

Oatley Flora & Fauna Conservation Society Inc.

Working to protect, conserve and enhance the natural environment
locally and globally, since 1955



Department of Planning, Industry and Environment
Major Projects Team
Attention: Anthony Ko

7 November 2019

Submission on Snowy 2.0 Main Works Environmental Impact Statement

Oatley Flora and Fauna Conservation Society Inc. (OFF) is strongly opposed to the Snowy 2.0 project as described in the Main Works Environmental Impact Statement (EIS). An organisation our size cannot address all elements of the EIS but many of our members also belong to the NSW National Parks Association and we support that organisation's more detailed submission.

Our organisation has been active since 1955 and has nearly 300 members. Groups of OFF members have stayed in Kosciuszko NP (Smiggin Holes, Charlotte Pass) in summer for many years; more significantly, they have explored much of the park on extended bushwalks and cross-country ski-ing trips.

Members of OFF have seen how fragile the land in the high country is. We value the endemic fauna and flora very highly and believe the proposed works will have a serious and permanent deleterious effect on the integrity of the landscape and its biodiversity. It is already threatened by numerous human-induced problems including warming temperatures, the spread of weeds, and damage by feral horses.

The EIS describes a scale and concentration of environmental impact that is totally inappropriate in a sub-alpine region, particularly in Kosciuszko NP, which is a unique and iconic national treasure that has National Heritage Listing.

Our members are well-informed on energy issues and believe claims of the extent of energy storage potential are unrealistic. We believe there are alternative, less expensive and lower impact schemes that have not been adequately examined from an engineering aspect, or costed. The massive cost of the Snowy 2.0 project will be a liability for the Australian public for many decades to come.

For these reasons our organisation believes the Snowy 2.0 project does not meet the standards required of an Environmentally Sustainable Development and accordingly the project should be refused by the Minister for Planning.

Of particular concern to our organisation are the following:

1. The EIS asserts that the Snowy 2.0 project will have only a minor impact on Kosciuszko National Park because the development footprint is only approximately 0.25% of the total area of the park. This is quite misleading because the Project Area in the EIS is approximately 250,000 ha in extent – a third of the area of the Park.

The areas to be destroyed by Snowy 2.0 are chiefly located in the sub-alpine area which is one of the rarest habitats in Australia. It is this zone that will become increasingly important as a refuge for alpine species adversely affected by the warming climate. Consideration of adverse environmental impacts of Snowy 2.0 should focus on this habitat.

The EIS acknowledges that the construction footprint will 'disturb' over 1,680 ha but it seriously understates the full extent of permanent damage outside the heavy construction zones; when the damage inflicted by construction of roads and transmission lines, workers' camps and works areas, and the impacts on Talbingo and Tantangara Reservoirs, are included, the scheme will actually damage more than 10,000 ha of Kosciuszko NP. That includes nearly 1000 ha of habitat of threatened fauna and flora, and Threatened Ecological Communities.

2. The disruption to ground water systems created by the tunnelling, and works beside the Yarrangobilly River, will impact extensively on water-dependant habitats and species. Watertable drawdown is predicted to be in excess of 50 m

above the tunnel in areas of high hydraulic conductivity (Gooandra Volcanics). This will have a catastrophic impact on the environment along sections of the tunnel, drying up existing creeks, impacting the local fish and other aquatic animals, and reducing inflows to the reservoirs; in turn this will reduce the volume of water releases.

We cannot understand how Snowy Hydro could demonstrate such disregard for the protection of water-dependant ecosystems, not just in alpine areas, but in the headwaters of our major river systems. We totally disagree that such impacts are 'acceptable'. Once ground water systems are disrupted by mining activities the damage is irreversible and can even worsen over time. Our organisation has witnessed this in mining operations under the water catchment of the Sydney Basin.

3. Another environmental debacle that Snowy 2.0 threatens to create, is the dispersal of pest species, including exotic fishes, throughout Kosciuszko NP waterways and beyond. For example, Redfin Perch is a Class One Noxious Pest - it is illegal to transfer Redfin between waterways in NSW but Snowy Hydro acknowledges that it is inevitable these noxious species will be transferred from Talbingo to Tantangara. Establishment of the dominant Redfin Perch will be to the detriment of both recreational anglers and significant populations of threatened native fishes.

Bad enough that the Snowy 2.0 EIS accepts that these noxious species will be transferred to Tantangara, but it is highly likely that the barrier and filtration systems proposed by Snowy Hydro will not stop their eventual transfer downstream to the Murrumbidgee River and Lake Eucumbene and thence throughout the rest of the Snowy Scheme and downstream rivers (Snowy, Murrumbidgee and Murray). We have already witnessed the environmental damage and costly control schemes associated with European Carp.

3. One of our members has had experience operating the National High Voltage Grid as well as the Snowy Hydro 1 and has provided the following comments:

Tumut 3 has six 250MW generators of which three also operate as pumps. These pumps are normally used overnight using low cost brown coal power; they can empty Jounama Dam in 6 hours. Similarly, generating during the peak exhausts the operational capacity of Talbingo in 3-4 hours. With Snowy 2 these figures could be increased by around 250% based on the change in installed capacity (750 to 2000MW). However, the short time frame still holds. Of concern, which did not seem to be evaluated, are the water flows and capacity of the various reservoirs. As Snowy 2 will empty into Talbingo, the operation of T3 will have to be closely integrated with Snowy 2 and I have serious doubts about the capacities of these reservoirs, particularly Jounama Dam to be able to reliably handle these increased volumes of water.

Tantangara Dam currently stores water from the Murrumbidgee and, via Eucumbene Dam, sends that water through the Tumut power stations to Blowering Dam for distribution to the Murrumbidgee Irrigation Scheme. Snowy 2 water will bypass Tumuts 1 and 2 and feed directly to Tumut 3; therefore, there is no net gain in energy production from natural water flows. The only advantage is the pumping of the water and its later use in generation.

The net amount of power is negligible on a national scale, while 350GWh pa might seem large it equates to less than 1GWh per day, whereas currently in NSW the two largest wind farms in Sapphire and White Rock near Glen Innes are generating 4-5 GWh per day. **Their construction costs were orders of magnitude less than Snowy 2 and yet generate more power.** It is inevitable that the cost of renewable generation will continue to fall in the future and will further negatively impact on the viability of Snowy 2. Similarly, battery costs are continuing to fall and again battery storage costs are significant less than Snowy 2 for an equivalent capacity and have substantially less environmental impact. Finally, the closure of Liddell Power Station in the next few years seems to have been incorporated into the justification of this project. Again there are orders of magnitude differences; Liddell generated 22 GWh of power (checked on the NEM website on 7 November 2019). This is much greater than 1 GWh!!

Conclusion

The Snowy 2.0 project, as described in the Main Works EIS, does not meet the principles of Ecologically Sustainable Development as required in the Environmental Planning and Assessment Act. The environmental, economic and community benefits of the project cannot justify the enormous scale and severity of environmental impacts on such a unique and irrepairable landscape of Australia.

Yours sincerely,



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