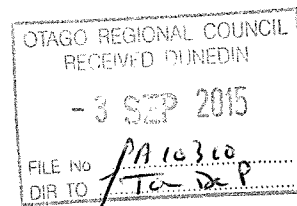


41

Submission Date 03-09-2015 17:53:04
Name of submitter: Mike Lane
Organisation: Wakatipu Anglers Club
Postal address: Street Address: PO Box 81
City: Kingston
Postcode: 9748
E-mail: wellworn@orcon.net.nz



I wish / do not wish to be heard in support of my submission: I do not wish to be heard

If others make a similar submission, I will / will not consider presenting jointly with them at a hearing: I will consider presenting jointly

Signature of submitter, or person authorised to sign on their behalf::

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

My submission relates to spawning habitat of Salmonids in the Lindis river. I oppose the proposed minimum flow of 750 lps and wish to see it amended to at least 1000 litres per second.

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

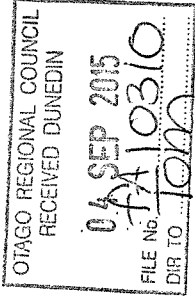
I wish to support an improved summer minimum flow of at least 1000 litres per second.

3. Give reasons for the decision you want made:

A dry river bed is a dead river bed. Without water in our rivers we simply don't have a river.
I regularly fish the Cromwell area and the Lindis stream acts as a major spawning tributary for the catchment.

Without a minimum flow of at least 1000 litres per second fish are unable to survive in this river.

42



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SUBMISSION FORM (Print clearly on both sides)
Proposed Plan Change 5A (Lindis: Integrated water management to the Regional Plan; Water for Otago)
(Form 5, clause 6 of the First Schedule, Resource Management Act 1991)



Name of submitter

J.C.A. Lucas

Organisation
(if applicable)

Postal address
(include postcode)

Sand Hills
550 SH6
RD2
Wanaka 9382

Telephone:

03 443 8857

Email:

amy.lucas@xtra.co.nz

I ~~wish~~ **do not wish** (circle preference) to be heard in support of my submission.

If others make a similar submission, I **will** /will not consider presenting jointly with them at a hearing (circle preference).


Signature:

3-7-15
Date:

(of submitter, or person authorised to sign on their behalf).

Trade competitor's declaration (if applicable)

I could gain through trade competition from a submission but my submission is limited to addressing environmental effects directly affecting my business

Signature: _____

Note that all submissions are made available for public inspection



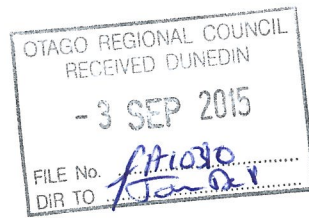
Send to:
Freepost ORC 497
Otago Regional Council
Private Bag 1954
Dunedin 9054

**SUBMISSIONS MUST BE RECEIVED BY 5.00 PM
FRIDAY 4 SEPTEMBER 2015**

Please turn over

1 State what your submission relates to and if you support, oppose or want it amended e.g. Alternative provision y	2 State what decision you want the Orago Regional Council to make e.g. provision y should say	3 Give reasons for the decision you want made. e.g. I want provision y changed because
<p>I oppose the limits river minimum flow of 750L/sec the primary allocation of 1000L/sec, the ways excluding the Tarras area and the back of transition rules to assist the change</p>	<p>That the maximum Hinds River minimum flow be no greater than 500L/sec</p>	<p>Tarras district relies on irrigation to maintain food and fibre production, population and buildings. For those farmers properties with recently upgraded border dyke irrigation and fenceable paddocks the time frame needs to be extended by at least 5 years to take ^{lessen} the burden financially from the younger generations</p>

Please add pages as required



43

for the aspiring angler

Submission on Proposed Plan Change 5A (Lindis: Integrated Water Management)

Submitter Name: Upper Clutha Angling Club
Address: 1 Baker Grove, Wanaka 9305
Email: uppercluthaanglingclub@gmail.com

1. Background

The Upper Clutha Angling Club (the Club) is based in Wanaka and most of its members are anglers who reside in the Upper Clutha area. The Club was originally formed in the late 1940s (then known as the Wanaka Rod and Gun Club) and its primary purposes are the practice, promotion and protection of recreational angling. It has a history of taking an active interest in the protection of the fisheries environment and of water quality which are fundamental to the wellbeing of sports fish (trout and salmon). The Club's membership has hovered around 50 throughout the past decade with the majority of members being fly fishers who fish local rivers and streams (including the Lindis River) and the shores of Lakes Wanaka, Hawea and Dunstan as well as further afield.

