

Water demand management instead of water supply management: a case study of Yulin City in northwestern China

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Abstract Water Supply Management (WSM) during the 20th century has tremendously benefited many areas around the world. However, with rapid socio-economic development and major engineering interventions, lessons from most countries have demonstrated that WSM is not suitable because it treats fresh-water as a virtually limitless resource, and rarely takes full account of environmental and economic impacts. Water Demand Management (WDM) has gradually found its place in Integrated Water Resources Management (IWRM). Yulin City, in the dry northwestern part of China, has experienced water shortages, hindering socio-economic development. Rapid population growth, and industrial and agricultural development, have increased the gap between water supply and demand. With Yulin City as case study, WDM practice is presented in this paper. The WDM measures adopted in Yulin City include legislation, institutional arrangements, water metering, leakage reduction, wastewater re-use, water allocation between multiple sectors, water price, and public education to improve awareness of water saving.

Key words water supply management; water demand management; water price; climate change; water conservation; Yulin City, China