

Sponsor Name: Center for Rural Affairs**Nearest Town:** Hartington**Project Name:** Bird Habitat Enhancement**Project No:** 09-169**Amount Requested:** \$220,900**Term of Project Request:** 2**Review Group:** Education

This project addresses NETF priorities of habitat and soils. Results of project activities will enhance grassland bird habitat and soil quality while improving farm/ranch profitability. Management overview sessions around the state and four in-depth training sessions by UNL and others will help farmers and ranchers to better understanding of plant/soil/livestock management, leading to more use of management strategies that increase wildlife habitat, build soil quality and soil carbon levels, and improve business profitability. Video case studies and internet materials will allow ongoing training and wide distribution of information. Benefits to wildlife, plant diversity, soil carbon levels, and farm/ranch profitability will be monitored. Project funds of \$220,900 are requested and would be matched with \$16,750 non-NETF funds.

Sponsor Name: Central Platte Natural Resources District**Nearest Town:** Lexington**Project Name:** Aquifer Tests for Defining Aquifer Parameters in Support of Magnetic Resonance Soundings for Groundwater Model Development**Project No:** 08-130-2**Amount Requested:** \$291,350**Term of Project Request:** 2**Review Group:** Statement of Intent

To better understand future and long-term effects related to Integrated Management including drought on the central Platte River riparian ecosystem and to effectively manage water resources, the COHYST ground-water flow model is being constructed to simulate current and/or future ground-water and surface-water conditions. The predictive accuracy of this model depends upon the quality and quantity of hydrogeologic data available in the study area. Input parameters are typically derived from test holes and aquifer pump tests, and the existence of this data is often sparse and additional drilling can be time-consuming and expensive. Magnetic Resonance Sounding (MRS) is a quick, non-intrusive surface geophysical technique that directly measures ground-water to gather information similar to that gained by aquifer pump tests, specifically hydraulic conductivity and water in storage. These are valuable parameters that can improve the accuracy of ground-water models, therefore enabling water-resource managers to make more informed decisions.

A recent application of the MRS technique at Lexington, Nebraska showed excellent results. However, ground truth data in the form of long term aquifer tests is limited to only one site among the 11 sites surveyed to make an assessment of the accuracy of this data, or to assure that the proper calibration parameters are being used. Two additional sites have been selected for these aquifer tests. Additional MRS measurements are necessary in conjunction with timely, appropriately located ground truth data to realize the full potential of this technology as an alternative to extensive well drilling and pumping test. The data collected will be used in a sub regional groundwater model, based on the COHYST model, which is currently under construction by the CPNRD and NPPD.

THIS PROJECT WAS SUBMITTED IN 2007 BUT NOT FUNDED DUE TO PLACEMENT ON THE RANK ORDER LIST. THIS PROJECT WAS FUNDED \$152,900 IN 2008 WITH THE INTENT TO FUND UP TO \$291,350 IN YEAR TWO AND \$243,600 IN YEAR THREE PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE SECOND YEAR REQUEST.

Sponsor Name: Ducks Unlimited, Inc.**Nearest Town:** York**Project Name:** "Roundouts" in the Rainwater Basin**Project No:** 09-131**Amount Requested:** \$392,046**Term of Project Request:** 2**Review Group:** Rural Habitat

The "Roundouts" in the Rainwater Basin proposal is a unique, ground-breaking, experimental effort to restore and protect vitally important wetland habitats. The Rainwater Basin is a landscape originally blessed with over 100,000 acres of shallow wetlands. In the past 150 years, the majority of these wetlands have been drained and converted to cropland. Millions of migratory birds continue to descend upon the remaining wetlands each spring, stopping to rest and feed prior to resuming their northward migration. The Nebraska Game and Parks Commission (NGPC) and the U.S. Fish and Wildlife Service (USFWS) have acquired approximately 15,500 acres of wetlands in this region. However, many of these wetlands extend across property boundaries onto adjacent, privately-owned lands that are managed for different purposes. In this situation, most of these wetlands are not fully restored. In some instances, the drainage feature, such as a ditch or tailwater recovery pit, is located on the adjacent privately-owned land. Restoration would negatively impact the adjacent property. Management of these wetlands is difficult because of fragmented ownership. NGPC and USFWS continue efforts to acquire properties that lie adjacent to lands already owned when that acquisition will result in ownership of an entire wetland "footprint." The term "roundout" refers to the acquisition of a property that results in the ownership of an entire wetland footprint. Previous efforts have focused on the direct acquisition of roundouts. However, most of these are simply not for sale. Under this proposal, irrigated cropland will be acquired in the vicinity of high priority roundouts. Landowners of the priority roundouts will then be approached with a proposal to trade the desired roundouts for the higher quality irrigated cropland. Roundouts contain wetland footprints, which are generally not considered high quality cropland. Consequently, it is believed this approach to acquire roundouts will be successful. SIMILAR RAINWATER BASIN ACQUISITION PROJECTS WITH DUCKS UNLIMITED HAVE BEEN FUNDED \$1,225,000 FROM 2002- 2007.

