

STATEMENT OF EVIDENCE OF JET BOATING NZ INC

Dated this XXth Day of XX 2009

1. Introduction:

This evidence is supplied by Jet Boating New Zealand Inc (JBNZ).

2. Scope of evidence

2.1 This evidence addresses the following issues:

- An overview of the JBNZ, its charter, functions, membership and affiliated associations.
- National significance of the Hurunui River for jetboating.
- Reduction in Navigability of rivers resulting from excessive abstraction and artificial flow fluctuations
- Increase in conflicts if jetboaters are forced to go to other rivers

2.2 This evidence is on behalf of JBNZ, who **support** the application for a Water Conservation Order on the Hurunui River.

3. Overview of JBNZ

3.1 JBNZ has 1837 current members spread around New Zealand through nine geographic branches. It is a well organised, disciplined and respected organisation. Amongst its many jet boating related interests it has a very strong focus on safety in respect to all jet boating activities.

3.2 It is estimated that other jet boaters exist in a ratio of approximately 2:1 to Jet Boating New Zealand registered boats – that is, there are estimated to be over 5,000 jet boats in New Zealand.

3.3 The use of the Hurunui River by members is steadily growing. A lot of our members are both anglers and jet boaters and rely on boating the river for access to fishing places.

3.4 JBNZ has become increasingly concerned about the adverse effects of water abstraction on jet boating opportunities in New Zealand's waterways. For instance, the Waimakariri river is currently threatened by excessive abstraction for irrigation. The Wairau River is under threat from a consent granted for a new hydro scheme. Many rivers are off-limits to jet boating through a 5 –knot speed restriction imposed for safety purposes.

3.5 Examples of rivers which have previously become un-boatable as a result of excessive abstractions for irrigation and/or hydro-electric power generation include the Ohau, Pukaki, Tekapo, Patea and Hawea Rivers. These rivers are now essentially unusable by jetboaters as a result of water abstraction. JBNZ is very concerned about the steady erosion of opportunities to pursue our sport.

4. National Significance of the Hurunui River as an inland waterway for Jet Boating and related activities

4.1 The mainstem Hurunui River, from Lake Sumner to the sea, is available for jet boating, with the 5 knot speed restriction having been lifted in all sections. Greenaway (2002) assessed all sections of the Hurunui River to be of local/regional importance for jet boating. It should be noted, however, that JBNZ considers the “run” from Mandamus to Lake Sumner to be of national importance.

4.2 Jet boating is a major method of accessing the river for angling (trout and salmon), kayaking, picnicking, and game bird hunting. Therefore, the values listed in the application as “outstanding” are to some degree reliant on the continued ability to access the river by jet boat.

5. Flows required for safe jet boating

5.1 NIWA (2004) undertook flow modelling to assess flows required for safe jet boating of the Hurunui River. The study concluded that a flow of 15 cumecs would permit adequate passage for jet boats through the Amuri Plains Reach. However, it only takes 1 barrier to stop jet boats, and the study found that a flow of less than 15 cumecs can occur in any month between January and June (largely the “high season” for jet boating).

5.2 Therefore, further information was obtained by Mr R. Gerard, former National Rivers Officer for JBNZ. Mr Gerard has an intimate knowledge of the Hurunui River, and has stated that:

For jet boating purposes the Hurunui River below Mandamus needs to be considered in three sections:

Section 1: Sea to SH 1 bridge:

This section is braided. The flow required for jet boating depends on the number of braids, but a flow of 25 cumecs is adequate for jet boating throughout this section.

Section 2: SH1 bridge to SH 7 bridge

Between SH1 and the Pahau confluence, the Hurunui River is mostly in one channel in a gorge. Above the Pahau confluence the riverbed spreads out and the flow is often in two or more braids. A flow of 20 cumecs is adequate for jet boating between SH1 and SH7 bridges.

Section 3: SH 7 bridge to Mandamus

Above SH 7 bridge, the river is braided and climbs more steeply. Boulder bars restrict passage at low flows, particularly when there are multiple braids. A flow of 35 cumecs is adequate for jet boating between SH 7 and the Hurunui Mandamus flow recorder. Experienced and adventure boaters will boat the Hurunui at lower flows, and inexperienced or recreational boaters will only use the river at higher flows. For example, I have boated Section 2 at a flow of 13 cumecs, but had to navigate a bar that necessitated crashing over boulders and traversing a difficult and very shallow braided section. On another occasion when there were multiple braids, it was difficult to find a navigable channel at 30 cumecs.

Section 3 generally will not be used by recreational boaters below 40 cumecs. Over time, the number of braids in any braided section of the Hurunui River will change, as will the flow distribution across boulder bars. Therefore, the flows considered adequate may not always mean that unimpeded access is possible through these sections of the river at the minimum flows needed for jet boating identified above.

