Appendix three – Glossary

BASIX

Building Sustainability Index

Dam storage levels

Dam storage refers to how much water is in the 21 storage dams (11 major dams) that supply the Greater Sydney Region. Water NSW manages these dams, which hold more than 2.6 million ML of water.

ELL

Economic Level of Leakage

ELWC

Economic Level of Water Conservation

Greater Sydney

Greater Sydney refers to the geographical areas that comprise Sydney, the Illawarra and Blue Mountains.

Integrated water cycle management

An approach to water supply and demand management that considers all aspects of the water cycle. These include using recycled water (wastewater and stormwater) for non-potable and indirect potable options for water sensitive land use and urban design.

IPART

Independent Pricing and Regulatory Tribunal (New South Wales)

KL, ML and GL

The main metric water volume measurement units used by the water sector in Australia:

- 1 Kilolitre (KL) = 1,000 Litres
- 1 Megalitre (ML) = 1,000 KL
- 1 Gigalitre (GL) = 1,000 ML.

Leakage management

Leak management comprises of leak detection and repair of damaged pipes in Sydney Water's network of over 22,000 kilometres of water pipes. Leak management is a major way Sydney Water reduces water loss.

Levelised cost

The present value of the stream of costs associated with water conservation projects divided by the present value of water saved. Both the costs and water saved are measured over the time period of the water savings resulting from the action. The levelised cost is compared to the estimated value of water to determine whether the investment in the water conservation project can be justified.

Long-run value of water It represents the costs that are expected to be avoided by the community if potable water usage were to be reduced sometime beyond the next few years, when major infrastructure investments are possible. This value differs from the short-run value in that the value to customers from reducing the risk of water restrictions is replaced by the avoided costs of pushing back optimal combination of future demand and supply-side investments.

Millennium drought

A prolonged period of dry conditions with low rainfall which affected the southeast, southwest and in particular the Murray-Darling Basin and southern cropping zones of Australia from late 1996-mid-2010. The cities of Perth, Adelaide, Melbourne, Hobart, Canberra, Sydney and Brisbane were all affected by persistent or periodic drought episodes.

NABERS

National Australian Built Environment Rating System

Potable water

Water that is intended for use as drinking water and should materially meet the Australian Drinking Water Guidelines.

Present value

The present value is the current value of a future annual stream of dollars (or volume of water savings). The future stream is converted into a current value equivalent using a specified discount rate (e.g. the regulated real pre-tax Weighted Average Cost of Capital), taking account of the year in the cost/water saving was incurred (e.g. the current value of \$1 incurred in year ten would be greater than a \$1 incurred in year 30).

Short-run value of water

It reflects the Sydney Water's operating costs from supplying a kilolitre of water (such as electricity for pumping and chemicals for treatment), the value to customers from reducing the risk of water restrictions, as well as, any avoided 'externalities' (e.g. cost of environmental damage) associated with supplying the water. The short-run value will be higher at low water storage levels because under those conditions water is supplied from more expensive sources (e.g. desalination) and the risk of water restrictions is higher.

Smart meter

An advanced water meter that provides high resolution and frequent water consumption data, which can improve feedback to consumers and thus enhance water conservation and management.

Stormwater harvesting

Stormwater harvesting involves the capture, treatment, storage, and use of urban stormwater runoff. As opposed to rainwater harvesting, stormwater runoff is collected from drains rather than roofs.

The Department

The New South Wales Department of Planning, Industry and Environment.

WaterFix

WaterFix is a water efficiency measure operated by Sydney Water. WaterFix residential is a plumbing service for individual dwellings to install efficient fittings and fix minor leaks which has run since 1998. WaterFix Strata is a similar service that focuses on strata buildings.

Water recycling

Water recycling refers to the treatment and reuse of sewage, greywater and/or stormwater, for non-potable purposes.

Water reuse

The process of using treated wastewater for drinking water is called potable water reuse. Potable water reuse provides another option for expanding a region's water resource portfolio.

There are two types of potable water reuse:

- Indirect potable reuse: Uses an environmental buffer, such as a lake, river, or a groundwater aquifer, before the water is treated at a drinking water treatment plant.
- Direct potable reuse: Involves the treatment and distribution of water without an environmental buffer.

Water restrictions

Water restrictions are a regulatory demand management and/or drought response measure, that seeks to reduce water use through restricting residential and business use of drinking water. Penalties may apply for non-compliance.

Water service developer charges

Developer charges are up-front charges that a water utility may levy to recover part of the infrastructure costs incurred in servicing new development or additions and changes to existing development.