

MEMORANDUM

DATE: February 28, 2007

TO: Lancaster County Board of Commissioners, Lincoln City Council, Lower Platte South Natural Resources District Board of Directors, The Nebraska Game and Parks Commission, and The Nature Conservancy

FROM: Tom Malmstrom
Natural Resources Coordinator
Parks and Recreation Department
Saline Wetlands Conservation Partnership

RE: Saline Wetland Conservation Partnership
2006 Progress Report

As members of the Saline Wetlands Conservation Partnership (SWCP) I want to make you aware of the activities, which occurred in 2006. The SWCP was initiated in 2003 and continues to progress. The City of Lincoln has been awarded two Nebraska Environmental Trust (NET) grants for the eastern saline wetlands. The first grant received in 2002 was completed this year and the second grant awarded in 2005 goes through 2008. These grants have been used for land acquisition and restoration purposes and also provide matching funds for other funding opportunities.

The Partnership continues to utilize the "Implementation Plan for the Conservation of Nebraska's Eastern Saline Wetlands, 2003" for guidance in efforts to conserve the saline wetlands. Since its inception the partnership has purchased nearly 590 acres of saline wetlands, has initiated educational activities, set in motion saline wetland restoration projects, and provides for operation and maintenance of these areas. A summary of the 2006 activities is provided.

WETLAND RESTORATION

- Frank Shoemaker Marsh – The final design for the wetland restoration project was completed in May 2006. A total of 35 persons attended an open house regarding this wetland restoration on May 2, 2006.

Yost Excavating was awarded the contract for construction services in the amount of \$846,754.24. The project is funded from Federal Section 319 funds and the 2005 Nebraska Environmental Trust grant. Construction commenced in September and is expected to be completed by May of 2007.

- Jack Sinn Wildlife Management Area – The City of Lincoln, through a contract with the Nebraska Game and Parks Commission (NGPC), reimbursed the Commission \$169,492.55 to complete the Phase III restoration project. This funding was provided by Federal Section 319 funds the City was awarded for the eastern saline wetland complex.
- Whitehead Wetlands - Engineering has been completed for the restoration/replacement of an existing drop structure adjacent to Little Salt Creek and incorporating a water control structure to provide management capabilities that would support the existing wetland system. The project also includes removal of sedimentation which has occurred along 28th Street and access improvements by raising the existing berm at that location. The Lower Platte South Natural Resources (LPSNRD) district is funding this project. This project will be completed in 2007.
- Schleich Wetlands – Engineering has been completed for the restoration of an existing drop structure adjacent to Little Salt Creek. The LPSNRD is funding the engineering services and the City of Lincoln will fund construction with Federal Section 319 funds. This project will be completed in 2007.

WETLAND MANAGEMENT

- Two seasonal employees were hired by the City of Lincoln in 2006 to perform management on the saline wetland areas. Members of the Partnership established management activities to be addressed within the eastern saline wetlands complex. These employees primarily worked on noxious weed and woody vegetation removal. The Coordinator provided supervision of the employees.

ENDANGERED SPECIES

- The Salt Creek tiger beetle (*Cicindela nevadica lincolniana* Casey) was listed on the Federal endangered species list in October 2005. Also listed as a State endangered species, it is endemic to the eastern saline wetlands in Lancaster and southern Saunders counties. The Saltwort (*Salicornia rubra*) is a state listed endangered species. In Nebraska, the eastern saline wetlands are the location where it is found.
- Representatives of the partnership organizations and the coordinator have been involved with the Habitat Conservation Planning efforts initiated in 2006 in response to the Salt Creek tiger beetle's Federal endangered species listing. The U.S. Fish and Wildlife Service is the sponsoring agency.
- When requested, the coordinator and other members of the partnership have provided information to consultants of the U.S. Fish and Wildlife Service regarding Federal activities related to the endangered species act

EDUCATION

- North Star High School – Coordinator established annual program with the Environmental Studies class on saline wetlands in 2005. In 2006, the coordinator in cooperation with the environmental studies instructor at North Star sponsored nine field trips for a selected group of students to the saline wetlands. These field trips included presentations to the students by personnel of the LPSNRD, and the NGPC. Topics covered regarding the saline wetlands included vegetation, hydrology, entomology, restoration and mitigation, management, well monitoring and sampling, wildlife, and the relationship of urbanized development with natural areas.
- Coordinator educational presentations - The Coordinator continues to present “saline wetland jeopardy” to fifth grade students attending the Earth Wellness Festival and also presented information on saline and freshwater wetlands to Maxey Elementary students. Other presentations were given to local groups and conservation agencies.
- Updated the saline wetlands information on the City web site
- Provided a tour of saline wetlands to participants of the International Engineering Conference in May 2006

