

[Redacted]

From: Otago Regional Council <notifications@engagementhq.com>
Sent: Thursday, 16 April 2020 2:58 pm
To: [Redacted]
Subject: Anonymous User completed Submission Form – Proposed Water Permits Plan Change (Plan Change 7) to the Regional Plan: Water

Anonymous User just submitted the survey 'Submission Form – Proposed Water Permits Plan Change (Plan Change 7) to the Regional Plan: Water' with the responses below.

Full name of submitter

Tony Enright

Name of organisation (if applicable)

Southern Lakes Holdings Ltd (Dunstan Burn Station)

Email

[Redacted]

Postal Address (or alternative method of contact)

[Redacted]

Phone number

[Redacted]

Do you wish to be heard in support of your submission?

(Being 'heard' means speaking at a hearing)

Yes

If others have made a similar submission, would you consider presenting a joint case with them at a hearing?

No

Could you gain an advantage in trade competition from this submission?

No

Are you directly affected by an effect of the plan change that:

- a) adversely affects the environment; and
- b) does not relate to trade competition or the effects of trade competition

I am

State what your submission relates to and if you support, oppose, or want it amended:

(e.g. support rule 'x', or amend policy 'y')

As described in more detail within the attached submission document, Dunstan Burn Station supports in principle with the amendments proposed, with further transparency into specific rules mention by Richard Saunders and available for due consideration before the submission date, with release of additional statements that make clear the effect of interim limits upon the final Land and Water Regional Plan or the Federal Government's legislation on freshwater management, and with consideration for High Country operations where national infrastructures are lacking support for the measurement levels demanded.

State what decision you want the Otago Regional Council to make:

(e.g. amend policy 'y' to say....)

These are provided in a detailed document attached to this submission. Request: a. immediate amendments to Plan Change 7 section 10A.4 in relation to the calculation of limits imposed on interim permits issued (amendments highlighted in the attached submission); b. immediate release of, or access to, specific rules associated with “for activities that do not have five years of data, or that do not meet the plan criteria for a short-term consent” as highlighted in the email notice of 18 March by ORC Richard Saunders; c. that submissions remain open until these rules are released and reasonable time for their consideration and final submission is available; d. immediate release of, or access to, additional statements that make transparent the effects of operating under these interim policies as they will have on longer term permit applications when federal freshwater management legislation is finally released; and e. policy consideration be given to high country operations where national infrastructures are not available to accommodate the level of measurement required.

Give reasons for the decision you want made:

(e.g. I want policy 'y' changed because...)

These are provided in detail within the attached submission. We require these consideration in order to: - secure the efficiency of, and investments into, existing irrigation infrastructure; - provide security for our farming operations with policy changes which could adversely impact farm operations and sustainability; - allow farming operations to coexist with and alongside of the Land and Water Regional Plan.

Please attach any additional information.

Southern Lakes Holdings Ltd (owners of Dunstan Burn Station)
1253 Loop Road, RD1 St Bathans
Oturehua, 9386

Attention: Submissions for Water Permits Plan Change (Plan Change 7)

1. GENERAL COMMENTS

Southern Lakes Holdings Limited (SLH) in principal supports an interim plan change in lieu of the anticipated legislation on freshwater management across New Zealand.

However, we request:

- a. immediate amendments to Plan Change 7 section 10A.4 in relation to the calculation of limits imposed on interim permits issued (amendments highlighted below);
- b. immediate release of, or access to, specific rules associated with “for activities that do not have five years of data, or that do not meet the plan criteria for a short-term consent” as highlighted in the email notice of 18 March by ORC Richard Saunders;
- c. that submissions remain open until these rules are released and reasonable time for their consideration is available;
- d. immediate release of, or access to, additional statements that make transparent the effects of operating under these interim policies as they will have on longer term permit applications when federal freshwater management legislation is finally released; and
- e. consideration be given to high country operations where national infrastructures are not available to accommodate the level of measurement required.

2. AMENDMENT TO SECTION 10A.4 TO ADDRESS SEASONAL INFLUENCES IN IRRIGATION CALCULATIONS

10A.4.4 and Seasonal Averaging

Annual Variation

The calculation of irrigation limits based on “*seasonal averaging*” (or average of actual water taken over multiple years) will not accommodate the plant stress and plant needs under dry conditions across central otago. An average calculation unfortunately skews data towards the wetter seasons.

