



INTEGRATED URBAN WATER DESIGN

Our design approach extends from concept to construction. We assist our clients frame the initial scope of works and concepts to engineering design, structural analysis, and drafting for contract documentation, liaison with government authorities and councils, project management, and communicating with stakeholders such as subcontractors and suppliers.

We aim to mix the hard engineering skills and experience with our understanding of urban communities and the latest ecological science to deliver the best possible on ground outcomes.

Why Alluvium

Designs that minimise costs and risk for the asset owner

We go beyond the 'blobs' on a map that are typical of the field. We believe we can save our clients money and produce a better on ground outcome by using an approach which considers the detail of the operation of any asset we design.

National exposure

The evolution of urban water management across Australia has been varied with both different environmental conditions and local governance having major impacts on design approaches. We have senior staff in each of the major jurisdictions and our design 'community of practice' is focussed at sharing lessons across the country.

Links with research

Our design team has been part of the evolution of urban water management over the past 25 years. We have formal relationships with several of the major research organisations in this field (for example CSIRO, the CRC for Water Sensitive Cities, and Griffith University).

Safety in operations and design

Our urban design work follows the same safety processes as our work for major river diversions for the resources sector. Safety is a core promise from Alluvium and we have hit our 'no lost time injuries' target for each of the past five years.



Water sensitive urban design (WSUD)

Alluvium is a leading provider of WSUD and water sensitive cities concepts, and are experienced with a variety of climatic situations from tropical northern Australia to the temperate south. We are specialists in engineering design approaches to integrate the urban water cycle into urban design.



Detailed modelling skills for urban areas

Our staff have been integral in the development and implementation of most of the commonly used tools for assessing urban water futures (such as Source and MUSIC).



Urban ecology

Alluvium has extensive experience and depth in understanding how WSUD and urban waterway management can help deliver urban ecology outcomes. We understand in detail the types of urban habitats, species that inhabit them, and the hydrological and microclimate requirements needed in our design work.



Liveability in urban design

Our work is informed about the long-term interests of the community and future generations. We see our role as using water in the urban landscape to deliver community mental and physical health outcomes.



Social and economic analysis

Water resources decisions invariably involve trade-offs. Our economists and social scientists understand the context of water in the urban environment and want to work in multidisciplinary teams rather than as isolated specialists.



Community inclusiveness

Our design work considers how to bring communities together. We seek design solutions to encourage mixing and engagement of people from diverse backgrounds.