

WESTPOWER'S COMMENTS: IMPACTS OF THE PROPOSED WAITAHA RIVER WESTPOWER HYDRO SCHEME ON WHITEWATER AND KAYAKING VALUES

Introduction

As part of processing the Waitaha Hydro Scheme concession application, under section 17S(4) of the Conservation Act the Department of Conservation (**DOC**) sought information from Whitewater New Zealand (**WWNZ**) to "*help assess the values of the Waitaha River to whitewater kayakers, including an understanding of the flow regimes that are needed by kayakers to paddle the Morgan Gorge*".¹

On 30 March 2015, DOC provided the report prepared by WWNZ - *Impacts of the Proposed Waitaha River Westpower Hydro Scheme on White Water and Kayaking Values*² (**WWNZ Report**) to Westpower for comment.

Westpower wishes to acknowledge the work undertaken by WWNZ in compiling the report, and to thank DOC for the opportunity for comment. This document sets out Westpower's comments on the WWNZ Report, adopting the headings and page references in the WWNZ Report for ease of reference.

While the WWNZ Report contains some useful information in relation to kayaking values it also contains some omissions and inaccuracies, as explained in this document. Westpower is also concerned that the WWNZ Report strays beyond comment on the kayaking values of the Waitaha River and flow regimes required to kayak the river as requested by DOC.

White water values (pp 3-8)

Although DOC's request was that the values of the entire Waitaha River be examined from a kayaking perspective, and the report acknowledges that *different reaches of the water have different landscape and riverscape settings* (p 3), the WWNZ Report focuses on the landscape of the Waitaha at Morgan Gorge and above, with very little mention of the river downstream. The comment on p 3 that the river passes *through unmodified and largely pristine natural landscapes* is true regarding the river from Morgan Gorge and above, but not further downstream. Landscape assessment best practice is to understand the whole river and its context, not just part.³

There are references, in the WWNZ Report, to Froude regarding natural character (pp 3 and 4). This Froude reference is more to do with coastal natural character (as outlined within the references). No reference has been made to other more pertinent research on understanding river values, such as *Riverscape and Flow Assessment Guidelines*, (2009) Boffa Miskell Ltd & NIWA. Terms such as natural character, natural features and landscapes are used interchangeably and inconsistently throughout the WWNZ Report, therefore it is not easy to understand from an expert technical perspective exactly what point is being made.

Westpower acknowledges that the landscape of the Waitaha River provides part of the attraction, and value, of the river to kayakers from an experiential perspective. However, in commenting on such matters the WWNZ Report often strays beyond commenting on the *values of the Waitaha River to whitewater kayakers*, and purports to make broader landscape and other assessments. Westpower queries WWNZ's expertise to comment on landscape matters and considers that a more accurate assessment was conducted by (for

¹ As described in email from Di Clendon (DOC) to Sue Cotton, 30 March 2015

² Douglas A Rankin and Shane Orchard, January 2015.

³ That context is provided in the concession application with regards to the current statutory status of the Waitaha River (pp 161-162) and in the relevant expert reports.

example) its landscape expert (including expert peer review) of the various sections of the river, applying the correct legal tests.⁴

The landscape assessment undertaken by Westpower, and provided in the application (the Landscape Report - Appendix 9), was undertaken by a suitably qualified and experienced person and is based on best practice. Further, and to ensure a robust assessment of both landscape values and potential effects, the Landscape Report was peer reviewed by Mr Gavin Lister, a Director of Isthmus.

River reach scale (pp 4-6)

The WWNZ Report comments that the natural features of the Morgan Gorge *are unique and cannot be recreated*. Whilst assessing the values of Morgan Gorge as being such that it could be considered an "outstanding natural feature" the Landscape Report (section 2.2, pp 11-14) provides a "Westland District Landscape Context" which describes a range of major river catchments in this part of the West Coast (i.e. Waitaha, Wanganui, Poerua, Whataroa) which contain numerous physical characteristics which, whilst in some ways are unique to each area, collectively share common elements such as: indigenous vegetation cover; hot springs; gorges; waterfalls; and wild rivers. Further the Landscape Report provides commentary on currently noted gorges and hot springs, recorded by the Geopreservation Society, which includes the hot springs at the bottom of Morgan Gorge but not the gorge itself. The Landscape Report further notes a range of gorges in close proximity to, and including the Waitaha River, such as the Waitaha, Morgan, Kakapotahi, Whataroa and Hokitika to provide some context in regard to such features.

