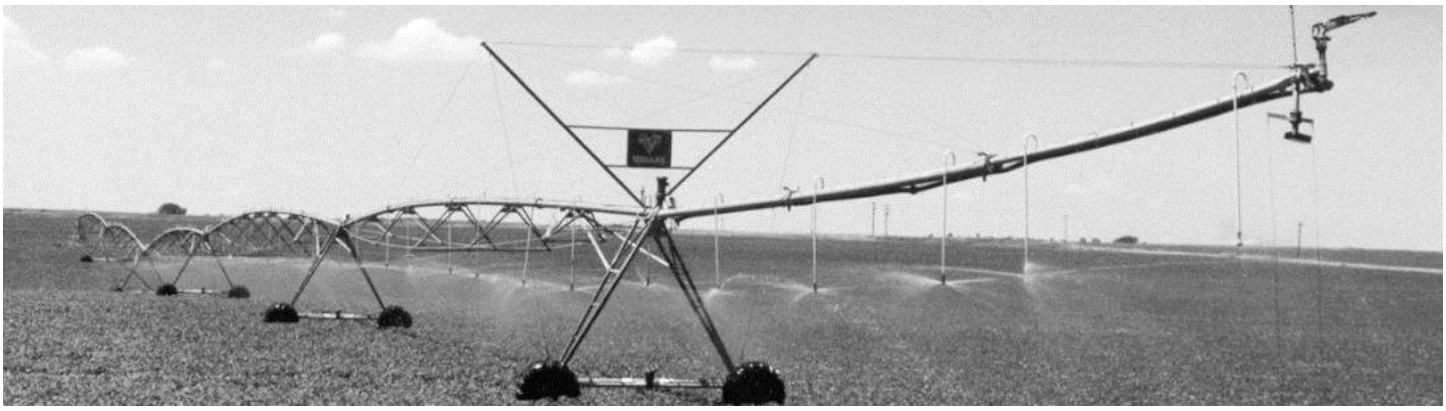
The Communicator

Published by The Central Nebraska Public Power and Irrigation District

AWEP funds helped water conservation efforts



By Marcia Trompke, Conservation Director

Funding has ended for new projects in Central's Agricultural Water Enhancement Program (AWEP) cost-share grant from the U.S. Department of Agriculture-Natural Resources Conservation Service (USDA-NRCS), but the five-year program has paid handsome dividends.

AWEP grants provided more than $1 million in cost-share funds for center pivots and sub-surface drip systems (SDI) to Central customers that helped increase on-farm water delivery efficiency and extended storage water supplies at Lake McConaughy.

USDA-NRCS provides cost-share funds for pivot hardware and underground pipe and annual incentive payments to dryland farm pivot corners for three or four years and/or to try no-till planting practices in their fields. Central supplies valves, perforated pipe screening in the canal, a flow meter and the equipment and labor to move or refurbish a canal turnout to accommodate the new system. The SDI units receive a flat rate per acre cost-share from USDA-NRCS and the same benefits from Central.

When final installations are complete next spring, AWEP funds will have enabled the installation of 29 pivots and four SDI units to the Central system from 2010 through 2014. During this same period, many other Central producers received cost-share funds through the USDA-NRCS local Environmental Quality Incentive Program (EQIP) funds or the Ogallala Initiative. A total of 488 center pivots and 11 SDI systems were operating on Central's irrigation system in 2013. The number of pivots will exceed 500 in 2014.

Every conversion from gated pipe to pivot or SDI irrigation extends the wa-

(Continued on p. 4)

Water deliveries to be allocated in 2014

Storage conditions at Lake McConaughy and continued low inflows will result in an allocation of water deliveries in 2014. Central's board of directors approved a staff recommendation to provide 9 inches/acre next summer. The decision was based on several factors, including carryover storage in Lake McConaughy and federal reservoirs in Wyoming, drought, and reduced inflows to Lake McConaughy resulting primarily from pumping by upstream irrigation wells.

