Integrated resource planning: how do we know if our water planning and management is best practice?

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Abstract

Millions of dollars are spent every year in Australia on urban water planning and management. Over the last decade the need for effective planning has become more critical as urban populations rise, environmental impacts on river health become more important and below average rainfall patterns have resulted in a reduction in supply security. During this time our resource needs in many parts of Australia have begun to outstrip availability. This has forced water service providers to begin to think of a variety of ways to provide water services to their communities which do not rely solely on traditional supply-side thinking but encompass a combination of water efficiency, source substitution, reuse and supply.

Over this time a number of planning frameworks have been developed to aid water service providers to deal with this emerging situation. One key framework which has been implemented in part by both large and small utilities and water service providers across Australia uses integrated resource planning (also referred to as least cost planning). This framework has been developed over several years and is considered best practice internationally. It is advocated by the International Water Association, the Water Services Association of Australia and will shortly be the basis of major work being undertaken for the National Water Commission to develop a broader national approach to water planning and management.

However, whilst such best practice frameworks are available we need to ask how we can make sure they are being implemented effectively. This paper briefly outlines the integrated resource planning (IRP) framework developed and discusses how benchmarking can be used to assist in testing whether the framework is being effectively implemented. An international case study example is used to illustrate the use of benchmarking.

This paper will be of interest to a broad spectrum of water service providers involved in water planning and management.