



Parks and Recreation Department  
Lynn Johnson, Director  
2740 "A" Street  
Lincoln, Nebraska 68502

402-441-7847  
fax: 402-441-8706

"Making Lincoln a Better Place to Live"



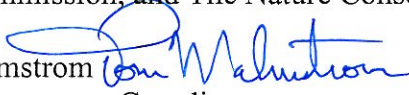
MAYOR CHRIS BEUTLER

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## MEMORANDUM

DATE: March 15, 2011

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

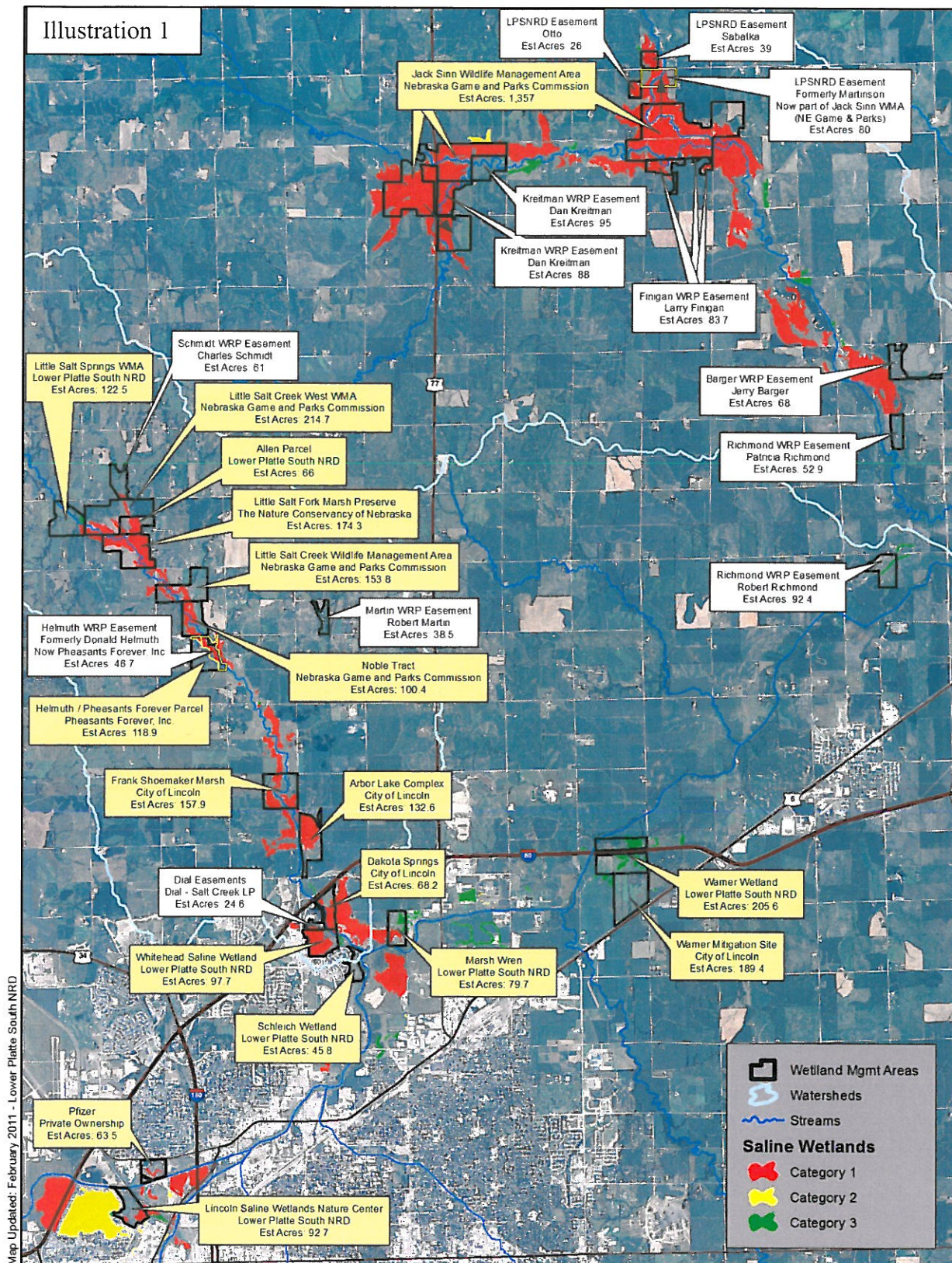
FROM: Tom Malmstrom   
Natural Resources Coordinator  
Parks and Recreation Department  
Saline Wetlands Conservation Partnership

RE: Saline Wetlands Conservation Partnership – 2010 Progress Report

On behalf of the Saline Wetlands Conservation Partnership (SWCP) I want to make you aware of the activities, which occurred in 2010. The SWCP was initiated in 2003 and continues to progress. The City of Lincoln has been awarded three Nebraska Environmental Trust (NET) grants for the eastern saline wetlands. The grants were received in 2002, 2005, and 2008. The City of Lincoln received a \$1,200,000 grant over a three year period in 2008; \$800,000 awarded in 2008 and \$400,000 awarded in 2009 through June of 2011. These grants have been used for land acquisition and restoration purposes and provide matching funds for other grant opportunities.