Deliveries will be made over a 12-week or 8-week irrigation season (depending upon the customers' choice) beginning on June 9 and ending on Sept. 1. Elwood Reservoir will not be used to supplement deliveries on the E65 Canal system.

Inflow to Lake McConaughy during the 2012-13 water year (Oct. 1-Sept. 30) will fall short of 600,000 acre-feet, less than 65% of the historic median annual inflow of 916,900 acre-feet. The reservoir was at less than 45% of its capacity when Central's irrigation deliveries ended on Sept. 2, although releases for other irrigation canals continued for another two weeks.

In an effort to store more water in Lake McConaughy before next year's irrigation season, Central plans to seek a waiver from the U.S. Fish and Wildlife Service that would allow lower minimum water releases during the non-irrigation season.

Central recognized for 75 years of collecting weather data

By Holly Hiebert, Public Relations Assistant

The National Weather Service presented the Honored Institution Award to The Central Nebraska Public Power and Irrigation District on Aug. 22 in recognition of more than 75 years of cooperative weather observations.

Nate Nielsen, Central's Kingsley Dam foreman, accepted the award for Central. Nielsen is currently in charge of collecting the information from the measuring units and downloading the information to the National Weather Service office in North Platte. Nielsen has been helping collect the data for nearly 20 years. The observing site at Kingsley Dam was established on Aug. 1, 1938.

"It's a prestigious award," said Steve Carmel, NWS observing program leader at North Platte. "Across the nation, we have over 11,000 cooperative weather observers. We have approximately 80 unpaid volunteers in our area right now."

Carmel also noted that the information collected helps provide critical data for weather warnings in 26 counties covered by the North Platte office.

"This award is fairly rare because we don't see a lot of institutions that continue taking observations for this long of a period," Carmel said. "What's historic about it is not only have they been here a long time producing quality observations, but also their information has been used in tornado and squall line research and other projects."

75 Years of Service *— Kingsley Dam Foreman Nate Nielsen (left) accepts a plaque from Ryan Knutsvig, meteorologist-in-charge of the National Oceanic and Atmospheric Administration's North Platte National Weather Service office in North Platte, in recognition of Central's cooperative weather observations over the past 75 years. At right is Steve Carmel, observing program leader from the NWS office in North Platte.*

The National Weather Service's Cooperative Weather Observer Program is a unique partnership between the NWS and citizen volunteers in every state and territory. The program has given scientists and researchers continuous weather data since its inception in 1890. Volunteer observers participate in the nationwide program to provide daily reports on temperature, precipitation and other weather factors such as snow depth, river levels and soil temperature.

Summer job provides valuable experience to college students

By Mark Peyton, Senior Biologist

Some may not call it a job. A day in the sun on what *Outside Magazine* once described as one of the best inland beaches in North America. Driving around watching birds. Some might call that a vacation, but that's the nature of the job assigned to three of Central's summer employees at Lake McConaughy.

Jennifer Proescholdt, Debra Hafer, and Alex Engel are college students pursuing degrees in wildlife management. All three brought with them previous experience in their chosen field.

Jennifer, a senior at the University of Nebraska-Omaha, is from Iowa. Last year she worked for South Dakota Game, Fish, and Parks monitoring least terns and piping plovers on islands in the Missouri River. Debbie, of Cody, Neb., is a senior at Chadron State College and she previously worked for the Natural Resource Conservation Service in Wyoming analyzing sage grouse habitat. Alex is from Ogallala and a senior at the University of Nebraska-Lincoln. Last year he worked for the Nebraska Game and Parks Commission in fishery biology and zebra mussel prevention.

This summer they worked with Gabe Wilson, Central's on-site biologist, monitoring nesting by Great Plains piping plovers and interior least terns. Lake McConaughy is home to one of the largest collections of the piping plover, which is listed as a threatened species under the Endangered Species Act. During an international survey in 2006, the number of birds using the beaches of Lake McConaughy was second only to the count at North Dakota's massive Lake Sakakawea.