Sponsor Name: Ducks Unlimited, Inc.**Nearest Town:** Hastings**Project Name:** Rainwater Basin Fencing Needs - Improving Habitat through Grazing**Project No:** 09-186**Amount Requested:** \$211,589**Term of Project Request:** 1**Review Group:** Rural Habitat

Nebraska's Rainwater Basin is arguably the most important spring migration habitat for waterfowl in the mid-continent. Each spring, 5 to 15 million migratory birds descend on this landscape to rest and refuel before continuing north to prairie and arctic nesting grounds. Unfortunately, the Rainwater Basin has undergone extensive wetland loss since settlement. To reverse that trend, Ducks Unlimited and multiple conservation partners working in the Rainwater Basin have focused efforts on restoration and long-term protection of privately owned wetlands. However, restoration and protection of these critical wetlands is only half the battle. Once restored, some type of disturbance to promote early-successional annual wetland plants must occur or they become dominated by undesirable species such as cattail, river bulrush, and reed canary grass. Livestock grazing is an exceptional tool to provide that disturbance to maintain plant communities in the desirable early-successional stage while providing a sustainable agricultural practice benefiting private landowners. With this proposal and contributing partner funds, 13 protected properties, working with 9 private landowners, will be fenced for the purpose of instilling a grazing regime that improves habitat quality where extensive conservation dollars have previously been invested. Over 16 miles (93,488 linear feet) of fencing will be installed in order to generate the ability to graze 643 acres of wetlands and 318 acres of native grasslands. By giving the landowner the ability to graze, livestock will remove undesirable species, allowing early-successional plants an opportunity to proliferate. The fencing projects will also provide a long-term source of management that will serve to maintain habitats in the desired condition. The Rainwater Basin fencing grant not only improves habitat for wildlife, grazing will provide a sustainable agricultural practice with an economic return to the landowners that participate in the project.

Sponsor Name: Ducks Unlimited, Inc.**Nearest Town:** Mitchell**Project Name:** Spotted Tail Water Enhancement Project**Project No:** 09-187**Amount Requested:** \$156,294**Term of Project Request:** 1**Review Group:** Rural Habitat

Under this proposal, the Spotted Tail Water Enhancement Project will greatly increase and accelerate habitat conservation goals on the Platte River in Nebraska. The Spotted Tail property is located in Scottsbluff County and composed of 830 acres of floodplain habitat on the north bank of the North Platte River. Owned by Platte River Basin Environments, Inc. (PRBE), a non-profit organization dedicated to protecting critical wildlife habitat in perpetuity, the property offers almost two miles of North Platte River frontage. An irrigation ditch constructed in the 1960's currently diverts significant water from passing through the numerous remnant side channels, sloughs, and wet meadow habitat that make up a majority of the Spotted Tail property. That diversion does not allow the natural flow to run through more than 580 acres of wetland habitat that is currently not functioning. The ultimate goal of the Spotted Tail Water Enhancement Project is to redirect a portion of the irrigation flow back through the natural waterways, throughout the floodplain of the property. The project will also remove invasive Russian olive, saltcedar, and phragmites on 75 acres of floodplain habitat, thus improving the shortgrass prairie community on the property. This proposal requests funds from NETF to assist with the diversion costs to provide water to the presently non-functioning 598 acres and 2 miles of river floodplain wetland habitat. Ducks Unlimited has secured over 53% of restoration funds needed through a North American Wetlands Conservation Act, U.S. Fish and Wildlife Service, Platte River Basin Environments, and High Plains Weed Management Association to support the enhancement work on the Spotted Tail tract. NETF funds would be the vital component that maximizes the overall environmental benefits of the project by providing the supplemental water source needed.

Sponsor Name: Eastern Loess Canyon Rangeland Alliance**Nearest Town:** Brady**Project Name:** Invasive Species Control in an Ecologically Sensitive Landscape**Project No:** 09-170**Amount Requested:** \$35,660**Term of Project Request:** 1**Review Group:** Rural Habitat

This project is a result of the efforts of the Prescribed Burn Task Force to stimulate the formation of partnerships between local stakeholders to promote the conservation practice of prescribed burning. The Loess Canyons Rangeland Alliance (LCRA) was one of the initial entities formed by this effort. Due to the increasing demand for prescribed burning for control of eastern red cedars in this environmentally sensitive landscape, the LCRA has been unable to stay abreast of equipment & manpower requests. Additionally, to achieve the mortality levels on the invading cedars needed to accomplish conservation objectives requires specific weather conditions. This limits the number of burns the LCRA is able to conduct prior to spring green up. The vision of the LCRA is to spearhead a landscape scale invasive species control effort throughout the Loess Canyons. To implement this vision, the group plans to foster chapters throughout the Loess Canyon landscape, complete with the manpower, equipment and technical expertise to conduct burns independent of one another. This will allow multiple burns to occur on the days with favorable conditions, exponentially increasing the effectiveness of the landscape scale control effort. Formation of the ELCRA is the first step in the process. The LCRA will provide the political infrastructure model and supplement the NRCS in providing technical expertise for the new chapter. We are asking the Nebraska Environmental Trust Fund to provide the funding for the equipment necessary to safely conduct the prescribed burn.

