



Stormwater and Waterway Planning for Growth in Sydney

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Sydney Water is developing new processes to better incorporate consideration of stormwater and waterways into its planning to service growth. This initiative comes as Sydney's population is forecast to almost double by 2056 and the NSW Government has embarked on billions of dollars worth of new road and rail projects to encourage and facilitate this transformation. The growth in the city will be a mix of in-fill and new development areas with focus around the current CBD, Parramatta and the proposed Western Sydney Airport, as well as higher densities along major transport corridors such as Sydenham to Bankstown. All this growth requires water services. For stormwater this means adequate drainage and flood management but also the protection and enhancement of waterways and consideration of the role that stormwater harvesting can play.

The stormwater planning process is part of an integrated planning approach that looks at all water services required for a specific growth area and considers how these services interact to achieve the desired outcomes for the community. The key outcomes that drive stormwater planning are around flood management, waterway health and liveability. Flood management incorporates the existing floodplain management process led by local government. Waterway health focusses on reducing the impact of additional pollutant loads and flows from developed areas. Liveability focusses on green/blue corridors for people and biodiversity.

The approach to this planning involves layering of baseline information, allowing areas of concern and opportunities to be identified. Layers such as existing assets, flood mapping, pollutant modelling and open space mapping are overlaid with projected housing density increases and land use changes for specific locations, as well as future stormwater asset renewal planning and other related major projects by Sydney Water and other key stakeholders.

The development of the integrated planning process is discussed with reference to case studies for growth areas currently being investigated in the Sydney Metropolitan area.