



and the states.” The two governors emphasized that such coordination is preferable to “new federal programs with regulatory authority over the states.”

### **Regional Entities**

There are several regional entities that either focus on drought or include drought as a major component of their work (Appendix B, File D). The Western Drought Coordination Council, for example, presented the Commission with a set of potential actions that focus on drought planning, impact-reduction measures, and effective response. And the Tarrant Regional Water District (Texas) incorporates simulated drought exercises as a training tool in its drought planning.

The Commission received a number of comments that encouraged regional drought planning or incorporation of drought concerns into comprehensive regional water management plans. The comments echoed earlier recommendations of the 1990 National Science Foundation’s Drought Water Management Workshop. Participants at the workshop concluded, “The real need is to institutionalize drought management into improved overall water management systems.” They stated that attempts to understand and address drought problems will be unsuccessful unless the larger context of which they are an inseparable part is also understood and addressed. The Army Corps

In 1999, Kentucky experienced the driest July-September period in 105 years of record. Yet none of the water systems in the state required outside emergency assistance. Officials credit Kentucky’s drought management planning program, adopted in 1993—a program that paid off through pre-drought water conservation measures and better preparedness for citizens and communities. The state provided financial and technical assistance as well as detailed guidelines to assist communities in developing management plans. Those plans called at a minimum for water systems to project future water demand; evaluate the adequacy of water supplies and infrastructure; and, where gaps existed among current capabilities and future needs, determine the best means and the associated costs to meet those needs.

of Engineers drew a similar conclusion in the first year (1989) of the National Drought Study.

The regional approach has been undertaken in the past and survives today. On June 14, 1965, during the height of the 1960s drought in the Northeast, New York City stopped releases from its Delaware River reservoirs to maintain its withdrawal rate. With less fresh water flowing past Philadelphia, there was a risk that salt water would be drawn into Philadelphia’s water supply system. In August, President Lyndon Johnson convened a special meeting of governors and mayors from the Delaware Basin that led to emergency measures for managing the Delaware. The President then asked Congress for

The six-county, multi-municipal Metropolitan Water District of Southern California incorporates drought planning and preparedness in its comprehensive Integrated Resources Plan and Water Surplus and Demand Management Plan. Testimony at our hearing in Los Angeles noted that the District emphasizes citizen and customer participation in water conservation as well as long-term water supply and resource management programs for a region receiving 10 to 15 inches of rainfall in an average year.

Metropolitan’s plans ensure reliable water supplies for more than 16 million people (municipal, industrial, commercial, and agricultural uses) despite weather, regulatory, or disaster-based drought pressures. The southern California region has spent \$8 billion for water conservation, recycling, and storage projects since 1982, and those investments appear to be paying off. The region is using less water today than in 1975, even though the population increased by 5 million people from 1975 to 1999.

The Denver, Colorado area boasts a similar success. The Denver Water Authority told us that their year-round water conservation program “has reduced water demand over the last 20 years. Even though the population of our service area has increased from 840,000 in 1980 to 970,000 in 1998, the total water we deliver has stayed relatively flat at around 77 billion gallons per year. We attribute much of this to our water conservation efforts.”