Sponsor Name: Elkhorn Sanitation Service **Nearest Town:** Omaha
Project Name: RecycleBank **Project No:** 09-178
Amount Requested: \$272,000 **Term of Project Request:** 1 **Review Group:** Waste Management

Elkhorn Sanitation Service (ESS) is a locally-owned residential and commercial waste hauler in Greater Omaha serving Cass, Douglas, Sarpy, Saunders and Washington counties. ESS offers residential customers recycling through its exclusive RecycleBank partnership allowing homeowners to earn rewards for recycling. RecycleBank is a premier national rewards program that motivates people to recycle more by tracking and awarding points for every pound of recyclables collected curbside. Points can then be exchanged for tangible rewards, including discounts and gift certificates redeemable at local and national retailers for useful and necessary household items such as groceries and clothing among numerous others. RecycleBank partners with local haulers in various states including ESS in Omaha, Nebraska. ESS delivers to its customers a 96-gallon, RFID-tagged RecycleBank cart that allows consumers to commingle all their recyclables for twice-monthly pickup. This single-stream processing, combined with the large cart, is proven to increase recycling in all communities surrounding current service areas. In fact, ESS collected 98 tons of recyclables in its first month of RecycleBank service, up from 44 tons in the previous month. Participating households are currently recycling 80-90 percent of their waste. Truck-mounted scales and RFID technology are required to track the volume of recyclables and report data to subscribers' RecycleBank accounts. Elkhorn Sanitation Service is requesting funding for a hauling truck and the equipment required (scales and RFID scanners) to absorb the growth of and facilitate densification of current routes to serve more households with its RecycleBank program. The addition of one truck will allow ESS to reach further into new communities surrounding current service areas. ESS will use this truck to more efficiently meet a goal of 15,000 household subscriptions for RecycleBank service to increase recycling rates by making recycling easy and financially rewarding to consumers.

Sponsor Name: Glastone LLC **Nearest Town:** Lincoln
Project Name: Glastone **Project No:** 09-158
Amount Requested: \$167,270 **Term of Project Request:** 1 **Review Group:** Waste Management

The intent of this project is to create a local market for recycled glass through the small scale manufacture of countertops and tile. The product will use post consumer glass collected from local individuals and businesses to create a countertop material that competes with man-made and natural stone products. This business model would divert material from the local waste stream, add considerable value and be locally marketed. Local jobs would be created through the facilities necessary to process the raw waste glass and the manufacturing plants where the finished sustainable building material is produced. In addition, the creation of visible and tactile products helps to educate the public on the completion of the recycling loop. The project sponsor, Glastone LLC, is a new company formed to produce this product and is under the same ownership and benefits from the expertise of Straw Sticks & Bricks, an established green building supply company which currently operates in Nebraska, Missouri, Kansas and Colorado.

Sponsor Name: Grand Island, City of **Nearest Town:** Grand Island
Project Name: Central Nebraska Environmental Complex **Project No:** 09-106
Amount Requested: \$796,360 **Term of Project Request:** 1 **Review Group:** Waste Management

The Central Nebraska Environmental Complex is a strategically located facility that provides a multi-facet approach to preserving natural resources. The complex offers space for safe recycling and disposal of household hazardous waste, computers, aluminum, educational resources, job training, and reuse of materials. The complex has the potential to protect air, land, and groundwater from contamination of inappropriate disposal of hazardous waste materials. It will further divert materials from landfills while reducing risk to sanitation workers and first responders. Inappropriate disposal consists of discarding materials down drains, storm sewers, on the ground or through solid waste services. The City of Grand Island is requesting \$796,360 from the Nebraska Environmental Trust for the construction of a 7,650 sq. ft. Central Nebraska Environmental Complex. The facility is designed and sized to meet the needs of the primary service area. This service area is outlined within the interlocal agreement and covers 79,952 citizens or 31,981 households. Grand Island serves Central Nebraska as a retail hub for 350,000 citizens or 140,000 households. The average home can accumulate as much as 100 pounds of household hazardous waste according to the United States Environmental Protection Agency. The retail pull will increase the use of the complex with proper marketing, potentially serving hundreds of thousands of Nebraska residents annually. This retail pull is considered a secondary service area. In 2004, the Grand Island City Council identified the need for a household hazardous waste and recycling facility. In 2006, a \$75,000 Nebraska Department of Environmental Quality grant funded the architectural and engineering design of such a facility. The 2008 City Council goals include securing funding and construction of the Central Nebraska Environmental Complex. Furthermore, the City Council set the continued effort of aggressively addressing environmental issues and advocating for citizens as an additional goal. THIS PROJECT WAS SUBMITTED IN 2007 BUT NOT FUNDED DUE TO PLACEMENT ON THE RANK ORDER LIST.

