

**IN THE MATTER** of the Resource Management Act 1991

**AND**

**IN THE MATTER** of applications for resource consent by the Central Plains Water Trust and a notice of requirement for the designation of land by Central Plains Water Limited associated with the construction and operation of the Central Plains Water Scheme

---

**STATEMENT OF EVIDENCE OF ANTHONY BUCKHURST MATRAVERS ON BEHALF  
OF THE NORTH CANTERBURY FISH AND GAME COUNCIL**

---

## INTRODUCTION

1.1 My full name is Anthony Buckhurst Matravers (called Tony) and I am 58 years of age.

### Angling experience

1.2 I was first introduced to angling for freshwater sports fish (Trout) in the very early 1960s when I would push bike to the Avon River after (Intermediate) school and at weekends. In 1976 following my return to Christchurch with family, I was introduced to angling for Chinook Salmon initially in the Rakaia River and shortly thereafter, the Waimakariri River.

1.3 It is fair to say that Chinook Salmon fishing rapidly became the dominant activity of my leisure time including annual holidays, which were structured to coincide with the main Chinook spawning runs. My family (wife, one son and two daughters) were actively involved in not only the fishing but also the many holiday periods and weekends that we would camp at the river side.

1.4 Not satisfied to sit on the sidelines, during the early 1980s I successfully stood for election as a councillor for the North Canterbury Acclimatisation Society, where I was appointed as their representative on the South Island Salmon Committee. During this time I also took a further active role by accepting a Warrant as a Fisheries Officer (Ranger) to operate principally in North Canterbury waters, and more specifically, the major Chinook rivers being the Rakaia and Waimakariri Rivers.

1.5 With some reluctance at the end of my tenure as a ministerial appointment to the Transitional North Canterbury Fish and Game Council, I declined to stand for Council, choosing (perhaps selfishly) to devote more time to developing a lifestyle business that would allow me more field time and opportunity for active Chinook angling and compliance activity as a warranted officer.

1.6 In 1996 I purchased a Hamilton 131A jet boat, which is used extensively on both the Rakaia and Waimakariri Rivers, and less often on the Waiau, Hurunui and Waitaki Rivers. I have spent hundreds and hundreds of hours jet boating the Rakaia and Waimakariri Rivers and am well aware of the difficulty in boat passage when rivers have reduced flows, especially in the Waimakariri.

- 1.7 Since 2001 I have traveled to British Columbia on an annual basis angling for salmon (including Chinook) in “wild” braided shingle river systems similar to our own Rakaia and Waimakariri Rivers. This has undoubtedly given me the enviable perspective of being able to compare and observe Chinook fish passage linked to river flow conditions in both hemispheres.

### **Scope of evidence**

- 1.8 I have been asked by Fish and Game to describe my experience of the Chinook Salmon fisheries of the Rakaia and Waimakariri River, including the reasons why I fish these rivers and what factors lead me to fish at certain times and locations. I specifically consider the impact of turbidity and flow on optimal timing conditions.

## **2. CHINOOK SALMON FISHERIES OF THE RAKAIA AND WAIMAKARIRI RIVERS**

- 2.1 In the 20 years prior to my purchase of a jet boat, the prime reason for me visiting either the Rakaia or Waimakariri Rivers was to actively pursue Chinook fishing.

- 2.2 As my introduction was to the upper Rakaia, not surprisingly this area became my main focus. In my twenties with a young family, financial commitments limited my transport and therefore access to various river sections, and in those days an equal amount of time was spent at the more accessible middle to lower reaches of the Waimakariri. The aesthetics of the river valley or braided forms of the plains also influenced my choice of fishing location.

- 2.3 My wife and son became seasoned anglers and looked forward to every opportunity to pursue Chinook fishing and continue to this day to be very actively involved. This has been a very strong bonding influence on my family. I have also formed strong links and social ties with a number of fishing friends enjoying their company to these rivers as well.

- 2.4 Between mid November and mid March on average I visit the Rakaia and Waimakariri rivers anywhere between 20 and 50 times, some of these visits would involve riverside stays of up to a week at a time.

### Why do I predominantly fish these two rivers?

- 2.5 There are a number of reasons why the Waimakariri and Rakaia rivers are attractive:
- a. Fish availability – fish stocks likely to be higher especially in the Rakaia
  - b. Volume of sustained water flows, even in times of lower headwater rainfall
  - c. Proximity to my place of residence
  - d. Ease of access given both mode of transport and physical riverbed/public access
  - e. Provision of adjacent public camping facilities
  - f. Physical environment, the aesthetics of an area, pristine water and riverbed conditions for Chinook fishing, as these two rivers have consistently higher and longer flow levels than say the Hurunui and Waiau.

### Where do I fish on each river?

- 2.6 Prior to purchasing my jet boat in 1996 I would fish the following sections of the rivers:
- a. Rakaia - lower to middle river (December), mid-river (January) and above the gorge (February).
  - b. Waimakariri – West Melton to Courtenay (March and April) where access is available.
- 2.7 After the jet boat purchase I have spent more time fishing in the following areas:
- a. Rakaia – mouth to lower river (November/December), and mid river (January, February & March).
  - b. Waimakariri – middle reaches with odd foray into gorge (March & April)
- 2.8 I believe these river sections at these times of the year offer me the best possibility of connecting with Chinook salmon. There are also certain key factors that will improve the opportunity.

