# Caring For Our Water

## Determine Water Conservation Measures

This unit specifies the competency required to develop skills in effectively increasing water sustainability and care and improving the management of the water cycle.

Plumbers are in *direct contact with end users on a daily basis*. A clear understanding of existing water efficient products, emerging technologies, best management practices and existing conservation programs is essential in fostering conservation, developing partnerships with local water utilities and authorities, and increasing business opportunities.

Work associated with this unit is undertaken within the plumbing and services sector in accordance with relevant US standards.

It is a pre-requisite that all participants seeking *accreditation* in any 'Course in Green*Plumbers* Environmental Solutions' are required to be licensed and or recognized as a plumber by the Authority Having Jurisdiction.

**Nominal Hours - 8**

## Performance Criteria

Performance criteria specify the level of performance required to demonstrate achievement of the element.

**1. Identify the water cycle process**

1.1 How much water is there?

1.2 Where is it and how much is useable?

1.3 The *water cycle.*

1.4 Define *the urban water cycle management process.*

1.5 Identify the extent of the local supply system, operated and managed by the local authority.

1.6 Identify key functions of the networked water supply system.

1.7 Identify the extent of the local drainage and treatment system operated and managed by the local authority.

1.8 Outline *the government's policy on water sustainability.*

**2. Determine standards of water quality**.

2.1 Identify sources of potable water from local catchments for urban use.

2.2 Specify stages of water treatment process

2.3 Assess potential problems of maintaining water quality

2.4 Outline monitoring and testing procedures for maintaining network water quality

2.5 Categorize the different classes of water.

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**3. Compile information on water consumption methods**

3.1 Differentiate the sectors that consume water and the effect on local water restrictions/limitations.

3.2 Estimate levels of water usage using appropriate water consumption methods.

3.3 Document water and energy savings using inspection report process.

**4. Select potable water efficient products**

4.1 Brief history of *non* water efficient products

4.2 Failures of initial 'low flow' products

4.3 Effects of failures of 'low flow' products

4.4 Identify water conservation rating programs and labeling for selected water efficient products.

4.5 Discuss the testing and performance standards on water efficient products to the customer.

4.6 Identify water efficient products for the variety of sectors that consume water.
(Water closets, Shower heads, kitchen and lavatory faucets, washing machines, irrigation, etc)

4.7 Locate and comply with local incentive schemes for the uptake of water efficient products.

The following is included in the 8 hrs course but deleted in the 3 hour sessions.

**5. Rainwater as an alternate water source**

5.1 Determine suitability of rainwater as an alternate water source.

5.2 Components of rainwater catchment system.

5.3 Recommend the appropriate components to ensure safe rainwater use.

5.4 Identify the installation and reuse of rainwater.

5.5 Demonstrate duty of care and safety requirements for installation.

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