2. The Club's General Submission and Basis for Submitting on proposed Plan Change 5A

The Club welcomes the Proposed Plan Change and in supports wholeheartedly the long overdue proposed setting of minimum flows for the Lindis River after more than a century of often unfettered abstraction with little regard for environmental impacts on aquatic ecosystems.

Excessive water abstraction over the past century has seriously compromised a healthy aquatic environment in the Lindis and many Club members have seen just how degraded the river system becomes in the summer. The very low flows that have occurred over extended periods in the summer due to abstraction threaten the very existence of fish populations present in the Lindis River. The Lindis is not considered a particularly good fishing river – and it is highly likely that a major factor influencing this is the degraded state of the lower river reaches in the summer. Restoration of a healthy summer environment in the Lindis through a suitable summer flow regime may result in an improved fishery. Regardless, the Lindis is certainly an important trout spawning stream, contributing fry and fingerlings to Lake Dunstan which is a very important recreational fishery. The populations of sport fishes in our lakes are entirely dependent on continued access of both adult fishes and juveniles to and from the spawning grounds that lie in the inflowing rivers.

Maintaining the migratory pathway between Lake Dunstan and the Lindis River requires adequate river flows so that the fishes can respond to all of the environmental stressors they are exposed to. The Club submits that this means it is essential to maintain sufficient surface flows throughout the entire summer period to ensure fish passage can occur between the Lindis River and Lake Dunstan.

It is the summer period when naturally low flows, high temperatures and predation pressures often mean that fish must be able to move from the river to the lake to survive until the river environment improves again.

3. What the Club supports in Proposed Plan Change 5A

The Club supports all of the following provisions in Proposed Plan Change 5A

- the proposed 1600 l/s minimum winter flow
- the proposed 1000 l/s primary allocation limit
- proposed first and second block supplementary minimum flows in winter-spring and in summer-autumn periods
- proposed supplementary block size and proposed treatment of groundwater as surface water
- proposed maximum allocation limits for specified aquifers in the Bendigo-Tarras basin.

In the Club's submission, these provisions of Proposed Plan Change 5A all assist in improving the river's aquatic environment by better maintaining appropriate minimum flows in the respective seasons which will help in restoring and maintaining a healthy aquatic environment for fishes and other ecosystem components reliant on the Lindis River.

4. What the Club does not support in Proposed Plan Change 5A

- The Club does not support the proposed summer minimum flow of 750 litres per second which it contends is too low.

A minimum flow of 750 l/s is inadequate for a number of reasons. These include that it would not be sufficient to maintain continuous stream flows (and thus fish passage) to and from Lake Dunstan during the critical summer period. Where continuous stream flows are not maintained, drying reaches of the river often result in both adult and juvenile fish mortality due to stranding, heat stress, lack of oxygen and predation. Club members have seen fish mortalities first-hand resulting from low and discontinuous flows below Ardgour Road Bridge.

Overall, the Club contends that there is strong scientific evidence that the environmental consequences of the proposed summer minimum flow of 750 l/s would result in significant adverse environmental effects that are likely to be especially damaging to the maintenance of healthy fish stocks in the Lindis River and would seriously compromise the restoration of a fully functioning aquatic ecosystem. In the Club's view, there is insufficient economic benefit from the additional 250 l/s being available for abstraction under a 750 l/s minimum regime compared to a 1000 l/s minimum to offset this adverse environmental impact.

5. What the Club requests

- That a minimum flow of not less than 1000 l/s be set for the Lindis River during the summer period, measured at Ardgour Road bridge.

The Club understands that research has shown that a minimum flow of 1000 l/s during the summer period would be sufficient to maintain surface flows, and thus a connection and migratory pathway for fishes to and from Lake Dunstan. More importantly, recent research has shown very high levels of fish mortality during low flows when stretches of the river dewater. There will still be periods where fishes are exposed to lower flows, heat stress, low oxygen levels and predation in drought

conditions. However, setting a higher minimum flow of 1000 l/s during the summer period will help to mitigate the full impact of any unavoidable stressors impacting fishes that occur naturally.

From a more general recreational perspective, the Club submits that a higher minimum flow of at least 1000 l/s throughout the summer would substantially improve the recreational amenity of the river for anglers and other users.

- 6. The Club would like to be heard in support of this submission**
- 7. If others make a similar submission the Club will consider presenting jointly with them at the hearing**

Rick Boyd
President
Upper Clutha Angling Club

3 September 2015

fax 03 479 00015

44

VIAGO REGIONAL COUNCIL
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- 4 SEP 2015
FILE NO. SA10310
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COMMISSION FOR THE ENVIRONMENT
Private Mail Centre 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100

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Name of submitter Timburn Ltd

Organisation
(if applicable)

Postal address
(include postcode)
Timburn Station, Tarras, 93 47

Telephone: 03 445 2877

Email: Sam.Lucas@xtra.co.nz

Note that all submissions are made available for public inspection

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FRIDAY 4 SEPTEMBER 2015

I wish / do not wish (circle preference) to be heard in support of my submission.