Efforts of the SWCP are to protect, restore, and manage the rare and unique saline wetland habitat. 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, partners have purchased nearly 1,200 acres of saline wetlands and other associated upland habitat, initiated educational activities, participated in saline wetland restoration projects, and provided for operation and maintenance of these areas. Illustration 1 identifies many of these properties, which are discussed on page 3 and pages 14-16.







## SUMMARY OF 2010 ACTIVITIES

### LAND ACQUISITIONS

- **Allen Parcel** – Between Branched Oak Road and Raymond Road and adjacent to the west of 1<sup>st</sup> Street  
Size: 66.6 acres  
Purchase price and date: \$304,000 on February 17, 2010  
Funding sources: Lower Platte South NRD (\$76,000)  
SWCP (\$75,000)  
2008 NET Grant (\$153,000)  
Owner: Lower Platte South Natural Resources District

**Notes** – The property contains 27.2 acres of Category 1 saline wetlands and is identified as critical habitat for the endangered Salt Creek tiger beetle. The floodplain encompasses 32.9 acres of the property. It is located between Little Salt Creek West WMA owned by the Nebraska Game and Parks Commission (NGPC) and Little Salt Fork Marsh Preserve owned by The Nature Conservancy.



- **Helmuth Parcel** – South of Mill Road and west of 14<sup>th</sup> Street  
Size: 119.0 acres  
Purchase price and date: \$630,000 on November 23, 2010  
Funding sources: Federal Section 6 (\$275,000)  
2001 State Wildlife Grant through the U.S. Fish and Wildlife Service (\$131,666.50)  
NGPC (\$23,333.50)  
Donation from Helmuth family (\$200,000)  
Owner: Pheasants Forever, Inc.

**Notes** – The property contains nearly 35 acres of Category 1 saline wetlands and 40.7 acres is enrolled in the wetland reserve program through the U. S. Natural Resources Conservation Service. The property is managed by the NGPC. It is located south of the Little Salt Creek WMA owned by the NGPC.

## **WETLAND RESTORATION**

Arbor Lake Complex - A wetland restoration conceptual design was completed in August 2009. In 2010, the City of Lincoln hired a firm to complete the final design for the wetland restoration. A core and technical/planning team consisting of several agency representatives worked with the consultants on the final design. An Open House was held on October 19, 2010 and was attended by 27 persons. The final design was completed in December 2010 and it is anticipated restoration work will begin in the fall/winter 2011. This project is being funded with Federal Section 319 funds and the 2008 NET Grant, all received by the City of Lincoln.

## **WETLAND MANAGEMENT**

Two seasonal employees were hired by the City of Lincoln in 2010 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, and access and structure maintenance. Funding for these positions is provided with 2001 State Wildlife Grant funds the NGPC received from the U.S. Fish and Wildlife Service (USFWS). The Coordinator provided supervision of the employees.

## **SALINE WETLAND RESEARCH**

In 2007, the NGPC received funding from the U.S. Fish and Wildlife Service to collect biological and hydrological data. This information will be used for the development of a Habitat Conservation Plan for the Salt Creek tiger beetle and the Eastern Saline Wetlands of Nebraska. In addition, the SWCP has worked with partners on soil and plant community inventories throughout the saline wetlands. Following is a summary of research conducted in 2010.

### **Salt Creek Tiger Beetle Research**

The following research information provided by:  
Leon Higley, Sheri Svehla, Tierney Brosius, and Willa Toren-Senn  
School of Natural Resources, University of Nebraska-Lincoln

### **Field Collection and Rearing – Summary for 2007-2010**

Permits for obtaining eggs from *C. n. lincolniana* allowed field collection of females and males, and release after two weeks. Table 1 indicates the numbers of females collected and larvae produced from 2007-2010 (because eggs are laid in soil and are fragile, there was no attempt to obtain egg numbers to avoid damaging eggs). The potential fecundity of *C. n. lincolniana* is a function of ovariole number and the number of egg batches produced. Ovariole number has never been determined for *C. n. lincolniana*, however, existing data on ovariole number among *Cicindela* species shows a range from 10-16. Consequently, 10, 13, and 16 ovarioles were used in calculating potential productivity from our data. Because females could only be held for two weeks, only a single batch of eggs was anticipated. Unfortunately, if circumstances (rain or cool temperatures) delayed adult collection, females could have already laid their first batch of eggs, as seem likely to have been the case in 2008 and 2010. Nevertheless, as data in Table 1 indicate,

reproductive success during rearing was high in those years when fecund females were collected (2007 and 2009). For all years except 2008, the percent realized larval production is remarkably high (ca. 45-28% across all years), given that many insects experience mortality of 80% in these stages. Beyond the issue of collecting fecund females, the most important conclusion drawn from this data is that the ovipositional substrates and other egg laying criteria are acceptable.