Sponsor Name: Groundwater Foundation, The **Nearest Town:** Statewide
Project Name: Growing Groundwater Awareness in Nebraska **Project No:** 09-155
Amount Requested: \$177,377 **Term of Project Request:** 3 **Review Group:** Education

Nearly 85% of Nebraskans rely 100% on groundwater, therefore it is crucial that at least 85% of Nebraskans are conscious of this resource and are actively protecting it. Nebraskans have thrived on the abundant supply of clean, plentiful groundwater. Recently the media has provided information about threats to our water supply. Our state is dealing with costly solutions to water issues. Yet much of our citizenry lacks the fundamental information regarding groundwater, the resource that puts our state in a unique and critical position for the future. The GF has recognized the need for an orchestrated, multi-media campaign, entitled Growing Groundwater Awareness in Nebraska (GGAN). GGAN will generate awareness of and concern for Nebraska's vital resource, groundwater. It will create clear, positive, yet concerned messages for the general public; it will enlighten, motivate and empower our citizenry to play a part in protecting our groundwater. GGAN will render Nebraska's water resource a uniting factor not a dividing factor. GGAN will be developed as a coordinated, cohesive media campaign by the GF and an Advisory Committee. The campaign will utilize strategies derived from extended research conducted on effective messaging to create environmental behavior change. This will be accomplished by utilizing traditional media outlets to divulge the messages in addition to providing on-site, hands-on activities, the creation of an interactive web site, and continued monitoring and evaluating of the methods employed throughout the project. Funding from the Nebraska Environmental Trust will cover 50% of the overall costs related to the entire GGAN project.

Sponsor Name: Groundwater Foundation, The**Nearest Town:** Statewide**Project Name:** Infiltration: Groundwater Education that Sinks In**Project No:** 09-156**Amount Requested:** \$130,565**Term of Project Request:** 3**Review Group:** Education

The Groundwater Foundation (GF) is seeking funding for a multi-dimensional, three-year program titled Infiltration: Groundwater Education that Sinks In. The goal of Infiltration is to provide in-depth educational experiences for both youth and adults about Nebraska's groundwater resources. Infiltration will include three components. Water Ways, interactive youth education at various venues; Groundwater-ology, groundwater educational tools and interactive web information; and Water Workshops, adult education on a variety of Nebraska water issues. The three components of Infiltration are critical elements to creating a better understanding of groundwater as a crucial resource in Nebraska. It is especially important at a time when water conservation and protection is becoming a common subject given the potential effects of climate change. Citizens, young and old alike, will need to be capable of making informed decisions, and as such their exposure to groundwater concepts must go beyond what is learned in school. Opportunities to learn about basic groundwater issues, new science and technology with potential impacts to groundwater, groundwater conservation, groundwater protection, and the relationship all of this has to their lives must be made available. Infiltration represents GF's ongoing commitment to educating Nebraskans about the nature and value of groundwater as we enter a period where individual actions play a vital role in the protection of this natural resource for the future.

Sponsor Name: High Plains Weed Management Association**Nearest Town:** Scottsbluff**Project Name:** Nine Mile Creek Invasive Species Control and Habitat Restoration**Project No:** 08-102-2**Amount Requested:** \$9,900**Term of Project Request:** 2**Review Group:** Statement of Intent

The Nine Mile Creek Watershed Council has a management plan in place that has resulted in Nebraska Environmental Trust Fund awarding \$410,000 to secure approximately 450 acres of riparian buffer strips along the streams in the watershed. This has addressed "lotic" wetlands by assuring that the buffered area will not be disturbed by livestock encroachment. Additional work needs to be done to restore these areas to their most productive status. The US Environmental Protection Agency awarded the Nine Mile Creek Project a grant of \$80,900 to eradicate "invasive species" in the watershed. This part of the management plan is still in effect. The Russian olive trees have been removed, spraying to control noxious weeds is ongoing, and Salt cedar trees have been foliage sprayed. The results, after 3 years, are very encouraging. It has been determined that with 3 more years of constant attention being paid to controlling re-growth of Russian olive sprouts and eradicating any new growth of noxious weeds, the "Rehabilitation of Nine Mile Creek" will be a major success. Section 319 funds are being used to fund the watershed coordinator's position, install best management practices, and ensure the success of the project.

The Nine Mile Creek Management Plan has long range goals and objectives that continue to address the situation. The Nine Mile Creek Management Plan includes tours for state and local agencies, conducting workshops for area school students, engaging local civic organizations, and promoting the project with brochures, media coverage, and handouts. An award winning video was made chronicling the history, farming practices, and changes that are found within the watershed. This has been the most effective promotion tool to date.

THIS PROJECT WAS FUNDED \$8,500 IN 2008 WITH THE INTENT TO FUND UP TO \$9,900 IN YEAR TWO AND \$9,900 IN YEAR THREE PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE SECOND YEAR REQUEST.

