set that we will all now reference and refer to for the hearing.

Much appreciated, Natasha



Natasha Pritchard PRINCIPAL CONSENTS PLANNER

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From: Tony Jack <tony.jack@pioneerenergy.co.nz>
Sent: Wednesday, 4 May 2022 11:53 a.m.
To: Will Nicolson <will@landpro.co.nz>; Natasha Pritchard <<u>natasha.pritchard@orc.govt.nz</u>>
Cc: Jayde Couper <<u>jcouper@fishandgame.org.nz</u>>; Helen maisuria <<u>rajuhelen@hotmail.com</u>>; Nigel
Paragreen <<u>nparagreen@fishandgame.org.nz</u>>
Subject: RE: Onslow agreement on data to use at hearing

Natasha,

That data set was daily averages direct from NIWA and I missed the gaps & anomalies.

Attached is a corrected dataset. I have filled any gaps from 2010 with daily average levels direct from our electronic record. I have also corrected the data from 1 March 2015 to 30 July 2016 as the NIWA data over that period appeared to be a straight line interpolation.

I have not filled any gaps prior to 2010 as the record was manual and there are not many significant gaps prior to the dam raising, a gap in Jan 1985 – Jan 1986 being the exception.

Regards

Tony Jack Development Engineer

11 Ellis Street P.O Box 275 Alexandra 9320, New Zealand M: 027 733 2555 P: 03 440 0022 W: www.pioneerenergy.co.nz



From: Will Nicolson <<u>will@landpro.co.nz</u>>
Sent: Wednesday, 4 May 2022 11:02 AM
To: Natasha Pritchard <<u>natasha.pritchard@orc.govt.nz</u>>; Tony Jack <<u>tony.jack@pioneerenergy.co.nz</u>>
Cc: Jayde Couper <<u>jcouper@fishandgame.org.nz</u>>; Helen maisuria <<u>rajuhelen@hotmail.com</u>>; Nigel
Paragreen <<u>nparagreen@fishandgame.org.nz</u>>
Subject: RE: Onslow agreement on data to use at hearing

Hi Natasha,

I've included Tony in this thread in an attempt to cut out the middleman (me!). Tony – any chance you can assist with Natasha's query below? With regards to the lake level data, attached.

Thanks, Will

From: Natasha Pritchard <<u>natasha.pritchard@orc.govt.nz</u>> Sent: Wednesday, 4 May 2022 10:40 AM

To: Will Nicolson <<u>will@landpro.co.nz</u>>; Nigel Paragreen <<u>nparagreen@fishandgame.org.nz</u>>;
 Cc: Jayde Couper <<u>icouper@fishandgame.org.nz</u>>; Helen maisuria <<u>rajuhelen@hotmail.com</u>>
 Subject: RE: Onslow agreement on data to use at hearing

Hi Will,

Thank you for sending this through.

I have just noted that the data is showing that the lake level was greater than 7 metres below crest between 24 March 2018 and 9 April 2018. The data around these dates does look a little off and doesn't align with the information on lake levels in the model provided previously. Is Tony able to check this and provide us with a corrected copy, if appropriate.

Much appreciated, Natasha

From: Will Nicolson <<u>will@landpro.co.nz</u>>
Sent: Tuesday, 26 April 2022 5:57 p.m.
To: Nigel Paragreen <<u>nparagreen@fishandgame.org.nz</u>>
Cc: Jayde Couper <<u>icouper@fishandgame.org.nz</u>>; Helen maisuria <<u>rajuhelen@hotmail.com</u>>; Natasha
Pritchard <<u>natasha.pritchard@orc.govt.nz</u>>
Subject: RE: Onslow agreement on data to use at hearing

Hi Nigel,

Lake level daily average attached, provided by Tony.

Cheers,

Will

From: Nigel Paragreen <<u>nparagreen@fishandgame.org.nz</u>> Sent: Tuesday, 26 April 2022 9:17 AM To: Will Nicolson <<u>will@landpro.co.nz</u>> **Cc:** Jayde Couper <<u>icouper@fishandgame.org.nz</u>>; Helen maisuria <<u>rajuhelen@hotmail.com</u>>; Natasha Pritchard <<u>natasha.pritchard@orc.govt.nz</u>> **Subject:** RE: Onslow agreement on data to use at hearing

Thanks Will, I appreciate it.

