

WEATHER MODIFICATION PROGRAM

Fact Sheet No. 18

January 2001

Kansas Water Office

Background

The State has been involved in weather modification activities since the early 1970's. In 1974, the Kansas Legislature passed the Kansas Weather Modification Act (K.S.A. 82a-1401 *et seq.*) which established a process to issue weather modification permits in a manner which protects the public interest. The emphasis of the 1974 Act was the promotion of research to further available knowledge on weather modification and the regulation of private weather modification activities to protect the health and economic welfare of Kansas citizens. The Act was modified in 1995 to include the issuance of a permit for an "operational" weather modification program.

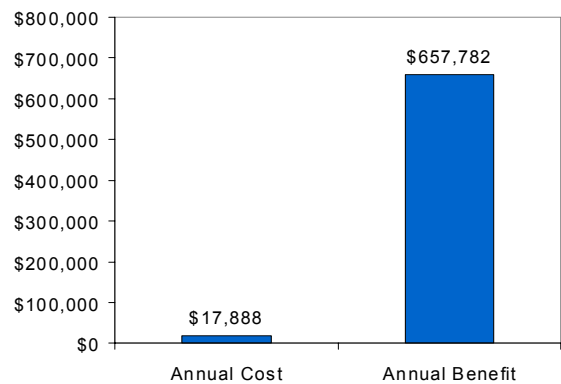
Purpose

The primary purpose of weather modification in Kansas has been to reduce crop-hail damage; although a significant effort has also been made to increase precipitation. Hail suppression helps prevent the waste of water which has been used to raise a standing crop. If the crop is damaged, its value disappears and the water used to raise the crop has been wasted. The economy of Western Kansas is dependent on agriculture, which is very susceptible to damage by natural phenomena such as hail storms. Hence, Western Kansas has been the focus of the weather modification activities in Kansas. The Western Kansas Weather Modification Program has been operating from 1975 to the present time under the leadership of Western Kansas Groundwater Management District No. 1.

Overview

An evaluation of the program was completed by the Kansas Water Office in 1994, showing a 37:1 benefit to cost ratio for crop-hail damage suppression as shown in Figure 1.

Figure 1
Estimated Annual Cost and Annual Benefit
Per Target Area County, 1979-1993



Subsequently, *Kansas Water Plan* funds have been provided to the Western Kansas Weather Modification Program annually, beginning in FY 1996. In FY 2000 the Program received \$281,078 funds from counties, \$226,000 from groundwater management districts and \$360,000 from the *Kansas Water Plan* Fund for a total of \$867,078. In 1997 the Program was expanded from primarily Southwest Kansas to include the area within the boundaries of Northwest Kansas Groundwater Management District No. 4. In FY 2001, the Northwest Kansas Groundwater Management District No. 4 voted to discontinue the Program. Hence in FY 2001, the Program will primarily focus on Southwest Kansas.

Additional Information

Further information on this subject or on many other *Kansas Water Plan* related programs can be obtained from: Kansas Water Office, 901 S. Kansas Avenue, Topeka, KS 66612-1249, phone (785-296-3185), toll free (888-KAN-WATER) or check our WEB site at www.kwo.org.