

Senator Glenn Sterle
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Senator Barry O'Sullivan
Tenancy A, 189 Hume Street, Toowoomba, Qld 4350

Senator Janet Rice
240 Sydney Road, Coburg, Vic 3058

24th May 2018

**Re: Rural and Regional Affairs and Transport Senate Estimates Hearing 23rd May
Fisheries Research and Development Corporation (National Carp Control Plan)**

Dear Senators Sterle, Rice and O'Sullivan,

I am writing to you today having watched with interest the report to the Senate Estimates Committee yesterday by the National Carp Control Plan (NCCP). By way of a brief introduction to myself, I am a graduate Microbiologist with some 30 years' experience in various Medical and Diagnostics aspects of Science in the UK, Europe, USA, South Africa, and Asia plus for the past 8 years in Australia.

My initial interest in the NCCP proposal to use the CyHV-3 as a biocontrol for feral carp goes back more than 9 years whilst still living in the UK and a keen Koi Hobbyist. Having seen firsthand the devastation caused by the virus (also called Koi Herpes Virus or KHV) to Anglers /Fisheries, food (carp) producers and the fish Breeders of Japan & Israel, I was alarmed by the idea of deliberately releasing the virus into an (as yet) uncontaminated Australian environment. I would emphasise at this point that my primary concern is the devastation that will undoubtedly be caused to our Rivers and Lakes by the virus and millions of tonnes of dead carp rather than any impact to my hobby of keeping pet Koi.

During the Senate estimates hearing on Wednesday, Mr Matt Barwick and Dr Horne made reference to other Carp control measures to supplement the virus. Mr Barwick used the expression; "having to use a multi-pronged approach based on experience of other pest controls used throughout the rest of World". NCCP have stated on numerous occasions that CyHV-3 will not be successful in the long term on its own.

However, in an NCCP Webinar just 24 hours before the Senate hearing (6pm Tuesday 22nd May) Mr Barwick stated that currently no other Carp control measures are available in the event of the virus release being rejected by Federal and State Government. As such, I believe that is it deliberately misleading of the NCCP to offer up the use of genetic biocontrols and commercial fishing as alternatives or adjunct controls to the virus to the Senate committee. There is little or no evidence of any significant funding from the \$15m budget allocation to NCCP being used for anything other than research in to the use of the Virus and the massive clean-up campaign. Mr Barwick in fact did not answer this question on funding of alternative control measures when asked by Senator Rice. It would appear that the NCCP is in danger of becoming the National Virus Release Plan rather than the National Carp Control Plan.

The NCCP could be accused of being dismissive of outside expert scientific advice. Claims have been made that Australia cannot be compared to other countries, due to our unique environment and climate. This despite the fact that only laboratory testing has been undertaken here and with only a single published study (McCull et al, CSIRO). Said study also showed an alarming mortality rate for non-carp fish species (e.g. approx. 60% of Murray Cod, Perch etc.). This was brushed off as poor animal husbandry by the author. It could be argued therefore that a proportion of the carp would have also succumbed to poor husbandry rather than the virus, so the virus efficacy and kill rates may be significantly over estimated.

My involvement within the Koi community (whilst not being relevant in itself) has enabled me to communicate frequently with experts in matters relating to the Virus (KHV or CyHV-3). This includes Dr. Paula Reynolds from Lincolnshire Fish Health (UK) and overseas experts in Biosecurity. Dr. Reynolds' experience with the virus dates back to the late 1980/90's when the first cases started to surface in Israel, Japan and UK. She has published several papers on KHV and has written to the Senate and again recently to Mr Barwick expressing her concerns over the use of the virus. Dr. Reynolds' concerns are based on her vast scientific experience and cannot be dismissed as having some form of 'motivation' (to quote Dr Horne). I am also aware of the recent publications within 'Nature' and 'Science', along with letters from Dr Jackie Lighten and Prof Cock van Oosterhout.

The clean-up campaign is acknowledged by all parties as being of paramount importance. NCCP funded research from Universities in Canberra, NSW and SA show that Rivers, Lakes and Wetland water will putrefy and become "Black water" if carp carcasses are not removed quickly. Contrary to recent Press releases, the carcasses of dead carp are unlikely to be suitable for use by companies such as Charlie Carp or SAMPI as a source of garden fertiliser. Ordinarily these companies use live carp that are snap-frozen. Carp that die from the CyHV-3 virus are covered in lesions and often sink to the bottom and begin decomposing before eventually surfacing. They would certainly not be suitable for collection, and it is misleading to suggest this. One estimate for using commercial waste management companies to collect carp carcasses is \$1,000 per tonne. With the total amount of carp being somewhere between 0.5 – 2.5 million tonnes, the cost of the clean-up could be massive, and will go on for many years as the virus continues to kill carp (as seen regularly in South Africa). The use of Commercial fishing, electro-fishing and screens/traps was ruled out as being financially nonviable by the NCCP. However, this assumption is based on data that is more than 10 years out of date, and certainly doesn't take into account the astronomical costs of cleaning up after the release of the virus. When arguing that a clean-up campaign can be managed successfully, the NCCP state that the concentration of carp is within just 5% of the Murray Darling Basin. In fact during the proposed visit to Mildura by the Committee, it is likely that you will see how carp can be concentrated using screens and management of water flow. Would it not make more sense to extract live carp from these areas, using them gainfully for commercial use (Fertiliser, export or even food) rather than as dead carcasses that are unusable and environmentally damaging?

I realise that within this letter I have included a tremendous amount of information and evidence for you to digest. However, I trust that you will be able to take on board not only the points raised, but also the sincere concerns that I have, along with many colleagues from the scientific community and general public. Please do not hesitate in contacting me should you require any additional information or clarification.

Yours sincerely

Martin D Rocliffe M.I. Biol