

**Second submission to IPC regarding Neonen's responses to IPC questions**  
**12.4.24**

**1. The inadequate aquatic ecology impact assessment that needs to be done appropriately.**

Again, the proponent has failed to conduct and present an adequate aquatic ecology impact assessment. This is a critical gap in the EIS that must be addressed.

The proponent's consultants conducted 2 limited aquatic species surveys in local creeks. However, neither the proponent, nor the Department of Planning in assessing the project as "approvable", seems to realise that an aquatic species survey does not equate to an aquatic ecology *impact assessment*. The former is a subset of the latter. Unfortunately, The EIS is completely devoid of any reasonable attempt at an aquatic ecology impact assessment. Not only did it omit significant aquatic species that we know to be resident in the development area - such as Bell's Turtle, and a simple literature review would have disclosed this - but it also failed to conduct an aquatic ecology impact assessment of the proposed development activities.

Bell's Turtle was omitted completely from the original assessment, as were other potentially impacted species. In addition, there was no impact assessment of Neoen's plan to pump significant amounts of water from the large dam on Pine Creek on the property *Banalaster* to provide water for the concrete batching plant. This dam is a significant Bell's Turtle breeding habitat and, during droughts, a critical refuge area for the species. The proponent seems to have confused the conduct of a simple and limited aquatic species survey, with the required broader assessment of aquatic ecology *impacts* of the development activities. They are not the same thing.

In the resubmission in response to the questions posed by the IPC, the ridiculous claim is made that the large dam on Pine Creek of 32 ha in area is only a maximum 1.5 m deep. This erroneous assumption is used to make the false claim that, therefore, this dam cannot be habitat for Bells Turtle. As a former soil conservationist, who has designed and built many farm dams, by my calculations the depth of this dam is between 15 m and 20 m . In addition, specialists in the ecology of the Bell's Turtle have informed us that the Bell's Turtle is found in shallow creeks and ephemeral streams of less than 1.5 m depth.

The fact that this false claim of the 1.5 dam depth has been made by the Department of Planning and not the proponent Neoen in their submission, throws into question the objective appraisal process applied by the Department, questions their impartiality, and really undermines the Departmental credentials to undertake these reviews of proponent submissions.

The proponent also did not make an assessment of the *volume* of Pine Creek dam. At the same time, the proponent says that the concrete batching water demand on the dam water would require extraction of 100 ML. They then go on to say that this extraction of water would have no significant impact on the dam volume itself. In the

absence of the provision of an estimate of dam volume, it is impossible to take this no significant impact claim seriously.

### **Recommendation 1:**

**The proponent should be required to undertake a comprehensive and adequate aquatic ecology impact assessment addressing the significant gaps that were evident in the limited aquatic ecology assessment within the initial EIS.**

### **Recommendation 2**

**An independent third party should be appointed to:**

- **measure the Pine Creek dam depth, and calculate dam volume;**
- **confirm the accuracy of Neoen's estimate of extraction levels for concrete batching, claimed by the proponent to be 100 ML;**
- **survey Pine Creek dam to determine whether it is habitat for the Bell's Turtle, and whether there are existing populations there;**
- **assess the impact of the proposed development and the water extraction on the Bell's Turtle population in the dam, if they are found there, and its ecology.**

## **2. Inadequate assessment of impacts on catchment processes, rainfall runoff, soil erosion, and turbidity, and consequently impacts on aquatic ecology.**

Again, the proponent has failed to provide any modelling of the impacts of the development on catchment processes, rainfall run-off, soil erosion and turbidity with consequent impacts on aquatic ecology. The proponent has also failed to describe the soil erosion, turbidity and water quality monitoring framework it will put on place to monitor impacts

This development will have a large landscape footprint. Many trees and areas of native grasslands will be cleared, many kilometres of formed gravel roads will be constructed, as will drainage channels and creek crossings. Large concrete pads will be constructed for each turbine. This is an area of highly erodible duplex soils and skeletal soils, located on undulating to steep slopes. Gravel roads concentrate rainfall run-off and are highly erodible, requiring high maintenance. In this landscape, it should be mandatory that the proponent consider the impacts of the development on rainfall run-off, soil erosion, river turbidity and catchment hydrology

In the EIS, there was no assessment of the *in-situ* effects of the substantial land disturbance on rainfall run-off and soil erosion rates, nor was there an assessment of the broader impacts on catchment processes, stream turbidity,

soil erosion load, water quality, and subsequent impacts on aquatic ecology.

All these impacts can be modelled, estimated and quantified. The proponent should undertake this modelling, and present the assessment back to the IPC and the Department. In addition, there is no monitoring framework or technology proposed for assessing these impacts, or detailed mitigation measures identified, during the construction phase, and beyond. The proponent should develop a monitoring framework and plan, and indicate where it would install monitoring sites within the local catchment, and downstream, what technology will be used, and how and when it will report the datasets emanating from this monitoring.

### **Recommendation 3:**

**The proponent should be required to undertake modelling of the impacts of the proposed development on vegetative ground cover, rainfall run-off, erosion, stream turbidity and water quality. The proponent should be required to present the assessment back to the IPC and the Department. The secondary impacts on aquatic ecology should also be assessed, and reported within the aquatic ecology impact assessment component of the EIS (as a component of Recommendation 3).**

### **Recommendation 4:**

**The proponent should develop a monitoring plan and framework for assessing impacts on vegetative ground cover, rainfall run-off, erosion, stream turbidity and water quality. The proponent should identify the monitoring technology proposed for assessing these impacts, and indicate where it would install monitoring sites within the local catchment, and downstream, and how, when and to whom it will report the datasets and analysis emanating from this monitoring. The proponent should clearly state the mitigation measures it will undertake during the construction phase and beyond.**