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The Nebraska Water Leaders Academy: Blending Science with Research and Engagement

Connie I. Reimers-Hild University of Nebraska-Lincoln, creimers2@unl.edu

Mark E. Burbach University of Nebraska-Lincoln, mburbach1@unl.edu

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CORNHUSKER ECONOMICS



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University of Nebraska–Lincoln Extension

Institute of Agriculture & Natural Resources Department of Agricultural Economics http://agecon.unl.edu/cornhuskereconomics

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	Yr	4 Wks	4414140			
Market Report	Ago	Ago	11/1/13			
Livestock and Products, <u>Weekly Average</u>						
Nebraska Slaughter Steers, 35-65% Choice, Live Weight	\$*	\$*	\$133.00			
Nebraska Feeder Steers, Med. & Large Frame, 550-600 lb	161.42	*	187.25			
Nebraska Feeder Steers, Med. & Large Frame 750-800 lb Choice Boxed Beef,	147.83	*	175.86			
600-750 lb. Carcass	195.34	*	204.56			
Carcass, Negotiated	80.44	*	82.90			
51-52% Lean Slaughter Lambs, Ch. & Pr., Heavy,	85.41	*	93.70			
Wooled, South Dakota, Direct National Carcass Lamb Cutout,	86.25	*	154.13			
FOB	302.18	*	318.49			
<u>Crops,</u> <u>Daily Spot Prices</u>						
Wheat, No. 1, H.W. Imperial, bu	8.39	*	6.93			
Corn, No. 2, Yellow Nebraska City, bu	7.44	*	4.17			
Soybeans, No. 1, Yellow Nebraska City, bu	15.07	*	12.15			
Grain Sorghum, No. 2, Yellow Dorchester, cwt Oats, No. 2, Heavy	12.59	*	7.00			
Minneapolis, MN , bu	3.82	*	3.57			
<u>Feed</u>						
Alfalfa, Large Square Bales, Good to Premium, RFV 160-185						
Northeast Nebraska, ton	237.50	*	*			
Platte Valley, tonGrass Hay, Large Rounds, Good	215.00		135.00			
Nebraska, ton	190.00	*	127.50			
Nebraska Average	287.25	*	205.00			
Nebraska Average	107.25	*	64.50			
*No Market *USDA website down due to Government Shutdown - 4 Wks Ago						

Nebraska faces increasing challenges to its water resources due to changing climate, mounting demand for freshwater, aging infrastructure, declining aquatic species and declining water tables and stream flows in some areas, with unprecedented floods in others. These challenges require new and innovative leadership approaches for sustainable water management. In response, the Nebraska Water Leaders Academy (NWLA) was created through a partnership between the Nebraska State Irrigation Association and the University of Nebraska-Lincoln, to prepare Nebraska's future leaders in the water arena to meet these challenges. The NWLA was designed to offer an educational and developmental experience to mid-level professionals. Information is presented by experts from various technical disciplines in six sessions, which are held throughout the state of Nebraska over the course of one year. Topics include, but are not limited to, basic hydrology, economics, social issues and competing uses of water in Nebraska. The Academy also includes a strong leadership development component.

The objectives of the Water Leaders Academy are to:

- Identify men and women who have demonstrated leadership skills and who wish to enhance those skills in the water and natural resources arena.
- Develop participants' scientific, social and political knowledge about water and related natural resources.
- Provide training materials, professional presentations and experiential learning activities that will instill sound and accurate information about efficient, economic and beneficial uses of Nebraska's water resources.
- Provide broad-based educational experiences and activities to develop and enhance leadership and critical thinking skills.



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- Encourage and assist participants to become actively involved with water policy issues at the local, regional, state and national levels.
- Develop an ongoing program that incorporates multidisciplinary educational and leadership programs to provide life-long leaders in water resources management.
- Challenge traditional paradigms while encouraging critical thinking and creative solutions.

Twenty-seven participants from across Nebraska, with a wide range of professional, geographic and water resources backgrounds completed the Academy as of December 2012. The third class of NWLA graduates completed the Academy in November of 2013. Twelve individuals, with a wide variety of backgrounds, participated in the 2012 Academy. The 2012 Academy program consisted of six, two-day sessions. The leadership component of the Academy was facilitated by Dr. Mark E. Burbach and Dr. Connie Reimers-Hild, University of Nebraska-Lincoln (UNL). Other Nebraska water related topics were addressed by leading experts in their respective fields. Table 1 (on the next page), lists the topics covered in the 2012 Academy.

Academy Impact: Blending Evaluation and Research

A program evaluation is vital to the success of the Academy. Robust evaluation allows Academy planners to determine the effect of the Academy on participants' leadership knowledge, skills and behaviors; evaluate the instructional methods used in the Academy; allow participants to provide constructive feedback; and guide the development of future classes. The evaluation consisted of two components - session evaluations and a quantitative analysis using a pre- and post-Academy leadership survey. The session evaluations gauge participants change in knowledge levels related to leadership and water issues covered in each individual session. Participants also provided subjective feedback concerning the major knowledge they gained from the session, a summary of the session experience and other important comments they wanted to share with the Academy planners. Session evaluations were used by session planners to modify and adjust future sessions, particularly with regard to session topics and presenters. Feedback from the participants was also used to plan the 2013 Academy.