Sponsor Name: League of Nebraska Municipalities - Utilities Section **Nearest Town:** Lincoln
Project Name: Water/Wastewater/Stormwater Environmental Protection Automation **Project No:** 09-109
 Network
Amount Requested: \$117,000 **Term of Project Request:** 2 **Review Group:** Water

Public works infrastructure failures, whether created by disaster, mechanical dysfunction or even human error almost always result in an environmental impairment such as discharge of untreated wastewater into a stream or groundwater. Sometimes this impairment can be remedied immediately, but sometimes assistance, or the needed parts, can be many hours or even days away. This project will create a 24 hour secured searchable database of personnel, equipment, materials that can be made available to government owned water, wastewater, and stormwater systems when a system experiences a disaster, mechanical failure, or human error. This project will create an online rapidly deployable network of government owned water, wastewater and stormwater systems that can provide almost immediate assistance to another system that might need assistance. The financial challenge will be to create the initial database and creating a common "language" through direct hands-on communication with participating systems so that they can begin using a common "language" for available assistance, such as understanding that one water system might call a piece of equipment a "skid loader" while another system calls that same piece of equipment a "bobcat." Rapid deployment will necessitate that all systems use the same terminology.

Sponsor Name: Lincoln Children's Zoo **Nearest Town:** Lincoln
Project Name: The Lincoln Safari **Project No:** 09-139
Amount Requested: \$180,000 **Term of Project Request:** 3 **Review Group:** Education

Eight organizations in the Lincoln, Nebraska, area have created the "Healthy Families Play Outside" (HFPO) collaboration to directly address a growing crisis in the nation's youth. Research by Richard Louv and many others show a steadily declining interest and participation in outdoor activity - with serious consequences. The partner organizations share a commitment to environmental education and are responding to this research: the Lincoln Children's Zoo, the University of Nebraska Extension, the Nebraska Statewide Arboretum, Lincoln Parks and Recreation Department, the Nebraska Game and Parks Commission, the Dimensions Educational Research Foundation, the Groundwater Foundation, and the Lower Platte South Natural Resources District. The most visible and successful program of the HFPO collaboration is the "Lincoln Safari", which includes an outdoor scavenger hunt and a variety of individual activities, programs, and educational handouts created, implemented and focused by each partner for its corresponding audience. Halfway through its first year, the Lincoln Safari has had major impact on public awareness and visitation to Safari sites. This program has already motivated 4,500 families - 20,000 people to "get off the couch and out into nature" and to some surprising places. Rubbing posts, placed at obscure locations, have introduced families to nature they simply would never have visited otherwise. The Safari isn't limited to encouraging outside play, it provides both a template and motivation for experiencing nature; providing the partners with expanding opportunities for environmental education. The Lincoln Safari takes participants to the very places the Nebraska Environmental Trust seeks to preserve, and creates an ideal opportunity to teach environmental stewardship. This request would fund the Lincoln Safari for three years.

THE TRUST FUNDED A \$2,500 PIE GRANT IN 2007 TO SUPPORT OTHER ACTIVITIES OF THIS PARTNERSHIP (RICHARD LOUV LECTURE).

Sponsor Name: Lincoln, City of **Nearest Town:** Ceresco, Davey, Lincol
Project Name: Eastern Saline Wetlands Project 2008 **Project No:** 08-129-2
Amount Requested: \$400,000 **Term of Project Request:** 2 **Review Group:** Statement of Intent

The Eastern Saline Wetlands Project 2008 will conserve the most imperiled natural community in Nebraska. The targeted eastern saline wetlands ecosystem is located primarily in the Salt Creek watershed in northern Lancaster and southern Saunders counties. Conserving the eastern saline wetlands also protects the endangered Salt Creek tiger beetle and saltwort plant as well as other fauna and flora which survive in the saline wetlands unique to this limited area of the state. Only about 4,700 acres of saline wetlands still exist and these acres are only partially conserved.

Conservation would be afforded the saline wetlands in four ways:

1. By acquiring the wetlands and adjoining buffer and connective tracts in fee simple from willing sellers.
2. By purchasing permanent conservation easements from willing sellers on the wetlands and adjoining buffer and connective tracts.
3. By continuing to retain a full-time Saline Wetlands Coordinator with a portion of the matching fund contributions.
4. By restoration and management work on the wetlands.

No commercial, industrial, residential, or other use detrimental to the protected ecosystem would be allowed on project lands. Land acquired or conserved by a conservation easement would be largely left in its natural state or used for limited agricultural purposes. The saline wetlands are largely in the flood plains of the streams; the conservation of them will provide a permanent measure of flood control along the waterways and protect the quality of the stream water and groundwater from typical urban and agricultural pollutants.

With the existing Saline Wetlands Conservation Partnership and a Coordinator focused on the project, the partners will implement the Conservation Action Plan; a framework for more effective and higher-leverage conservation of the eastern saline wetlands as an integrated unit.

