# **Small Farm Water Quality Improvement Project**

## Water Quality

The Small Farm Water Quality Improvement Projected started when information from a previous 4-H livestock waste management and water quality education program displayed recorded and analyzed data obtained from attendees. Workshops were held in 9 different locations, with participants attending from at least 10 different Utah counties. A total of 316 people completed evaluations post-event, with 249 youth and 67 adults. Based upon results from evaluations, 44% of participants indicated their knowledge before the event was either poor or very poor. The remaining attendees felt that their knowledge was fair (25%) or good (21%), and 9% of attendees felt that their knowledge was very good. When asked how effective the workshop was at increasing knowledge, 68% of attendees responded that it was very useful, while 25% indicated it was somewhat useful. Only 7% indicated that the workshop was not very useful or not at all useful at increasing knowledge. When asked if participant's views had changed on water quality and waste management due to the workshops, 64% strongly agreed or agreed that the workshop had changed their views.

These evaluation results helped to showcase a sampling of the small farm livestock/horse audience. These results tell us that small farm producers are a perfect audience in need for water quality improvement funding and education.

The Small Farm Water Quality Improvement Project has offered a unique avenue for small farms and agriculture operations to improve the state of their surrounding water quality. Large agriculture operations and farms are often monitored to ensure water contamination does not occur. However, small agriculture operations many times go unwatched and unmanaged. Many of these small farms reside near, on, or alongside potential water sources, thus increasing the chances that water pollution will occur. Although many large farms are able to upgrade and improve facilities or farmlands to prevent water contamination. Many small farm producers do not have the income, savings, or resources to be able to implement needed upgrades and changes to avoid water contamination. The small farm water quality improvement program has addressed these issues by targeting small farmers from Box Elder, Cache, Weber, and Morgan counties. These small farmers were given the opportunity to apply for grants to improve the waste management and overall water quality of their operations.

## Application

Applications for funding were made available to help with fencing, water pumps, berms, and essentially anything that promotes improvement of waste management and clean waterways. Applications were created by Utah State University Extension with an emphasis on regulations to meet standards set by the Division of Water Quality. The approval of the project applications were overseen by Utah State University Extension Faculty. Over 22 individuals submitted applications for funding.

### Funding

In order to best help producers, yet still allowing for some skin in the game, 20% of the total cost (whether in labor or additional materials) was required to be provided by the producers. The other 80% of the project cost can be reimbursed once the project is complete and approval of the committee is met. Nearly \$75,000 was made available to small farm producers. Each individual producer was allowed to apply for up to \$10,000 per application. Out of the 22 individual applications, 7 were chosen to be funded.

### Impacts and Outcomes

Measurable water quality impacts have been an important piece of this project. The faculty of Utah State University Extension have overseen evaluation through some onsite visits (pre/post) and before/after photos of treated areas. Projects ranged from fencing off riparian areas to complete restructuring of facilities built near waterways. There has been a clear indication of overall water quality impact for those downstream from changes made. Thousands of residents who utilize the watersheds downstream will be benefited by these small farm water quality improvements.

Extension faculty will use this documented information to educate, inform, and promote the positive impacts of small farm waste management and water quality projects. Results will be disseminated to other small farm producers, Utah State University Extension Faculty across the State of Utah, and at conferences such as the National Association of County Agricultural Agents.