By John D’Aloia - September 2019

I am John D’Aloia, and I have been a resident of Banyule for more than 30 years. Since living in Banyule, I have volunteered with a number of community groups in the protection of wildlife and the rehabilitation of habitat.

I have a Masters of Environmental Science. I was a member of the committee of management of Warringal Conservation Society for 29 years, and President of the Society for 17 years. I was a Community Representative on Banyule Council’s Environmental Advisory Committee for 24 years from 1992 – 2016. I am currently a committee member of Friends of Banyule.

I am seriously concerned about the adverse environmental impacts of this project, both real and projected, and, seek to outline my concerns in more detail.

NELP Overall Objectives and Guiding Principles:

Since the formation of NELP, the community has been provided with numerous information bulletins that included commitments and Guiding Principles that NELP have stated that they have applied to their project. These include:

An information bulletin in September 2018, where NELP outlined their Environmental Sustainability commitments to the community, stating that:

“Sustainability for the North East Link Authority means moving beyond just a ‘business as usual’ approach, to one in which we actively seek to maximize long term benefits: for the environment; our communities and our economic prosperity.”

In the same document, NELP outlined its sustainability commitments, including:

- Urban Ecosystems: Protecting and seeking opportunities to enhance natural environments...
- Communities: Making a positive contribution to social, cultural and community health and wellbeing...
• Climate change: Playing part in Victoria’s achieving its emission reduction targets while preparing for the challenges presented by climate change...

Transport Integration Act 2010, and its relevance to NELP

Relevant to NELP’s commitments and guiding principles, is the Transport Integration Act. This is a key piece of legislation that emphasises economic, social and environmental objectives be considered in the design, construction and operation of road projects, including NELP.

Part 2, s10 of the Transport Integration Act states that “The transport system should actively contribute to environmental sustainability...”, and outlined 5 key areas that sustainability can be addressed, including:

• Protecting, conserving, and improving the natural environment, and
• Avoiding, minimising and offsetting harm to the local and global environment

Unfortunately, NELP’s own Project Objectives, appear to have little regard for the project’s environmental impact. Despite NELP’s stated commitment to environmental sustainability, not one of its 4 objectives refer to environmental sustainability.

It is submitted that NELP have failed to properly demonstrate that it has complied with the triple bottom line objectives as outlined in the Transport Integration Act, and in relation to its own sustainability commitments. For example,

• It is unable to demonstrate that they have actively sought to avoid and minimize the removal of approx. 26,000 trees.

• NELP have failed to adequately consider, or document the juvenile trees, understory and groundcover vegetation that will be lost, unless required to do so, as is the case with the Matted Flax Lily.

• NELP refused to consider community and expert submissions that seek to protect substantial swathes of habitat, by altering their reference design. This is especially true with regards to:
  o The extension of the Tunnel North to Grimshaw St.
  o Possible changes to the Manningham Road interchange.
• NELP will destroy valuable urban forest habitat that will take decades to rehabilitate and restore, if at all.

• There is no evidence provided that NELP is enhancing habitat links. It appears there is no habitat management plan. Any satisfactory restoration of habitat requires tree planting to be done in conjunction with planting of understory and groundcovers.

• NELP seek to barrel drain the Banyule and Koornung Creeks, making their waters unavailable to flora and fauna.

• This project will permanently deprive the community of approx. 52 hectares of Open Space, with no plan to replace this loss.

• NELP proposes to remove the 300-500-year-old River Red Gum on the corner of Bridge St. & Manningham Road. As previous submissions have demonstrated, this tree is of considerable social and cultural value to the local and wider community. So much so, it was voted the National Trust’s Victorian Tree of the Year. It is the height of arrogance for NELP to suggest that its proposed written, oral and photographic records will be compensation for the loss of this valued tree.

• NELP have failed to respect vegetation offsets approved by DELWP in the Simpson Army Barracks,

• NELP’s proposed trench through the Simpson Army barracks will decimate the population of the rare and endangered Studley Park Gum.

• There is no evidence that NELP is contributing to biodiversity.
**Simpson Army Barracks and Studley Park Gum**

NELP’s current design proposes a trench through the Simpson Army Barracks. This will catastrophically impact the population of Studley Park Gum, and may eventually lead to it becoming functionally extinct.

The Studley Park Gum is a rare naturally evolving fertile hybrid of River Red Gum and Swamp Gum.

This taxon is considered to be of regional botanical significance, particularly in view of the infrequent co-existence of its parent species, and is listed as endangered on DELWP Advisory list of Rare or Threatened Plants in Victoria 2014.