**Table 1**  
**Potential egg and realized larval production by *C. n. lincolniana***

YEAR	Collected females	Reared larvae	potential egg production if ovarioles #*			% of potential production if ovariole # =*		
			10	13	16	10	13	16
2007	18	141	180	234	288	78.3%	60.3%	49.0%
2008	12	1	120	156	192	0.8%	0.6%	0.5%
2009	12	51	120	156	192	42.5%	32.7%	26.6%
2010	11	2	110	143	176	1.8%	1.4%	1.1%
<b>TOTAL</b>	<b>53</b>	<b>195</b>	<b>530</b>	<b>689</b>	<b>848</b>	<b>36.8%</b>	<b>28.3%</b>	<b>23.0%</b>

\*Note: These values are based on ovariole #, which is unknown for *C. n. lincolniana*, and are based on production of a single batch of eggs.

Although significant larval mortality was anticipated in the early stages, once appropriate feeding procedures (from 2008 on) were established no larval mortality occurred before overwintering. Given exposure to natural enemies and variable prey resources, survivorship for larval rearing before overwintering almost certainly exceeds natural survivorship in the field.

Beyond these details on rearing, one other important recommendation emerges from the research. Given the low numbers of *C. n. lincolniana* in the field, and the high variability in obtaining eggs from field collected females, it is believed changes should be made to develop a captive breeding program. In 2010, a reared female did successfully mate, so at least in principle captive breeding is possible. Obviously, solving the problem of overwintering mortality is crucial to such an effort, and starting with a sufficiently large number of eggs will be crucial. Consequently, it is recommended to initiate such a program for at least each of two years, and change permitting to allow field-collected females to be retained long enough for the production of multiple batches of eggs.

### Pitfall trapping 2010

The objective of this component of our research is to establish criteria for using carabid beetles as ecological indicators for “natural” saline wetland areas. By comparing Carabid assemblages found on designated study sites it can be determined if assemblages differentiated from one site to the next and within sites. This comparison will also look at the influence of habitat on activity and distribution of the Carabid species. Making comparisons will determine if changes occur in species composition as topography changes. The research would also identify potential specialists for use as possible ecological indicators. These indicator species could then be used to monitor the effects of management practices on wetland-obligate invertebrates.



Pitfall Trap



Pitfall trapping was used for collection of ground dwelling Carabid beetles at three different sites, Arbor Lake Wildlife Management Area, Capital Beach, and Whitehead Wetlands. All three sites are located in Lancaster County, Nebraska. Pitfalls were placed in these sites in early spring (21 April) when temperatures were above freezing (0°C), through fall (5 Oct.) when temperatures were below the freezing point.

Three pitfall traps were placed in a single transect line at 5 meter intervals. Along each transect there were 3 different treatments, Salt Flats, Short Grass, and Tall Grass. Traps were collected once every week, and specimens were transported back to the lab. Samples were then sorted, and number of carabids recorded for each pitfall. Carabids were identified to species. Species occurrence and abundance was tabulated from each pitfall in each different treatment from each site, and each sampling period. Statistical analysis is in progress to determine differences, if any, in carabid assemblages among and in between research sites.

### **Hydrological Research**

The following research information provided by:

F. Edwin Harvey, PhD, PG

Director, Justin Smith Morrill Scholars Program

Coordinator, UNL Water Science Major

Professor of Hydrologic Sciences/Research Hydrogeologist

GSA Books Science Editor

In an effort to better understand the groundwater flow dynamics within this region, electrical resistivity data were collected within a number of different sites within the Little Salt Creek Watershed. Electrical Resistivity Imaging (ERI) can provide an expanded understanding of groundwater distribution through the acquisition of a large number of resistivity measurements collected at the surface. Multiple lines of data were collected at the Little Salt Creek Wildlife Management Area and Whitehead Saline Wetlands.

Geophysical surveys were also conducted in-stream at Little Salt Creek in the region adjacent to Arbor Lake Saline Wetland just north of Arbor Road on North 27<sup>th</sup> street in Lincoln, Nebraska. Upon inversion of these measurements, the distribution of resistivity can be displayed in cross-section and groundwater flow conditions can be inferred. Additionally, a number of drive-point piezometers were installed within Little Salt Creek at the area adjacent to Arbor Lake Saline Wetland, and also at the Little Salt Creek Wildlife Management Area. Once installed, measurements of electrical conductivity were gathered from water within the wells to help in correlating resistivity measurements to the electrical conductivity values of groundwater at these sites.

Currently, ERI images are being examined and compared to fluid electrical conductivity measurements and bore logs from monitoring wells in the area. Thus far, distinct plumes of saline water can be seen migrating from depth and discharging into local streams. With additional analysis UNL hopes to develop an understanding of the complicated three-dimensional pathways that the saline groundwater takes to surface water channels.