The birds arrive at the beach in April and begin nesting (shallow scrapes in the sand) in May. Typically, plover nests contain four eggs and tern nests have three eggs. The plovers hatch in about 28 days and the young chicks attain flight capability approximately 24 days later. Tern chicks typically hatch after about 21 days and are able to fly in about three weeks.

(Continued on p. 3)

The Communicator
Published by The Central Nebraska Public Power and Irrigation District
415 Lincoln St., P.O. Box 740
Holdrege, NE 68949-0740
(308) 995-8601
Editor: Jeff Buettner
The Communicator is published by CNPPID to inform its customers and interested parties of District activities and issues.

On the Lakefront

J-2 Regulating Reservoir

Central recently learned from the U.S. Fish and Wildlife Service that construction of the J-2 Regulating Reservoirs will reduce the impact of Central's flow attenuation plan on Johnson Lake.

The plan, developed with the FWS and the Nebraska Game and Parks Commission as part of Central's relicensing process, is intended to help reduce flows in the Platte River below Overton during the least tern/piping plover spring and summer nesting seasons. The plan requires Central to maintain space in Johnson Lake to temporarily capture high flows that may result from large rainfall events that could affect the birds' nests along the river.

"The regulating reservoirs would achieve this function," said Mike Drain, natural resources manager, "allowing us to operate Johnson Lake at a higher level during the spring and summer recreation season."

Central recently received a notice to proceed with pre-construction activities related to the reservoirs.

Lake McConaughy

Central is partnering with the Nebraska Game and Parks Commission to remove trees from the beaches in front of campgrounds on the north side of Lake McConaughy. The trees tend to sprout during periods when beaches at higher elevations are not periodically inundated. The affected areas will be treated with approved chemicals that will not pose health risks and at a time that will not affect recreational uses.

Contact Information

To assist cabin-owners seeking information about various lake-related topics, please refer to the following list.

Frank Vetter, real estate administrator, 308-995-3556 or 888-580-5299, ext. 3556: permit applications, permit rules and regulations, aerial photos of cabin lots, lot dimensions, lake frontage, square footage, open space areas, and lease questions.

Kent Aden, assistant real estate administrator, 308-529-2521 (cell) or 308-537-3582, ext. 4186: on-site meetings, construction setbacks, lot survey pins, permit application questions, permit rules and regulations, open space areas.

DeAnna Bartruff, legal secretary, 308-995-3563 or 888-580-5299, ext. 3563: new leases, title questions, who can enter into leases, lease documents, credit report form, closing information, lake association dues.

Cory Steinke, civil engineer, 308-995-3542 or 888-580-5299, ext. 3542: lake elevations/operations, hydrocycling agreement, flow attenuation plan, Environmental Account bypass agreement.

Summer job *(continued from page 2)*

The students' job is to locate the nests, build temporary fences around them for protection from vehicles, and then monitor the nests and chicks once they hatch. Sounds pretty simple. It isn't.

The plovers' strategy for survival is to be inconspicuous in a large area. They have excellent eyesight and are diligent at watching for danger. If you (or a predator) enter their territory, they will see you long before you notice them and will sneak off the nest. Once away from the nest, they will stand up and begin calling to get your attention, hoping to lead you away from the nest. If that doesn't work, they'll perform a "broken wing" act to convince you they are injured and "easy prey."

The terns employ a different tactic. They're aggressive and will dive at intruders while emitting a high-pitched screech. If that fails, they … well, go to the bathroom on you. The three students agreed that the worst part of their job was the smell of tern "poo" on their clothes.

The three workers became adept at locating nests and chicks. They could build fence around the nests in less than five minutes and were all proficient at taking GPS readings and transferring the data to a computer mapping program.