Seasonal variations over 2012-2017, as recorded close to our own region in central otago at the Lauder base station are shown in the table below[†]. This national database records the number of wet days within the *calculation period* 2012 to 2017 ranging from 55 to 68 days (an increase in 24%), and total annual rainfall varying from 347mm in 2017 to 525mm in 2012 (an increase in 51%). By contrast if seasonal variations are considered over a wider period 2000-2020, then the dry years across this region of central otago exhibit only 49 wet days and 264mm of rain per annum[€].

[†] National Climate Database, NIWA Base Station at Lauder Central Otago, ID 5535

[€] Data available on request

Summer Variation

Seasonal variations can be more critically highlighted by considering rainfall data in Central Otago over key irrigation months such as summer months only, where irrigation is most utilised. Based on the same database summer rainfall (December-February) for the *calculation period* this has varied from 75.8mm over the 2014/2015 summer to 173.2mm in 2017/2018 (an increase in 128%). This seasonal variation would immediately skew the *average calculation* to the wetter summers.

- This is an even higher seasonal variation than indicated by annual data but even more critical in nature as these consider some of the key months for actual irrigation usage.

Climate Variation

Furthermore, 5 years of data from irrigation usage is insufficient to quantify 1) climatic variation historically, or when considering 2) climate change conditions and the concomitant trends in temperature rises that the federal government predicts and is asking New Zealanders to design our future operations for.

10A.4.4 and Irrigation Infrastructure Installed in the period 2012-2017

Generally, irrigation infrastructure has been installed to sustain plants under dry conditions and anything below those maximums now diminishes the efficacy of, and investment into, irrigation infrastructures, pasture developments and fencing. Reasons of efficiency were the drivers for policy changes passed onto water users in Otago, we were required to invest into capital infrastructure of spray irrigation systems at short notice. Any less water would also be considered “inefficient” when benchmarked against the Aqualinc method.

Amendments are required to 10A.4.4 to remove seasonal averaging and return the limits to reflect the irrigation infrastructures installed and accommodate dry seasons (or maximum annual usage).

Irrigators Not fully Commissioned

During the calculation period 2012-2017 irrigation infrastructure under installation and commissioning, or incomplete will not be accounted for in the calculation of limits.

Moreover, it is not economical to commission the irrigation on an entire hill block all at once. There is significant effort, investments over pasture development times required over and above farm operations, there is significant economic limitations and changes to pastures, fencing etc to make the full irrigation area economic.

Amendments are required to 10A.4.4 to allow for irrigation infrastructures that were incomplete or under commissioning during the period 2012-2017.

Stats: Annual				
Station	Year (local)	Stat Code	Stat Value	Day-Mth of Extr
5535	2012	00	524.6	-
5535	2012	01	65.0	-
5535	2013	00	453.0	-
5535	2013	01	65.0	-
5535	2014	00	350.9	-
5535	2014	01	68.0	-
5535	2015	00	357.7	-
5535	2015	01	59.0	-
5535	2016	00	444.0	-
5535	2016	01	68.0	-
5535	2017	00	347.0	-
5535	2017	01	55.0	-

Source: NIWA National Databases 00 Total Rain, 01 Wet Days (>1mm rain), Lauder Base Station, Database ID 5535

Climates in High Country

Although Dunstan Burn Station lies within 25-30 kms of this weather station our own climatic conditions may be typically drier again, and, being predominantly high country affected by central otago weather extremes as such does have a high dependency on the irrigated areas for its sustainability.

10A.4.3

Similar to the above, the seasonal averaging of “maximum monthly usage” over a number of years seasonally skews the results to wetter seasons, not the necessary driest seasons or months.

When examining monthly rainfalls within the years 2012 to 2017 (1 July – 30 June) the minimum monthly rainfall for any year recorded over the more typical irrigation months of October through to April varies from 2.2mm in 2015 to 21.8 in 2016 (Source: NIWA National Databases, Base Station ID 5535).

2015 was a dry season, and all other seasons less so. 2016 was a wetter season.

The maximum monthly irrigation usage in 2016, and all other seasons, will be lower than required for a dry season in 2015 and therefore skew monthly limits.

This calculation is further limited by the arbitrary definition of a calendar month. That definition bears no relationship to Central Otago’s weather seasons. For example, Central Otago’s driest month of the season may be December or January ... or during 31 days of the December and January period.

The lesson here is that irrigation needs (and utilisation) do not follow arbitrary calendar month boundaries.

Amendments are required to 10A.4.3 to remove seasonal averaging and return the limits to reflect the irrigation needs of the dry month long period (or maximum 31 day usage).