In addition, a monitoring well was installed at Capital Beach to check groundwater head levels and water quality. The future plan is to begin looking more closely at the chemistry and hydrology of the springs in Little Salt Creek.

## **Soil Research**

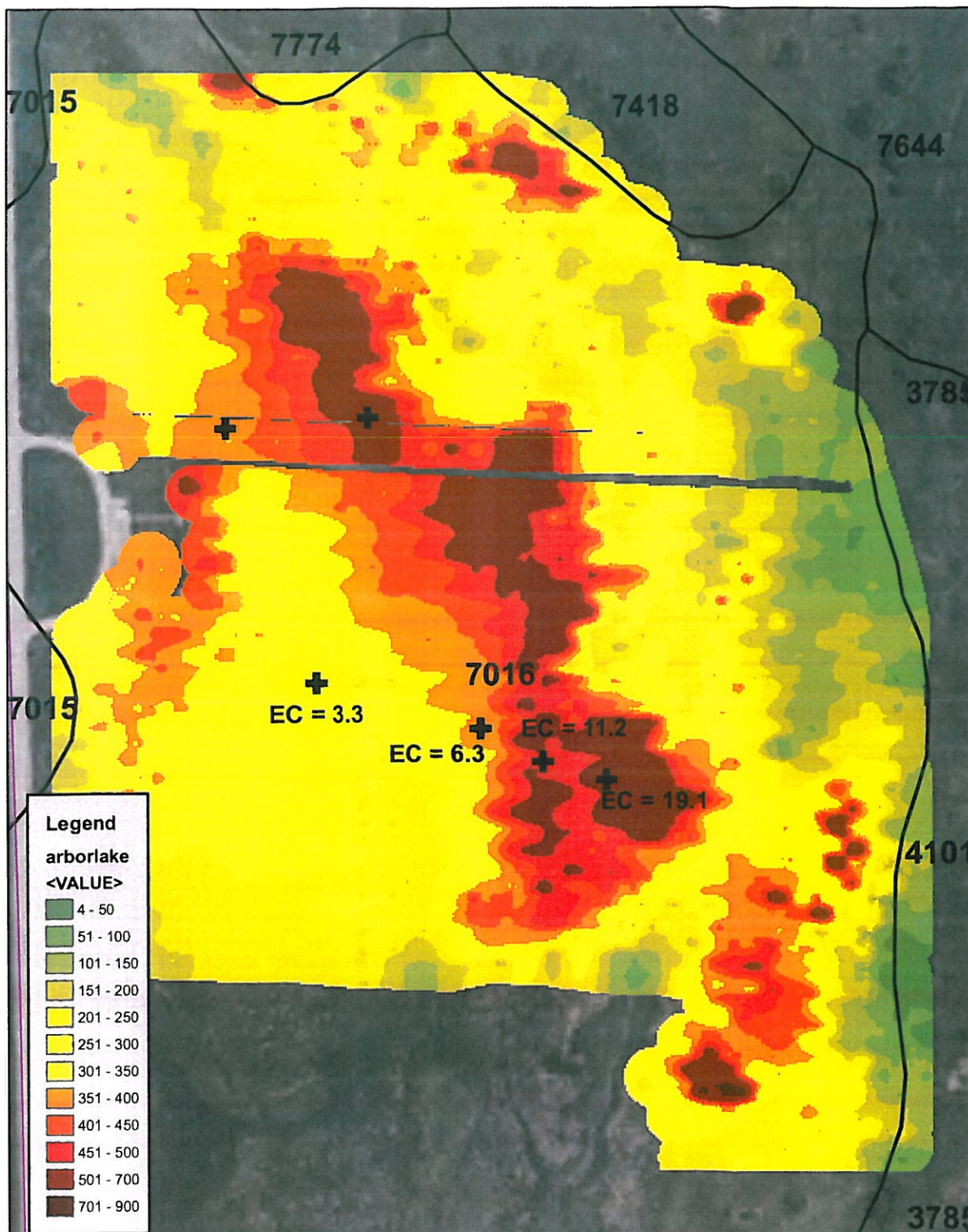
The following research information provided by:  
Dave Kohake  
MLRA Soil Scientist  
U.S.D.A. Natural Resources and Conservation Service

The Natural Resources and Conservation Service initiated field investigations at the Arbor Lake Complex using an Electro-Magnetic (EM-38) sampling device in 2009 and continued with the project in 2010. The device is useful for mapping variations in soil salinity and moisture content. Further EM-38 data collections may be conducted at other saline wetland sites in the future. Illustration 2 identifies the results of the mapping at Arbor Lake.

Sampling pits were also dug at two saline wetland areas in the summer of 2009. The sample analysis was conducted by the National Soil Survey Laboratory (through NRCS) and is pending full characterization, which should be available in 2011.

Data from grab samples collected in 2009 and 2010 will also provide future data.

