

If demand management is required to meet the conservation goal, a more specific program should be designed using the following guidelines before proceeding to Step 6.

Pricing

If a pricing program was selected, it will be necessary to design a new water rate. Usually, a change in both price level (price per unit of water) and price structure (price level variations according to quantity used or time of use) are necessary. The most important part is price level. Only when the price level is high enough, regardless of structure, will users reconsider how they are using water and conserve.³³

Any new water rate should be designed to accomplish the following:

1. Encourage the needed use reduction;
2. Cover the total cost of service; and
3. Minimize adverse impacts.

To achieve the necessary use reduction, it is important to estimate as accurately as possible the response by users to the new price, i.e., the elasticity value. Generally, as the price goes up, the demand for the produce goes down. As the price for water increases, the users will reduce their use. The elasticity value is simply the arithmetic value of the user's response, expressed as:

$$\text{Elasticity} = \frac{\text{Percent Change in Water Used}}{\text{Percent Change in Price}}$$

If response is low (i.e., water consumption is not reduced significantly in response to a price hike), then the elasticity will be low.