## Timing of fishing

- 2.9 My preference for venturing out to undertake Chinook fishing is as close as possible after a fresh, when turbidity levels produce about 6 inches of visibility (my sight) in the water. I guess a good measure is the “gumboot toe method” whereby if you stand in water wearing black gumboots with the water just below the top, and you can dimly see your toes, then its “fishable”. It is from this point on until the water becomes clear and is of much lower flow than in my experience I consider as prime salmon fishing time.
- 2.10 Upstream migrating Chinook instinctively respond to increases in river flows by becoming active and moving with purpose upstream. It is in these times that you are more likely to have success. In times of lower flows, when the water is warmer, passage is increasingly restricted (for both fish and boater) to the point that Chinook all but stop moving upstream (river becomes seemingly “empty”), become lethargic and are not interested in “attacking” or biting any lures or spinners being retrieved through the water.
- 2.11 The five salmon species (including Chinook) returning home in their native waters in British Columbia exhibit exactly the same instinctive characteristics and responses to increased water flows especially freshes. I have personally observed this phenomenon repeatedly during my visits to that part of the world.
- 2.12 In reality, anglers therefore have a very small window of fishing opportunity between a fresh subsiding and the water levels dropping back to clear and low. I firmly believe that any attempt to curtail this window of opportunity by, for example, water extraction or diversion will cause hardship for anglers and fish (passage) alike. I personally would want to see those fish that evade capture to finally reach their spawning grounds not be in such a beaten up and physically exhausted condition that they cannot contribute to future generations.
- 2.13 My experience as a Ranger also tells me that the very same window of fishing opportunity is when I am most likely to have the majority of angler contacts. I personally look to restrict my fishing on the Rakaia when flows fall below 150 cumecs. Correspondingly a similar regime operates for me on the Waimakariri whereby I access the stage height readings taken on the Waimakariri gorge reader. I am unsure however as to what this translates to in regard to cumecs.

## **Turbidity**

- 2.14 In my opinion, turbidity levels govern the ability of fish to see your lure or spinner in the water, not the movement of the fish themselves.
- 2.15 I have personally seen Chinook clearly on the move up stream in turbid water which is also at increased flows as a result of headwater rain that has generated the turbid water by carrying extra silt etc. Conversely, I have seen turbid water at lower flows (resulted from landslips) with no Chinook observed to be moving either up or down stream. This demonstrates to me that Chinook instinctively respond to higher flows to assist in fish passage.
- 2.16 Some turbidity in the water can assist in successful catching of salmon as the lure is then slightly obscured and it is thought that the fish is responding in a defensive manner to movement, rather than to the suggestion of a food source. This makes sense given Chinook stop feeding upon entering freshwater.

## **Flow**

- 2.17 The whole flow question is rather complex, Chinook have been proven to “sit tight” during low flows, and spark into life and migrate upstream during periods of higher flows (as evidenced by NIWA radio transmitter tracking).
- 2.18 Any riverbed stream is a collection of troughs, bends, fans, dips, and varying water speeds. Varying water flows will impact on all or any of these factors. What may have been a productive salmon lie or pool yesterday, can be an entirely different situation today. This is because water flows are constantly changing.
- 2.19 If flows are strong (given low turbidity) then the chances of catching a salmon in most areas of a streambed are much improved, since the fish are likely to be on the move. This then brings the fish to the angler. If flows are low then the angler must go to the fish, as the fish are likely to have become static. In times of low flows angler effort needs to be considerably increased in the hope that it will produce results. My best results in catching salmon, be it here in New Zealand or in British Columbia, have invariably been on a falling fresh. Therefore I consider that salmon passage is clearly

governed by the flow, the whole flow, and nothing but the flow. Consequently I regularly check water flow levels before I go out.

- 2.20 Turbidity is relevant in that it influences your choice of lures. In fishable but turbid water, a lure that is in contrast to the turbidity level, for example black or indeed fluorescent and of a greater size, is preferable to the smaller silver or copper lures that are desirable in clear water. This requirement to change lures according to the water flow and clarity acts in my opinion as a challenge and stimulates the angler thus enhancing the angling experience. Casting out the same old lure, day in, and day out, would likely become boring and lack a sense of fulfilment.
- 2.21 Of course, the flows affect opportunities for jet boating, as low flows can, and often do, effectively end any chance of boating sections of rivers, particularly so in the Waimakariri. In my opinion, lower turbidity which helps the driver “read” the river better goes hand in hand with the actual flow level. The best time for leisure and family boating occurs in the same opportunity window as that for Chinook fishing. Whereas flush outs of irrigation intake systems could potentially be a hazard to downstream foot anglers out in the riverbed, conversely sudden draw off of in stream water could potentially prove to be a hazard to downstream jet boaters when attempting to return to their boat launch site when riffles might have suddenly and without warning become too shallow to safely navigate.
- 2.22 Low flows reduce the number and availability of salmon pools or lies. Where a salmon may have stopped or rested in a pool or lie yesterday, a lower flow today means that the fish will go somewhere else or “hole up” completely waiting for a fresh. This situation then creates competition amongst anglers for the remaining available pools. This situation impacts at times on my own fishing experience, and I must confess to avoiding crowded areas such as the river mouth.

**A Matrovers**

**May 2007**