**Illustration 2**  
**Electro-Magnetic sampling results at Arbor Lake Complex, 2010**



Source: David Kohake, U.S.D.A. Natural Resources and Conservation Service

**NOTES:**

EC = Electrical Conductivity (higher the number the greater soil salinity)

**Illustration Legend** - The higher the value the greater the soil salinity



## **Plant Community Inventory of Saline Wetlands**

An inventory of saline wetland plant communities on SWCP properties was initiated in 2009 and continued in 2010. The inventory provides baseline data on the extent and condition of existing saline wetlands from which future changes in saline wetland areas and their condition can be monitored. This ground-based plant community inventory provides valuable data for further analysis of saline wetlands, including saline species population studies and threat assessments.

The study is being conducted with funding provided through an agreement between The Nature Conservancy and the Lower Platte South NRD. Plant assemblage has been completed on Arbor Lake Extension (Anderson Property), Allen Parcel, Little Salt Creek West WMA, Warner Wetlands, and Little Salt Fork Marsh Preserve. Tyler Janke, a wetland restoration specialist with The Nature Conservancy is conducting the inventory.

The inventory of most of the areas was restricted to the lowland areas displaying saline soils to prioritize wetland plant communities. Table 2 identifies native plant communities in acres for the areas. Illustration 3 shows the plant communities for the low areas of the Allen Parcel.

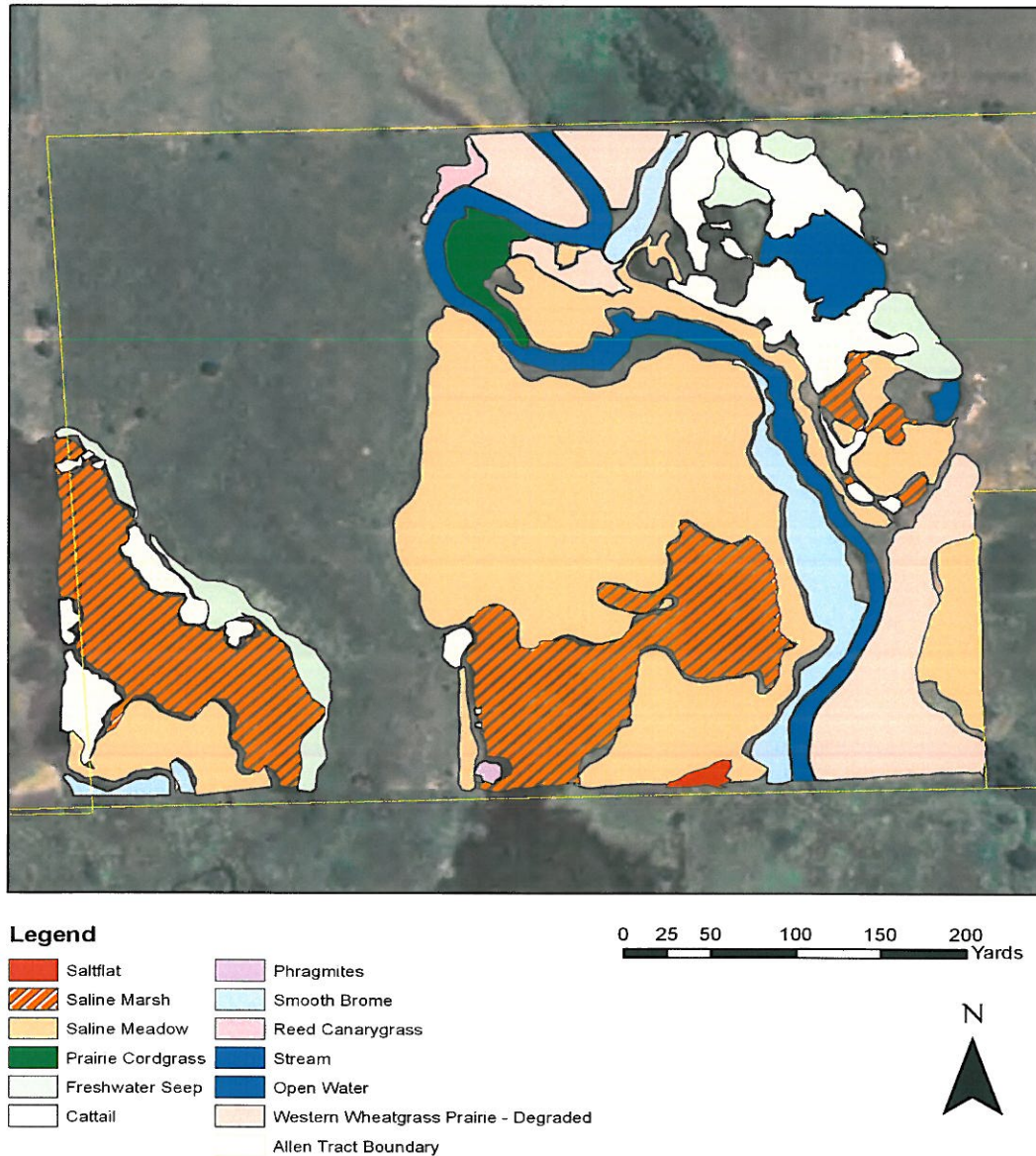
**Table 2**  
**Plant Community acres for Saline Wetland areas**