If others make a similar submission, I will / will not consider presenting jointly with them at a hearing (circle preference).

Signature: SJC Lucas Date: 4/9/15

(of submitter, or person authorised to sign on their behalf).

Trade competitor's declaration (if applicable)

I could gain through trade competition from a submission but my submission is limited to addressing environmental effects directly affecting my business

Signature: SJC Lucas



e.g. Amend provision y	e.g. provision y should say	e.g. I want provision y changed because
Proposed plan	we would like it amended as	I am the 3rd generation to farm
change SA-	per the "Lindis Catchment	Timburlin, the lifestyle, community
AMENDED	Group."	and recreation that my family
		is offered due to successful family
		succession in the past with good
		financial management in a busy
		farming market has allowed us the
		amazing opportunity which we hope
		to be able to achieve under our
		management. The Lindis plays a huge
		part in the ability to achieve this a
		fair result with minimum flows that
		means this area and community can
		carry on as it has for years should
		not be pushed through in these over
		growing tough financial and
		environmental times for all that
		are involved.

Please add pages as required



SUBMISSION FORM (Print clearly on both sides)
Proposed Plan Change 5A (Lindis: Integrated water management)
to the Regional Plan: Water for Otago
 (Form 5, Clause 6 of the First Schedule, Resource Management Act 1991)



Office use only

Name of submitter

Rebecca + Angus Chapman-Cohen

Organisation

(if applicable) Lindis Downs Ltd

Postal address

(include postcode) PO Box 21
 Taras 9347

Telephone:

03 4452520

Email:

lindisdowns@farmside.co.nz

Note that all submissions are made available for public inspection

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FRIDAY 4 SEPTEMBER 2015

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I wish / do not wish (circle preference) to be heard in support of my submission.

If others make a similar submission, I will / will not consider presenting jointly with them at a hearing (circle preference).

R Chapman-Cohen

Signature:

(of submitter, or person authorised to sign on their behalf).

4/9/2015

Date:

Trade competitor's declaration (if applicable)

I could gain through trade competition from a submission but my submission is limited to addressing environmental effects directly affecting my business

R Chapman-Cohen
 Signature:

Send to:
 Freepost ORC 497
 Otago Regional Council
 Private Bag 1954
 Dunedin 9054



1 State what your submission relates to and if you support, oppose or want it amended	2 State what decision you want the Otago Regional Council to make	3 Give reasons for the decision you want made
<p>e.g. Amend provision</p> <p>Policy 6.4.5 oppose + want</p> <p>Policy 6.4.5 amended</p>	<p>e.g. provision should say</p> <p>longer transition period within this policy - extend to 2026</p>	<p>e.g. I want provision changed because</p> <p>To allow irrigators to set up more efficient irrigation systems without financial strain over a longer period of time. water users need more time to adjust once the minimum flows is set.</p>
<p>Rule 12.1.1.4 oppose maps B4 and B7</p>	<p>To include all geographic areas of the Lindis catchment</p>	<p>This rule has caused confusion and there has been no reason explanation given to exclude areas from the Lindis catchment</p>

①

②

Please add pages as required

1 State what your submission relates to and if you support, oppose or want it amended	2 State what decision you want the Otago Regional Council to make	3 Give reasons for the decision you want made
<p>③ schedule 2A(3) oppose minimum flow of 750 litres/second</p>	<p>Amend to lower minimum flow of 450 litres/second</p>	<p>① Proactive irrigators have adjusted to more efficient water use systems (centre pivots/k-line, etc.) after being led to believe the minimum flow be recommended to be set at 450 l/s by the O.R.C. in initial meetings held in the Tairāwhiti community.</p> <p>② In an extended dry period 750 l/s to be retained in the Lindis River would leave irrigators running at 50% of less which is an uneconomical return on their capital investment</p> <p>③ IFA is yet to be proved in an extended dry season that 750 l/s would reach the Clutha River.</p>

Please add pages as required

1 State what your submission relates to and if you support, oppose or want it amended	2 State what decision you want the Otago Regional Council to make	3 Give reasons for the decision you want made
<p>(4)</p> <p>Schedule 2A(3) specific minimum flow for primary takes opposed</p>	<p>Amend to a higher primary allocation of 15001/s</p>	<p>It is an estimation that the Lindis River would gain another 5001/s inflow if the removal and management of willow trees extending the length of the river was initiated by the O.R.C.</p> <p>This would not only increase the water levels in the Lindis River available to users, but also would increase the amount significantly for primary allocation with no detrimental effect to wildlife on the river.</p> <p>Please note these trees are an introduced weed.</p>

