



2012

UNIVERSITY OF
Nebraska
Lincoln

EXTENSION

Know how. Know **now.**

WATER, CLIMATE & ENVIRONMENT- COMMUNITY

Meeting the Challenge

Signature Outcome 1 ... Maintain/Improve Water Quality/Quantity UNL

Extension provided education that led to adoption of sustainable water quality and quantity management practices by private and community domestic water and wastewater system users. For example, it is estimated that 25% of the wastewater generated in Nebraska is treated using onsite wastewater systems. This wastewater returns to groundwater, with a statewide volume estimated at about 45 million gallons per day. Protection of Nebraska's groundwater quality has been achieved through education and training delivered to the onsite contracting industry. 167 onsite wastewater contractors learned about new state regulations, and 102 contractors learned about new onsite system alternatives, which will result in an estimated 225 million gallons per year of wastewater that has improved treatment prior to being recycled to groundwater in Nebraska. It is estimated that this improved wastewater quality will result in improved quality for about 500 million gallons of groundwater.

Signature Outcome 2 ... Resource Efficient Landscapes & Homes

Sustainably designed and managed landscapes and community green spaces are necessary for quality environments, healthy lifestyles, and vital, vibrant communities. UNL Extension education for green industry professionals, business and home owners, and public works employees leads to water and energy conservation, responsible pesticide use, increased plant diversity, and urban stormwater run-off mitigation with bioretention practices. These outcomes provide natural resource conservation and protection, economic opportunities, and a higher quality of life for Nebraska citizens.

Signature Outcome 3 ... Community Agriculture

The Community Agriculture signature outcome was created fall of 2012 to address local food production, local food safety, farmers markets, specialty food crops, urban agriculture, small business opportunities and the needs of small acreage owners across Nebraska. This signature outcome brings together the disciplines of production agriculture, horticulture, food safety, nutrition and entrepreneurship to connect current programming efforts together. Program planning is underway to build cross-discipline resources and program for 2013 and beyond. In 2012, over 1,300 subscribers receive Acreage Insights, a web-based newsletter, each month. Twenty-five web videos were created, and received 6,063 views.



Public Value

Protecting human health, natural resources and the environment by:

- Protecting surface and ground water quality
- Reducing exposure to pesticides
- Creating sustainable landscapes
- Ensuring safe produce production

The result is a safer environment for children and adults, high quality drinking water, and safe management of on-site residential waste. Along with the production of safe, local produce; lower demand on natural resources; and vital, vibrant communities.



Extension is a Division of the Institute of Agriculture and Natural Resources at the University of Nebraska–Lincoln cooperating with the Counties and the United States Department of Agriculture.

The 4-H Youth Development program abides with the nondiscrimination policies of the University of Nebraska–Lincoln and the United States Department of Agriculture.



“Resource Efficient Landscapes & Homes” Impacts

Better design and management practices taught by Extension, assist green space managers to reduce pesticide & fertilizer inputs and use less labor in Nebraska landscapes.

The use of environmental and economically sustainable greenspace practices have increased as a result of Extension programs teaching best management practices to over 1,221 green industry professionals.

In 3 locations, rain barrel use and rainwater harvesting workshops taught 48 Master Gardener volunteers how to teach the topics. **Stormwater education** was delivered to 472 youth and 63 adults in water explore day camps. Two new rain garden demonstration sites were installed and 3 green infrastructure tours held throughout the state.

Resource efficient landscape practices are being used as a result of Backyard Farmer reaching over 22,000 households per week. In July of 2012, BYF YouTube views reached and then exceeded 1 million views and the BYF YouTube channel usually receives an average of 1,800 views per day.

550 Master Gardener volunteers reached 37,419 people, through 21,243 volunteer hours, with a public value of approximately \$367,000.00 or twelve full-time Extension employees.



“Water Quality/Quantity” Impacts

Nebraskans have a safer drinking water supply and are ensured wastewater is being treated to a higher standard before being recycled to groundwater due to Extension education.

Approximately 9,000 youth **learned about stewardship of Nebraska’s water resources** through water and environmental festivals.

People using HTML versions of drinking water NebGuides 25,836 times **achieved desired water quality** at a reasonable cost. NebGuide PDF versions are estimated to have received similar use, doubling the number of people using drinking water information for decision-making purposes.

Private drinking water **well owners learned important information** about their water supply systems through six new NebGuides developed in partnership with the Nebraska Well Drillers Association.

Nebraska ADT members in Afghanistan and their clientele know how to **make drinking water safe in remote areas with limited resources**.

More than 2,369 people attending events using a new large format demonstration model, named The WATER Machine, **gained a better understanding of Nebraska’s groundwater**.

Drought Response - Extension staff developed and disseminated drought resources to assist homeowners and communities. Topics included management of drought-impacted trees, turf, and ornamentals; and indoor and outdoor water conservation. Information was delivered in newspaper articles, publications, on TV, via the Internet, and in face-to-face programs. Staff responded to numerous inquiries related to drought. UNL Extension created a statewide website at <http://droughtresources.unl.edu>.



“Community Agriculture” Impacts

Locally grown foods are safer, as fruit and vegetable growers implement production and handling practices to prevent contamination by microbial

Ten workshops across Nebraska educated over 200 fruit and vegetable growers about **Good Agriculture Practices (GAPs) and the creation of farm food safety plans**. As a result, growers will be able to respond and adapt to current and future changes in food safety policy.

Workshop participants implemented the following GAPs practices:

- 74% implemented a hygiene program for all employees
- 67% implemented a common sense recordkeeping system
- 59% implemented a system to clean all harvest equipment on a regular basis
- 55% developed a farm food safety program for their farm that implemented GAPs

Participants from Colorado, Texas, Iowa, and Wyoming took these concepts back to their home states.