<b>PLANT COMMUNITY</b>	<b>SALINE WETLAND AREA</b>				
	<b>Plant community inventory in acres</b>				
	<b>Allen Parcel</b>	<b>Arbor Lake Extension</b>	<b>Little Salt Creek West WMA</b>	<b>Little Salt Fork Marsh Preserve</b>	<b>Warner Wetlands</b>
Saline Marsh	5.95		5.78	2.55	
Saline Meadow	11.76	0.36	25.76	18.86	5.77
Salt Flat	0.08	0.64	0.18	0.51	
Western Wheatgrass	3.12	2.95			78.02
Seep	1.15		7.49	0.12	
Freshwater Meadow		3.39			
Prairie Cordgrass	0.42	1.2			7.55
Degraded Lowland Grassland		23.02			
Stream/Open Water	2.31	3.59	1.37	15.49	1.32
Cropland		4.52			
Smooth Brome	1.38	8.77	7.35	25.35	9.9
Reed Canarygrass	0.12	0.19	1.29	12.1	0.03
Cattail	2.53		3.94	6.55	0.02
Tall Wheatgrass		3.11			
Phragmites	0.03		0.04		
<b>TOTAL ACRES</b>	<b>28.85</b>	<b>51.74</b>	<b>53.2</b>	<b>81.53</b>	<b>102.61</b>

Source: Tyler P. Janke, Wetlands Restoration Specialist, The Nature Conservancy, 2010

**Illustration 3**  
**Allen Parcel WMA Plant Community Inventory, 2010**

**Allen Tract Inventory 2010**



Source: Tyler P. Janke, Wetlands Restoration Specialist, The Nature Conservancy, 2010



## **ENDANGERED SPECIES**



The Salt Creek tiger beetle (*Cicindela nevadica lincolniiana* Casey) was listed on the Federal endangered species list in October 2005. It is endemic to the eastern saline wetlands in Lancaster and southern Saunders counties. Saltwort (*Salicornia rubra*) is a state listed endangered species. In Nebraska, the eastern saline wetlands are the only location the Saltwort is found.

In 2007, the U.S. Fish and Wildlife Service listed the Proposed Rule in the Federal Register regarding the Designation of Critical Habitat for the Salt Creek tiger beetle (SCTB). In April 2009, the USFWS reopened Critical Habitat Designation to add a total of 138 acres to three of the four previously proposed units. As a result, the proposed revised critical habitat designation for the species now includes four critical habitat units totaling approximately 1,933 acres. The rule was made final on April 6, 2010.

- Habitat Conservation Planning was initiated in 2006 in response to the Salt Creek tiger beetle's Federal endangered species listing. To date there has been limited activity. The targeted completion date for the plan is 2012.
- When requested, the coordinator and partnership representatives provide information to the U.S. Fish and Wildlife Service on 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. The coordinator in cooperation with the environmental studies instructor at North Star sponsors field trips for a selected group of students to the saline wetlands. The field trips include presentations to the students by personnel of the LPSNRD, UNL, NGPC, and the NRCS. Topics covered regarding the saline wetlands included vegetation, hydrology, entomology, restoration and mitigation, management, soils, well monitoring and sampling, wildlife, and the relationship of urbanized development with natural areas. In the fall of 2010, a total of seven (7) field trips and two (2) class presentations were held.
- Coordinator educational presentations - The Coordinator continues to present “saline wetland jeopardy” to fifth grade students attending the Earth Wellness Festival. Other presentations were given to local groups and conservation agencies.
- Coordinator participates in Elementary School Nature Nights and field trips to saline wetlands sponsored by the LPSNRD



## **FUNDING RESOURCES**

- 2005 Nebraska Environmental Trust Grant – The grant amount was \$800,000 over a three year period. A total of \$438,432.77 was utilized for wetland restoration at Frank Shoemaker Marsh and \$361,567.23 was used for land acquisition. The grant terminated on June 30, 2010. A final report was completed and submitted on July 21, 2010.
- Federal Section 319 Grant (2007 and 2009) – 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. In November of 2007, the City was awarded \$250,000. Of this, a total of \$52,500 was expended for restoration services related to the Arbor Lake Wetland Restoration Project.

The remaining \$250,000 was awarded in 2009. The total amount available for restoration services was \$447,500. In 2010, \$95,000 was expended for engineering services of the Arbor Lake Wetland Restoration Project leaving a balance of \$352,500 at the end of 2010. This will be expended on future engineering and construction services for the Arbor Lake Wetland Restoration Project.

