

IMPACT



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Dairy Nutrient Management Planning Project

The Situation

Ground and surface water contamination from agricultural practices has become a large concern to everyone in Idaho. Results of statewide and regional ground water monitoring show areas of concern where concentrations of nitrates and fecal coliform bacteria are near or above drinking water quality standards. Nutrients and sediment are of concern on several of Idaho's water quality limited surface water bodies targeted for the TMDL process. Farming and cattle operations, when not following Best Management Practices (BMPs), can contribute such contaminants to groundwater through leaching and surface water with runoff.

Recent legislation was passed to require certified nutrient management plans (NMP) on every dairy in the state by July 2001. In January 2001, less than 200 of Idaho's 840 dairy producers had Idaho State Department of Agriculture (ISDA)-approved nutrient management plans.

Good information and education programs are important in influencing industry acceptance of nutrient management BMPs and to assure compliance with regulation.

Our Response

UI outreach efforts focused on increasing awareness of Idaho dairy producers about requirements of a NMP, assisting them with necessary data collection, and assistance with

the Idaho OnePlan Nutrient Management Planning Software.

Outreach through print media targeted dairy producers in the Idaho Water Update newsletter, local newspapers, and newsletters of the Idaho Dairy Association, Idaho Farm Bureau, and Progressive Dairyman, and a University of Idaho CIS Publication (#1076), "Nutrient Management Plans Who Needs Them and How to Prepare for Your Own?".

A worksheet was produced and workshops conducted by U of I Extension specialists and educators to assist producers in gathering necessary data for their NMP. The worksheet was mailed out to every Idaho dairy and was used in "Prepare for your Nutrient Management Plan" workshops conducted by U of I Extension specialists and educators. Workshops introduced producers to the requirements of a NMP and assisted them in filling out University of Idaho data worksheets. Approximately 200 dairymen attended the workshops conducted in Caldwell, Blackfoot, Rexburg, Preston, Twin Falls, Burley, and Gooding.

The Idaho OnePlan Nutrient Management Planning Software, a Geographic Information System (GIS) based software, was developed to make the planning process efficient and user friendly. On the Internet, "clipped" farm imagery, soils, topographical, water quality and other GIS data are downloaded with the planning software. The software assists producers and planners in: identifying vulnerable resource areas; evaluating the adequacy of animal waste

containment facilities; calculating nutrient content of animal manure; scheduling agronomic-based nutrient application rates; and maintaining farm records. Output from the software is a NMP, which requires on-farm validation and certification by a certified planner.

Two Idaho OnePlan Software Training workshops trained 28 ISDA, UI, and Idaho Soil Conservation Commission (ISCC) planners who used the software in statewide planning sessions with producers who completed the U of I data worksheets.

Program Outcomes

As the July 1, 2001, deadline for nutrient management plans on all Idaho dairies passed, all but one producer had submitted plans to the ISDA. Approximately 220 plans were completed using the Idaho OnePlan Nutrient Management Planning Software. Without the use of the software, Marv Patten, ISDA Dairy Bureau chief, estimated that as many as 180 plans would not have been written by the July 1 deadline. Another 45 days, at a minimum, would have been needed to complete them.

Considering that an average size dairy had a potential loss of milk sales of just over \$2,000 per day, Denis Feichtinger, Natural Resource Conservation Service agricultural economist, estimates the loss of milk sales would have been \$8.4 million to producers factoring in the 45 days it would have taken to complete the plans. That figure doesn't include the potential losses for entire communities.

The Future

Final revisions to the Idaho OnePlan software are under way. Workshops with planners and producers will be conducted focusing on maintaining records and implementing the NMPs produced with the software.

Cooperators and Co-Sponsors

The success of the project is due to the commitment of the U of I outreach efforts and the collaboration of ISCC, ISDA, and UI personnel to produce NMPs. Success of the Idaho OnePlan software is due to the leadership of Jim Wood, NRCS; Warren McFall, EPA; Jennifer Beddoes, ISDA; and Kristin Keith, U of I, and the commitment of the OnePlan design team. Funding for the software is from the Idaho Dairymen's Association, ISCC, IDEQ, and the USDA Cooperative State Research, Education, and Extension Service.

For More Information

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