

### **1.3 Development and Purpose of Best Management Practices Guide**

The BMPs and the cost effectiveness tools in this Guide are offered to the state's regional water planning groups, water providers, and water users as a tool for planning and designing effective conservation programs. The Guide is organized into three sections, for municipal, industrial and agricultural water user groups ("WUG") with a total of fifty-five BMPs. At the end of each section is a chapter giving guidance on cost effectiveness evaluation for the specific BMPs in the section. Each BMP is organized to be of assistance in conservation planning, program development, implementation, and evaluation.

The BMPs can be evaluated for potential water savings and the cost effectiveness for consideration in the regional water planning process. Within each planning region, sufficient variation exists at the local water user level that more specific analysis should be done by a prospective end-user prior to adopting the BMP. Best-management practices contained in the BMP Guide are voluntary efficiency measures that save a quantifiable amount of water, either directly or indirectly, and can be implemented within a specified timeframe. The BMPs are not exclusive of other meaningful conservation techniques that an entity might use in formulating a state-required water conservation plan. At the discretion of each user, BMPs may be implemented individually, in whole or in part, or be combined with other BMPs or other water conservation techniques to form a comprehensive water conservation program. The adoption of any BMP is entirely voluntary, although it is recognized that once adopted, certain BMPs may have some regulatory aspects to them (e.g. implementation of a local city ordinance).

The Task Force unanimously agreed that the BMP Guide must be in accordance with the state's philosophy of region-based water planning. The Task Force firmly believes that applying a mandatory set of BMPs throughout Texas would **not** be appropriate. One size does not fit all in a state characterized by wide variations in climate, geography, municipal demographics, water utility and service profiles, and agricultural and industrial needs. State policies adopted to guide the implementation of water conservation in Texas must acknowledge the fundamental decision-making primacy and prerogative of regional planning groups, municipalities, industrial and agricultural water users, and water providers. Each BMP is organized into nine standardized sections (A-I), which are described in general terms below.

#### ***A. Applicability***

The specific type of water user group that could potentially benefit from the BMP is described, as are the general goals for water efficiency that the BMP addresses.

#### ***B. Description***

This section provides an explanation of the specifics of the conservation measure(s) included in the BMP. The best available technology that is proven and cost effective is recommended. Often a best available technology may not yet be cost effective to be implemented by all water users. Highly efficient water conservation measures that will produce cost-effective results are mentioned.

**Example:** The current standard for water efficient toilets is 1.6 gallon per flush (“gpf”) models. Lower flush volume toilets exist such as dual flush toilets which flush 1.6 gpf for solid waste and 0.8 gpf for liquid waste, but their availability is not yet widespread in the United States. Since this technology is new and few models are available, costs are currently high but are expected to fall as additional models become available. As prices fall, this technology will become more cost effective.

### ***C. Implementation***

The basic steps to accomplish the BMP are described. If the description section includes more than one measure to complete the BMP, the implementation section will suggest necessary steps for achieving the water savings.

### ***D. Schedule***

In BMPs which have multiple implementation steps, a recommended schedule for implementation is included. In general, planning, data gathering and evaluation steps should be accomplished within 12 months of adoption of a specific BMP.

### ***E. Scope***

For simpler BMPs, the scope is complete when the steps described in the implementation section have been achieved. For more complicated BMPs, the scope indicates the level of implementation necessary to consider the BMP complete. Where different levels of implementation or constraints are present, these are described.

### ***F. Documentation***

To track the progress of a BMP, the water user should collect certain data to document progress implementing the BMP and evaluating actual water savings. This section identifies the recommended data.

### ***G. Determination of Water Savings***

This section specifies information necessary to calculate water savings from implementation of the BMP and may include statistical or mathematical formulas when appropriate.

### ***H. Cost-Effectiveness Considerations***

Basic costs of implementing the specific BMP are explained. Due to the wide variety in actual costs based upon size of program and location, ranges of costs are given where appropriate. In many cases, costs and expenses can be reduced or spread out when multiple BMPs are implemented by an entity. This section primarily serves to remind the users of costs to consider when performing a cost effectiveness analysis.

*I. References for Additional Information*

The BMP concludes with a listing of resources that can assist a water user in implementing the BMP.