- 2008 Nebraska Environmental Trust Grant – The grant amount is \$1,200,000 over a three year period. A total of \$366,250.42 was expended in 2009 and \$156,900 in 2010 for land acquisition and billboard removal (\$3,900). A total of \$676,849.58 remains and will be expended on the Arbor lake Wetland Restoration Project and land acquisition.
- Federal Section 6 – In 2010, the NGPC through the U.S. Fish and Wildlife Service expended \$275,000 for the acquisition of the Helmuth property containing saline wetlands.

An additional grant was submitted in the amount of \$130,000 in 2010 for future land acquisition.



## **SUMMARY OF OTHER COORDINATOR ACTIVITIES**

- Attend and participate in Nebraska inter-agency wetland meetings sponsored by the U.S. Corps of Engineers
- Attended meetings regarding City and County projects regarding construction activities scheduled near or on saline wetland areas
- Presented information regarding the saline wetlands to Lancaster County Ecological Advisory Committee and LPSNRD Recreation, Forestry, and Wildlife sub-committee
- Presented information regarding the saline wetlands and provided tours at Frank Shoemaker Marsh to Wachiska Audubon, EPA Region VII Director, UNL wetlands ecology class, and Western States Water Council
- Toured saline wetland areas with Central Platte NRD burn manager to discuss prescribed burning opportunities and several agencies and local zoos regarding endangered species recovery habitat.
- Youth education – presented and participated in elementary school Nature Nights sponsored by the Lower Platte South NRD, the Earth Wellness Festival, and UNL Career Day
- Participate with Natural Resources and Conservation Service (NRCS) B Team regarding the scoring and design of Wetland Reserve Program applications in Lancaster County
- Assist and observe NRCS soil scientist regarding saline soil research
- Land management – Supervision of seasonal employees, annual saline wetland area task discussions with land managers from other agencies, noxious weed and woody vegetation control at publicly owned saline wetland sites, and Phragmites location identification with established GPS coordinates
- Project Manager for the Arbor Lake Complex wetland restoration project.
- Member and participant of the Educational Workgroup of the Nebraska Partnership for All-Bird Conservation.
- Participant of the Habitat Conservation Plan committee sponsored by the U.S. Fish and Wildlife Service and miscellaneous activities related to endangered species
- Participant and team representative of Nebraska Wetland Assessment grant project through the NGPC
- Miscellaneous grant administration and participation in grant applications through conservation agencies regarding wetland projects

## **SALINE WETLAND PROPERTIES**

- **Frank Shoemaker Marsh** – 27<sup>th</sup> 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

**Activity summary** – Noxious weed removal continued and included the documentation of several new small plots of Phragmites. Post-restoration monitoring includes observations of wetland vegetation and management of the hydrology through the five water control structures in place. Several monitoring wells installed by UNL are continually monitored. The total number of wells includes three shallow wells (15-30 feet), three intermediate wells (60-90 feet), and one deep well (~180 feet).

- **Dakota Springs (Formerly King)** – South of Arbor Road and East of 27<sup>th</sup> Street  
Size: 68.7 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

### **Dakota Springs Extension Purchase (Dial Realty, 7.45 acres)**

Purchase price and date: \$48,500 on December 31, 2008  
Funding source: Federal Section 6

**Activity summary** – Noxious weed removal continued. Monitoring wells installed by UNL and are continually monitored. The total number of wells in place includes two shallow wells (15-30 feet) and two intermediate wells (60-90 feet). A large billboard was removed from the site in 2010.



- **Warner Saline Wetlands** - 98<sup>th</sup> 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

**Activity summary** – Woody vegetation removal continues with Honey locust and cedars. Plant community inventory was conducted in the summer/fall of 2010.



- **Little Salt Creek Wildlife Management Area** – 1<sup>st</sup> Street and Raymond Road  
 Total Size: 256.5 acres  
 Purchase price and date: \$476,000 in June 2004 (original 156 acres)  
 Funding sources: Federal Section 6 (\$276,000)  
 2004 NET grant through NGPC (\$200,000)  
 Owner: NGPC

**Noble Tract Extension** - Along Little Salt Creek, between Mill Road and the southern boundary of the original Little Salt Creek Wildlife Management Area. (100.5 acres)

**Activity summary** – Prescribed grazing was conducted. Cedar removal and noxious weed control continues. A parking lot was developed on the south side off of Mill Road. Monitoring wells were installed by UNL and are continually monitored. The total number of wells includes three shallow wells (15-30 feet) and three intermediate wells (60-90 feet).

- **Little Salt Creek West Wildlife Management Area** – South of Branched Oak Road between NW 12<sup>th</sup> and 1<sup>st</sup> Streets  
 Total Size: 220.0 acres  
 Purchase price and date: \$979,000 on October 9, 2009  
 Funding sources: Federal Section 6 (\$560,000)  
 2005 NET Grant (\$42,838.58)  
 2008 NET Grant (\$366,250.42)  
 Ducks Unlimited (\$10,000)  
 Owner: Nebraska Game and Parks Commission

**Activity summary** – Prescribed grazing was conducted. Cedar removal and noxious weed control continues. Trees were removed from the terraces located on the northwest portion of the property. A parking lot was developed on the north side off of Branched Oak Road. Plant community inventory was conducted in the summer/fall of 2010.