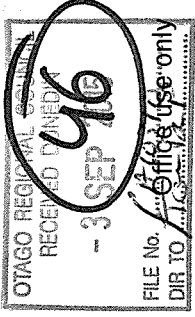
Please add pages as required



SUBMISSION FORM (Print clearly on both sides)

Proposed Plan Change 5A (Lindis: Integrated water management to the Regional Plan: Water for Otago)

(Form 5, Clause 6 of the First Schedule, Resource Management Act 1991)



Name of submitter

Bruce Jolly

Organisation (if applicable)

Postal address (include postcode)

135 Morris Road
R.D.2
Wanaka 9382

Telephone:

027 6564269

Email:

ubjolly@gmail.com

Note that all submissions are made available for public inspection

SUBMISSIONS MUST BE RECEIVED BY 5.00 PM
FRIDAY 4 SEPTEMBER 2015

Please turn over

I wish / do ~~not wish~~ (circle preference) to be heard in support of my submission.

If others make a similar submission, I will ~~assist~~ consider presenting jointly with them at a hearing (circle preference).

Signature:

Date:

31/8/15

(of submitter, or person authorised to sign on their behalf).

Trade competitor's declaration (if applicable)

I could gain through trade competition from a submission but my submission is limited to addressing environmental effects directly affecting my business

Signature:

Send to:
Freepost ORC 497
Otago Regional Council
Private Bag 1954
Dunedin 9054



1 State what your submission relates to and if you support, oppose or want it amended <i>e.g. Amend provision y</i>	2 State what decision you want the Otago Regional Council to make <i>e.g. provision y should say</i>	3 Give reasons for the decision you want made <i>e.g. I want provision y changed because</i>

Please add pages as required

SUBMISSION

Proposed Plan Change 5A (Lindis: Integrated water management) to the Regional Plan: Water for Otago

Submitter: Bruce Jolly
135 Morris Road
R.D.2
Wanaka 9382

I could not gain an advantage in trade competition through this submission.

I wish to be heard

I farm in the Ardour valley and I am the 4th generation of my family to irrigate with water from the Lindis River.

They all developed and improved their water efficiency as science technology and economics allowed.

The water I use from the Lindis Catchment for irrigation is a vital part of my farms economic viability and any decrease in the water available to me will have an effect.

The irrigated land gives my family's business a certain amount of robustness that we need to operate in this harsh and variable climate.

It gives some certainty to the amount of silage we can make the numbers of young stock we can finish and the amount of area we can have out of production for a 1080 rabbit control poison.

Along with options on how we manage a drought and the number of people we employ.

This gives us a little patch of green on the edge of a very dry property.

In this environment the farms need more resilience to adverse events than most other areas of New Zealand, and irrigation is one of our key pieces to this resilience.

The close community that rely on this irrigation already work together and manage the available water because we know how vital it is for the survival of our businesses.

I have in recent years already made considerable investment in changing my flood border dyke irrigation to sprinklers. To do this change is considerably more expensive than green field development as you have to remove the old system. The sprinklers are very efficient with water but they must have highly reliable water because of the way they are designed to operate and to justify the expense to get bank funding.

I started the change to sprinkler irrigation in preparation to the expiry of the Deem Permits. With the best information at that time the ORC had indicated the minimum flow would be 450l/s if Tarras Water Ltd proposed development didn't go ahead. The draft section 32 Evaluation Report that existed before April of this year was considerably different to the one that exist today and was supportive of a minimum flow of 450l/s. My development was commenced on that assumption and designed for the reliability that would allow.

At 750 l/s the reliability plummets as there is only a little over a 1000l/s of reliable water in the river and if 75% is going into the minimum flow it does not leave much to spread among the irrigators and their 3000 hectares of existing irrigation.

6.4.5 3 object.

There needs to be a transition period between the expiry of deem permits and the enforcement of the minimum flow.

With the change from Deem Permits to RMA consent there will be a number of additional conditions.

That in the case of the Lindis Irrigation Company will mean a change of take points and distribution infrastructure to meet efficiency requirements. This will have the other benefit of delivering environmental benefit to the river by not having a large volume being taken at 2 point too multiple takes spread further down the river.

12.1 2A Monitoring site: agree

750l/s minimum flow: object.

The major gains for river environmental health are made from moving the default minimum flow of 200l/s to 450l/s. Any environmental gains above a flow of 450l/s are very minimal.

The economic and social impact from 200l/s to 450l/s is reasonably minor if there is a transition time to do the changes required in a well planned development plan catchment wide. But at 750l/s the economic and social impact would be harsh and crippling to the long term viability.

