

Hakaterere News

September 2011



From the committee

John Waugh, hydrologist, and member of our committee, made a submission on ecological issues on the Ashburton River (reprinted below) on behalf of Forest & Bird to the Ashburton Zone Committee of the Canterbury Water Management Strategy (CWMS).

Forest & Bird is taking a great interest in the CWMS and has a responsibility to submit on water issues in our area. We are very pleased to have John's expertise in hydrology and local knowledge of the Ashburton River.

Ecological issues on the Ashburton River

Background

- The Ashburton River is seriously over-allocated in relation to out-of-stream water use
- Total allocation (surface and groundwater) is 17.934 cumecs (60.7% of the mean flow)
- Stockwater takes in the Ashburton catchment total 5.47 cumecs
- The average allocation of 14.53 cumecs is more than twice the NES recommendation of 7.1 cumecs
- Ashburton River is the most heavily allocated river in NZ, in relation to its natural mean flow of 29.56 cumecs.

The Government's NPS "Freshwater Management, 2011" (12 May 2011) says overallocation has to be addressed.

FIVE KEY ISSUES that need to be addressed on the Ashburton River

(1) RIVER MOUTH needs to be kept open most of the time (more than 90% of time). This allows the whole river to function in an ecologically sustainable manner. Fish, both native and sports

fish can migrate in and out of the river. Fish and Game data from the last 7 years shows that the flow needs to be 7.0 cumecs from October to April, and 5.0 cumecs from May to September (Mark Webb, pers comm. 2 May 2011), to keep the mouth open most of the time.



Fishing at the Ashburton River mouth – the mouth needs to be kept open most of the time

(2) RIVER FLOWS need to be managed to maintain adequate flows throughout the river system, by setting appropriate "minimum flows"

- NES flow (80% of 7-day MALF at SH1) is 10.77 cumecs and is suggested by Ministry of the Environment (MfE) as an appropriate value.
- Flows at SH1 need to be set at around 6 to 7.5 cumecs in summer to maintain suitable instream habitat.
- Flow at the mouth for summer months needs to be at least 7.0 cumecs.

- A flow regime also needs to be established to keep the river healthy. Floods and freshes play a vital role in maintaining the “braided” character of the Ashburton River.

(3) RESTORE FLOWS to rivers that are now dry for (a) a greater period of time (months instead of days or weeks) and (b) over a longer reach of river. Examples where this applies are the North Ashburton River and the Hinds River around and above SH1.

(4) WATER QUALITY Water Quality issues need to be thoroughly investigated by Environment Canterbury, from Buick’s Bridge to the hapua/mouth. Then actions need to be taken to clean up the river, to allow people to safely use the river for “contact” recreation.

(5) PRESERVE the Upper South Ashburton River and adjacent river-side flats in its natural state.

(a) This particularly applies to the outwash plain from Buick’s Bridge down to Hakatere Corner, and between the Lake Heron Road and the river. Invasive weed species like broom and willow need to be kept out of this area. Forest and Bird understand that some weed and pest control action has been undertaken in this area, and this should be continued. This area is prime nesting habitat for banded dotterel and a few wrybill.

(b) Hakatere Corner down to Blowing Point Bridge is more heavily infested with weed species, but endangered bird species are known to breed in this area. It also needs ongoing weed and pest control action.

CONCLUSION The Ashburton River Water Management Plan should set long-term targets to be achieved over 20 years, but with working milestones to be met in 5, 10, and 15 years.

Possible effects of climate change

To check whether flows in the Ashburton River are stable, I computed decadal mean flows, set out below. The results are quite a surprise.

North Ashburton River at Old Weir, site 68810, the mean flow (1982 -2011) is 8.373 cumecs.

Decade mean flows are:
 1981-1990: 9.42 cumecs
 1991-2000: 8.63 cumecs

2001-2010: 7.46 cumecs

Hence the North Ashburton has lost 2 cumecs of natural inflow over the period 1981-2010.

South Ashburton River at Mt. Somers, site 68806, the mean flow (1967-2011) is 10.805 cumecs.

Decade mean flows are:
 1971-1980: 10.09 cumecs
 1981-1990: 10.73 cumecs
 1991-2000: 11.64 cumecs
 2001-2010: 9.74 cumecs

Hence the South Ashburton river has lost around 1 cumec of natural inflow between 1981 and 2010. Effectively the Ashburton at SH1 has lost 3 cumecs over this 30 year period. The most likely cause of the loss of natural inflows is the effect of climate change. It is very clear that the flows in the Ashburton River are not stable, and this needs to be allowed for in managing the water resource. At the same time irrigation demand has more than doubled, placing increasing stress on the water resource.

