

## Around Dakota Ag



**SEEDING THE CLOUDS:** A dark cloud is a promising candidate for seeding in a pilot project in western North Dakota.

# Making it rain

**A** NEW study by economists at North Dakota State University shows the North Dakota Cloud Modification Project, or NDCMP, in western North Dakota has a significant economic impact.

The study — financed by NDCMP — analyzed the project's impacts on agricultural production from increased rainfall and reduced hail losses.

The economic impact of cloud seeding was evaluated at enhanced rainfall levels of 5% and 10%, which reflects the range of long-term, independent NDCMP evaluations. The value

### Key Points

- NDSU study shows that cloud seeding has paid dividends.
- More rain and less hail increased net crop returns.
- Study pegs value to farmers in pilot area at \$5 to \$8 per acre.

of increased crop production is estimated at \$8.4 million to \$16 million annually.

The study also evaluated crop output saved from hail suppression, which totals \$3.7 million per year. This figure combined with the value of in-

creased crop production (\$8.4 million to \$16 million) yields the project's total direct economic impact of \$12 million to \$19.7 million per year.

Based on anticipated 2009 costs, that's a \$16 million to \$26 million return for each dollar invested. When considering the re-spending of those dollars in the economy, the numbers balloon to \$37 million to \$60 million.

In addition to estimating the benefits from current cloud seeding operations, the study calculated the potential benefits of a hypothetical state-

wide program. Estimates show a total direct impact ranging from \$95 million to \$135 million, while gross economic benefits average \$294 million to \$414 million annually.

"The results of the study are eye-popping," says Darin Langerud, director of the Atmospheric Resource Board, the state agency that oversees NDCMP. "Not only do farmers benefit, but so does the economy in the region where the project is being conducted."

Study coauthor Dean Bangsund says, "From a producer's perspective, the direct eco-

nomical value of cloud seeding, averaged across NDCMP counties, is estimated to range from \$5.16 to \$8.41 per planted acre. Those values represent a meaningful boost in revenues to producers."

NDCMP is conducted each summer in Bowman, McKenzie, Mountrail, Ward and Williams counties and part of Slope County.

For more information about NDCMP or the North Dakota Atmospheric Resource Board, go to [www.swc.nd.gov/arb](http://www.swc.nd.gov/arb).

Source: North Dakota Cloud Modification Project

## ND eyes Farm to School program

**E**LEVEN North Dakota communities will be assessed for the possibility of establishing a direct link between local agricultural producers and school lunch programs.

"The next phase of our 'Going Local' initiative is to become a Farm to School state," says Doug Goehring, North Dakota agriculture commissioner. "The goal of the national Farm to School program is to bring healthy food from local farms to school children. The program teaches healthy eating habits, while providing local farmers with a new direct market." The surveys will be con-

ducted in October in Bowdon, Dickinson, Fargo, Grand Forks, Hazen, Jamestown, Mandan, Minot, Napoleon and Valley City.

"The information collected in these surveys will also be valuable in measuring the growth of local-food production and consumption in the state," Goehring says. "Anything we can do to expand market options for farmers is helpful in developing a more diverse agricultural economy."

North Dakota is one of three states that does not have a profile with the national Farm to School program.

"We have some catching up to do," he says. "I am confident that with the growth of local-

food production and the support of parents and school officials, we will see more and more local foods appearing on school lunch menus across North Dakota."

The National Farm to School Network is a collaborative project of the Center for Food and Justice, a division of the Urban and Environmental Policy Institute at Occidental College and the Community Food Security Coalition.

Since the Farm to School program was started in the 1990s, more than 2,000 local programs have been established in 40 states.

Source: North Dakota Department of Agriculture

