Urban Design and Landscape Plan (UDLP)

Background

I have a background in ecosystem restoration in both the public and private sectors and including Owner/Director of Indigenous Design Environmental Services from 1987 to 2019. I have worked as a consultant and restoration manager on some of Victoria's largest infrastructure projects. I have also had extensive experience with community conservation projects.

At the request of Bulleen Art and Garden and Friends of Yarra Valley Parks I presented twice to the NELP. The presentations were:

- **Community Liaison Group: Sustainability Workshop**
  22nd March 2019: Sustainable Landscapes – Planning for Long-term Vegetation Management
- **North East Link Project Inquiry and Advisory Committee (IAC)**
  3rd September 2019: Managing Vegetation Offsets and Landscape Plantings - Planning for Long-term Vegetation Management.

Both presentations emphasized ecological restoration (revegetation) practices undertaken at the Yallourn and Morwell mines where more than 2 million plants, across all vegetation strata were established. Ecological restoration projects included overburden rehabilitation, riparian restoration, and bushland enhancement. Involvement in these projects commenced in 1986 and is ongoing today and includes both planning (consulting) and implementation (on-ground services).

These presentations also outlined aspects of work undertaken since 2014 at the 250-hectare Ecological Reserve managed by Watersure on behalf of the Victorian Desalination Plant. Management involves planning and monitoring as well as supplementary planting (this included up to 100,000 plants annually) and vegetation maintenance. This project is also ongoing.

These projects are mentioned to highlight experience gained in ecological restoration including the establishment and maintenance of vegetation to create sustainable/resilient landscapes. The fact that involvement in these three projects is ongoing provides credibility to the successful outcomes we have brought to these projects.

Lessons to be Learned

My presentations also provided many examples of how poor vegetation management of the Eastern Freeway and the Eastlink have resulted in unsustainable landscapes that have become infested with numerous noxious weeds and several Weeds of National Significance. In land management terms this is an unjustifiable outcome. Given the extent of coverage and the invasive attributes of these weeds, it is unlikely that a sustainable landscape could be achieved without drastic measures and exorbitant budgets.

In the past week, travelling along the Eastern Freeway has presented some of the worst weed spraying I have witnessed in recent times. Patches of Blackberries that have been allowed to thrive for many years have been sprayed. The underlaying Lomandra longifolia that has endured since the original freeway planting have been killed. This will open large patches of ground that will be rapidly colonized by weeds. This could have been avoided and money saved if the Blackberry was sprayed when it was young and hadn't yet produced seed. Over time, both freeways have provided numerous examples like this one.

In large civil engineering projects, the landscape construction phase is usually successful. However, there are too many examples demonstrating the maintenance phase does not lead to sustainable

landscapes. The two freeway examples fall into this category. The NELP 18th September 2018 Sustainability document stated:

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

It is very likely that a statement similar to this was used frequently to gain community support for the construction of the Eastern Freeway and the Eastlink.

Current Position

The Northeast Link Tunnels UDLP contains plans and drawings (Attachment 2). However, there does not appear to be any text outlining how these plans are to be implemented and how the long-term maintenance program is to be managed. As with the two freeway examples mentioned above, there is no criticism given to the original plans and drawings. Also, the implementation of the plans was of a high standard. It was when the capital works were completed, and the maintenance phase began that the deterioration of the landscapes started, and it has continued to deteriorate ever since.

As with many civil engineered infrastructure projects, the maintenance contract is awarded to a civil contractor with very limited knowledge of sustainable landscape management. The landscape maintenance budget is managed by the contractor and often viewed as an add-on. As there is minimal to at best poor auditing or monitoring of the landscape project, funds are often diverted back to the core civil maintenance activities if these activities are running over budget. This happens primarily because no one is complaining about the deteriorating landscapes or the noxious weeds that have been allowed to flourish.

We don't imagine that a vegetation management specialist would run a major civil infrastructure maintenance project, and conversely a civil contractor should not be given sole responsibility for the project's landscape maintenance. It is precisely this problem that NELP will need to address when it develops implementation plans, maintenance plans, and timeframes for the landscape component of the NELP. The success of this work will determine if its sustainability objectives are met. Failure to get this right is likely to end similarly to the Eastern Freeway and the Eastlink landscapes.

To assist with the development of implementation plans and the long-term maintenance of the landscapes, I recommend that the National Standards for the Practice of Ecological Restoration in Australia be used as a guiding document for this project. Section 3 of the document provides a good introduction to what will be required to ensure success. Please note that the monitoring and evaluation sub-sections are too often overlooked or not included in vegetation/landscape projects.

The UDLAP landscape plans and drawings have achieved a high standard. The implementation of the plans is likely to be very successful. However, if the maintenance component is not integrated into the project process, i.e., planning, implementation, and maintenance, it is unlikely that the NELP sustainability goals will be met.

I would welcome the opportunity to discuss the above with the planning team if you think this would be of assistance.

Regards

Alan Noy