The role of consultants in the Integrated Water Cycle Management process

WHY INVOLVE A CONSULTANT?
A consultant has several specific roles to improve the efficiency of the urban water service during the Integrated Water Cycle Management (IWCM) process. To be effective, the consultant should have diverse skills relating to urban water service planning including catchment, water resource and urban area specialties. During the IWCM study, the consultant should add value to the existing skills of the local water utility, council and community.

Essential skills include:
- broad technical knowledge and experience related to urban water service provision including climate, demand management, finance and modelling
- communication skills suited to dealing with government, the community and report preparation
- legislation and legal understanding including Government acts and regulations, contracts, agreements e.g. MoU and licensing
- professional impartiality and independence including an external perspective that may be difficult for the utility, council and local community to effectively achieve.

KEY REQUIREMENTS OF THE CONSULTANT

The IWCM process addresses extending the typical urban water service planning process to include broader planning matters. The consultant can add value most effectively by assisting the utility to recognise what has changed and where new opportunities may be found. The consultant should be able to assist in adopting change in the following areas.

1. **Data and information** The IWCM process relies on accurate, relevant data and information that relates directly or indirectly, at a catchment, water resource or urban level, to the provision and management of the urban water service. This data and information is often missing, incomplete or not quality assured. The consultant has the responsibility to collate and review all relevant data and information collected by the utility and use it correctly. Where relevant, the consultant should recommend changes to data collection activities or new collection needs. The utility should have all its relevant data and information ready at the start of the IWCM study.

2. **Catchment and water resource issues** The IWCM process is interested in catchment and water resource issues where they limit or give opportunities to define IWCM issues or to develop IWCM scenarios. These issues are not the role of the utility to address, unless it is clearly determined that any utility action at a catchment level will address the issue and is the most cost effective option. The consultant must guide the process of clearly separating IWCM issues from all issues found at the catchment, water resource and urban level.
3. **Only utility issues** IWCM is a strategy for how the utility provides the urban water service. As such, only matters directly relevant to the utility’s service provision should be continued through the IWCM process. This is because the funds to implement the solutions come from the utility’s water supply and sewerage customers. Issues found during the process that do not relate to the utility should therefore be referred elsewhere. The consultant’s role is to ensure that only options and scenarios are developed that relate to the urban water service and the utility’s management and planning role.

4. **Wide range of technically feasible options** The IWCM process is about thinking ‘outside the square’ in relation to possible options. This is where the greatest opportunities may exist to address the issues through a ‘win-win’ situation that may also reduce costs. The consultant can best add value at this point through having wider experience with typical utility and urban water service issues and options.

5. **Building scenarios (solutions)** The consultant should take all the short-listed options and package the best mix to address the IWCM issue most effectively. The consultant must confirm that the scenarios developed address all remaining IWCM issues after considering the ‘business as usual’ and possibly the ‘simplified’ scenarios. Where individual options are very costly and it is possible to modify the targets and therefore the issues, the consultant should raise this with the Project Reference Group (PRG) as early as possible to reduce the chance of scenarios being developed that turn out to be too expensive for the PRG to support.

**THE CONSULTANT’S ROLE IN IDENTIFYING AND DEALING WITH IWCM ISSUES**

The IWCM process is about recognising the urban water service issues and developing a strategy based on suitable options. The process may find other issues that are not the responsibility of the utility. While the IWCM process can assist with non-utility issues if there is a net benefit to the utility, the final IWCM Strategy should present only options and scenario costs that are acceptable to be charged to the utility’s customers as a result of providing the urban water service. The following diagram highlights the importance of managing the IWCM process to focus on the utility’s responsibility.
The IWCM process focusing on the role of the utility

**Catchment information**
Issues that restrict or enhance IWCM options

**Water resource information**
Issues that restrict or enhance IWCM options

**Urban information**
Issues that are:
- a/ formally the responsibility of the utility
- b/ formally the responsibility of the council
- c/ formally the responsibility of others

Assessment and allocation of issues to utility, council or others
(This step involves the consultant, council, utility and PRG)

**LWU issues (to remain in the IWCM process)**
Only issues that are formally the responsibility of the utility should be included here. These issues are those for which it is reasonable to charge the water service customers (e.g., all water and sewerage service works and running costs, licence compliance costs, asset maintenance and replacement costs, and stormwater management costs if cost effective for the LWU to support).

**Council issues**
Only issues which are formally the responsibility of the council should be included here. These issues are those for which it is reasonable to charge the council ratepayers (e.g., general stormwater, local flooding, vegetation, soil erosion, and riparian zones in the council area).

**Other issues**
All issues found which should not be charged to the water service customers or the council ratepayers should be included here (e.g., catchment erosion, river nutrient reduction, bank erosion and groundwater quality management).

Solution costs to utility customers
Solution costs to council ratepayers
Solution costs at a catchment or state-wide level

Solution costs to the local community via water service charges and rates
(By combining the water, sewerage and stormwater issues together when considering solutions, there is the potential to reduce both the water customer and council ratepayer costs through the IWCM scenario adopted.)

FURTHER INFORMATION
For further information, or to discuss any aspect of the Integrated Water Cycle Management process, please contact your NSW Office of Water regional Water Utility Officer. Contact details can be found on the ‘Contact Us’ page of www.water.nsw.gov.au. For more general IWCM enquiries or information email information@water.nsw.gov.au.