The section 32 supporting documentation has so much misleading and incorrect information it needs to be questioned whether any of it should be allow as an accompanying document. I would like it compared to the earlier version and highlighted what has been removed because it was not supportive of a pre-determined position.

1000l/s Primary allocation: object

This is just too far away from anything that it will get down to. In consideration of the area of land irrigated and volumes of water this should be in the 1500 to 1600l/s range. There is aproximatley 3000ha irrigated from the Lindis Catchment at present.

12.1 2C Lindis Alluvial ribbon aquifer is included as primary allocation and subject to minimum flow: Agree

Section 32 Evaluation Report:

As stated above this report is seriously flawed.

Given the weighting the National Policy Statement (NPS) puts on social and economic benefit or harm and irrigation, there does not seem to be any supporting documentation to the percentages they use in the various options under costs/risks Economic.

In the various options: benefits. If alternative water sources are economic, and you do have a way to access it. It will be done regardless of any minimum flow.

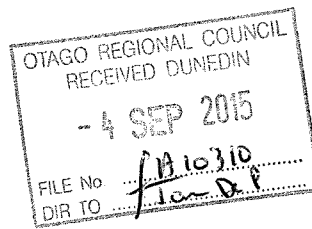
Those that do not boundary the Clutha River would be seriously challenged to access alternative source without years of negotiating with the likes of Contact Energy, DOC, LINZ, Transit, CODC and ORC. All have a long expensive and convoluted requirement process that unless you have great determination you may never get through, all the while forking out fees to consultants and lawyers to go through a process you may never be able to complete or is totally un-economic after meeting all the conditions imposed. And that is just to get access over public land.

So if there is no enabling policy from local and central government to streamline that mine field of a process it is not very achievable for most individuals. We missed the opportunity Tarras Water Ltd gave with its community scheme and share those costs.

We already manage as a group and are preparing for the consent renewals and efficient use. This will also happen regardless of the minimum flow process not because of it. The minimum flow process will only be of help if the minimum flow is low enough to allow for the investment to make the changes.

There is no mention of other ways of meeting the environmental gains require other than minimum flow. ORC was invited to participate in a series of meeting held between January and June of this year. These think tank meeting which where attended by DOC, Fish & Game, Iwi and Lindis Catchment Group representative's and on the last meeting by ORC looked at transition issues and other tools that could be used to enhance the outcomes. These were either disregarded or we were told there was already policy enabling them. None of which even got a mention in the report that they had been considered and rejected even though it was put up by all the major interested parties.

I think more weighting should be given to the pre April Draft section 32 Evaluation Report. Where there is the detail of the science supporting a 450l/s
There is no social and economic evaluation that could stand up in a court hearing though unfortunatley.



47

SUBMISSION TO OTAGO REGIONAL COUNCIL ON PLAN CHANGE 5A

Form 5

Submission on publicly notified proposal for policy statement or plan
Clause 6 of First Schedule, Resource Management Act 1991

To: *Otago Regional Council*
policy@orc.govt.nz

Name of submitter: Malvern Downs Ltd

Contact person: Robbie & William Gibson
Farm Owners

Address for service: Malvern Downs, Tarras, No 3 R.D. Cromwell

This is a submission on the following proposed plan change – Plan Change 5A (Lindis: Integrated Water Management) to the Regional Plan: Water for Otago

The specific provisions of the proposal that our submission relates to and the decisions we seek from Council are as detailed on the following pages.

We wish to be heard in support of our submission.

SUMMARY OF SUBMISSIONS

- 1. Malvern Downs Ltd does not consider Council has met its planning responsibilities under Proposed Plan Change 5A (Lindis: Integrated Water Management).**
- 2. The Section 32 Evaluation Report should be considered inadequate.**

3. That in line with Council's own science, reports and evaluations over a 6-7 year period, that Option 2 of the 'Options for managing surface water in the Lindis Catchment' should be adopted.
4. That under Schedule 2A, for the Lindis River Catchment, a primary allocation minimum flow is adopted as follows:
 - 750 l/s October to November
 - 750 l/s May
 - 1,600 l/s June to September.
5. Council must adopt an appropriate and realistic transitioning framework for the Lindis Catchment. This should enable an extension of minimum flows for at least 5 years post expiry of deemed permits (mining privileges) - at minimum until 2 October 2026.
6. Full consideration of the community's identified values must be provided for, specifically those relating to the 'availability of water for irrigation during the growing season'. To date, present and future impacts have not been appropriately considered or evaluated.
7. That the Proposed Plan Change Mapping includes the Tarras Creek catchment and retains existing boundaries of the Lindis Alluvial Ribbon Aquifer.
8. That Council adopts a more workable and appropriate primary allocation limit of 1,500 l/s, rather than the only other option (1,000 l/s) considered.
9. That Council delete reference to both the Bendigo and Lower Tarras Aquifers from Schedule 4B.2.

