

Worksheet 3.6C

Planning a water audit – scope of work checklist

This is an example only – adapt this worksheet to suit your organisation's requirements.

Source: Adapted from Sydney Water's Every Drop Counts Business Program.

	Include in audit? Yes/No
Objectives	
General objective – e.g. to carry out a comprehensive water efficiency audit to achieve the following:	
Identify current water usage patterns	
Benchmark water use against standard or best industry practices	
Describe the current hydraulics system and identify any deficiencies	
Identify water conservation opportunities (including reuse and rainfall capture)	
Document the extent of existing water efficiency, reuse and rainfall capture	
Recommend plumbing retro-fit and other water saving initiatives, demonstrating the costs and savings including payback period.	
General methodology	
To carry out a comprehensive water audit in an efficient manner that is least disturbing to the building/centre occupants, the audit may involve:	
On-site investigation to quantify water usage at each of the following:	
Amenities – toilets, basins, showers, urinals and kitchen fittings	
Air conditioning systems and cooling towers	
Cleaning and house keeping	
Grounds maintenance	
Fire Services	
Other water-using fixtures and equipment	
Review of owner's plumbing maintenance practices	
Leakage measurement through flow metering	
Review existing water meter size (for possible downsizing)	
Review building's water reuse arrangements (if any are in place)	
Specific measures:	
Meeting with Building Management to discuss audit, access to information, documentation and a walk-through of the building/centre	
Inspecting water services, meters, pumps, reservoirs, tanks and water fixtures throughout the building/centre	
Inspecting all relevant water services plans	
Obtaining water meter readings from the local provider for the past 3 years and assessing this information to determine usage trends	
Installing a pulse unit and data loggers for submeters (existing or specifically installed for audit)	
Installing acoustic flow meters to monitor flow profile and usage – at supply-to-main domestic storage and fire hydrant tanks; and at water-out-of-main domestic water tanks	

	Include in audit? Yes/No
Flow testing water fixtures throughout the building/centre	
Analysing data obtained to determine daily usage and base flows	
Installing people counters at entrances to support normalisation of usage data	
System modelling over X days to identify usage for various areas or equipment within the building/centre	
Assessing base flow in system and calculating water charges	
Identifying and assessing water saving options	