Appendix two - About the audit

Audit objective

This audit assessed whether water conservation initiatives for the Greater Sydney Metropolitan area are effectively investigated, implemented and supported.

Audit criteria

We addressed the audit objective by answering two questions:

- 1. Are water conservation initiatives effectively investigated and implemented?
- 2. Are effective arrangements in place to coordinate and support water conservation initiatives?

Audit scope and focus

In assessing the criteria, we checked the following aspects:

- 1. Are water conservation initiatives effectively investigated and implemented?
 - a) Are options and proposals for water conservation initiatives supported, and evidence based?
 - b) Are water conservation plans developed with clear objectives?
 - c) Are approaches to water conservation implemented and reviewed?
 - d) Are water conservation measures being adequately considered for urban growth and infill?
- 2. Are effective arrangements in place to coordinate and support water conservation initiatives?
 - a) Are responsibilities for key activities adequately identified?
 - b) Are regular reviews conducted on the level and appropriateness of investment in water conservation?
 - c) Are barriers to water conservation identified and addressed?
 - d) Are collaborative arrangements, partnerships and community engagement established?
 - e) Are arrangements for capacity building in place?

This audit focused on the Department of Planning, Industry and Environment (the Department) and Sydney Water.

The audit included examining:

- development and implementation plans for water conservation
- initiatives to conserve water and improve its efficient use of water, including public awareness campaigns about water usage
- leak management across the Greater Sydney water distribution network
- recycling, re-use and efficiency initiatives, opportunities to save potable water, both public and private
- the regulatory environment for water conservation initiatives.

Audit exclusions

The audit did no examine:

- the effectiveness of water restrictions
- the effectiveness of councils' in implementing water reuse and recycling initiatives
- water conservation initiatives outside the Greater Sydney Metropolitan area
- conservation initiatives undertaken by Water NSW.

However, we have commented on these issues where they affected our findings or to provide context.

Audit approach

Our procedures included:

- Interviewing:
 - staff in the Department of Planning, Industry and Environment and Sydney Water responsible for developing and implementing water conservation programs and initiatives
 - stakeholders with knowledge and experience in water conservation programs
 - stakeholders and engaging with experts and consultants with a knowledge of pricing and its potential impact on water conservation initiatives.
- 2. Consulting with other stakeholders including:
 - the Greater Sydney Commission
 - IPART
 - Water NSW
 - Infrastructure NSW
 - private water utilities and water industry representative groups
- 3. Examining:
 - the 2017 Metropolitan Water Plan, and historical versions back to 2004
 - Sydney Water's Water Conservation Plan 2017 and its Operating Licence 2015 to 2020, and historical versions
 - information on the mechanism developed for investigating new proposals for meeting water supply and security needs
 - the list of options that have been assessed to meet long term water supply needs
 - the Department's Metro Water's annual assessment of the level of investment in water conservation
 - information on the relevant funds and status of these activities, such as the Climate Change Fund and WaterSmart cities program
 - activities by Sydney Water, the Department and agencies noted in the Metropolitan Water Plan to support public and private sector capacity building and community engagement
 - reviews of barriers and enablers to cost effective water recycling, including a key study by Infrastructure NSW
 - plans from the Greater Sydney Commission and others, and the results for conservation initiatives in some urban growth or infill (as potential case studies)
 - water pricing, especially as it relates to and may impact water reuse, water saving and leak management
 - information and audit reports related to metropolitan water supply and regulation from other jurisdictions (for comparison)
 - previous NSW Audit Office reports related to water resource management and supply, and Financial Volumes that included water indicators.

4. Collecting and analysing data on water conservation initiatives; potentially examining information on the Sydney Water's demand forecasting, the Economic Level of Water Conservation, and leak management.

The audit approach was complemented by quality assurance processes within the Audit Office to ensure compliance with professional standards.

Audit methodology

Our performance audit methodology is designed to satisfy Australian Audit Standard ASAE 3500 Performance Engagements and other professional standards. The standards require the audit team to comply with relevant ethical requirements and plan and perform the audit to obtain reasonable assurance and draw a conclusion on the audit objective. Our processes have also been designed to comply with requirements specified in the *Public Finance and Audit Act 1983* and the *Local Government Act 1993*.

Acknowledgements

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Audit cost

The total estimated cost for the audit is \$413,123.