We feel the Eastern Saline Wetlands Project 2008 qualifies for the feature program bonus.

THIS PROJECT WAS FUNDED \$1,550,000 FROM 2002-2007. THIS PROJECT WAS FUNDED \$800,000 IN 2008 WITH THE INTENT TO FUND UP TO \$400,000 IN YEAR TWO PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE SECOND YEAR REQUEST.

Sponsor Name: Lincoln, City of **Nearest Town:** Lincoln
Project Name: Rain Garden Water Quality Project **Project No:** 08-132-2
Amount Requested: \$100,000 **Term of Project Request:** 1 **Review Group:** Statement of Intent

Install approximately 90 rain gardens throughout the City and to create a comprehensive educational campaign about the benefits of homeowner rain gardens. Installing approximately 18,000 square feet of rain gardens to provide on-site treatment of runoff will improve the quality of stormwater in the City. The benefits are realized by removing pollutants from stormwater, providing localized runoff control, reducing erosion, catching sediment, improving habitat and adding aesthetic value to the property. Many rain gardens will be installed in front yards of private property or at schools to be visible to the public so the entire neighborhood can benefit from the rain garden's aesthetic and functional features.

The educational campaign will include soliciting rain garden installations on private properties, giving each homeowner the opportunity to improve stormwater quality and teach others about improving stormwater quality. Educational information about rain gardens and other water quality issues will be presented at public meetings, events, websites, and other media. Installation of rain gardens at area schools will enhance the educational campaign through coordination with science lesson plans. A broader audience will be reached because students will have a hands-on opportunity to learn about and maintain a rain garden. The major benefit of this program is improving the quality of stormwater and actively incorporating public participation.

The City of Lincoln is seeking a match for this proposal. The cost would be covered 51% by Nebraska Environmental Trust for rain gardens, education, and administration; 21% by NDEQ for rain gardens, education and administration; 14% by the private sector for rain gardens; 7% by the Lower Platte South NRD for rain gardens and 7% by the City for rain gardens.

No state or federal permits are needed for the completion of the project.

THIS PROJECT WAS FUNDED \$45,000 IN 2008 WITH THE INTENT TO FUND UP TO \$100,000 IN YEAR TWO PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE SECOND YEAR REQUEST.

Sponsor Name: Lincoln, City of **Nearest Town:** Lincoln
Project Name: NDOR/Salt Creek Floodplain Property **Project No:** 09-133
Amount Requested: \$144,100 **Term of Project Request:** 1 **Review Group:** Rural Habitat

This project seeks to protect the quality of water in Salt Creek by protecting and preserving natural buffer and floodplain land adjacent to Salt Creek. This project will focus on acquiring a parcel of land that is in the Salt Creek floodplain, has natural resource value with red oaks and bur oaks and has the potential of being developed. This land will serve as a natural barrier for stream protection by creating and preserving this natural resource. By protecting the water quality, the project will protect all stream dependent life and its habitat including the downstream habitat of Salt Creek tiger beetle, and endangered species. The acquisition of land for floodplain protection and restoration of natural resource areas will further ensure that the children of Lancaster County will have in the future, s substantial, close-at-hand, permanent natural environment in which to learn about nature and the environment. This land is adjacent to existing city owned park land and abandoned railroad corridor with a trail. It is also adjacent to the Prairie Bowmen Club, an archery club which is located on land with similar natural resource features. The natural resource area will be acquired by the sponsor from a willing seller. A letter of agreement is attached. The City of Lincoln in 1999 identified parcels of land important for the protection of the Salt Creek floodplain by either fee simple acquisition or conservation easement. This parcel was one identified. The land is currently owned by the State of Nebraska and has been identified as surplus land they would like to sell. We think it is important to acquire this parcel for floodplain protection instead of being acquired by a developer who can fill the floodplain and develop it.

Sponsor Name: Lincoln, City of **Nearest Town:** Lincoln
Project Name: Friends of the Urban Forest **Project No:** 09-181
Amount Requested: \$289,829 **Term of Project Request:** 3 **Review Group:** Urban Habitat

Lincoln Parks & Recreation Department (LPRD) will develop a pilot project called "The Friends of the Urban Forest", targeting tree condition assessment, diseased tree removal, tree planting and replacement, and tree maintenance in Lincoln, Nebraska's core neighborhoods. The three-year project will employ one full-time Project Coordinator and six AmeriCorps Members (stipended volunteers in service to their country and community), who will be supervised by Steve Schwab, City Arborist. The project will organize neighborhood associations and community volunteers to complete many of the project's activities, and will leverage additional federal support through the Corporation for National & Community Service and private support from corporate foundations such as the Home Depot Foundation. The project will address NET priorities of Habitat; Surface & Ground Water, and Air Quality. The project will develop a replication manual and training videos, which will be placed on-line for other Nebraska communities to utilize to stretch limited state and local dollars dedicated to tree planting and maintenance.

