## **NSW TSC Act 1995: Assessment of Significance**

## **Box-Gum Woodland: Kyeamba Borrow Pit**

- a) In the case of a threatened species, whether the action proposed is likely to have an adverse effect on the life cycle of the species such that a viable local population of the species is likely to be placed at the risk of extinction;
  - White Box Yellow Box Blakely's Red Gum woodland is not a threatened species.
- b) In the case of an endangered population, whether the action proposed is likely to have an adverse effect on the life cycle of the species that constitutes the endangered population such that a viable local population of the species is likely to be placed at risk of extinction:
  - White Box Yellow Box Blakely's Red Gum woodland is not an endangered population.
- c) In the case of an endangered ecological community or critically endangered ecological community, whether the action proposed;
  - i. Is likely to have an adverse effect on the extent of the ecological community such that its local occurrence is likely to be placed at risk of extinction;
    - White Box Yellow Box Blakely's Red Gum woodland (Box-Gum Woodland) occurs in the Kyeamba Borrow Pit as a community in low condition with a mixture of native and non-native grass species in the ground stratum. There is one white box and one red stringybark tree which will not require removal.
    - The activities on the proposed borrow site will impact the ground layer on the site which is dominated with exotic species. The stripping of topsoil of subsequent rehabilitation works would retain the seed bank of the existing grass species. While all areas of Box-gum Woodland are considered significant in the region (DEC 2007a), the impacts on the ground layer are not expected to result in the extinction of the community at a local scale.
  - ii. Is likely to substantially and adversely modify the composition of the ecological community such that its local occurrence is likely to be placed at risk of extinction.
    - The proposed use of the Kyeamba Borrow Pit is unlikely to substantially alter the species richness of the sites. Currently, a mixed native and exotic ground cover persists, with the percentage cover of exotic species higher. Therefore, the proposed activity will not result in the local extinction of the EEC.
- d) In relation to the habitat of a threatened species, population or ecological community;
  - The extent to which habitat is likely to be removed or modified as a result of the action proposed;

The use of the borrow pit operation would modify the ground cover in the degraded Box–Gum Woodland. Excavation of the top 2-3 metres of soil would reduce the habitat quality for the Box-Gum Woodland community or possibly introduce weed species, however proposed stockpiling and reuse of topsoil would assist to mitigate the impact of weeds and assist to re-establish the grass species of the TSC EEC. In addition, revegetation using grass species known to occur in the Box-Gum Woodland should be investigated. It is unlikely that the habitat impacted by the borrow pit activities will greatly affect the extent of habitat available for the Box-Gum Woodland in the long term.

ii. Whether an area of habitat is likely to become fragmented or isolated from other areas of habitat as a result of the proposed action; and

The proposed use of the Kyeamba Borrow Pit will not further fragment known Box-Gum woodland.

iii. The importance of the habitat to be removed, modified, fragmented or isolated to the long term survival of the species, population or ecological community in the locality.

The degree to which Box-Gum Woodland has been cleared in the region renders all habitats where remnants exist to be of significance. However, the Box-Gum Woodland at the proposed borrow pit site is of low condition due to current and historic land uses including grazing. The low condition Box-Gum Woodland patch is not considered important in the long term survival of the ecological community in the locality.

e) Whether the action proposed is likely to have an adverse effect on critical habitat (either directly or indirectly);

No critical habitat has been declared for this community.

f) Whether the action proposed is consistent with the objectives or actions of a recovery plan or threat abatement plan;

No recovery plan or threat abatement plan has been developed for this community. However, 25 priority actions have been identified to help recover the Box–gum Woodland in New South Wales (DEC 2007a).

g) Whether the action proposed constitutes or is part of a key threatening process or is likely to result in the operation of, or increase the impact of, a key threatening process.

The clearing of native vegetation is listed as a key threatening process under the TSC Act. The proposal will result in the removal a modified ground cover that is currently dominated by exotic species. As such, the proposed borrow pit is not likely to adversely affect the long term survival of this community in the locality.

## Conclusion

The removal of any Box-Gum Woodland is considered significant due to extensive clearing of this community in the past. However, due to the modified state of the Box-Gum Woodland on the proposed borrow pit site (mostly grassland dominated by exotic species and only 2 trees which will not be removed), the activity, as determined through the above 7-part test, is not considered to be significant.