John R Waugh, Hydrologist, 20-08-2011

Forest & Bird donates art award

Forest & Bird donated a prize for the best native botanical art at the annual Ashburton Society of Arts exhibition held in June. This was won by Andrea Moonlight with a beautiful stylised fern painting. Congratulations Andrea!



Kanuka planting at the Harris Reserve

The Harris Scientific Reserve at Lovetts Road, Maronan, was a scene of great activity on Sept 4th as about 250 people planted 2800 trees to augment the 2000 (mostly kanuka) plants already planted there by the Ashburton Community Conservation Trust (which was formed by Forest & Bird). This big increase in the planting in the reserve has come about thanks to the Living Legends project.

Living Legends was set up as part of the Rugby World Cup, and nationally, funding has been made available for 17 native plant restoration projects. The Harris Reserve is one of the sites chosen to participate. Our local Living Legend, ex-All Black Jock Ross, was on hand to help “draft” groups of helpers into the paddock to begin the planting.

This is a huge boost to the development of the Harris Reserve and with ongoing support from Living Legends we will make progress much faster than previously expected. Conditions at the reserve are quite extreme, with low fertility soil which tends to dry out quickly. This site is one of only a handful of such Canterbury Dryland ecosystems still in existence, and as such is an important indicator of how the plains looked before settlement. It has also become a repository for plants that are fast disappearing.

Thank you to all those people who helped prepare the site, then plant, water, and mulch the trees. It was very inspiring to see the transformation from bare paddock to a veritable forest of young trees, and it was great to see the enthusiasm from young and old.



Kanuka planting day at the Harris Reserve

Native planting at the new industrial area

It is encouraging to see how well the native planting, including beech trees, at the new industrial area is progressing. The council is to be commended for their planting work at the site.

Survey of native vegetation

The Ashburton Community Conservation Trust formed by Forest and Bird has recently invited tenders from botanists to carry out a survey of the Ashburton District dryland vegetation from SH72 and between the Rangitata and the Rakaia Rivers. A previous survey completed in 1996 identified many sites throughout the District where indigenous (native) vegetation was still existing. This data was available at the time of writing the original Ashburton District Plan and appeared to recognise the plight of these often tiny remnants. A rule was included which stated that there should be no clearance of indigenous vegetation on Rural A and B land (7.6.5.1.13).



A mature kanuka on the Lovetts Road which may be hundreds of years old

Unfortunately this clause has had no ability to protect those remnants and we have seen native vegetation removed or lost due to other land use and neglect often on public land. The remnants remaining, because there are so few of them in the Ashburton District, are now regarded as being significant sites. An example is the meuhlenbeckia on the fence at Hinds School.

The Canterbury Water Management Strategy and the Canterbury Biodiversity Strategy recognise concerns about the loss of plains indigenous vegetation and as a result we were able to suggest to the District Council Biodiversity Action Plan that before decisions are made regarding managing the remaining indigenous plantlife and

associated ecosystems we need to find out what is left. Hence the survey which will be completed over this summer.

A recent situation exemplifies the urgency. A farmer developing land for centre pivot irrigation bulldozed several mature Kanuka trees bordering the Rakaia River near the new Acton canal system. This was very disappointing when others in the community are spending many hours protecting indigenous ecosystems. Restoring a Kanuka forest in particular is a very difficult task. There has been a lot of publicity about this recently. In the Selwyn District when a similar situation occurred the farmer was required to replant much of the affected area as well as plant a separate area with locally sourced vegetation. As a signatory to the Canterbury Biodiversity Strategy we expect the Ashburton Council will apply the same rules and require the land owner to replant and maintain the Kanuka trees as was the case in Selwyn.



Kanuka destroyed

Nature in London

While looking after my small grandchildren in London we visited wonderful parks and even 'farms' in the middle of the city. Families are well catered for and there are many opportunities for children to touch base with nature.

One memorable place was the Rainham Marshes at Purfleet on the banks of the River Thames in the upper estuary area. These ancient marshlands were a Ministry of Defence firing range for over a century. This historic place includes the firing range and lookout shelters as well as shells from bombs off loaded by fleeing Germans during World War 2.

The Royal Society for the Protection of Birds has restored and manages the marsh which comprises ponds, streams and extensive reed beds. There is an abundance of wild plants including banks of blackberries and other 'weeds'. A network of tracks and boardwalks are provided as well as viewing points to observe the wetland's array of wildlife.

The wetland like others in UK is very family friendly and has a good array of information panels. Local RSPB members were on hand to explain and show various species to be found there. It is home to a diverse range of birdlife as well as insects such as the scarce emerald dragonfly. Grass snakes and huge frogs are in the marsh as well as the water vole which is seldom seen elsewhere in UK.

Part of the site includes the Thames estuary shore line with a mix of sea, shore and migratory birds as well as an ancient petrified forest. A place such as this is a welcome contrast to the busy London city and well worth a visit.