Sponsor Name: Lower Big Blue Natural Resources District **Nearest Town:** Wymore
Project Name: Big Indian 11A Watershed Improvement Project **Project No:** 09-132
Amount Requested: \$275,000 **Term of Project Request:** 1 **Review Group:** Water

The LBBNRD and Big Indian 11A Stakeholders have been working to develop a Watershed Management Plan to protect and reduce the amount of sediment and phosphorus entering Big Indian 11A, Big Indian Recreation Area, and to improve the water quality within the lake and the watershed. The Lake is currently included on the Section 303(d) listing of "impaired" and "threatened" waters. In 2008, the LBBNRD was awarded a \$150,000 grant from the NET to support watershed and in-lake water quality work at Big Indian Reservoir. At the time the application was submitted, project partners were anticipating funding through the Aquatic Habitat Stamp administered by the NGPC. Since that time, the project partners learned that Big Indian Reservoir did not make the final Aquatic Habitat project list. Given the importance of this reservoir to the public and the need to remove it from the list of impaired waters, the LBBNRD is requesting additional funds from the NET to complete in-lake work. NET funds will be used specifically to construct in-lake wetlands and sediment retention structures. Based on NDEQ calculations, these structures will reduce sedimentation enough for the removal of the reservoir from the list of impaired waters. Additional NET funds are critical to meet water quality goals and more so, to proceed with this project. Given the high priority of this project, funding from NDEQ has been increased beyond what was initially approved to help address the budget shortfalls. The LBBNRD is seeking a 1-year NETF grant for \$275,000 to assist in the construction of the in-lake wetlands and sediment retention structures, and to be used as match to receive additional funds from other sources, \$1,116,250 federal money and \$300,000 local money.

Sponsor Name: Lower Niobrara Natural Resources District **Nearest Town:** Multipl
Project Name: Irrigation Water Management Monitoring Program **Project No:** 09-102
Amount Requested: \$90,000 **Term of Project Request:** 3 **Review Group:** Water

Funding is being sought from the Environmental Trust to provide flowmeters for interested landowners participating in any monitoring programs within the Lower Niobrara Natural Resources District (LNNRD). A flowmeter, depending on model and brand costs roughly \$1,400 with installation. The LNNRD would be using the Trust funds to purchase a flowmeter and cover the installation cost with NRD funds to a maximum of \$1700 per approved site. The LNNRD includes parts of five counties in northern Nebraska, and encompasses approximately 1,699,200 acres consisting primarily of agricultural land. Around 200,000 acres are irrigated by 1,700 high capacity wells with an average well irrigating 133 acres. Each of the thirteen communities and all rural residents in the District depend on groundwater for their water supply. Groundwater levels in the LNNRD have fluctuated between two to five feet on average during the last five years. Drier than "normal" conditions in combination with a newly developed water law, LB962, has prompted a large amount of new irrigation well development. The LNNRD estimates nearly 40,000 new acres have been developed for irrigation since January of 2000. Quantifying the amount of groundwater utilized for irrigation is essential for water and nitrate management. Having a better understanding of total amount of water irrigated along with pumping rates gives the landowners an ability to keep up with crop water requirements. Better information on the amount of water withdrawn from the aquifer used in combination with changes in static water levels will provide the LNNRD board of directors and other policy makers with a key piece of information when updating a quantity management section to the Groundwater Management Plan (GWMP). Information from this project will also be submitted for use in the Elkhorn-Loup Modeling (ELM) Project of which the LNNRD is an active participant.

Sponsor Name: Lower Platte North Natural Resources District **Nearest Town:** multiple
Project Name: Lower Platte River Modeling Study **Project No:** 08-116-2
Amount Requested: \$51,261 **Term of Project Request:** 2 **Review Group:** Statement of Intent

The purpose of this project is to develop a regional groundwater flow model that will be used to analyze the interactions of aquifer-stream-well systems and to determine the 10/50 boundary line for wells that are hydrologically connected to rivers and streams. The model will focus on the following counties: Saunders, Butler, Colfax, and Dodge, which are administered by the Lower Platte North NRD. This project consists of two phases: phase I - development of model framework, phase II - hydrologic data collection and groundwater stream model development. This model will be used as a management tool for the districts water resources. A SIMILAR PROJECT TO IDENTIFY AQUIFER SUB-AREAS IN THE DISTRICT WAS SUBMITTED IN 2006 BUT NOT FUNDED DUE TO PLACEMENT ON THE RANK ORDER LIST. THIS PROJECT WAS FUNDED \$82,167 IN 2008 WITH THE INTENT TO FUND UP TO \$51,261 IN YEAR TWO AND \$42,938 IN YEAR THREE PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE SECOND YEAR REQUEST.