Cheers,

Nigel

From: Will Nicolson <<u>will@landpro.co.nz</u>>
Sent: Tuesday, 26 April 2022 9:14 am
To: Nigel Paragreen <<u>nparagreen@fishandgame.org.nz</u>>
Cc: Jayde Couper <<u>icouper@fishandgame.org.nz</u>>; Helen maisuria <<u>rajuhelen@hotmail.com</u>>; Natasha
Pritchard <<u>natasha.pritchard@orc.govt.nz</u>>
Subject: RE: Onslow agreement on data to use at hearing

Morning Nigel,

Tony has agreed to share the lake level data, and will prepare it and disseminate when he gets the chance.

We will need to go back to the institution that provided the data for the modelled scenarios to see whether they are ok with sharing that. Will come back to you once we know more.

Regards, Will

Will Nicolson

Senior Planner/Scientist



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From: Nigel Paragreen <<u>nparagreen@fishandgame.org.nz</u>>
Sent: Thursday, 21 April 2022 8:11 AM
To: Will Nicolson <<u>will@landpro.co.nz</u>>; Natasha Pritchard <<u>natasha.pritchard@orc.govt.nz</u>>
Cc: Jayde Couper <<u>icouper@fishandgame.org.nz</u>>; Helen maisuria <<u>rajuhelen@hotmail.com</u>>
Subject: RE: Onslow agreement on data to use at hearing

Thanks for that Will,

That sounds like a good plan. Hopefully, Tony is agreeable to the idea.

The other data set that I've been thinking about a lot is that which underpins the modelled lake level graph for max consent conditions and max consent conditions + variation that were provided the other week. It could be useful down the track to have a chat about the relevance of that modelling, as it clearly has little relevance to the real world. If they are thought to be relevant, then it'd be useful to find a way share the data and/or to make the presentation more user friendly for the parties and decision maker. I see a fundamental issue if one party were to rely on a dataset at hearing that the decision maker and other parties aren't able to interrogate.

Cheers,

Nigel

From: Will Nicolson <<u>will@landpro.co.nz</u>>
Sent: Wednesday, 20 April 2022 9:17 am
To: Nigel Paragreen <<u>nparagreen@fishandgame.org.nz</u>>; Natasha Pritchard
<<u>natasha.pritchard@orc.govt.nz</u>>
Cc: Jayde Couper <<u>icouper@fishandgame.org.nz</u>>; Helen maisuria <<u>rajuhelen@hotmail.com</u>>
Subject: RE: Onslow agreement on data to use at hearing

Morning Nigel,

That seems like a reasonable approach. I'll go back to Tony to make sure he's ok with providing the latest lake level data, and ask him to send it through when he can.

Other than the pile of documents that have been provided to council alongside the application over the past ~4 years, was there anything else you had in mind?

Cheers, Will

Will Nicolson

Senior Planner/Scientist



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From: Nigel Paragreen <<u>nparagreen@fishandgame.org.nz</u>>
Sent: Tuesday, 19 April 2022 10:37 AM
To: Will Nicolson <<u>will@landpro.co.nz</u>>; Natasha Pritchard <<u>natasha.pritchard@orc.govt.nz</u>>
Cc: Jayde Couper <<u>icouper@fishandgame.org.nz</u>>; Helen maisuria <<u>rajuhelen@hotmail.com</u>>
Subject: Onslow agreement on data to use at hearing

Kia ora Will & Natasha,

I thought I'd touch base to get your thoughts. With the Onslow variation barrelling off to a hearing I think it's useful to have a shared set of data that the parties can work from. It'll create confusion at the hearing if we're all working from different data sets. Avoiding that confusion and enabling a smooth hearing is in the benefit of all parties.

I'm proposing that we agree on a common set of essential data that can be used by all parties at the hearing. What do you two think of that approach conceptually?

If we were to agree on this approach, my feeling is that it's best to start with lake level data. Will, I assume that of the parties, PEL will be the only one to have up to date lake level data. F&G has records up to 2018. Acknowledging the benefit to all parties of avoiding confusion at hearing, how does PEL feel about sharing an up to date lake level dataset?

Cheers,

Nigel Paragreen | Environmental Officer Otago Fish and Game Council PO Box 76, Dunedin 9054 Cnr Hanover and Harrow Street, Dunedin

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