

**SOUTH RAKAIA BACH OWNERS' ASSOCIATION SUBMISSION ON THE
PROPOSED CANTERBURY LAND AND WATER REGIONAL PLAN
ADDENDUM 22ND MARCH 2013**

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Inadvertently omitted 15th March 2013, but this point was included in our original written submission September 2012.

Schedule 2

- 1 We support fish screening as described in **Schedule 2** of the Plan
- 2 During the 2012 TrustPower hearing expert witness Mr Unwin confirmed that salmon numbers have declined 75% in the Rakaia in the last 30 years.
- 3 Mr Unwin gave the following reasons for the considerable drop in salmon numbers:
“...I would expect a long term decline in Rakaia runs to be associated with factors, both natural and anthropogenic, which vary only slowly with time. The list of potentially relevant factors is large, diverse, open-ended, and speculative. It includes land use changes, water quality, flow regime, **fry losses to irrigation intakes**, angler harvest, impact of hatchery releases and climate changes.....”
- 4 Juvenile salmon make their way down to the sea during the same months as irrigation take is occurring. Thus, an unknown number of juvenile salmon are being lost in irrigation canals and other methods of water take.
- 5 While fish screening is a way of mitigating loss of fry in irrigation intakes, fish screens vary in their effectiveness based on screen type, location, and approach velocity.
- 6 Our members have been told that yearling salmon have been found in lower Rakaia storage ponds - confirming our concerns about unknown quantities of salmon fry leaving the river via existing irrigation intakes.
- 7 All screens need to be proven fit for purpose at their specific site; and, appropriately maintained to ensure effectiveness.

References:

- South Rakaia Bach Owner' Association members
- The TrustPower Application to Amend the National Water Conservation (Rakaia River) Order 1988 and associated evidence documents: <http://ecan.govt.nz/get-involved/consent-projects/past-notifications/rakaia-wco/Pages/evidence-rakaia.aspx>
- Fish Screening: good practice guidelines for Canterbury, NIWA Client Report: CHC2007-092, October 2007