

Urban Waterway and Aquatic Weed Management - case studies from over 20yrs

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Summary Waterways have again become central places for people to gather, to move along and in urban areas these are increasing the majority of the retained or replanted 'bushland'. Waterway development setbacks and creek lined corridors are mandatory in many new and renewed urban developments. As well as being recreation places with multi use pathways riparian zones often double as stormwater management locations with the inclusion of constructed wetlands. As with any built asset ongoing maintenance is required particularly in the area of weed management. Two key considerations are inhibiting weeds establishing, particularly in newly planted areas and controlling the weeds that are present. Of interest too is the prediction of cost and the required setting aside of funds from both the public and private sector to effectively manage weeds in urban waterways, wetlands and riparian zones. Aquatic weed management resourcing is generally under estimated and aquatic weed ID is generally low across the sector. This presentation provides case studies from over 25 years of working in urban waterways,

riparian zones and wetlands. Wetlands and weeds can be synonymous if not managed – with 100 of \$1000s being spent annually on waterway weed suppression. The aim is to provide information that assists with weed management including in designing these assets, preparing and costing the long term management of these areas, particularly when they go into community title management. A focus will be on successful actions to take in urban waterway and wetland management as well as predictive costing for budget allocations. Case studies are given with tools on wetland weed ID and how to minimise spread as well as the use of new technologies for larger areas such as Drones for the treatment of *Salvinia* in Penrith Lakes Sydney. Multiple considerations of managing weeds in wet environments are covered including high frequency repeat weed incursion, WHS considerations and ecological requirements including low/no chem in waterways.

Keywords Aquatic Weeds, Riparain zones, predicting budgets, techniques, on-ground successes