

NSW Department of Planning  
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Attn: Ms Rebecca Newman

#### Submission on the Port Waratah Coal Services proposed Terminal 4 Coal Loader

I am a professional scientist and amateur ornithologist, who has specialised in the study of shorebirds for over forty years. I oppose the proposed Port Waratah Coal Services (PWCS) Terminal 4 (T4) coal loader project because it will destroy the habitat of migratory shorebirds and other bird species at Swan Pond on the western side of Kooragang Island (now known as Ash Island) and at Deep Pond on Kooragang Island. I suggest approval of the T4 project should be subject to reductions in the size of the project footprint, thus either avoiding or minimising the need to destroy environmentally important habitat.

The T4 project and its associated infrastructure will destroy unique wetland habitat in the Hunter Estuary which is essential foraging and roosting ground for migratory shorebirds. The assemblage of bird species impacted includes not only migratory shorebirds, but also wildfowl and passerine species inhabiting salt marsh. The unique nature of the habitat to be destroyed is that it involves both saline and fresh water conditions/features. Consequently, not only does it provide essential habitat for migratory shorebird species breeding in the northern hemisphere, but it also acts as drought refuge for other species of shorebird and wildfowl breeding in inland Australia. Many of these bird species and their habitats are protected by NSW and Australian Law and are the subject of international treaties binding Australia to the wise management of their habitat.

The T4 EA correctly recognises the unique biodiversity of the area and the impossibility of replacing it with an existing area of equivalent biodiversity. It therefore proposes multiple offsets addressing different aspects of the habitat which will be destroyed. With respect to birds, I have concerns about the adequacy of the two proposed offsets as discussed below.

#### Ellalong Lagoon Offset

The purchase of Ellalong Lagoon for reservation is a valuable contribution to the environmental assets of NSW. However, it is distant from the area of fresh water habitat impacted by T4 and is not part of the matrix of wetlands in the Lower Hunter Estuary for which the areas to be destroyed, Deep Pond and Swan Pond/Area E, form an important, perhaps essential, hub in times of drought.

## Hunter Estuary Wetlands Offset

The shallow saline and brackish wetland with its roosting sites at both Swan and Deep Ponds are poorly represented in the Hunter Estuary. It provides non-tidal and supra-tidal foraging opportunities which are particularly important to the small shorebird species. These species struggle to put on sufficient weight prior to their migration north if they are restricted to feeding on tidal mud flats in the absence of non- and supra-tidal options. Consequently, it is imperative that this type of habitat, which will be destroyed at Deep Pond and Swan Island by T4, is replaced. This can only be achieved by habitat creation, a reality accepted in the T4 EA, which seeks to satisfy this requirement by an offset termed the Hunter Estuary Wetlands. However, this area has not been purchased. Until the purchase has been completed and the details released to the community, it is not possible to comment on its suitability both with respect to location relative to other areas frequented by shore birds and its functionality. For instance, shorebirds need alternate roosts when disturbed. I make three comments with respect to the difficulty of creating shorebird habitat. Firstly, although there is successful demonstration of shorebird habitat creation in Australia, most of the experience is overseas and in many respects habitat creation is an experiment with uncertain outcomes. Secondly, there will be lead time before an ecosystem capable of supporting the foraging requirements of a diverse group of shorebirds is established. It is essential that the replacement habitat is demonstrated to be viable before the existing habitat is destroyed and there seems to be inadequate time for this to occur. Thirdly, the newly created habitat will almost certainly require ongoing management for which long term provision must be made and funded.

The part of Ash Island known as Swan Pond, which is the eastern side of Area E, is a famous bird watching area within the Hunter Wetlands National Park. People attracted to the area are drawn from the Newcastle community, the rest of NSW, interstate and from overseas. Even if the proposed offsets successfully support the displaced species, the community will have lost a valued natural asset. It is important that the conditions of consent attached to the offset areas ensure that visitors can have access and can view birds in a manner which limits disturbance (e.g. the provision of hides which can be entered by screened walkways).

Project planning should seek to avoid, mitigate and only as a last resort offset environmentally important areas like Deep Pond and Swan Pond. I question whether the T4 EA has explored all options which would avoid the destruction of habitat in these areas. Has the intensity of the T4 operation been benchmarked against best practice (tonnes coal exported/annum/m<sup>2</sup> of footprint)? Such comparisons will indicate whether the size of footprint can be decreased? The footprint of T4 is determined by the size of the coal storage stockpiles and eight new rail delivery lines. Can the stockpiles be decreased by minimising the amount of coal stored at the port site (just in time delivery) and by blending materials for shipment away from the port site where industrial land is scarce? Do trains have to queue on environmentally sensitive land at Swan Pond, rather than on less sensitive sites near Hexham?

The T4 project is linked to a large number of other projects involving coal mines and infra-structure developments in NSW. The assessment of these projects individually fails to evaluate the cumulative impact of the all these projects on the NSW environment. For instance, approval of new coal mine capacity incremental to existing port capacity inevitably requires new port facilities. The justification of the new mine capacity should take into account not only the environmental implications at the mine site, but also at the port and vice versa.

Yours faithfully

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