The Landscape Report concludes that *the Upper Waitaha River and its margins holds very high, near pristine levels of natural character* but notes that *this level of natural character would be the same or similar for other upper catchments in the broader West Coast Region*.⁵ This is reinforced by the descriptions of the rivers in Mr England's report and in the photos presented with the report and in Graham Charles most recent edition (2013) of New Zealand *Whitewater 5 – 180 Great Kayaking Runs*. These all include references to deep and sculpted gorges, patterned rocks and rock walls, steep clad bush valley walls and massive schist boulders.

Kayaking values (pp 8-10)

Westpower considers that this section provides useful information in response to the information requested by DOC. Westpower notes that, at Appendix III (p31-33), the trip reports for the Waitaha River – Ivory Lake to Upper Waitaha Hut and the Waitaha River - Morgan Gorge, as requested by DOC contain no date kayaked. The Morgan Gorge section trip report contains reference to a 15-20 cumec flow range. Without the date it is not possible to check actual flows from monitoring data. Mr England's Waitaha Trip⁶ report (p 239) refers to the Morgan Gorge being descended successfully for the first time, the day after the trip described in his report which makes the first descent on 21 February 2010.

Scarcity and status values (pp 10-11)

The WWNZ Report asserts at p 10 that *there is no other resource offering the same mix and level of extremely challenging white water that can substitute for the Waitaha River. Thus, its loss would be a travesty for the New Zealand and international white water community*.

However, Westpower considers that context is important and assists in understanding the 'substitutability' of the Waitaha River. The Recreation Report (Appendix 19), which was peer reviewed by Mr Dave Bamford of

⁴ We note that, for example, the authors of the WWNZ Report give dictionary definitions of *outstanding* and assesses the Morgan Gorge against that definition (p 5) and refer to the RMA rather than the Conservation Act (p 3).

⁵ Landscape Report, pp 36-37.

⁶ Waitaha Trip Report p 239 In *An assessment of the whitewater recreational values of West Coast rivers – whitewater kayaking*. LEaP Research paper No.2 January 2011.

TRC Tourism Ltd, considers these matters based on a thorough review of available and up to date information including many of the assessments referred to in the WWNZ Report. The Recreation Report at section 6.4 Resource Substitutability (p 54) notes that:

From a kayaking perspective, the presence of a set of wild whitewater rivers on the West Coast provides a concentration of kayaking opportunities and a wide range of choice, particularly at the advanced end of the kayaking opportunity scale. Table 4 (page 31) indicates that at the gross level the Waitaha River is one of 14 grade 5 rivers on the West Coast which rely on, primarily helicopter access.

In 2010, Mr England undertook an assessment of the whitewater recreational values of West Coast Rivers. In the summary of his report⁷, he indicates that many West Coast rivers hold these values.

The research shows that, as a whole, the rivers of the West Coast region are the most highly valued in New Zealand and amongst the most highly valued in the world by whitewater kayakers. To whitewater kayakers around the world, the West Coast region is characterised by its rivers and its rivers are characterised by their high levels of challenge, scenery and wilderness.

In comparison to other regions of NZ and the world, the West Coast region has a very high density of rivers that offer great whitewater challenge, inspiring river scenery and a strong wilderness feel. Added to this are such qualities as cleanliness and clarity of water, a range of access arrangements including helicopter access, geographic closeness of rivers meaning low travel times between rivers, and a wider regional experience that offers additional social attractions.

That so many rivers of the West Coast are valued so highly does not belittle their assessment, but truly represents their remarkable qualities. It makes it impossible to segregate a common set of top rivers, but a general trend is that northern Westland has the highest concentration of top rated rivers for whitewater challenge, with very high scores for scenery and wilderness; while northern Buller and South Westland have small concentrations of rivers top rated for wilderness and scenery with high ratings for whitewater challenge.

The main whitewater kayak users of West Coast rivers are highly specialised and experienced, which reflects and is reflected by the high proportion of more challenging rivers, yet the region is also held in high regard as a destination to aspire to by users of lower ability. Of interest is the demographic profile of survey respondents, showing that most whitewater kayakers on the West Coast are male, of widespread ages, educated to bachelor's degree or beyond, professionally employed with incomes above national averages.