The population is of considerable conservation significance for scientific and evolutionary reasons. Its significance is due to it being a fertile hybrid where there is high genetic difference between the parents. It has a high level of character stabilization and is present in distinct swarms, and it has the potential to become a new species. (Cameron, Rule and Randall, 1999)

The majority of known sites of this naturally evolving taxon, occur along the lower Yarra River corridor to the Northeast of Melbourne. Whilst most of the sites represented discrete stands which were already quite isolated from other stands at the time of European settlement, the sites within the Yallambie-Macleod-Rosanna area are thought to be the fragmented remnants of larger and possibly inter-connected stands present at the time of settlement.

Of the 28 sites where Studley Park Gum are known to exist, the Simpson Army Barracks supports multiple generations of hybrids, with the largest and most extensive, and essentially the only viable site where hybridization is actively occurring. It is considered that this taxon is likely to remain genetically stable in the long term, and where it can continue to evolve naturally.

As previously stated, the impacts of NELP’s trench through the Simpson Army barracks will have a catastrophic impact on Studley Park Gum, to the point where it may lead to it becoming functionally extinct, in the following ways:

- A decimation of the population through removal of more than 44 Studley Park Gums identified within the project boundary.
- Indirect impact through groundwater drawdown within and beyond the project boundary, during construction and operation, which will lead to further substantial losses
- Barrel draining of Banyule Creek, reducing the access to water
The loss of waterways and groundwater drawdown will be exacerbated by the effects of climate change.

Although, it has been accepted as being a taxon of regional significance, given its highly restricted distribution along the Lower Yarra River corridor, it is also unique to Victoria. It is submitted that any adverse impact on this taxon should be considered a matter of State, National and Global significance.

Proposed Mitigation Efforts for the Translocation of Studley Park Gum

Rather than considering other alternatives to allow for the ongoing viability of the Studley Park Gum at the Simpson Army barracks, NELP has proposed the mitigation efforts involving a Groundwater Dependent Ecosystem Monitoring and Mitigation Plan, and the Implementation of a Studley Park Gum Management Framework to translocate 98 Studley Park Gums to an appropriate recipient site.

With respect to the Groundwater monitoring and mitigation, the modelling used by NELP has been identified by other expert submitters to the IAC, as being substandard, and seriously flawed in its assessment of groundwater drawdown. Therefore, the potential impacts on Studley Park Gum and other trees may be seriously underestimated.

With respect to the implementation of a Studley Park Gum Management Framework, the proposal to translocate 98 Studley Park Gums establish of a new population of Studley Park Gum at another site is somewhat perplexing.

To achieve the translocation of 98 plants, NELP proposes to propagate 288 Studley Park Gum seedlings from seeds collected from trees in the Simpson Army barracks, and Watsonia Station.

According to NELP experts, the large number of initial seedlings are to account for unavoidable plant loss. This is based on the assumption that there will be a 70% survival rate, year on year over a 3 year period. It is a mystery why NELP’s experts have only applied a 3 year limit on their calculations. Is it assumed that after 3 years, there will be 100% survival rate, or is this when NELP will leave the responsibility for establishing and maintaining this population to Council authorities?
A Naturally Evolving Hybrid

Unfortunately, NELP do not appear to understand the scientific significance of a naturally evolving hybrid. As stated by Cameron, Rule & Randall 1999:

“...manipulative horticultural techniques such as selecting and propagating seedlings in nurseries, do not satisfy the requirements for a sustainable management regime which can promote the natural regeneration of the eucalypt populations through seed germination. Whilst the planting of nursery-grown tubestock may appear to compensate, in the short term...it cannot substitute for the processes of natural selection which ensure that the gene pool of a population remains adapted to a changing environment in the long term. Floral enrichment by spot planting of nursery propagated tubestock is thus not an ecologically sustainable long-term management strategy since it interferes in the evolutionary development of the population.”

It is therefore, submitted that to propagate selected seedlings clearly ignores the basis for this hybrid’s scientific and evolutionary significance.

Tree Loss and Proposed Offsets

NELP have outlined that more than 26,000 trees will be removed or adversely impacted by the project, and propose to replace this loss with 30,000 seedlings.

