Draft Cumberland Plain Conservation Plan Submission

[redacted] 8 October 2020

- 1777.8 hectares of land from 8 Threatened Ecological Communities will be affected, including 1014.6 hectares of Cumberland Plain Woodland and 487.7 hectares of Shale Sandstone Transition Forest which have a status of Critically Endangered. It is not acceptable to destroy Critically Endangered Ecological Communities. We should be working to conserve **all** instances of these communities.

- The plan states that up to 25% of the Plan's conservation target may be achieved by restoring ecological communities. If restoration was successful, it would take many years for plants in the restored areas to grow and provide food, habitat and nesting hollows. Depending on the amount of restoration required, the value of these offsets would not be realised until long after the development is completed. Like needs to be replaced with like – areas that need extensive restoration are not suitable offsets.

  The effectiveness of restoration is also questionable. A study by the UNSW on Cumberland Plain Woodland Restoration that looked at locally native trees and shrubs planted in Western Sydney as part of building a green belt concluded that:

  "After the first ten years, many of the planted trees had survived and begun to develop into saplings, and the dense groundlayer of weedy grasses had begun to thin beneath the planted trees.

  However, there was little evidence of the new plant community developing into Cumberland Plain Woodland or differentiating from untreated pastures, with few native plant species having entered the system in addition to those planted. Studies of invertebrate communities returned similar results.

  We are currently investigating changes in plant and bird communities of the plantings over the 20 years since their establishment. Vegetation sampling was completed in 2013 and bird sampling is currently underway."

  Refer to (https://www.ecosystem.unsw.edu.au/research-projects/conservation-practice/habitat-restoration/cumberland-plain-woodland-restoration)

  The Greater Sydney Landcare Inc states on its website https://greatersydneylandcare.org/cumberland-plain-conservation-plan-what-we-need-to-ask-for-how/#more-4215

  "Research demonstrates that neither traditional nor scalp-and-seed revegetation compensates for clearing Cumberland Plain Woodland. We need to save the woodlands that remain, not plant seedlings."

  There is also a link on the Greater Sydney Landcare Inc site to a report by Wayne Olling, Manager Flora & Fauna Blacktown & District Environment Group Inc, reviewing the ground scalping and direct spreading of native plant seeds that have been undertaken on selected plots on the Cumberland Plain. He concludes:

"Not for a moment should scalping and direct seeding be contemplated as an alternative to preserving intact or reasonably intact stands of threatened ecological communities. Further, the experience with Castlereagh Scribbly Gum Woodland at Wianamatta Nature Reserve precludes scalping and direct seeding being a suitable investment to offset this and potentially other ecological communities"

His report includes the Scheyville National Park trial quoted in Case Study 5 of Sub Plan A.

- *Pimelea spicata* Rice Flower. The recommendation in the Cumberland Plain Assessment Report Pg 31 is:

  "Based on this assessment, it is recommended that the Plan adopt an additional species-specific commitment for Pimelea spicata to retain some or all of population 532 within GMAC during detailed precinct planning. This recommendation has developed too late in the assessment process to be adopted in the draft version of the Plan for public comment. It is likely the recommendation will be adopted prior to finalising the Plan"

  This recommendation should be adopted. The Royal Botanic Gardens reports on its website https://www.rbgsyd.nsw.gov.au/Science/Australian-plantbank/Conservation-in-action/Restoration-of-threatened-species/Conserving-threatened-species-in-Western-Sydney

  "*Pimelea spicata* is a difficult species to propagate and to collect seed from in quantity, particularly during drought conditions. Seed germination rates are low due to physiological dormancy, although treatment with gibberellic acid and smoke water improved germination. Cuttings are slow to establish, and even with well struck cuttings losses at the potting stage can be significant."

  The difficulty in propagation demonstrates the importance of maintaining the wild populations.

- Outer Sydney Orbital (OSO) development in Wianamatta Regional Park seems to affect many species such as:
  - *Pultenaea parviflora* – Loss of population 127 which consists of 83 plants
  - *Persoonia nutans* – The likelihood of potential impacts to population 63. "It is likely that this population is important to the ongoing viability and recovery of the species as the species is endangered"
  - Cooks River Castlereagh Ironbark Forest TEC

  It is inappropriate to have this road cut through the Wianamatta Regional Park and alternatives need to be found. I don't know the history of the park but I assume when it was established it was not with the expectation that a major orbital road would dissect it!

