## BORCK CREEK STORMWATER CORRIDOR – FINDING SPACE IN A CHANGING WORLD

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## ABSTRACT

Greenfield growth in Richmond, the largest town in the Tasman District, is concentrated in the Borck Creek catchment which flows from the Bryant and Richmond Ranges onto the flat Waimea Plains and out into Tasman Bay. Borck Creek is a heavily modified watercourse that curves around the current developed border of Richmond and is subject to development pressures along a significant portion of its length. The location of the waterway on the boundary of the current township, within the prime development areas, presents both a challenge and opportunity for stormwater management planning to ensure that safe and effective discharge paths are available for the entire catchment. The project affects dozens of current landowners, but also is able to take advantage of the relatively undeveloped nature of the existing catchment to implement a holistic infrastructure solution for the potential thousands of future residents.

The opportunity and need to develop the Borck Creek catchment was identified by Tasman District Council over twenty years ago. The project sought to achieve a variety of outcomes; encompassing stormwater servicing & flood management, ecological restoration, amenity and recreation values, and active transportation opportunities. The long term nature of the project has meant that aspects of the required outcomes have changed throughout its lifespan to date, which have presented some significant challenges for the management team.

The changes began as a result of an extreme flood event in 2013 which spawned a project to upgrade central Richmond's stormwater network - diverting significant additional flows into the Borck catchment. Updates to rainfall and climate change estimation tools, and future development projections over time have further changed the expected flows, and changes to local and central government policy, along with societal expectations have affected the way environmental and social values are incorporated into the corridor designs.

As with any significant infrastructure project, the Borck Creek corridor is subject to local government budget pressures. The project has benefitted greatly from an ongoing programme management budget and capability. As a result of this budgetary flexibility there have been opportunities to work with developers and contractors to construct parts of the corridor and use the fill for adjacent developments, resulting in significantly reduced costs and improved outcomes for the community.

The Borck Creek project also requires extensive land purchase by Council to implement, and the importance of individual land purchases increases as more sections of the corridor come online and alternative routes for the corridor become limited. This emphasises the importance of a clear, methodical and welldocumented analysis approach for establishing corridor width to facilitate Public Works Act processes. In the case of Borck Creek where land requirements are exceeding the widths originally established in the designations ten years ago, this is particularly important and another aspect where the integration of multiple uses into the corridor needs careful consideration.

This paper aims to share the lessons TDC has learned through the Borck Creek stormwater corridor programme in the hope they are useful and informative for other local government organisations.

## **KEYWORDS**

Development, stormwater, management, planning, flood management, ecological restoration, recreation, amenity, active transport, climate change, land purchase, Public Works Act, designation