FUNDING RESOURCES

- 2002 Nebraska Environmental Trust – The grant amount was \$750,000 initially over a three year period. This grant was modified for a completion date of 12/31/2006. Grant funding was expended and a final report was completed for the grant. This grant primarily funded land acquisition of saline wetland areas.
- 2005 Nebraska Environmental Trust – The grant amount is \$800,000 over a three year period. Through 2006, a total of \$650,000 has been awarded and it is anticipated in 2007 that the remaining \$150,000 will be received. A total of \$254,614.64 has been expended through 2006 for wetland restoration at Frank Shoemaker Marsh.
- Federal Section 319 – The City of Lincoln has received a total of \$1,000,000 for the eastern saline wetland complex. This funding is from 2002 and 2005 grants. Through 2006, a total of \$743,690.10 has been expended. These funds were used on the acquisition of property, wetland restoration, and engineering services.
- The coordinator on behalf of the City of Lincoln submitted a grant in 2005 for Federal Section 319 funds in the amount of \$500,000 for the eastern saline wetland complex. The intention of the grant is for restoration activities. It is anticipated the awards will be announced in the summer of 2007.

OTHER COORDINATOR ACTIVITIES

- Establishing GPS photo points at saline wetland sites (two seasons at each site from same point) to establish baseline data on the landscape. The intention is to update the data every five years.
- Worked and met with Lincoln Electric System on several occasions regarding the placement of the North Tier III power line
- Noxious weed and woody vegetation control at publicly owned saline wetland sites
- Project Manager for the Frank Shoemaker Marsh wetland restoration project
- Participates with the USGS Natural Resources and Conservation Service B Team tours of potential wetland sites for the Wetland Reserve Program
- Member and participant of the Educational Workgroup of the Nebraska Partnership for All-Bird Conservation
- Participant of the City of Lincoln's Little Salt Creek Watershed master planning efforts
- Coordinated the inter-local agreements between the parties of the partnership, which are effective through February 2009
- Grant administration including the preparation and submission of the Final Report for the 2002 Nebraska Environmental Trust Grant

SALINE WETLAND PROPERTIES

Frank Shoemaker Marsh – 27th Street and Bluff Road

Size: 160 acres

Purchase price and date: \$472,000 on June 12, 2003

Funding sources: 2001 State Wildlife Grant through the
USFWS (\$222,000)
2002 NET grant (\$250,000)

Owner: City of Lincoln

2006 activity summary – A large area of scrub trees were removed by a contractor in March 2006. This was funded by the 2002 NET Grant. The final wetland restoration design was completed in May 2006. Yost Excavating provided the low bid of \$846,754.24 and was selected as the contractor to complete the restoration. The restoration began in September 2006 with an expected completion date of May 2007. The restoration project is funded with Federal Section 319 funds and the 2005 NET Grant.

- **Melvin King Property** – South of Arbor Road and East of 27th Street
Size: 61.2 acres
Purchase price and date: \$204,700 in January 2004
Funding sources: Federal Section 6 (\$153,525)
2002 NET grant (\$51,175)
Owner: City of Lincoln

2006 activity summary – Removal of several salt cedars located along the north bank of Little Salt Creek.

- **Warner Saline Wetlands** - 98th Street and Interstate 80
Size: 140 acres
Purchase price and date: \$298,580 on December 7, 2004
Funding sources: Federal Section 319 (\$179,148)
LPSNRD (\$43,043.20)
SWCP (\$76,388.80)
Owner: LPSNRD

2006 activity summary – Woody vegetation removal continues with Honey Locusts and Eastern Red Cedars.

- **Little Salt Creek Wildlife Management Area** – 1st Street and Raymond Road
Size: 156 acres
Purchase price and date: \$476,000 in June 2004
Funding sources: Federal Section 6 (\$276,000)
2004 NET grant through NGPC (\$200,000)
Owner: NGPC

2006 activity summary – Site preparation for a prescribed burn and new perimeter fencing installed.

