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Water quality crisis update

Twelve months on from the delivery of the “Water Quality Crisis” report, another flood, and another announcement from council (5th March 2022), to the effect that: *“Our drinking water storages at Shannon Creek Dam and Nymboida River have received a huge amount of dirty water over the past week. The dirty water will affect our water treatment processes and we unfortunately cannot be certain of the water quality”*.

As our earlier report explained, supported by evidence, it is soil disturbance through human activity and bad management that contributes to excessive turbidity, not just heavy rainfall. We showed water samples taken from flooded creeks in undisturbed catchments that had little or no turbidity, while samples from other waterways resembled cream of chicken soup. There is no doubt that we can take measures to improve water quality, while also conserving precious topsoils, and significantly improving biodiversity in the river system as a whole.

Council needs to do more to reduce water pollution in both the Nymboida and Shannon Creek catchments.

Council made efforts to protect the Shannon Creek dam from the threat of bushfire ash in 2020, using rock barriers and floating booms, but greatly underestimated the massive amounts of water, and the power that water generates, resulting in all those efforts being swept away in a blink.

While matters affecting water quality in the Nymboida River catchment are mostly state government responsibilities, that does not excuse the lack of lobbying effort that has been undertaken to date. Council must become far more proactive in demanding improvements, which should include an end to native forest logging, something that’s not even commercially viable anyway. It should also include the removal of grazing leases in state forests, a greater focus on control of feral cattle, horses etc from the catchment, the granting of assistance to landholders to fence waterways to exclude livestock, and greater focus on erosion control generally.

However, when it comes to the Shannon Creek catchment, council is directly responsible as it owns much of that catchment, a significant amount of which has been leased out for cattle grazing ever since the dam was built more than 15 years ago. Unfortunately, two wildfires combined in 2017 to destroy many of the fences surrounding the Shannon Creek dam’s 500m buffer zone, the 2019 fires completed the job, and have not been repaired. This has allowed those cattle to drink, trample, paddle and defecate in the region’s drinking water ever since.

The following are images of erosion on Council's property in Shannon Creek, just upstream of the dam, were taken earlier this year, **before** this latest deluge, so is there any wonder that the dam has *“received a huge amount of dirty water over the past week.”*



What has happened to the precipitous slopes bordering that particular gully, or other locations in the Shannon Creek catchment, has yet to be determined, but the results have been clear. Right now, the Shannon Creek dam is a sea of muddy water which, in all likelihood, will render it unusable for a very long time (see below).



Muddy water in the dam will be unusable for an extended period



Large volumes are being released, presumably to prevent overflows via the spillway, causing damage to the \$4m repair of the spillway's calming structure, currently under way, as well as to rid the dam of silt (see state of downstream flow, above right).

This is not an issue that can easily, or cheaply, resolved, and one that should have been considered when deciding to build an “off-stream storage” on a major stream, in a highly erodible landscape which was known to be prone to land slippage, but council needs to deal with what is now the reality.

That reality is the result of 150 years of bad land management, through land clearing, over logging, excessive burning, and cattle grazing, and has to be addressed if any sort of decent water quality is to be maintained, and there needs to be a plan to achieve that. Right now, I do not believe that Council, or the state government have such a plan.

The Clarence Environment Centre has been providing Council with regular updates relating to this issue for more than a year, which includes approaches made through meetings of Council’s Water Efficiency Advisory Committee, of which the Centre has been a long-time member. Unfortunately, we have received no feed-back, so cannot report on any actions that are being taken, which I’m sure, or at least hope, there are.

Compiled by John Edwards