

Australian water supply systems: challenges and how they are resolved

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Abstract

Australian water authorities supply water to around 20 million customers via piped network and they mostly use surface water resources. Urban population in Australia is lightly populated, implying vast network is needed to supply smaller population. In some states, water supply is blessed with abundant water while some states live under scarcity of surface water resources and hence resort to various other means such as desalination and groundwater recharge and withdrawal. Next to the scarcity issue is the water quality issue. Since the invention of disinfection by-products suspected of causing cancer in humans when chlorine is used as a disinfectant, many water supply utilities faced many challenges in reducing the disinfection by-products. Some utilities have adopted a different disinfectant and some utilities moved to treat water extensively before chlorine is applied. The talk will address the success stories and challenges remain to be resolved.