- **Arbor Lake Extension (Anderson Property)** – Adjacent to Arbor Lake, 27th Street and Arbor Road
Size: 69.2 acres
Purchase price and date: \$361,710.67 on September 1, 2004
Funding source: 2002 NET grant through City of Lincoln
Owner: City of Lincoln

2006 activity summary – Abandoned well was decommissioned. Funding provided by the City and LPSNRD. Miscellaneous construction debris and old fencing material was removed from the site and hauled to the landfill. Significant efforts were undertaken to control noxious weeds and woody vegetation was removed from drainage areas.

- **Seacrest Range** (43 acres) – Located west of Folsom Street along both the north and south sides of Capitol Parkway West. The area is owned by the City of Lincoln. Efforts were undertaken to remove cedar trees and honey locusts and to control noxious weeds on the site. Several soil samples were taken from an elevated portion of the site to analyze the soil salinity at locations on the east side near Folsom Street. These borings were taken at three depths: 6 inches; 3 feet; and 4.5 feet. The results of the analysis indicated the following:

Soil Boring Depth	Sodium ppm	Soluble Salts (mmhos.cm)
6 inches	365	0.52
3 feet	1,524	1.47
4.5 feet	3,021	2.55

It is assumed fill was placed at the location where the borings took place years ago. These borings indicate characteristics of saline soils beneath the fill. Saline soils and vegetation is found throughout the remainder of the site on the south side of Capitol Parkway West.

- **Lincoln Saline Wetlands Nature Center** (92.7 acres) – It is located near Capital Beach in Lincoln. This area is owned by the LPSNRD. Management activities in 2006 were noxious weed control and removal of Russian Olive, Honey locust, and Red Cedar trees
- **Schleich Wetlands** (50.2 acres) – It is located southwest of Little Salt Creek near where it empties into Salt Creek and east of the Northbridge housing development in Lincoln. This area is owned by the LPSNRD. Engineering was completed for the repair of a drop structure adjacent Little Salt Creek. Management activities in 2006 were noxious weed control and bank stabilization along the buffer area adjacent the Northbridge subdivision.
- **Whitehead Wetlands** (98.8 acres) – It is located east of 27th street and a short distance south of Interstate 80. This area is owned by the LPSNRD. Engineering has been completed for the restoration/replacement of an existing drop structure adjacent to Little Salt Creek and removal of sedimentation which has occurred along 28th Street. Management activities in 2006 were noxious weed and phragmites control.
- **Arbor Lake** (63.3 acres) – It is located north of Arbor Road and east of 27th Street. The area is owned by the City of Lincoln. Efforts were undertaken to remove cedar trees and honey locusts and to control noxious weeds on the site. The site was grazed for 30-45 days in the fall to control other vegetation. The City of Lincoln Public Works Department repaired a portion of the south berm in 2006 due to structural failure associated with dispersive soils and site hydrology.

- **Noble Tract** (100.5 acres) – It is located on either side of Little Salt Creek and north of Mill Road. It is owned by The Nature Conservancy (TNC). Due to resource limitations, TNC expressed an interest in one of the other partners to assume ownership of the property. Discussions regarding the transfer of ownership have occurred with both the LPSNRD and the NGPC.
- **Little Salt Fork Marsh Preserve** (174.2 acres) – It is located northwest of 1st and Raymond Road and owned by The Nature Conservancy. Management activities in 2006 were noxious weed control and woody vegetation removal.
- **Jack Sinn Wildlife Management Area** (913.1 acres) – Located south of Ceresco in Saunders and Lancaster counties. This area is owned by the NGPC. In 2006, the NGPC completed restoration activities associated with a Phase III project. Perimeter fencing construction continued throughout the year. Funding for these projects was provided by the NET, Federal Section 319 funds through the City of Lincoln, and the State Wildlife Grant fund administered through the NGPC. Management activities in 2006 were noxious weed control, woody vegetation removal, and rotational grazing for other vegetation control.

This program has been extremely successful and continues to accomplish many of the goals of the Implementation Plan for the Conservation of the Eastern Saline Wetlands. We hope you would agree. Your continued support is appreciated. If you have any questions, please contact me at 476-2729 or tmalmstrom@lpsnrd.org.