- **Arbor Lake Complex** – North of Arbor Road and east of 27<sup>th</sup> Street.  
 Total Size: 132.5 acres  
 Owner: City of Lincoln

**Arbor Lake Extension Purchase (Anderson Property, 69.2 acres)**

Purchase price and date: \$361,710.67 on September 1, 2004  
 Funding source: 2002 NET grant through City of Lincoln

**Activity summary** – Continued efforts to control noxious weeds and woody vegetation. UNL conducted insect inventories throughout the summer along the salt flat areas and NRCS conducted soil research throughout the area. Approximately 12 acres were cropped by an adjacent landowner; this includes areas under the transmission line, which were disturbed during construction in 2007. Monitoring wells installed by UNL are continually monitored. The total number of wells includes three shallow wells (15-40 feet) and two intermediate wells (60-90 feet). The Arbor Lake Wetland Restoration final design was completed. It is anticipated construction will commence in the fall/winter of 2011. Plant community inventory was conducted in the summer/fall of 2010.

- **Little Salt Springs (Formerly Schell)** – NW 12<sup>th</sup> Street and Branched Oak Road  
 Size: 123 acres  
 Purchase price and date: \$472,188 on July 31, 2007  
 Funding sources: Lower Platte South NRD (\$187,960.35)  
 2005 NET grant (\$227,227.95)  
 Partnership Funds (\$57,000)  
 Owner: Lower Platte South NRD

**Activity summary** – Continued efforts to control noxious weeds and woody vegetation. A parking lot was developed on the north side off of Branched Oak Road. The third year growth of the high diversity native seeded on the formerly cropped areas (60 acres) is progressing well.

- **Marsh Wren** – Between 40<sup>th</sup> and 56<sup>th</sup> Streets and north of Salt Creek  
 Total Size: 80.0 acres  
 Purchase price and date: \$320,000 on May 27, 2009  
 Funding sources: Lower Platte South NRD (\$25,000)  
 SWCP (\$25,000)  
 City of Lincoln floodplain acquisition funds (\$178,000  
 (\$89,250 each from the City of Lincoln and the Lower  
 Platte South NRD))  
 2005 NET Grant (\$91,500)  
 Owner: Lower Platte South Natural Resources District

**Activity summary** – Continued efforts to control noxious weeds and woody vegetation. Field road was graded and leveled through an agreement with the lessee.

- **Seacrest Range** (43 acres) – Located west of Folsom Street along both the north and south sides of Rosa Parks Way. The area is owned by the City of Lincoln. Efforts continued to remove cedar trees and Honey locust and to control noxious weeds on the site. Efforts continued in 2010 to control Phragmites along the Haines Branch on the north side. Construction of the relief sewer along the south boundary was completed.
- **Lincoln Saline Wetlands Nature Center** (92.7 acres) – It is located near Capitol Beach in Lincoln. The area is owned by the LPSNRD. Management activities in 2010 were noxious weed control and removal of Russian olive, Honey locust, and cedar trees. A monitoring well was installed by UNL to check groundwater levels and water quality.
- **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 subdivision in Lincoln. The area is owned by the LPSNRD. Management activities in 2010 were noxious weed and woody vegetation control.



- **Whitehead Wetlands** (98.8 acres) – It is located east of 27<sup>th</sup> street and a short distance south of Interstate 80. The area is owned by the LPSNRD. Management activities in 2010 were noxious weed control. Monitoring wells installed by UNL are continually monitored. The total number of wells includes five shallow wells (15-30 feet), four intermediate wells (60-90 feet), and one deep well (~180 feet).

In 2009-2010, a deck was constructed overlooking the wetland area along 28<sup>th</sup> Street. The deck has educational panels informing visitors of the saline wetlands and native plants and animals.



- **Little Salt Fork Marsh Preserve** (174.2 acres) – It is located northwest of 1<sup>st</sup> and Raymond Road and owned by The Nature Conservancy. Management activities in 2010 included a prescribed grazing rotation throughout the property for the majority of the growing season.
- **Jack Sinn Wildlife Management Area** (1,352.3 acres) – Located south of Ceresco in Saunders and Lancaster counties. This area is owned by the NGPC. Perimeter fencing construction continues. Management activities in 2010 were noxious weed control, woody vegetation removal, and prescribed grazing.

This program has been very successful and continues to accomplish many of the goals of the Implementation Plan for the Conservation of the Eastern Saline Wetlands. Your continued support for the conservation of these natural areas is appreciated. If you have any questions, please contact me at 476-2729 or [tmalmstrom@lpsnrd.org](mailto:tmalmstrom@lpsnrd.org). You can visit the saline wetland website at <http://lincoln.ne.gov/city/parks/ParksFacilities/wetlands/index.htm>