The quantitative analysis component measures the participants' change in leadership knowledge, skills and behavior from the beginning to the end of the Academy. This evaluation component provides a gauge of the cumulative effect of the Academy on participants, and the overall effectiveness of the Academy curriculum. The object was to explore research-based leadership and innovation behaviors associated with positive organizational outcomes. The participants change in knowledge of and engagement with water issues in Nebraska was also reassessed. The research will be ongoing and include results from succeeding years.

Results of the Class of 2012

The results of the quantitative analysis, and the review of the session evaluations demonstrate that the NWLA is meeting it's objectives and is successfully developing future leaders in the water arena. Academy participants demonstrated a significant increase in their leadership knowledge, skills and behavior; and feedback from participants was constructive and highly positive. Participant concerns were addressed in subsequent sessions and/or considered in the planning and implementation of the 2013 Academy.

Based on the data and information from the Class of 2012, major changes in the curriculum were not necessary. The instructional methods generally worked well, and the session topics and presenters were generally well received. The Academy planners will continue to use ongoing evaluation and research to improve the NWLA. The evolving nature of water issues in Nebraska requires the Academy to be vigilant in the selection of topics and presenters in future Academy programs.

Academy alumni have been, and will continue to be encouraged to stay involved with the Academy. Two Academy alums served on the 2013 Academy Planning Team, and alumni are also presenting at select NWLA sessions and following its activities online. Academy alumni were also asked to keep the Academy organizers updated on their involvement in water issues, and alumni will be included in announcements from the Academy planners. Program organizers have discussed the possibility of evaluating the long-term impacts of the academy, as well as formalizing alumni activities.

The 2012 Academy explored new communication methods to strengthen the program. They found that Facebook could play a key role in communication and connectedness of both current and past participants. A private group set up for academy discussions during session interims, in which participants can engage in games or discussions around the previous topics to keep the material fresh in their minds, was created based upon the feedback from 2012 participants. The Facebook group also allows current participants to engage with alumni, providing more insights into the session topics for individuals to consider. There is also a public Facebook page available for anyone to look at and join. This page serves as both an educational tool and advertisement for NWLA. Facebook provides an online forum for graduates and participants to post pictures, upcoming events and information about sessions. The Academy's Facebook page houses the mission of the program, while promoting the NWLA to intergenerational audiences. Facebook serves as an easy way to distribute and use resources while connecting Academy alums, participants, presenters and planners, now and in the future. The program's Facebook presence expanded the reach of the Nebraska Water Leaders Academy. Using technology and social media has the potential to support the growth of the program into the future.

Increasing the Reach and Engagement of NWLA

The NWLA is truly a collaborative effort that includes many partners, and is partially funded through a grant from the Nebraska Environmental Trust. Approximately twentyfive other organizations and businesses support the NWLA through sponsorships, volunteer presentations and financial commitments.

Each year the Academy participants are divided into preselected teams, with each team being required to create and complete a group project. These projects have increased the reach of the NWLA, and select group projects are being disseminated to the public. For example, one NWLA team has developed an informational tool for educational modules on Nebraska's water resources. This information has been uploaded to a DropboxTM folder available to elementary teachers. A second team has prepared a water resource guide in the form of a "pull-andreveal" slider. Users pull the slider to reveal the name of a watershed in one window, while facts about the watershed are revealed in another window. This slider has been shared with public and natural resource agencies. The third team has developed a slide show guide to Nebraska's water resources. This team has presented their project to a college course on environmental resources, and plans to present it at other educational venues.

Final Thoughts

The NWLA continues to meet its objectives and to expand and evolve based on feedback and research being conducted in conjunction with participants. The success of the first two classes of the NWLA provided a great foundation on which to build and expand. Blending water science and policy with leadership will be of tremendous value to Nebraska's future water resources. More research and evaluation will be available in the near future, based on findings from the NWLA Class of 2013.

Anyone interested in participating in the Class of 2014 can enroll by going to:

www.nebraskastateirrigationassociation.org

Note: This article is adapted from the 2012 Nebraska Water Leaders Academy Final Report. Copies of the report can be obtained from the authors.

Connie Reimers-Hild, (402) 873-3166 Extension Educator in Innovation University of Nebraska-Lincoln Extension Kimmel Education and Research Center <u>creimers2@unl.edu</u>

Mark Burbach, (402) 472-8210 Associate Geoscientist, Survey Division School of Natural Resources University of Nebraska-Lincoln <u>mburbach1@unl.edu</u>

Leadership Topics	Other Water Related Topics
Transformational and Transactional Leadership	Nebraska Climate
Leading Creativity and Innovation	Nebraska Ecology
Conflict Management	Nebraska Hydrogeology
Personality	Water Budgeting
Personal Communication Skills	Municipal Supply and Wastewater
Scenario Planning	North Platte Basin Integrated Water System
Group Communication Skills	Special Purpose Resource Entities
Adaptive Management	Nebraska Panhandle Irrigation Issues
Personal Empowerment	Nebraska Panhandle Water Research Projects
Motivation	Niobrara River Basin Natural Resources
Nebraska Surface Water and Groundwater Laws	Niobrara River Basin Ecotourism
Nebraska Instream Flow Laws	Niobrara National Scenic River
Economics	Platte River Valley Environmental Issues
Federal Reserved Water Rights	Rehabilitation of the Thirty Mile Canal
Ostrom's Principals of Common Pool	NRDs - History, Responsibilities and Water Quantity and
Resources Management	Quality Projects
Nebraska's River Basin Compacts and Obligations	
History of Water Development, Water Policy and Political	
Structures in Nebraska	
Public Boards and Service Organizations	

Table 1. Topics Presented by Leading Experts at the 2012 Water Leaders Academy