

## Reimagining Arnolds Creek – A social perspective

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## Biography:

Jenny is an environmental engineer at Alluvium Consulting with a strong interest in urban water, waterway management and liveability. Since joining Alluvium, Jenny has worked on a variety of water quality, urban water, water sensitive urban design (WSUD), and water policy projects. More recently she has been a design engineer on two separate channel naturalisation projects.

Stuart provides stormwater engineering advice to the natural resource industry on best practice management for stormwater and waterway management works. Drawing on a combined background of stormwater drainage design, geomorphology and river restoration engineering, Stuart has been involved in waterway management and the development of drainage and water quality designs in Australia for over 15 years. Stuart has designed works for a range of unique urban and rural environments across Australia that contains differing geomorphic conditions, geometric challenges and high levels of community and stakeholder engagement.

Arnolds Creek is a site with immense potential to become a high quality open space which connects the community and provides amenity in Melton West. Arnolds Creek is the first site to be transformed as

part of Melbourne Water's Reimagining Your Creek program.

The 1.4km of reimagined creek involves the daylighting of the creek's piped low flow, replacing a concrete channel with a new hydraulically modelled and ecological creekline response, and transforming the underutilised space into a healthy and ephemeral waterway with flexible open spaces and ultimately creating a community destination for the people of Melton.

Drivers for reimaging the Arnolds Creek Reserve include:

- Melton is one of the fastest growing towns in Victoria. The current population is 134,967 and is forecast to grow to more than 200,000 by 2026.
- The Melton area is relatively disadvantaged in socio-economic terms, with a negative Index of Disadvantage.
- A large proportion of the Melton workforce commutes outside of Melton for work (65.8%), resulting in increased time pressure to spend time in open spaces and engage in physical activity.
- Arnolds Creek has approximately one third the area of open space per person compared to the wider Melton Council area.

This design has been through a consultative journey from the original channel naturalisation study through to regular community, council and key stakeholder engagements, and design iterations that contribute to the ultimate design outcome. The journey has been collaborative with



the aim to deliver an increasingly liveable urbanised waterway that delivers multiple community benefits including:

- Safe and Accessible Waterway Enable access through the reserve and to the habitat areas located within the waterways
- Improved Community Health Expanding and clearing grassed areas for flexible community use, kickabout and passive occupation, reduction in heat stress and improved thermal comfort
- Waterway A strong interaction with the waterway through alignment of paths and crossings
- Community Identity and Destination Developing education / learning opportunities through the introduction of boulders, learning habitat gardens and wet habitat zones,
- Healthy Environment Over 40,00 new plants and large wet and dry zones to increase the variety of flora and fauna.