

SECTION 2 – THE NINE PLANNING STEPS

Sound conservation planning, which relates to demand-side management of water use, is a multi-step process that should be fully integrated with water supply planning. The U.S. Environmental Protection Agency (1998), under provisions of the Safe Drinking Water Act, has promulgated voluntary guidelines that identify nine steps for comprehensive, effective conservation planning. In the most recent comprehensive book on water conservation, water conservation expert Amy Vickers (2001) sets out a similar list of ten steps. The table below lists the steps outlined by both sources.

Water Conservation Planning Steps from Key Literature Sources	
U.S. EPA (1998)	Vickers (2001)
1. Specify conservation planning goals	1. Identify conservation goals
2. Develop a water system profile	2. Develop a water use profile and forecast
3. Prepare a demand forecast	3. Evaluate planned facilities
4. Describe planned facilities	4. Identify and evaluate conservation measures
5. Identify water conservation measures	5. Identify and assess conservation implementation techniques
6. Analyze benefits and costs	6. Analyze benefits and costs
7. Select conservation measures	7. Select conservation measures and incentives
8. Integrate resources and modify forecasts	8. Prepare and implement the conservation plan
9. Present implementation and evaluation strategy	9. Integrate conservation and supply plans, modify forecasts
	10. Monitor, evaluate, and revise program as necessary

The steps recommended by these two key literature sources are sensible and similar, but slightly different. A simple and logical synthesis, recommended and used in the remainder of this Guidance Document is as follows:

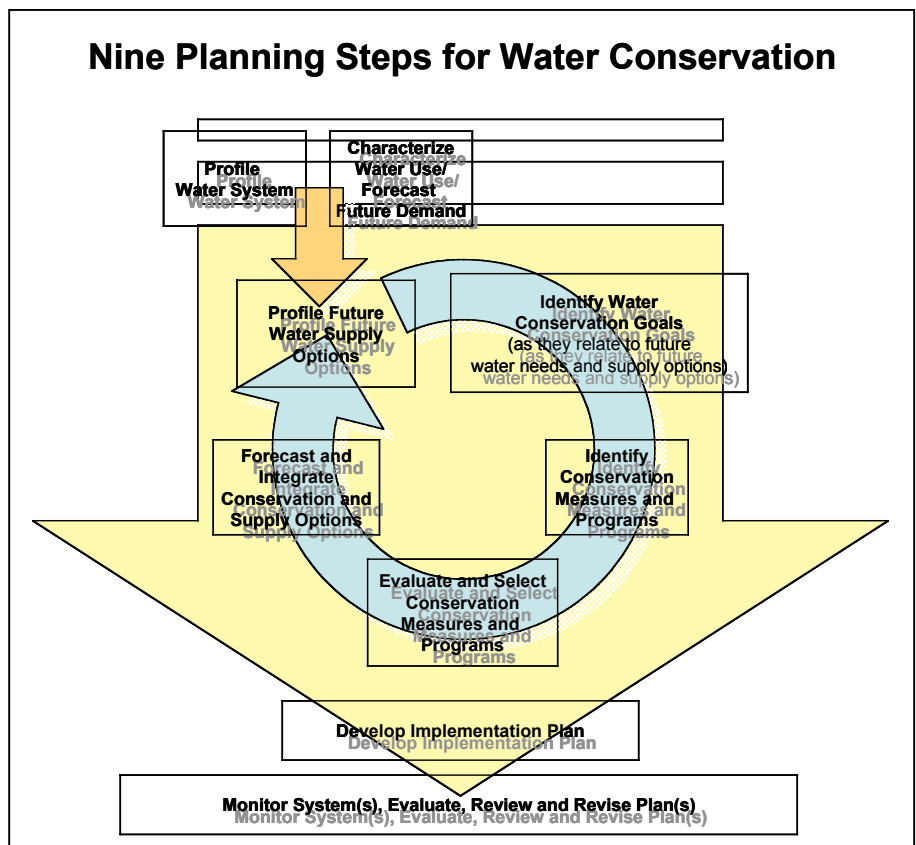
- ① Profile existing water system
- ② Characterize water use and forecast demand
- ③ Profile proposed facilities
- ④ Identify conservation goals
- ⑤ Identify conservation measures and programs

- ⑥ Evaluate and select conservation measures and programs
- ⑦ Integrate resources and modify forecasts
- ⑧ Develop implementation plan
- ⑨ Monitor, evaluate, and revise conservation activities and the conservation plan

Implementation of these nine steps will likely be different for different covered entities that are planning for meaningful water conservation. For example, some entities will have water supply master plans in place, which will help them to profile their existing water system and identify future water needs and supply options. Other entities may only have limited information available to characterize their water system or identify future water needs or supply options. For this reason, the nine steps can be modified and adjusted to fit the needs of the entity doing the planning.

At first glance the process outlined in this document may seem onerous. It is important to be mindful of the many potential benefits of water conservation noted in Section 1, especially in an arid state such as Colorado.

To this point, water conservation planning leading to *purposeful water conservation implementation and meaningful water savings* requires the commitment of an appropriate level of resources, engaged in serious and measured analyses and evaluations as would be required to plan for any significant water supply project. The process outlined in this document elevates the status of water conservation planning, integrating it with water supply planning.



The planning steps can also help entities identify where future planning efforts need to be focused. Through implementation of the nine steps, gaps regarding infrastructure and facilities needs, water use and demand forecasting, and/or future water supply options maybe identified – as a result of integrating water conservation planning with water supply planning. In this spirit, this planning process helps the planning entity look at the effect of water conservation on future water supply and demand, and how water conservation may affect (e.g., reduce) the need for and costs of new water supplies and other investments.

Although each planning entity has license to modify and adjust the nine planning steps to suit its own situation – based on issues such as budgetary constraints, knowledge of its physical system, future water supply needs and current and future water demand characteristics – the last two planning steps related to monitoring, evaluating and revising the water conservation plan must be addressed directly and with purpose. The effectiveness of any water management effort, especially one that expects to integrate supply-side and demand-side activities and resources, depends on timely review and adaptation as conditions change and knowledge evolves.



Water Conservation Planning Compliments Water Supply Master Planning

Water conservation planning is simply *the logical compliment* to water supply master planning for it requires the planning entity to bring together organizational resources from both sides of the utility or district to develop cost-effective solutions to meet future water needs.