Days began at 5:30 a.m., so the daily tasks could be completed before it got too hot. Though a pickup was used, a great deal of walking was required in areas of the beach where vehicles aren't allowed. The knack of driving in soft sand was acquired only after a few "valuable learning experiences."

The three students were a great help, not only with tern and plover monitoring, but with other activities. If the temperatures were too high or time permitted, they helped with a variety of maintenance duties including mowing, cleaning the radiators in the hydroplant, and painting. They also found some time to engage in some of the many recreational activities available at the lake.

The summer jobs ended in early August. Alex and Deb are planning to continue their studies in master's degree programs, while Jenny wants to work for a couple of years and then pursue an advanced degree.

All three gained valuable experience in wildlife biology (least terns are aggressive and they will go "poo" on you); gained insight into human behavior ("No sir, the sign you drove around said 'Keep Out'"); and they can tell you the easiest way to clean the radiators in a hydroelectric power plant.

http://www.cnppid.com

On the Web

Central's web site will soon have a new look! Watch for the unveiling of the new design, but be assured that the site will continue to provide pertinent information about Central's project, operations, multiple benefits and information about current issues.

Also, Central will introduce a blog that will contain a wide variety of topics, including interesting historical information and current observations about happenings within the District and throughout Nebraska's of water and natural resources.

The Central Nebraska Public Power
and Irrigation District
P.O. Box 740
Holdrege, NE 68949-0740

Return Service Requested

Bulk Permit
U.S. Postage
PAID
Permit No. 217
Holdrege, NE

Central part of Colorado foundation's Platte Basin tour

Central's hydro-irrigation project was part of the agenda for the Colorado Foundation for Water Education's tour of the Platte River Basin this summer.

Each year, CFWE takes lawmakers, water managers, attorneys, engineers, and members of the public on a multi-day tour of a river basin. This was the first time the tour crossed state borders. Participants learned about the Platte River Recovery Implementation Program and interstate water issues in Colorado, Wyoming, and Nebraska.

At the Lake McConaughy Visitors Center, Public Relations Coordinator Jeff Buettner briefed the group about the source of Lake McConaughy's water, the history and operations of Central's hydro-irrigation project, integrated and efficient use of surface water and groundwater within the project, and recreational development at project facilities. The group also toured the Kingsley Hydroplant with Kingsley Dam Foreman Nate Nielsen and visited the Water Interpretive Center.

Near Loomis, Conservation Director Marcia Trompke provided detailed information about innovative applications in sub-surface drip irrigation and Central irrigation customer Scott Ford explained his unique solution to pivot irrigation on an irregularly-shaped field: a setup that allows quick disconnection / reconnection of pivot spans to allow coverage of areas that were previously gravity-irrigated.

"We were particularly impressed with the level of engagement and the knowledge, passion and dedication of our speakers, not to mention the beauty and unique geography of all three states," said Kristin Maharg, CFWE program manager.

"We also learned lessons about the relationship between water users and habitat recovery in the Platte Basin and increased our participants' understanding of consumptive and non-consumptive water needs and values in the three states," she said.

Other topics covered during the Nebraska portion of the tour included water administration in Nebraska; the Nebraska Public Power District's role in providing power and water; meeting habitat needs and channel restoration along the Platte River; growing more food with less water; drought-resistant crops; and voluntary approaches to maximizing water-use efficiency.

AWEP funds *(continued from page 1)*

ter supply available to Central's customers, improves water quality of the aquifer, improves soil structure and soil health of the farms when no-till or strip till are employed, reduces field labor hours and pumping costs, and increases yield potential by eliminating over- or under-watered areas. These benefits are cumulative for Central's system as a whole and for each farm in each season over the life of these units.

Control capabilities of these new units allow the fine tuning of water placement in the fields not possible with gated pipe. This control coupled with GPS/GIS, digital soil probes, aerial and satellite imagery, site specific weather data, EC mapping, chemigation capabilities and more is ushering in an exciting new era in crop production.