As noted in the Recreation Report (p 30), Mr England has found that the Waitaha was ranked (through an on-line survey of the international kayaking community) amongst 60 West Coast rivers as:

- 35th for 'number of respondents having used a river'
- 12th for percent of international respondents using a river
- 8th for overall importance
- 5th for whitewater challenge
- 10th for scenery from the river
- 5th for wilderness feeling.

⁷ An assessment of the whitewater recreational values of West Coast rivers – whitewater kayaking. LEaP Research paper No.2 January 2011.

Similar comments are found in the RiVAS report.⁸ The conclusions in the Recreation Report (pp 29-32, 54) were drawn from these data. Similarly the Landscape Report explains that while there are physical characteristics unique to each river they share many common features.⁹

These data support the finding in the Recreation Report that there is a level of substitutability for the kayaking (and other) values affected by the proposal, and the scale of effect on recreation participation and experience is below any threshold which would adversely affect recreation and tourism values at a regional level.

In regard to the supply of kayaking opportunities the Recreation Report indicates that the use of a 'Place' (i.e. the 'Hokitika Place' set out in the CMS) does not provide an adequate scale of assessment for the supply of some recreation opportunities. The supply of these opportunities must be considered at a regional scale due to mobility of kayakers and their national and international origins. Ultimately, however, the Recreation Report does conclude that the "Outcomes" set for the 'Hokitika Place' can be achieved with the Scheme in place (see Section 7.5.1 of the Recreation Report for example).

Whether there is indeed a 'loss' of the kayaking opportunity is also discussed in Westpower's expert reports: while the Waitaha River will no longer be unmodified, opportunities for kayaking will remain. This is reinforced through the proposed conditions forwarded by Westpower, based on the advice in the Recreation Report, as part of the application and further information process.

Usage value (p 11)

Westpower acknowledges that the number of users of a river is not the key determinant of the value of the river. This is reflected in the following extract from the Recreation Report (6.5.1 Kayaking, p 55).

6.5.1 Kayaking

Significance: Internationally and nationally significant (in association with the other high grade West Coast kayaking rivers) for advanced kayaking in grade 5 and grade 6 settings. The low use of the Waitaha River (assessed as 50 kayak days per annum, section 4.4), and particularly Morgan Gorge (rarely kayaked and by only the most skilled paddlers), is tempered by the extreme difficulty of the recreational opportunity it provides and its difficult access (helicopter to the get-in, and a difficult portage at Morgan Gorge for most users).

Rationale: Small numbers of users (limited by the required skill level) but attracts a cadre of elite international kayakers. The West Coast is a well-known adventure kayaking destination internationally (along with places such as Norway and California). The Hokitika area is recognised as a rafting and whitewater kayaking destination of international significance (DOC, 2004). The Waitaha has features which make it an important component of the West Coast kayaking scene. Of the 24 grade 5 rivers on the West Coast, the Waitaha River has been assessed as the 5th-equally most kayaked (see Table 5). This significance assessment applies equally to all sections of the River above the bottom of the Morgan Gorge.

We note that kayaking numbers of the Waitaha River have decreased in the last few years, with reasons including competition from other international destinations, as described in the Recreation Report (p 31).

⁸ Whitewater Kayaking in the West Coast Region: Application of the River Values Assessment System (RiVAS). K Booth et al [2010]

⁹ Landscape Report, section 2.2, p 11, para 2.

Since 2002 and over a period of 13 years there have been 6 – 7 attempts (successful and not) to kayak Morgan Gorge. As discussed in both the WWNZ and Recreation Reports, usage of the Morgan Gorge section of the river is expected to continue to be low and that there may be lengthy periods of time when it remains un kayaked. The WWNZ Report (p 11) acknowledges that use of the Waitaha River is low compared to other kayaking runs on the West Coast and nationally and that, due to both the technical difficulty of runs and access, "*most kayakers cannot and will not ever kayak these difficult runs*". Westpower considers that this low usage number is directly relevant to the number of no-take days that is appropriate to be offered in mitigation of adverse effects.

Previous assessments of values (pp 12-13)

The WWNZ Report suggests that the Recreation Report relied on *out of date literature* and information. However, the WWNZ Report does not identify which of the literature Greenaway has referred to or relied on when forming his views, or where it believes Greenaway has misinterpreted the information. It also does not qualify its comments in relation to Table 1 (and Table 7) about the alleged errors in those tables. It is therefore not possible to provide specific comment on those matters given the lack of clarity.

