



How to Protect an Urban StREAM: Stormwater Runoff Evaluation and Amelioration Method

Dr Geoff Vietz¹

¹*Streamology Pty Ltd, Bright, Australia*

The urban stream syndrome is a common occurrence worldwide where streams are degraded physically and ecologically following catchment urbanisation. The primary driver of degradation is recognised as stormwater runoff from urban catchments. To address this problem requires amelioration of the stormwater runoff but there is no method that assists planners, stormwater designers and engineers to evaluate the stormwater flows that are doing damage, unlike the methods available for streams below dams and storages. Drawing upon non-urban examples the Stormwater Runoff Evaluation and Amelioration Method (StREAM) has been developed to direct the identification of stream values, development of hydraulic metrics and links to hydrology that can be used to develop controls on stormwater runoff and inform drainage design. StREAM has been applied to case studies in Melbourne and Sydney and is intended for general use in urbanising and urban catchments.