



FROM RELIEF TO READINESS

For years, farmers and ranchers, tribes, public land managers, scientists, economists, small business owners, conservationists and wildlife managers, small and large municipalities, counties, states, regional entities, and the federal government have grappled with the far-reaching consequences of drought. Numerous papers, reports, and books have recorded and analyzed the impacts of drought. They have pointed out over and over again that drought planning and proactive mitigation programs may well reduce the need for huge federal emergency relief expenditures in drought-stricken regions—usually to assist farmers and ranchers and rebuild local economies. They have also indicated that planning and proactive mitigation may lessen conflicts over competition for water during drought.

Many states and local governments include drought in their comprehensive water management, land-use, and long-term planning strategies. Some have devised separate drought plans. These government entities know best about local resources and local priorities, and they know how to communicate with their constituencies and stimulate people to action. Some farmers,

ranchers, and other businesses also incorporate drought concerns into their risk-management assessments. Private entrepreneurs and nonprofit groups with an interest in water management and environmental issues work with governments to carry out drought education projects and water conservation initiatives that rely on the cooperation of the general public. In response to individual challenges over the years, Congress has enacted laws to create federal programs aimed at lessening the impacts of drought, and special congressional appropriations of federal taxpayer dollars underwrite much of the drought relief.

Despite such well-intentioned efforts, from a national perspective this country relies on a patchy approach to reduce the impacts of drought. And despite the major role that the federal government plays in responding to drought events, no single federal agency is in a lead or coordinating position regarding drought. State, local, and tribal governments must deal individually and separately with each federal agency involved in drought assistance. Crisis management—rather than planning and proactive mitigation measures—often characterizes the federal response to drought emergencies.

Droughts can last for years. This is one reason why it is difficult to determine if a loss in, say, landscape investments is because of drought or because of declining disposable income from an economic downturn. But even the most conservative estimates of the impacts of drought are large. The Commission found several studies of the federal government's response to the major post-World War II droughts. We updated those findings of federal drought expenditures to 1998 dollars and include them here. "Government Response to Drought in the United States: Lessons from the Mid-1970's" (June 1984), a report funded by the National Science

Foundation, indicated the federal government spent \$3.3 billion responding to the 1953-1956 drought. That study and "Managing Resource Scarcity" by the Western Governors' Policy Office also indicated that federal drought response cost at least \$6.5 billion during the 1976-1977 drought and about \$6 billion during the 1988-1989 drought. The last figure does not include crop insurance payments. Thus, extraordinary federal expenses for drought alone over the 1952-1988 period averaged at least half a billion dollars per year. Clearly there were other costs. "Drought and Natural Resources Management in the United States: Impacts and Implications of the

1987-1989 Drought" (Riebsame, Changnon, and Karl) documented a reduction in crop production of nearly \$20 billion and an increase in food prices of more than \$12 billion because of the 1988 drought. The report also noted that low flows on the Mississippi in 1988 caused barge shipping prices to double and triple, leading to an estimated \$1 billion in increased transportation costs. At the Commission's Austin hearing, Texas Agriculture Commissioner Susan Combs stated that the 1996 and 1998 droughts in her state caused a loss of \$4 billion in direct income, with the total impact to the state's economy close to \$11 billion.