  The Cumberland Plain Assessment report also indicates that the OSO will affect habitat connectivity (Table 24-19).

  The noise from construction and ongoing use of the road will probably also affect use of surrounding vegetation as habitat, introduce weeds and increase fire risk, for example, from cigarette butts. It could also result in road kill if populations of animals are isolated from each other or from food sources and potentially cause road accidents if drivers are trying to avoid animals on the road.

- Swift Parrot – The Cumberland Plain Assessment Report Summary states in Table 7 on page 33 "The Plan will lead to clearing 1,285 hectares of potential foraging habitat". This is concerning. The population is declining, thought to be 2000 mature individuals in 2010 and since then it has

been affected by predation from Sugar Gliders introduced to Tasmania. It is important to preserve their winter foraging grounds, especially after the bush fires that ravaged much of south-eastern Australia last summer.

- I am concerned about the Types of Indirect Impacts mentioned in the report especially spread of disease, weeds, predation by domestic animals (possibly more feral animals), altered fire regimes. I don't think these impacts can be effectively mitigated. With regard to fire regimes, there will be tension between protection of assets and our native vegetation. Too frequent fires will destroy plants that die in bush fires and depend on seed banks for propagation. For the plants to survive they need to be able to mature and flower, get pollinated and produce seed. There is probably an increased likelihood of arson close to major population centres.

- Sub-Plan A under Managing Key Diseases page 71 does not include Myrtle Rust. Dr Brett Summerell from The Royal Botanic Gardens Sydney states:

  "Myrtle rust is a fungal disease first recorded in New South Wales in 2010, which has quickly spread the full length of the east coast and is pushing many plant species rapidly towards extinction – a catastrophic outcome."

  Refer https://www.rbgsyd.nsw.gov.au/Stories/2020/Science-and-the-importance-of-nature

  It should be included in this list of diseases. It is mentioned elsewhere in the report but its importance needs to be highlighted.

- In Sub Plan A on page 71 under Managing Key Diseases it states that "Increasing urbanisation of the area could exacerbate the occurrence of these diseases". Some of the diseases identified in the report like Phytophthora, Myrtle Rust and amphibian chytrid fungus (chytridiomycosis) are very hard to control and have devastating effects. On page 129 Commitment 19 the timing for consulting with researchers to identify programs to help with the management of disease is from Year 6 onwards. This needs to be brought forward and commence as soon as possible.

- In Sub-Plan A, under Adaptive management steps for offsets in the section How the Plan's Offset Liability is determined the report says on page 89:

  "Importantly, this would give a total amount of native vegetation (in hectares) to be offset—not an amount for each impacted threatened ecological community or species. This method aligns with the strategic nature of delivering the Plan's conservation program, while ensuring that the executive implementation committee can maintain oversight over whether the Plan is on track in delivering offsets and apply adaptive management when required."

  I don't understand how this works, the offsets and the oversight of them need to be related to specific threatened ecological communities or species, not just the overall total of hectares.

- In the Highlights of the Draft Cumberland Plain Conservation Plan it states on page 27, Case Study 6 Threatened Species Ecology and Distribution:

  "The research program will aim to improve our understanding of the habitat requirements of species, the geographic distribution of species, and responses to changing land use and climate."

  It is a five-year research program. This seems a crucial study and needs to be completed before development begins and offsets areas are chosen.

- Glossary Strategic Conservation Plan – the description of the Term Working Group says:

  "Working groups will be established under the Plan to determine priorities and support delivery of the Plan's commitments to meet outcomes for a specific area of focus. They will comprise relevant stakeholders and experts as required. Four working groups are proposed to be established under the Plan: compliance, koalas, weed control and pest and animal control."

  I think there should be more working groups established. Koalas are not the only threatened species to be impacted under the plan.

- The bushfires last summer resulted in the loss of billions of animals, including koalas. The Cumberland Plain Conservation Plan needs to be flexible and respond to changes in circumstances for plants and animals. Disasters such as the bush fires or the spread of disease may mean that the "assessed value" of some plants and animals in the Plan area changes. For example, we know that the koala population is important as it is disease free but its significance increased after some populations around the mid-north coast were decimated by the fires. Koalas are an iconic species but there may be other species such as bats and birds where the importance of the trees and shrubs on the Cumberland Plain as food or nesting sites changes. The timeline for the plan is to 2056. It wasn't clear to me how the plan can be responsive to changed circumstances brought about by fires, climate change, diseases and other disasters that maybe we can't even foresee.