There are several issues, however, that seriously question the validity of NELP’s proposed offsets:

- Approximately 67-70% of the 26,000 trees to be removed are semi-mature, mature or over-mature trees. NELP has failed to factor in juvenile trees, and understory and groundcovers.
- The vast majority of these trees provide critical habitat for our indigenous flora and fauna. NELP proposes to replace these habitat trees with seedlings – this is an extremely poor quality outcome as far as habitat is concerned.
- If NELP are committed to being leaders in sustainability, it is difficult to understand why they only apply such minimum standards of less than a 2:1 ratio, when the EPRs in the Westgate Tunnel project allow for a replacement ratio of 5:1. The community expects world’s best practice in this regard, and NELP’s response is seriously lacking.
• Using NELP’s own expert calculations of plant survival rates, as outlined in the Studley Park Gum Management Framework, on its face, the quantum of trees to be offset will actually result in a Net Loss of trees. For example, let us assume that all the trees are planted at the same time, the amount of trees remaining after 3 years, is such that by Year 3, only 10,290 seedlings remain.

Of course, NELP will obviously seek to replant those seedlings to ensure they comply with DELWP requirements. However, this then has serious implications for NELP’s Tree Canopy Replacement Plan.

• According to NELP, the long-term loss of trees and canopy cover can be mitigated with the implementation of a comprehensive Tree Canopy Replacement Plan that would require replacement of canopy lost due to the project, and result in a net gain in tree canopy within 15 years after the project’s completion. However, this timeframe is difficult to accept in light of the 70% survival rate quoted by NELP experts.

• Tree Canopy replacement does not account for the habitat loss.

When Are Offsets, Not an Offset?

NELP has stated that it proposes to offset vegetation that is directly and indirectly impacted by the project.

There is a VicRoads offset under Banyule permit P933/06 that offsets just under 1000 trees on the Simpson Army Barracks due to the construction of a shared use path. According to Banyule Council documentation (assumed to have been provided to the IAC) there are approximately 1000 trees that were DELWP approved offsets more than 10 years ago, and these are within the project boundary of the Simpson Army barracks. The proposed trench through the Simpson Army barracks will effectively remove those trees that are offsets.

According to section 9.2 of the DELWP guidelines for the removal, destruction or lopping of native vegetation 2017:

“Offset sites must provide permanent compensation for the loss in biodiversity value from the removal of native vegetation.”

So, when is an offset not an offset? In this case, it appears that NELP have completely ignored their responsibility in ensuring that the offsets are maintained.
Given the above case, how can the community be confident that the offset sites, to be proposed by NELP, will continue to provide permanent compensation for the loss in biodiversity value from the removal of native vegetation? Are these offset sites truly going to be in perpetuity, or will it be until the next project comes along?

It is also uncertain how long NELP will be responsible for the ongoing maintenance of these offsets, once the construction phase is completed. It is submitted that NELP should be responsible for the life of the project, rather than leaving the burden of funding to local Council authorities.

Community Investment into rehabilitation and Restoration of Banyule Flats and Warringal Parklands

NELP has stated (EES p. 8-18):

“The decision to build a significant portion of North East Link as tunnels has enabled direct impacts on property and areas of ecological and heritage value to be reduced. Direct impacts on Banyule Flats, the Warringal Parklands, the Yarra River as well as the Heide Museum of Modern Art and other residential properties have been avoided.”

There are serious concerns that NELP has understated the potential impacts on Banyule Flats and Warringal Parklands. As previously stated, the groundwater modelling used by NELP has been identified by other expert submitters to the IAC, as being substandard, and seriously underestimating groundwater drawdown.

Banyule Flats is an area deemed to be of State Ecological and Conservation Significance (Practical Ecology 2017). This recognition is the result of more than 50 years, and tens of thousands of hours of community work by conservation groups like, Warringal Conservation Society, other community groups, members of the wider community, and Council officers.

Given the immense social investment and social value that Banyule Flats and Warringal Parklands hold within the wider community, NELP must undertake all necessary efforts to ensure that the extensive work of the community has not all been done in vain.

Conclusion
In conclusion, I do not support the current reference design for NELP, as the scale of the project is such that its construction and operation will have significant and catastrophic impacts on habitat, open space and waterways all along the length of the project. The mitigation plans put forward by NELP are either inadequate, ineffectual or non-existent.

Nonetheless, should NELP be approved for construction, and if it truly seeks to move beyond just a ‘business as usual’ approach, to one in which they actively seek to maximize long term benefits: for the environment; our communities and our economic prosperity, then I urge NELP and the IAC to set world’s best practice standards in all aspects of the design, construction and operation of this project: the community and our indigenous flora and fauna deserve no less.