The Recreation Report does however include all the most recent descents within the Waitaha River and the most recent published literature referred to in the WWNZ Report. It also acknowledges the recent successes by kayakers in making the first descents of both the Upper Waitaha and the Windhover Gorge and includes recent interviews with the helicopter companies which deliver the vast majority of kayakers into the more remote rivers on the West Coast. The Recreation Report also includes all relevant historical data, providing context over a long period.

The Booth Report (2008) was reviewed by DOC in 2012 as to what additional information would be required for a concession application. The gaps identified were primarily in relation to kayaking and referred to the England Report and the RiVAS document - which were prepared after the Booth Report - as well as the need to identify potential mitigation for identified adverse effects on recreation. The Recreation Report incorporates more recent information and other material into the assessment of values and effects. Proposed mitigation was included in the Recreation Report and in the concession application.

In terms of a specific matter raised in the WWNZ Report, Westpower notes that Mr Greenaway is a grade 3 kayaker.

Impacts on flow availability in the Morgan Gorge (pp 13-18)

100% loss (as suggested in the WWNZ Report)

As part of consultation, Westpower provided flow data information to WWNZ so they could carry out their own assessment or analysis on flow data. However, the conclusions drawn from this are difficult to understand, in particular the 100% loss of kayaking opportunities. Westpower does not agree that there will be 100% loss of kayaking opportunity. The Waitaha will continue to be able to be kayaked including through the no-take days without a modified flow and on days when the river has naturally high flows.

Range of flow through which Morgan Gorge can be safely kayaked

The range of flow through which Morgan Gorge can be safely kayaked remains unclear. The flow range of 17.5 -22.5 cumecs was suggested by WWNZ, through consultation undertaken by Westpower, based on the flow data provided to them, for the few days that the Morgan Gorge has been kayaked (successfully or not). It

is likely that further experience will show this range is wider. As discussed above, Westpower notes the Morgan Gorge trip report (Appendix III p 33) refers to a 15-20 cumec range. However, without a date for that trip it is not possible to compare this against monitored flow rates.

The flow range/regime required for kayakers to kayak the Morgan Gorge is based on a very small number of days (3 known dates as per WWNZ Report, Appendix V page 37). As mentioned previously, this does not include the date at which Mr England makes reference to the first successful descent. On this date (21 Feb 2010) the mean flow was 18.0 cumecs with a flow range of 17.2 – 19.5 cumecs. These are within the mid-range flows of 11.8 to 23.3 cumecs described in the Recreation Report (p 62).

The loss of flow range suitable for kayaking could be balanced to some extent by the improved knowledge, of kayakers, of actual river flow through proposed condition 17.5 to make flow information publicly available on the Westpower website. This will allow a more targeted run, rather than taking a chance based on an educated guess of what the flow is, and assist with trip planning given the access difficulties. This counters the statement on p 16 of the WWNZ Report that the flow conditions of 50 cumecs are only available during or after rain (assuming immediately after rain is meant), and are thus difficult to predict. Incidentally, it may take up to 2 days or more for the river to drop to 50 cumecs after a larger flood. Mr England notes in his Waitaha Trip report that “the Waitaha holds its flow for several days after a reasonable rainfall event.”

Westpower notes that this section in the WWNZ Report includes many assertions without any explanation. For example p 14 contains the statement *recently it has been concluded that these flow days will not be suitable or essentially available for kayakers at all* – with no explanation as to why not - and footnote 4, p 14, says that the Recreation Report is incorrect in its analysis of the impact of flow changes but does not explain how that report is incorrect. The Recreation Report, on p 62, describes, the change in availability of mid-range flows (11.8 to 23.3 cumecs) as well as flows above 23.3 cumecs; and describes both changes as representing a constraint on kayaking opportunity. However, without further specificity from WWNZ it is not possible for Westpower to make meaningful comment without the reasoning behind WWNZ’s statements.

Positive impacts (pp 19-20)

Section 5.4 of the WWNZ Report examines the 'positive impacts' of the Scheme, and poses alternative options for the generation of power. Westpower considers that this section is clearly beyond the scope of the requested information.

Westpower further notes that the consented and undeveloped 46 MW Arnold B hydro scheme on the Arnold River is promoted by WWNZ as an alternative to building the Waitaha Hydro Scheme. The Arnold is owned by Trustpower Limited which is a New Zealand electricity generation and electricity retailing company, listed on the New Zealand stock exchange. Trustpower has interests both within New Zealand and offshore.