1. INTRODUCTION

We have been farming Malvern Downs for over 100 years. My grandfather and father, Hector Gibson was one of the original farmers with the vision for what water from the Lindis could do for the Tarras community. He was one of the farmers that helped build the scheme.

Once built Tarras received water and our community developed into the wonderful place that it is today. The water from the Lindis being the 'life blood' of Tarras.

The Lindis river is unique, in that most years it goes dry " water goes underground and comes up 5 km downstream". The tarras water uses have always worked together in dry times to ration the water fairly for all the water uses. The priorityu permit holders have always taken cuts just like the rest of the water permit holders.

Malvern Downs is totally opposed to a miniumn flow of 750l/s, especially when the ORC promoted 450l/s at a public meeting in Tarras. On our modelling it would mean 60 days in the middle of summer where we wouldn't have water, which would put our livelihoods of my family and employees in jepordy. We rely on water for our winter crops at this time, 80% of our income is reliant of water for these crops. The RMA clearly states that you can't put livelihoods at stake.

We also oppose there not being a phase in or transiitonal period of 5 years before the miniumn flow is fully implemented. How can you possibly invest in new irrigation systems andinfrastruture when you don't know if you will have your water right renewed?

We strongly oppose the boundry changes for the lower Tarras catchment and the ORC insisting we go to another water source. How would we get another water right in 2021? We woud have to own land beside the river, then need at least five easements through other land owners land before we could get water to our own property. This would be cost prohibitive for our farming operation.

Robbie Gibson

William Gibson

OTAGO REGIONAL COUNCIL
RECEIVED DUNEDIN
- 4 SEP 2015
FILE No. 1010310

48

Submission of John and Marilyn Barlow on Proposed Plan Change 5A to Regional Water Plan, Otago

- We support Plan Change 5A with the exception of the summer minimum flow proposed of 750 litres/sec.
- We wish to see - a minimum flow of 1,000 litres/sec or over as the minimum summer flow from 1 October to 31 May.

Reasons

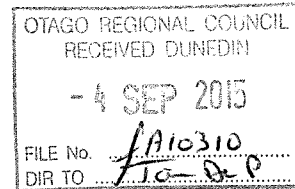
As public property post-cancellation of deemed permits, the Lindis should return to its natural character and retain a connection to the Clutha River throughout the year.

A major portion of Lindis water is used outside its physical catchment. We submit that this water should be replaced by water from alternative sources, e.g. Clutha River as the Lindis is a small and fragile stream.

The Lindis is an important spawning stream supporting the fishery in the Clutha R and Lake Dunstan.

The Lindis is used recreationally by a wide variety of users who should be able to see the river as a river and not as a dry stream bed.

Submission Date 04-09-2015 10:00:11
Name of submitter: Gavin James
Postal address: Street Address: 16A Montclare Ave
City: Christchurch
Postcode: 8041
Telephone: () 0211466375
E-mail: gandm.james@clear.net.nz



I wish / do not wish to be heard in support of my submission: I wish to be heard

If others make a similar submission, I will / will not consider presenting jointly with them at a hearing: I will consider presenting jointly

Signature of submitter, or person authorised to sign on their behalf::

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

Proposed minimum flows in the Lindis River are opposed and need amending

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

Proposed summer minimum flows below the Ardour Road flow recorder need to be increased.

3. Give reasons for the decision you want made:

Based on the IFIM data available for juvenile brown trout, summer minimum flows (October to April) should be at least 1000 l/s and probably nearer to 1500 l/s to provide adequate habitat for juvenile trout. Presently the lower reaches of the river frequently dry up in summer thus destroying juvenile trout and other fish in this very important spawning and rearing tributary of the Clutha River and Lake Dunstan.

Attach a document if needed: Lindis River minimum flow submission G James.doc

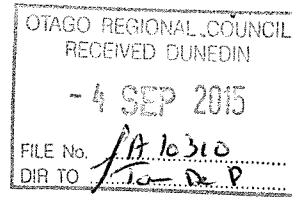
Submission on Lindis River Proposed Minimum Flows, September 2015.

