Fish screens finally back on agenda

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For years I thought no one cared, but the issue of river offtakes and the loss of fish down such offtakes took on new significance at Monday night's Public Forum initiated by the South Canterbury Water Enhancement Group (SCWEG).

Various kinds of screening and issues pertaining to screening structures were addressed by experts in the field.

Facilitated by Councillor Mark Oldfield in conjunction with Ecan CEO Dr Bryan Jenkins, the meeting heard from NIWA spokesperson ( Dennis Jamieson) present the complexity of issues surrounding effective exclusion of fish (native and/or exotic) from water offtakes.

It was immediately clear that a group comprising NIWA, Irrigation New Zealand, Fish and Game, and DoC, supported strongly and chaired by Ecan, had over the past three years researched the issues deeply and professionally. Davor Bejakovich and Shaan Charteris combined to provide the Fish and Game/DoC viewpoint, and Terry Heiler addressed the irrigator's concerns.

In short, the three years of study by the group was laid on the table for public consultation and consideration by the more than 50 persons present.

Dr Jenkins explained the lack of New Zealand data on the subject and the effort that's been made by all parties to gather international data.

He explained that DoC and Fish and Game are required by the Acts (under which they must operate) have statutory responsibility to protect fish within waterways, and one issue is that no one-size of fish screen system fits all waterways.

Under the relevant acts, Fish and Game are required to ensure a sustainable sports fish resource and DoC is required to protect freshwater fish habitats; advocate the conservation of aquatic life and freshwater fisheries, and have specific responsibilities in relation to fish passage -- including requiring diversion structures to have a fish facility.

"There remain questions to be addressed about the issues that need to be resolved and the technical detail required," said Dr Jenkins. "The operation and maintenance of screen systems will, in time, have to be more rigorously checked, but first we need to agree on the suitability of screens to achieve fish exclusion from offtakes."

Davor noted that fisheries in Canterbury are under pressure. There are significant differences in the flow regimes of rivers in which offtakes are situated or proposed, and freshwater fish are susceptible to abstraction of water through deterioration of habitat, diversion into intakes, and physical damage against screens inappropriately placed or operated.

"Most of the fish screens in Canterbury were designed and installed prior to the completion of contemporary scientific work on fish screen design, and some large schemes are still unscreened in Canterbury."

In the relatively recent past Central South Island Fish and Game officer Mark Webb, in cooperation with RDR, researched the effects of the then unscreened offtake from the Rangitata River at Klondyke and found some 200,000 juvenile salmon and 2500 trout were lost from the transfer of water across Mid Canterbury.

"With the installation almost complete of the RDR noise barrier at Klondyke, it's hoped that this screening method might provide an example for other offtakes elsewhere in Canterbury," said Davor.

Terry Heiler, representing Irrigation New Zealand, said "the research has told us much about what we don't know and still need to develop."

"There's got to be a tradeoff here," he said. "We all want to protect the fisheries but we also want to maintain productivity for the community." He noted too that 2-3mm screening to protect the fisheries would, in his opinion, close down most river offtakes in terms of viability and cost.

Dennis Jamieson said the research points to the need to try new things. "Experimentation is necessary to meet the diversity of the waterways in Canterbury."

The meeting broke into breakout groups to discuss the "where-to-from-here" and provide pubic input to what will inevitably involve more research.

The breakout groups identified many points requiring further evaluation, or explanation, with some identifying the difficulty of addressing simultaneously the matter of biological and engineering issues made harder through variable natural flow regimes and floods or drought.

Clearly there is some way to go, but equally clearly to me is that this first step has been a huge step forward towards accepting there is a real need for effective screens, and the matter is being addressed seriously. That the architects of Monday night's address have worked so diligently together on a matter that has caused conflict in the past is encouraging. They are to be congratulated on taking the issue into the public arena throughout Canterbury and listening to public perception before progressing the research further.

Prior to Monday night I could believe most anglers would think fish screens were a forgotten topic. How wrong we have been.

The potential benefit of the RDR noise screen will now be watched with great interest as perhaps pointing to retention of fish in rivers.

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On Tuesday afternoon, Dr Michael Wilson, in conjunction with Prof Haikai Tane, made an excellent job of promoting the value of willow trees for fish habitat and stream management. Dr Wilson explained his 10 year study of the subject.

"All rivers are shaped by the sediment and the way water moves," he said. "Willows control erosion of bank sediment, with the driver being the willow root mat."

The views expounded were well researched and supported by significant illustrations of streamside vegetation in Australia showing the manner in which berm plantings (natives or exotics) can use established willows to provide the nursery protection while the new trees develop.

"It's inappropriate to differentiate between native and exotic trees," he said.

I'll tell you more about this meeting next week..

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A reminder that the South Canterbury Angler's Club bus trip to Lake Benmore (The annual Brass Monkey fishing expedition), departs the Timaru Railway Station at 7.30am this Sunday, wet or fine.

Don't forget to take your camera. Both the fishing and the winter scenery are worth the visit.