



Living alongside the Growling Grass Frog in the Urban Jungle

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Biography:

Adele is a Graduate Environmental Engineer, with over 4 years exposure in the urban development scene. She has been involved and provided key support in various aspects of design including the hydraulic design of spillways, wetlands and drainage design as well as working largely in the strategic water sector. Adele is passionate about all things water and thrives on integrating her ever-expanding knowledge of the strategic water direction of Melbourne with technical outcomes and solutions. Adele is particularly interested in shaping water and drainage assets within developments for benefit of the wider environmental and ecological community.

Adele is one of the lead engineers in regards to stormwater input for the Vere Court Development Strategy and Concept Design and continues to work closely with Melbourne Water and DELWP to employ the best outcome for the development.

The ever-expanding growth corridor that is Melbourne's outer suburbs, are seeing a vast increase in the rate at which estate developments are constructed. With this rapid increase, comes various design and construction challenges at which we see these Urban Jungles appearing. From a stormwater perspective, some of the most complex challenges are to ensure that properties are not subject to flooding and that runoff is treated to best practice to ensure that downstream rivers and creeks are not adversely affected by urbanisation. In recent years, the focus has widened to understand the impact and integration of development with areas of conservation, set aside for selected protected flora and fauna. The Western Growth Region of Melbourne is home to a large population of the wildlife corridors for the Growling Grass Frog (GGF).

The release of the Biodiversity Conservation Strategy for Melbourne's Growth Corridors highlights the measures that are now being implemented, to mitigate the losses of habitat for this species. Part of this strategy focuses on Kororoit Creek, which is home to one of the biggest meta-populations of GGF in Victoria and is considered to be at the lowest risk of species extinction.

New and upcoming estates along Kororoit Creek, such as the development in Vere Court, Deanside, are now becoming heavily involved in integrating space for conservation areas for the GGF. It's aim? To create clear synergies between the greenspace needs of future communities, accommodating stormwater treatment and attenuation requirements, as well as protecting the biodiversity that sits within the allocated conservation areas.

This paper discusses specific methods that have been applied to integrate the needs of current stormwater regulation from a quantity and quality perspective while employing environmental benefits for the GGF habitat and also creating a green infrastructure asset that supports liveability for the local community. Specific elements that we will explore include wetland configuration and operation and how this enhances greenspace, encouraging GGF habitat and liveability for the wider community. It also explores the cost effectiveness of utilising treated stormwater to fill habitat areas.