

We would like to thank the committee, for meeting with us to discuss this issue. As a group of scientists and citizens, we are deeply concerned by the proposal to use the Carp herpes virus, to control Australia's most prolific aquatic pest.

We support the concept of a National Plan to address the problem. Carp within the Murray-Darling Basin are at densities 25 -75 times higher than peak rabbit populations. We owe it to our children, to minimise the impact of this species. That said, we must do so in a manner that does not risk more dangerous and unpredictable issues.

Unfortunately, the politicisation of the Murray-Darling Basin seems to have impacted on the scoping and operation of this project. While the impacts will be felt throughout Australia, the majority of any potential benefits would be delivered to upstream water users, while the majority of the risks fall to those living in downstream communities, people already *heavily impacted by disruption to our Rivers, Lakes and Coorong.*

Presentations by the NCCP team encourage listeners to believe that removing carp might restore macrophyte, turbidity and native fish to levels not seen since the 1920's. A time before river regulation. This has not helped matters.

There are numerous research papers and historical records that clearly demonstrate these *indicators were in decline long before widespread Carp infestation.* Early indications by Cotton Industry lobbyists, that Carp control will result in a Reduction in the need for environmental flows, is also tainting the public discourse. Any responsible plan must weigh real risks against realistic benefits.

It is critical to recognise that the scientists presenting here today are not alone, there is a significant level of concern across the community. Recent polling across 99 community groups demonstrated 76 percent opposition to the release of the carp herpes virus, a follow up poll showed that 84 percent of those polled support carp control where the virus is not used.

It is also important to recognise that my colleagues joining us here tonight, have taken a significant economic, professional and reputational risk, particularly those of us who still work within the natural resources sector. It is not something we do lightly, given ongoing attempts to discredit opposition voices. We believe it is critically important that facts and relevant research, rather than opinion, dominate this debate.

Design of a plan around a pre-determined solution is poor Scientific, Policy and Business practice. It leads to planners asking the wrong questions and indulging in selective use of science, to justify (in this case) the use of a high-risk, irreversible and unpredictable viral biocontrol.

The current published proposal, not to release the NCCP's own research reports until after public consultation has been concluded, is also poor form.

The CSIRO research, used to define the scope of the NCCP, appears to contain a number of technical oversights, leading to the development of conclusions that do not appear to be supported by the body of work described. We are happy to discuss these issues with you further, in questions.

While the current strain of the virus does not present a direct risk of infection to human hosts, the risk from secondary infection appears high and potentially recurring. This includes a number of third-world waterborne diseases, including Botulism, Aeromonas, poisoning from Cyanobacterial toxins and the life-threatening impacts of Hemorrhagic E. Coli infection.

*The risks are not limited to infection or viral mutation. Knock-down controls used in water bodies always present a significant environmental risk with a pest in these densities. Recent discussion has suggested that cleanup might be restricted to a small percentage of effected waterways. Using the initial estimate of killing 80% of two million tonnes, the simplest wastewater treatment calculations suggest that we could see a Biochemical Oxygen Demand resembling that of poor quality, secondary treated sewage for ALL water stored within the Murray-Darling.*

If we saw these levels, the rotting fish would consume more than four times the available dissolved oxygen in the water, with lethal impacts for other organisms sharing the water body. The suggestion that we might look to perform cleanup for only a small portion of priority areas presents very real dangers for total ecosystem loss.

*To have any chance of keeping nutrients within ANZECC guidelines (without considering the already degraded state of the basin), 50 to 90% of carp biomass would need to be removed within 48 hours of death. Practical considerations render this outcome all but impossible.*

From an ecological perspective, the use of knock-down biocontrol is a crude symptomatic solution, that overlooks safer, potentially more effective options in favour of lower start-up costs. In the last few years (indeed in the last couple of months) there have been significant improvements in our understandings of the Murray Darling Basin, suggesting far more effective and safer solutions even while maintaining the current levels of irrigation extraction.

These solutions, used in conjunction with manual removal of live carp and more sophisticated approaches such as single gender genetic technologies, could mean that we don't have to use an approach that carries such massive ecological and health risks. Rather than an approach requiring highways of trucks filled with rotting fish and producing a river not fit for drinking or recreational use, we could choose approaches that will leave our children with better waterways. Those waterways would maintain significantly reduced carp populations Forever. A result viral bio control simply cannot deliver.