Westpower has no control over Trustpower nor what happens in the Clutha. As described in the concession application, Westpower is a 100% community owned company (section 2) and the proposed Scheme is for the benefit of the West Coast community served by Westpower. The income and assets of Westpower belong to the community, and decisions made are based on the benefits to the community.

Mitigation (pp 22-23)

Mitigation options for recreation values have been considered from the outset, and while not agreed to by WWNZ, Westpower has proposed several conditions to ensure effects are minimised where possible. There has been a genuine attempt by Westpower to work together with WWNZ to ensure its members are not unduly affected.

Should the concession application be successful and subsequent resource consents be granted, Westpower remains committed to ensuring users of the Waitaha River and surrounds are not disadvantaged by the presence of the Scheme while undertaking their various recreational pursuits.

Mitigation is discussed in the Recreation Report (p 66) and the concession application (section 8). Proposed conditions 17.3-17.5 are specific to recreation (concession application p 155) and were based on discussions with WWNZ about the:

1. Design of the weir to look more natural and constructing the lower face of the weir to enable kayakers safe access to Morgan Gorge (considering the inherently unsafe nature of the Gorge itself). Westpower would take advice from the kayaking experts on how we could best achieve a suitable design for kayakers without compromising the engineering integrity of the structures or feasibility of the scheme.
2. Controlled releases and no-take days.
3. The provision of online river flow information including video footage that is publically available and which would enable kayakers to better judge optimal kayaking periods and to organise trips to the river.

Other conditions regarding mitigation/management with respect to landscape/rehabilitation matters are included in the Landscape Management Plan and Rehabilitation Management Plan Conditions 10 and 11, pp 151-152.

Further to the application, Westpower has reconfigured the intake site construction and operation layout to further reduce and mitigate potential effects (further information package submitted on 6 March 2015). Westpower has also provided DOC, in response to a request for further information regarding kayaking values and potential effects, modified revised conditions regarding:

1. No take days; and
2. Weir design and safety.

Concluding Comments

While the WWNZ Report purports to not be an advocacy document it clearly strays beyond the scope of DOC's request for information, and into advocacy in a number of areas. This is reflected throughout the document, for example in the following statement in the concluding comments section (p 24):

We believe that the impacts of the proposal, if allowed would not represent sound or appropriate resource management when there are lower impact options for power generation available.

DOC did not request that WWNZ advise it as to whether the concession should be granted nor whether alternative forms of power generation are available, and this type of conclusion should not be included in a report on kayaking values.

It is imperative that DOC consider only those matters included in the WWNZ Report that are relevant to the request, and within that scope which Westpower understands was related to kayaking values of the Waitaha River, considers only those comments that are accurate and reliable and does not take at face value WWNZ's assertions that the Recreation Report lacks the consideration required.

Whilst the WWNZ Report attempts to provide certain information on kayaking values as requested by DOC there are some difficulties, as discussed above, with confirming some of that information. Westpower does not accept that the Recreation and Landscape reports are deficient (as alleged in the WWNZ Report) and consider they take a balanced and considered approach. Indeed, as discussed above, both reports were subject to a robust peer review process with the Recreation Report being peer reviewed by Mr Dave Bamford of TRC Tourism Ltd (see Appendix 6 of the Report), and the Landscape Report being peer reviewed by Mr Gavin Lister a Director of Isthmus (see section 1.5 of that report).

Appendix VI

The WWNZ Report includes, at section 6 (pp 20-22) and Appendix VI (pp 48-72), a planning assessment.¹⁰ Westpower notes that a planning assessment was not requested by DOC and therefore considers the appendix, and planning assessments throughout the report, should not be considered further.

The application for concession submitted by Westpower contains a comprehensive assessment of Statutory Provisions (section 10 pages 159-184), undertaken by a suitably qualified person, which addresses those matters relevant to the application, including;

- the Conservation Act 1987,
- Conservation General Policies 2005,
- West Coast Conservation Management Strategy 2010-2020, including the Hokitika Place and associated "Outcomes".

Appendix V11

Note that these additional images of the Waitaha River are above Kiwi Flat and these views will remain unaffected by the Scheme.

¹⁰ Appendix VI, entitled: *The DoC West Coast Te Tai o Poutini Conservation Management Strategy and its relevance to the consideration by DoC and the Minister of Conservation of the possible granting of a concession for Westpower to develop a run-of-the river hydro scheme on the Morgan Gorge on the Hydro River.*