



Strategic Investment in Runoff Management: The Feasibility of Stormwater/Runoff Management Actions (FOSMA) Decision Support Tool

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To support the health of local waterways and Port Phillip Bay Melbourne Water manages runoff quality and quantity impacts across its jurisdiction through a range of activities. These include capital works and maintenance as well as partnerships and grant support through the Living Rivers and River Health Incentives programs. Outside of Greenfield development areas, urban and rural runoff management practices are often governed by opportunistic approaches because place-based master plans and prioritisation frameworks are not available. This can limit considerations of: 1) Melbourne Water's overall vision and the outcomes it needs to achieve for a catchment and the health of its waterways, and 2) the feasibility of management actions (e.g. constructed wetlands, raingardens, litter traps, riparian revegetation) in support of these. In order to assist Melbourne Water and its partners in making strategic runoff management investment decisions for a given area of interest, we partnered with Jacobs to develop a spatially-based tool that draws on the suitability framework developed by Kuller et al. (2017). The tool performs a feasibility assessment process that considers relative construction and maintenance costs as well as two place-based perspectives: 1) technology operation (e.g. biophysical, planning & governance) and 2) the needs of a location (e.g. ecosystem regulation, liveability). The tool will support investment decision makers and catchment planners to assess the ability of a range of runoff management actions to meet a given set of user-defined objectives (e.g. flow-regime management, water quality improvement, urban greening, habitat provision).