

APPENDIX 2. Adelaide Case Study Overview.

Adelaide is a city of 1.2 million people (Australian Bureau of Statistics 2013) stretching along the eastern coastline of the Gulf of St Vincent, and spreading inland to the Mt Lofty Ranges. Like Perth, Adelaide's climate is hot and dry in summer with winter dominated rainfall (Australian Bureau of Meteorology 2013). However, limited surface water resources make Adelaide the driest capital city in Australia (Office for Water Security 2010). Like much of the south-east of the Australian continent, Adelaide's climate began to shift to drier conditions in the late 1990s (Australian Bureau of Meteorology 2010). While the Adelaide region did not experience water scarcity till the mid-2000s, the city's major water source, the River Murray, had been experiencing record low runoff from 1997 (CSIRO 2008). As an inter-jurisdictional, over-allocated and nationally iconic river system, the health of the River Murray generated nation-wide public discourse and political discussion on the fate of this water resource. Due to Adelaide's high reliance on the river for potable supplies, inter-state politics and public engagement in water issues are influenced significantly by these national debates. Adelaide's management responses to the drought are outlined in more detail in the following timeline.

- **1990s – current**

Inflows to surface water storages reduce to approximately 65% of long term average. Inflows to Murray-Darling Basin system also reduced. City of Salisbury experiments with stormwater harvesting and aquifer recharge to maintain wetland health. Begins using harvested water for public open space watering, eventually expanding operations into a local government owned water utility supplying fit-for-purpose domestic and industrial water use.

- **1995**

Following national water reform and competition policy initiatives, water utility was corporatized (SA Water Corporation). Outsourcing of major functions through private sector contractors.

Catchment Water Management Act establishes regional management of water resources, with the provision of funding for catchment improvements through a levy.

The need for a transparent process to allocate funds from the levy drives significant community education and engagement activities.

- **1997 – current**

A number of wastewater recycling projects progressively increase city's capacity to recycle 25% (as at 2012) of wastewater for non-potable reuse.

- **2003 – current**

Range of water restrictions and education campaigns reduce domestic water consumption.

- **2004**

Natural Resources Management Act replaces *Catchment Water Management Act*, representing an integrated approach to natural resource planning, protection, water allocation and management. Includes formal mechanisms for community involvement in catchment planning.

SA becomes a signatory to the National Water Initiative.

SA signs Murray-Darling Basin (MDB) Water Agreement, a Commonwealth led initiative to reduce over allocation and improve the health of the Basin.

- **2005**

Diversification of water sources discourse emerges in Government water planning strategy: *Water Proofing Adelaide*.

- **2006**

Driest period on record experienced in late winter/early spring.

Murray-Darling System experiences lowest inflows on record. Adelaide's water security is significantly threatened.

SA Government mandates the installation of rainwater tanks on all newly built homes.

- **2008**

Independent Commissioner for Water Security appointed. Tasked with producing a whole-of-government strategy for water security.

Agreement on significant governance reform of the Murray-Darling Basin signed by relevant State, Territory, and Commonwealth Governments. Through this agreement SA secures greater storage capacity to capture Adelaide's full water extraction entitlement from Murray-Darling Basin system.

- **2009**

Economic Statement of the South Australian Economic Development Board recognizes access to water as a limiting factor to the State's economic growth prospects.

\$150 million investment from Commonwealth, State and Local Government to provide non-potable supplies through stormwater harvesting, with an interim target of 20GL by 2013.

- **2010**

Water for Good strategy for securing water supplies is released by Commissioner for Water Security.

State Government Department for Water formed to take carriage of water policy and provide a focal point for integration of water management activities.

30 Year Plan for Greater Adelaide released by the Dep. Planning and Local Government. Includes explicit objective to reduce water consumption in new dwellings.

- **2011**

Adelaide Desalination Plant (ADP) comes online at 50GL/annum capacity.

Commissioner for Water Security steps down, State Government abolishes the position.

- **2012**

SA Water announces the ADP to be placed in 'standby mode' when sufficient, cheaper water is available.

Water Industry Act introduced to open water services provision up to greater competition, with supporting regulatory and consumer protection mechanisms.

Department for Water amalgamated into the Department of Environment, Water and Natural Resources.

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