1. My name is Gavin James and I am submitting on the Lindis River Proposed Minimum Flow because of my interest in the river as an angler, and because during my career in fisheries research I have been involved in several low flow hearings. I was also involved with a MAF team surveying fish populations in the Lindis River in 1988. I have an MSc from Otago University, and have had 38 years experience as a fisheries scientist with MAF and NIWA in New Zealand before retiring in 2007.
2. At present the lower reaches of the Lindis river frequently dry up in summer, thus destroying juvenile trout and small native fish and limiting fish access within this very important spawning and rearing tributary of the Clutha River and Lake Dunstan (Jellyman D.J. 1990).
3. The Otago Regional Council Proposed Plan Change 5A (Lindis: Integrated water management) has proposed minimum flows of 750 l/s for summer (Oct to May) and 1600 l/s (Jun to Sep) to attempt to address this issue.
4. Most of my comments focus on interpretation of the IFIM (Instream Flow Incremental Methodology) habitat data described in the NIWA review of the science behind setting low flows in the Lindis River (Horrell, G. 2014). I have had some experience of applying IFIM modelling (Upper and Lower Waitaki system, Kakanui, Waitahuna rivers) as a biologist with angling experience. It should be noted that IFIM modelling has limitations as it only describes some of the factors limiting species, so the output data need to be interpreted carefully and conservatively.
5. The NIWA review indicates that maximum habitat for brown and rainbow trout spawning is provided by 1400 l/s and 2200 l/s respectively, and maximum adult brown trout habitat is provided by 4000 l/s but falls sharply below 2000 l/s. Most significantly for the lower river (which is most under stress from water abstraction), the review indicates that optimum juvenile brown trout habitat would be provided by a flow of 1400 l/s, but this reduces sharply below 750 l/s. Horrell's conclusion is that a minimum flow of 750 l/s would provide for adequate juvenile brown trout habitat and continuous flow to the Clutha confluence.
6. It is clear that the proposed minimum summer flow of 750 l/s is at the very lower end of acceptable habitat values indicated in the NIWA review, and in my view is unrealistically low. Based on the above habitat values I believe that the summer minimum flow should be higher - at least 1000 l/s. This allows for a small safety margin above the inflexion point for juvenile brown trout habitat WUA of 750 l/s, below which habitat falls sharply.
7. More importantly, the NIWA review also indicates that monitored water losses to groundwater between Ardgour Road and Lindis Crossing average 220 l/s, and a further 220 l/s is lost between Lindis Crossing and the Clutha confluence, so that the estimated minimum flow at Lindis Crossing in summer would actually be 530 l/s with just 310 l/s at the Clutha confluence. These flows are well below those that would provide adequate juvenile brown trout habitat in these lower sections of the river – the area most valuable for juvenile brown trout rearing. This is important evidence that the minimum flow should be set higher than 750 l/s, preferably nearer 1500 l/s to allow for adequate juvenile trout rearing in the lower river.
8. Based on the above juvenile brown trout habitat information and monitored water losses, it is clear that the minimum flow at the Ardgour recorder should be set at greater than 1000 l/s and preferably closer to 1500 l/s.

9. Of course if optimum flows for adult brown trout habitat were to be considered, then minimum flows would need to be higher again, at least 2000 l/s based on Horrell's figures. But it is acknowledged that this is rather unrealistic since the Lindis is historically a water-short catchment, and optimum flows for adult trout are rarely achievable in summer.
10. The main spawning period for brown trout is May, so minimum flows for May should be at the higher winter level of 1600 l/s to allow for trout access and spawning. Thus the lower summer flows should run from Oct to Apr (not Oct to May).

References

- Horrell, G. 2014. Review of the science supporting the proposed minimum flow regime for the Lindis River. Prepared for Otago Regional Council. *NIWA Client Report CHC2014-146*. 14p.
- Jellyman, D. J. 1990. Electric fishing survey of Lindis River and tributaries, and Clutha River in the vicinity of Cromwell, December 1989. Prepared for Electricity Corporation of New Zealand. *New Zealand Freshwater Fisheries Miscellaneous Report 75*. 18p.



SUBMISSION ON PROPOSE PLAN CHANGE 5A (LINDIS INTERGRATED WATER MANAGEMENT)

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DATE OF FILING: 4 September 2015

SUBMISSION

1. This is a submission on proposed plan change 5A (Lindis: Integrated Water Management), notified on 8 August 2015 (**PC5A**);
2. The Environmental Defence Society (**EDS**) is a not-for-profit environmental organisation comprised of resource management professionals who are committed to improving environmental outcomes.
3. EDS is not a person who could gain an advantage in trade competition through this submission, pursuant to clause 6 of Schedule 1 of the Resource Management Act 1991 (**Act**).
4. EDS wishes to be heard in support of this submission.
5. If others present a similar case EDS will consider presenting a joint case at hearing.
6. Thank you for the opportunity to submit.