5.3 Based on Mr Gerard's comments, a flow of 35 cumecs is required for moderately skilled jet boaters to get from the coast to Mandamus. The river flow at Mandamus is above 35 cumecs for 62% of the time on average over a year, but from January only about 45% of the time. From October to December, mean monthly flows are respectively 90, 72 and 60 cumecs – well above the 35 cumecs required for passage from the mouth to Mandamus.

5.4 With current irrigation abstraction (January to April), suitable jet boat flows are further reduced to about 35%. Therefore, the chances of the river being suitable for jet boating, i.e. exceeding 35 cumecs, on any day, (January to April), between SH 7 and the Hurunui Mandamus flow recorder, are about 1 in 2 in the absence of irrigation and with current irrigation about 1 in 3.

5.5 Natural flow variation in the Hurunui River is currently exacerbated by abstraction. This means that flows are less suitable for jet boating as a result of abstraction, than under a natural regime. The application, which seeks to restrict further abstraction, will therefore be of benefit for sustaining the Hurunui River as a jet boating resource.

5.6 The section from Mandamus to Lake Sumner is unaffected by water abstraction. However, its value as a jet boating resource is under threat by damming. This section can only be boated when flows are high, and usually only experienced boaters will utilise this area. However, the trip is considered to be of outstanding natural character, and is considered to be a highlight in any jet boaters experiences on NZ waterways. The application will ensure that this experience is retained for future generations, and not threatened by damming or diversion.

5.7 The Maritime Collision Rules state that boats must stay to the right at all times and upstream boats are to give way to downstream boats. This is only achievable when the flow in the river is such that safe navigation can be maintained. The Hurunui River can have many other users that share the river at the same time. These include kayakers, rafters and anglers. It is paramount to safety of all river users that a safe minimum flow is maintained at all times.

5.8 A problem with power boat safety is when river flows are in the “area of uncertainty”. This will cause people driving power boats to take unnecessary risks in marginal flow conditions. The problem with flow reduction is that it will bring the flow regime further into the “area of uncertainty”, through water abstraction, and flow fluctuations downstream of any dams. It can be expected that inexperienced boaties, are more likely to to take risks such as:

- Trying to motor through shallow braids at high speeds,
- Trying to retrieve boats in unsafe areas of the riverbed

5.9 Therefore, a consequence of cumulative (incremental) flow reductions is to make the river **look** boatable, but actually **be** unsafe. This is worse than if the flow was reduced to a level where the river was not boatable in any way.

5.10 Flow fluctuations downstream of dams can have an effect on the safety of the waterway for navigation because of rapid changes in water levels. As an example, a jet boater may launch his boat during a flow surge period, and then head down-river of the outfall. If there is a rapid flow recession, then our jet boater may become stranded downstream, without enough water to get home. While stranding is not in itself dangerous, it is more likely that our jet boater will take unnecessary risks to get back to the boat ramp. It is this added level of risk, caused by artificial flow fluctuations that can adversely affect boat safety.

5.11 In addition, there is the problem with safety with other river users such as rafters, canoeists and kayakers. At higher flows, these water craft can avoid powered craft through taking alternative braids. Powered craft have more manoeuvrability at higher flows, allowing evasive action if necessary. For example, a jet boat cannot stop in shallow water, but need to be kept at high speeds up “on the plane” to traverse shallow-water areas. These actions are more frequent at lower flows causing safety concerns and increasing conflicts between powered and non-powered boaties.

5.12 In conclusion, the adverse effects of excessive water abstraction and artificial flow fluctuations on inland waterway safety can be significant, as flows could be reduced into the “danger zone” more frequently, causing people to take unwarranted risks. The analogy is the phrase "an accident waiting to happen".

6. Increase in conflicts if Jet Boating opportunities are reduced

6.1 A reduction in Jet boating opportunities on one river will create significant pressure on those rivers remaining available to this recreational pursuit.

Reduced jetboating opportunities can arise from more stringent regulations (e.g 5 knot speed restrictions), water abstraction, reduced access and structures in riverbeds such as dams.

6.2 In each of these instances, jet boaters have had to go elsewhere to pursue their sport. This has caused congestion on other rivers, reducing safety and the quality of the boating experience. In addition, more boats on another river increases conflicts with other recreational pursuits such as angling, kayaking and simply the quiet enjoyment of the river.

6.3 A further effect on the boating public is the requirement for them to travel further to reach a suitable river for boating. It is the boating enthusiast, water users and the wider community who must bear the costs of these adverse effects, not the water abstractor nor the dam owner.

Conclusion:

JBNZ seeks the following decision:

- **That the application be granted in full**