Amendments are required to 10A.4.3 (2) to remove the definition of the month as a 'calendar month' and replace this with a 'moving average window of 31 days'.

3. ADDITIONAL POLICY STATEMENTS REQUIRED

10A.4 and Renewal Applications made following Federal Freshwater Management legislation

Our concerns with interim ORC policies restricting the irrigation limits is drawn from a lack of transparency on, or access to, the effects of operating under these interim policies will have on permit renewal applications in the future Land and Water Regional Plan.

For example, the calculation for annual limits in 10A.4.4 accommodate the needs of an average irrigation season. That irrigation season does not represent the plant needs or the design of the irrigation systems for a dry season in central otago. Moreover, the calculation represents only 5 seasons which does not adequately represent climatic variation nor climate change effects.

Now if federal government's new policies mandate calculations based on these interim limits or utilisation while operating under these, they will significantly impact the use of irrigation infrastructures installed today and reduce irrigation efficiency, farm productivity, and farm sustainability's.

At present Plan Change 7 limits are based on water usage over the period 1 July 2012 – 30 June 2017. What period will new legislation be based upon and will it include the period of operation under Plan Change 7 ?

Additional Policy Statements are required that make clear the long term impact of operating under these interim limits imposed by Plan Change 7.

Will Plan Change 7 limits become a "line in the sand" in the future Land & Water Regional Plan ?

4. RELEASE OF SPECIFIC RULES FOR ACTIVITIES WITHOUT 5 YEARS OF DATA

There are valid circumstances affecting the data available over this period:

- Major damages to irrigators from high north westerly winds typical of our region in central otago, rendering the irrigators unavailable throughout parts or all of an "irrigator season" or summer (the maximum periods of irrigation usage);

- Damages to measurement equipment in remote areas due to various events such as flooding, especially on open channel measuring systems, animal damage (mice, rats), rendering data unavailable throughout parts or all of an irrigation season;

Farming operators will have documented evidence of these damages from repair invoices or compliance reports.

Historically mining races and their recorded take points can be, and are, in remote areas of the farm operation and in high country:

- No national infrastructure presently service the communication needs, no mobile data coverage, such as in remote areas in high country;
- Limitations in alternative technologies for data transmission at this period 2012-2017, such as radio-frequency repeater systems and/or their reliability have limited the data collection;
- Economic limitations, such as the high costs for purchase of equipment, installing, operating and maintaining infrastructure (or reliable operation) where high country farm operators are bearing these communication costs solely;

Economic Considerations

In the case of Dunstan Burn Station, changes to policies for water usage were especially costly for complete compliance as take points are distributed across high country in various remote mining points. Collating those water take points for use with new spray irrigation systems takes time and capital investments into infrastructure, high operating costs, and the economic reality is that they cannot be made compliant all at once. Within the period 2012 – 2017 there are periods where farm returns were low, necessarily restricting expenditures and continued use of flood irrigation in some areas.

Modernising irrigation systems to comply with the policies for spray methods requires capital injections that are significant equity to Dunstan Burn Station. Recently SLH provided the High Court with documentary evidence of invoices for expenditure into irrigation in excess of \$1.375m^y. These were just the invoices available from this period where many were still not electronic, and the total costs were higher when considering labour, fuel and equipment. Over this period of time there were injections of capital and no finance was extracted from the farm operations for personal salaries, dividends or any other form of personal incomes. All revenue was reinvested for farm sustainability, including substantial irrigation systems and water usage compliance. This documents the extensive costs of compliance and changes to water use efficiencies.

Importantly, usage and efficiency improvements were demanded over a short timeframe by ORC policy changes yet little security provided over the longer term for those investments into securing water permits.

In the email notification of Plan Change 7 from ORC dated March 18 it was stated that “There is also a rule for activities that do not have five years of data, or that do not meet the plan criteria for a short-term consent”. SLH has not been able to find or access these rules.

Specific Rules are required that make clear the treatment of activities where there is not five years or data available.

Submissions should remain open until these have been available for consideration.

Specific policies should be added with consideration given to high country operations where national infrastructures are not available to accommodate the level of measurement required.

Southern Lakes Holdings Limited appreciates your consideration of this preliminary submission related to Dunstan Burn Station, and looks forward to release of the requested rules, and policies, at the earliest convenience in time for a final submission by 4 May 2020.

Sincerely

Tony Enright

Managing Director
Southern Lakes Holdings Ltd