Summary

7. EDS supports the following aspects of PC5A:
 - a. The winter minimum flow of 1600 litres per second (**l/s**) (1 June to 30 September);

- b. The primary allocation limit of 1000 l/s;
 - c. The supplementary flow regime;
 - d. The treatment of connected groundwater as surface water;
 - e. Setting maximum allocation limits for specified aquifers within the Bendigo-Tarras Basin (the Ardgour Valley, Bendigo, and Lower Tarras aquifers); and
 - f. Mapping the boundaries of the catchment for the purposes of the minimum flow.
8. EDS supports the primary allocation limit of 1000 l/s which is slightly higher than the default limit set by policy 6.4.2 of the Regional Plan: Water (**RPW**).
9. The proposed supplementary flows are more permissive than the default regime. We are conditionally supportive of this to enable water harvesting to occur to encourage irrigators to lessen their reliance on primary allocation from the Lindis.
10. We oppose the proposed summer minimum flow (1 October to 31 May) of 750 l/s for the following reasons:
- 10.1 It does not adequately provide for / have regard to the purpose and principles of the Act, including but not limited to:
- a. The purpose:
 - i. Safeguarding the life supporting capacity of...water, soil, and ecosystems (section 5(2)(b)).
 - b. Matters of national importance:
 - i. The preservation of the natural character of ...wetlands, and lakes and rivers and their margins, and the protection of them from inappropriate subdivision, use, and development (section 6(a)); and
 - ii. The protection of areas of significant indigenous vegetation and significant habitats of indigenous fauna (section 6(c)).

- c. Other Part 2 matters including:
 - i. Ensuring that resource use (including the taking of water and use of the assimilative capacity of water) is necessary, reasonable and efficient (section 7(b));
 - ii. The maintenance and enhancement of recreational values, amenity values, and the intrinsic values of ecosystems (section 7(c) and (d)); and
 - iii. Maintenance and enhancement of the quality of freshwater environments, including wetland environments, as habitats for indigenous species (section 7(f)).

10.2 It does not give effect to the National Policy Statement for Freshwater Management 2014 (**NPSFM**) including, but not limited to:

- a. Objectives A1, A2, B1, B2, B3; and
- b. Policies A1, A2, B1, B2, B3, B5, B6.

10.3 It does not give effect to the regional policy documents including, but not limited to:

- a. Objectives 6.4.3, 6.4.4, 6.4.8, 6.5.2, 6.5.4 of the Regional Policy Statement for Otago;
- b. Objectives 5.3.1, 5.3.4, 5.3.6, 6.3.1, 6.3.2, 6.3.3, 6.3.5, 6.3.6, 7.A.1 of the RPW; and
- c. Policies 5.4.1, 5.4.2, 5.4.3, 5.4.8, 6.4.0, 6.4.0A, 6.4.0B, 6.4.0C, 7.B.1 of the RPW.

10.4 It is inconsistent with the proposed Otago Regional Policy Statement including, but not limited to:

- a. Objective 2.1, Policies 2.1.1, 2.1.2, 2.1.6;
- b. Objective 2.2, Policy 2.2.12, 2.2.13; and
- c. Objective 2.3.

10.5 It is inconsistent with:

- a. The Otago Conservation Management Strategy.

10.6 The section 32 analysis does not adequately examine the appropriateness of the minimum flow for achieving the objectives, or alternatives for achieving the objectives, nor does it appropriately recognise the importance of environmental protection and an adequate minimum flow as a core element of sustainable management.

11. EDS proposes a summer minimum flow of greater than 1000 l/s.

12. EDS also opposes the proposed summer minimum flow season of 1 October to 31 May, and seek that this season is amended to 1 October to 30 April, with the winter minimum flow season similarly amended.

Relief sought

13. The following relief is sought:


Reference / page number	Item	Support / Oppose	Relief sought	Reasons
Schedule 2A	Summer minimum flow, 750 litres per second (1 October to 31 May).	Oppose	Amend to 1000 l/s.	EDS opposes the proposed summer minimum flow (1 October to 31 May) of 750 l/s for the reasons set out at paragraph 10 above.
	Summer minimum flow season (1 October to 31 May)	Oppose	Amend to 1 October to 30 April, and make subsequent	As above.

			amendments to the proposed winter minimum flow season	
Schedule 2A	Winter minimum flow	Conditional support		Support for the winter minimum flow, the primary allocation limit, and supplementary regime is conditional upon the summer minimum flow being raised to 1000 l/s and the flow season amended to 1 October to 30 April.
Schedule 2A	Primary allocation limit	Conditional support		As above.
Schedule 2B	First supplementary allocation block	Conditional support		As above.
Schedule 2B	Second supplementary allocation block	Conditional support		As above.

14. In general, and without detracting from the specificity of the above, EDS seeks that:

- a. PC5A be amended so as to promote the sustainable management of the natural and physical resources in the region, to comply with the Act and to give effect to the NPSFM and the relevant regional policy documents.
- b. The relief set out above or alternative relief/wordings which respond the the issues raised in this submission; and
- c. Such other relief as is necessary to address the issues raised in this submission including any minor or consequential relief.

Yours sincerely,



Gary Taylor
Chairman