



Water Efficiency Research Committee Projects - 2010

Project No. 14

Project Name: Demand Hardening Research

Description:

It is widely assumed by many water planners that conservation programs implemented before a drought diminishes the ability of water users to further reduce water demand during a drought. This phenomenon, often labeled demand hardening, has undermined the attractiveness of long-term demand management programs for many water supply planners. There is a further concern that implementing water efficiency programs can make it more difficult for an agency to respond to reduced water allocations and deliveries during serious water shortages compared to other agencies.

The existing literature on this subject is very limited and provides little practical guidance for water planners. However, some water management experts suggest that the concern over demand hardening may be exaggerated. Water savings from some long-term conservation programs may not achieve full potential in non-drought years. The full potential may become apparent only when measured during a drought period when water users fully employ their new conservation technologies and management practices. In this view, many of the presently unmeasured impacts of long-term conservation programs may balance or exceed the assumed effects of demand hardening.

Due to the uncertainty surrounding the concept of demand hardening, and the potential for it to be used as a reason to avoid water efficiency programs, more research is needed.

Type of Research: Field data collection and literature review.

Expected Term to Complete the Research: 12 months

Estimated Cost Threshold: Large

Current Status: Unfunded. No work currently underway.