Edith



The Rainham Marshes on the River Thames

Wrybill research on Rakaia River

Over the last three years DOC has undertaken research on wrybill in the upper Rangitata River. We have good information on distribution, key breeding areas, proportion of nests predated and flooded, and have begun to get an idea of productivity – that is, the number of chicks each female produces per year. What we are learning indicates that the population is in decline. Other studies on wrybill have shown that for a population to remain stable, a female must produce 0.75 juveniles per year. Last season, the females that we monitored produced a third of that figure.

This year, we have an opportunity to research wrybill in the upper Rakaia River. Contact Wind Limited has recently been granted resource consents for a 168 turbine wind farm in the North Island, on the coast between Raglan and Port Waikato. As part of the project Contact Wind Ltd is required to undertake a long term programme in the upper Rangitata River to offset any potential biodiversity losses (deaths) which may occur when wrybill fly north to their winter feeding grounds. Contact intend to do this by establishing a programme to enhance the breeding success of wrybill and the South Island Pied Oystercatcher (SIPO) nesting in the upper Rangitata River. This will involve determining current productivity of wrybill and SIPO in the upper Rangitata River over the next 2-3 years before undertaking a mammalian predator control programme. This work will complement Project River Recovery, a predator control programme undertaken in the Tasman River, and provide DOC with further information on how effective mammalian predator control is at increasing productivity of SIPO and wrybill in braided rivers.

Contact's involvement provides the department with an opportunity to use its resources in the upper Rakaia River while still gaining information of wrybill productivity in the upper Rangitata River. There has been no research done on wrybill in the upper Rakaia River for over 30 years. At that time the upper Rakaia River, along with the upper Rangitata River, was considered stronghold populations for the species. DOC now has an opportunity to survey and research this population, which will assist in a better understanding of the species nationally. We will

still be undertaking all other work such as weed control as normal in the upper Rangitata River.



Our objectives for research in the upper Rakaia River over the next six years will be:

1. undertake surveys to obtain an estimate of abundance of wrybill
2. map wrybill distribution
3. monitor up to 40 pairs to determine productivity
4. undertake video monitoring and DNA analysis of predated nests to determine predator guilds
5. understand location and abundance of southern black-back gulls and harriers
6. determine if avian control is beneficial in improving wrybill productivity

Wendy Sullivan, DOC Geraldine

Water meetings The Ashburton Zone Committee has put together a draft programme for water management which you are invited to review and give feedback on before it is finalised. Public meetings are being held and written comments are welcome – please send by Oct 21.

Community Engagement meetings:

Wed 28 Sept, 7-9 pm, Rakaia Church Hall

Thurs 29 Sept, 7-9 pm, Ashburton District Council Office

Fri 30 Sept, Mayfield Memorial Hall

Fantails How are the fantails in your area? Fantails often do not survive snowfalls and despite it having been a generally warm winter, there have been two snowfalls which may have caused fantail deaths. It would be interesting to know how they are faring – please keep an eye out for fantails.

Winter bird count The annual winter bird count on the Ashburton Lakes was again a great event. It was a warmish day but many of the lakes had some ice. A total of 4897 birds (but only 9 grebes) were counted, as compared to 5900 last year. This was the 27th year the count has been running. The lakes and mountains looked stunning under their winter covering of snow.



Don counting from the verandah of Neville's bach at Lake Clearwater



Lake Emma



The hut at Lake Emma

Rubbish on our roads! Peter Howden and his grandsons recently picked up rubbish from a 2.5 km section of road near Mayfield. They collected 648 pieces of rubbish of which there were 118 aluminium cans, 115 glass bottles, 112 plastic bottles – the balance being car tyres, paper, chip packets etc. Just imagine the amount of rubbish on the roads across our whole district – surely the public can do better than this???

Vehicle costs It would be appreciated if passengers would contribute to fuel and vehicle running costs. On trips to Christchurch or the high country please offer your driver \$10 per passenger, and \$5 within the Ashburton area.

The Ashburton Branch of F & B:

- Meets on the third Tuesday of every month at the Sinclair Centre, Park St, at 7.30pm
- Excellent speakers entertain and educate
- Kiwi Conservation Club – the junior branch of F&B – check the programme for KCC Great Days Out
- F&B organises field trips to interesting locations, usually within mid-Canterbury
- We welcome visitors and new members

Committee

Chair: Edith Smith 3084440

Secretary: Val Clemens 3085620

Treasurer: Peter Smith 3084440

Committee: Bill Hood, Janet Hood, Donna Field, Peter Howden, Valerie Sheldon, Paul Dyas, Warren Jowett, Don Geddes, Jean Wragg, Allan Sinclair, Mary Ralston.

Newsletter editor: Mary Ralston Contributions are welcome – please send to mary.ralston@xtra.co.nz or phone 3029202