

Reply to: Georgina Woods
PO Box 290
Newcastle 2300
georgewoods79@gmail.com

30 January 2018

Submission: Draft Environmental SEPP

The explanation of intended effect exhibited by the Department declares an intention to repeal and replace the Sydney Drinking Water Catchment SEPP 2011 and “continue existing protections for the Sydney Drinking Water Catchment.”

There is considerable evidence that the “existing protections” for the catchment are not sufficient to prevent long-term degradation of the quantity and quality of water it catches and stores for Sydney.

The Department is familiar with the damage caused by the Dendrobium coal mine under the Metropolitan Special Area of the catchment.

The “Height of Cracking” report commissioned by the Department and undertaken by Pells Sullivan and Meynink (PSM) confirms seam to surface connected fracturing, groundwater diversion and drainage, landscape slippage and valley bulging causing fracture pathways for leakage from below the reservoirs. Damage to the upland swamps that filter and release clean fresh to the catchment is occurring well beyond the longwall panels themselves, as much as 900m away.

Rainfall that should be feeding Sydney's dams and drinking water supply is being drawn into the mining goafs beneath the surface, raising considerable strategic risk for Australia's biggest city in the context of rising populations and volatile future rainfall. The report found that it is feasible that there is a hydraulic connection between mine workings at Dendrobium and the Avon and Cordeaux dams themselves, though there's not enough data to know for sure. A further expansion of Dendrobium mine is currently being proposed by South32.

Referring to the expansion of the Dendrobium mine, the Premier, Gladys Berejiklian said, “We need to take a serious look at this, because I don't want anything compromising – now or into the future – any of our water security.” (ABC TV News, 13 September 2017.) This is the moment to act.

An entirely new expansion proposal has now been submitted for this mine.

Similarly, a large high risk mine expansion is proposed at the Russell Vale mine, also in the Metropolitan Special Area. WaterNSW described the predicted loss from the surface flow into Cataract Dam of 7.3ML per day as a result of this mine as “unacceptable” particularly during dry periods, since the loss of water to this mine would be up to 10% of the flow in the Cataract catchment. A review of the project by the NSW Planning Assessment Commission found that its environmental impacts are likely to outweigh its economic benefits, but the project has not been formally withdrawn and there is no threshold trigger in NSW regulation to prevent it being approved to proceed at this stage. Importantly, the Department of Planning's assessment found the project could and should proceed.

WaterNSW has similarly expressed its concern about the Hume coal project, currently seeking approval, warning it may significantly reduce the quantity of water in the Sydney water catchment area.

The 2016 Catchment Audit, tabled in parliament on 8 August, 2017 warns, “The cumulative, and possibly accelerated, impact of mining on flow regimes in the Catchment is likely linked to the increased prevalence of the current longwall methods of underground mining.”

The experience of the 16 years since Dendrobium was approved leads to several important conclusions:

- Longwall mining has damaged the catchment, is diverting water from the surface, compromising the quality and quantity of water in the catchment and even jeopardising the integrity of the reservoirs.
- The “existing protections” in place since 2011, have not prevented or reversed this damage.
- Therefore, new and expanded regulatory controls are needed to protect Sydney’s drinking water.

We note that as part of the proposed new Environment SEPP, existing provisions in Schedule 2 of the *Hawkesbury Nepean Regional Environmental Plan* prohibiting extractive industry in certain locations will be transferred to Schedule 1 of SEPP (Mining, Petroleum Production and Extractive Industries).

This move should be extended to include listing the Metropolitan, Woronora and Warragamba Special Areas in Schedule 1 of the mining SEPP as well, with a prohibition on all forms of extractive industry.

In the creation of the new environmental SEPP we recommend the Department consider the water security of other major cities, particularly Newcastle and the Central Coast. The Tomago sandbed aquifers that supply up to a fifth of Newcastle’s drinking water has previously been under threat for coal seam gas development at Fullerton Cove and is now in part contaminated by PFOS and PFOA originating from the RAAF base at Williamstown. Hunter Water’s maps for the catchment areas of Chichester and Grahamstown Dams, the Williams and Allyn Rivers, and the Tomago, Stockton and Tomaree sandbeds must be added to Schedule 1 of the Mining SEPP and all forms of extractive industry prohibited.

The recent approval of the Wallarah 2 coal mine in the Jilliby State Conservation Area in the catchment of the Wyong River, which provides drinking water to the Central Coast was opposed by Central Coast Water and Wyong Council because of the loss of water to the catchment that it will cause and the risk to water security for an area that has suffered water shortages in the past. The Central Coast regional plan includes the goal to “Protect water catchments to sustain high quality and dependable water supplies across the region.” The approval of Wallarah 2 has put this goal in jeopardy. The area mapped as the surface water catchment in the regional plan must be added to Schedule 1 of the Mining SEPP and made off limits to forms of extractive industry.

In addition, as well as keeping the objective that the quality of water in the catchment be maintained and improved, we recommend the addition of an objective securing the quantity of water flowing into the catchment and prohibiting the approval of any development that reduces the quantity of water. This is important for the future water security of the city.