

## **A decision support framework that enables urban water systems managers to achieve sustainable decision-making**

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### **Abstract:**

The aim of this study is to develop a decision support framework that assists managers in the urban water industry to ‘sustainably’ analyse a mix of water service options, at the whole-of-city scale. This study has produced a framework which transitions decision-making in urban water systems from traditional command and control approaches that tend to focus on an outcome at a point in time to a more sustainable and dynamic decision-making process. While available models and evaluation techniques provide valuable input to the decision process, the complex nature of urban water systems requires more than just social and economic criteria to be considered as part of decision support frameworks and models (DSF). The authors believe that current DSF need to be supplemented by models, expert opinion, participatory processes, social learning and an adaptive decision-making method. This paper documents this issue and provides a DSF that enables urban water managers to achieve sustainable decision-making through the incorporation of the currently missing elements of participation, risk and learning.

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