Sponsor Name: Lower Platte South Natural Resources District **Nearest Town:** Hickman, Swedeburg
Project Name: Eastern Nebraska HEM Aquifer Mapping **Project No:** 09-112
Amount Requested: \$291,200 **Term of Project Request:** 2 **Review Group:** Water

This project will map the hydrogeologic units of two aquifers in eastern Nebraska using helicopter electromagnetic surveys (HEM). The HEM survey and ancillary activities will dramatically improve the ability of the NRDs to preserve the quality and quantity of groundwater over a large area of rural Nebraska in which the pressures of population and demand are steadily increasing. One of the aquifers proposed for study extends across both the Nemaha and Lower Platte South Natural Resource Districts (NRDs). More than 1,000 wells pump from this aquifer, including the municipal wells of Hickman, Firth, Hallam, and Sprague. Elevated nitrate concentrations in groundwater exist in the area; both Hickman and Sprague are likely to be classified as Phase II Groundwater Management Areas by the Lower Platte South NRD in the near future. The results of the proposed HEM study will be used by Lower Platte South NRD to implement Best Management Practices to reduce the levels of nitrate in the effected portions of the aquifer and preserve the viability of community and domestic wells. The other aquifer proposed for study in this project underlies a smaller area near the boundary of the Lower Platte North and Lower Platte South NRDs. The limited quantity of water in this aquifer constitutes a significant supply problem for the Swedeburg area and a continuing management challenge for the Lower Platte North NRD. The Lower Platte North NRD will use the results of this study to accurately assess the sustainability of the current development of this resource. Maintaining a supply of high-quality, locally attainable groundwater to small communities and rural residents of eastern Nebraska directly affects the local to regional economy and the overall quality of life. Public funding of water resources studies is the essential impetus toward providing a factual basis for long-term water-resource policy and effective management.

Sponsor Name: Lower Platte South Natural Resources District **Nearest Town:** Denton
Project Name: Denton Area Grasslands Conservation Easements **Project No:** 09-137
Amount Requested: \$750,000 **Term of Project Request:** 3 **Review Group:** Rural Habitat

The Lower Platte South NRD has been contacted by three landowners in the Denton, Nebraska area who are interested in selling perpetual conservation easements to protect their grasslands from development. The three tracts encompass approximately 560 acres with unbroken prairie or a combination of unbroken prairie and reseeded grasslands. The Smith tract is adjacent to and south of Audubon's Spring Creek Prairie and contains headwater springs to the creek that flows across the Audubon's property. The Clement tract is located a mile north of Audubon's prairie and both the Smith and Clement tracts are adjacent to the prairie grassland easements acquired by the Natural Resources Conservation Service (NRCS). The Stiefel pasture is located two miles north of the Clement tract and is being pastured to encourage the native prairie plants and to suppress exotic species. After the terms of the conservation easements have been agreed to, each tract will be appraised. The appraisal will be the basis for the offer to purchase. After each conservation easement is signed, it will have to be approved by the Lincoln/Lancaster County Planning Commission before it can be recorded on the deed for each property. The Lower Platte South NRD has considerable experience in negotiating and acquiring conservation easements on a broad variety of landscapes including native woodlands, eastern saline wetlands, virgin prairies and grasslands. Since 1986, the District has acquired 1,057 acres of conservation easements. The District is asking for \$750,000.00 of Nebraska Environmental Trust Funds (75%) to be matched with \$250,000.00 of District funds (25%). With the acquisition of these 560 acres of conservation easements, the total grassland base in the Denton area will be 2,934 acres (808 - Audubon, 1,366 - NRCS, & 760 - NRD/NETF).

Sponsor Name: Middle Niobrara Natural Resources District **Nearest Town:** Johnstown
Project Name: Investigation of Aquifer Properties and Assessment of Spatial and Temporal Data Network in the Middle Niobrara NRD **Project No:** 09-110
Amount Requested: \$173,000 **Term of Project Request:** 1 **Review Group:** Water

The Middle Niobrara NRD is requesting funds in the amount of \$173,000 to facilitate collection of aquifer property data, to obtain water-level recorders, and to perform a spatial and temporal data network assessment. The water supply of the Niobrara River Basin in north central Nebraska has been identified as Fully Appropriated by the Nebraska Department of Natural Resources, and is used for irrigation, recreation, hydropower generation, and wildlife, sometimes controversially. The MNNRD also faces several water management issues, water quantity, quality, and ground-water/surface water relationships. The Niobrara River is unique due to the fact that 95% of its water comes from the underlying groundwater aquifer and management is needed to protect the resource. All of these activities require the best in data gathering, data analysis and modeling to choose the proper path to sustainable water resources and to address current and future management needs. An aquifer test is proposed, to gain enhanced knowledge of aquifer property data, taking advantage of nested monitoring wells recently installed near Johnstown, NE by the ELM group as part of a separate effort. Aquifer test study components also include drilling and installation of monitoring wells and a production well, with geophysical surveys, to gather information on aquifer properties, and obtaining additional water-level recorders to be used for the aquifer test as well as for long-term monitoring in the District. Accurate aquifer property and water-level data are crucial to making sound water-management decisions, and also can be used to update the ELM groundwater model, an important feature of MNNRD management tools. In addition, this study will provide MNNRD with a rigorous assessment of the spatial and temporal coverage of existing data, which will help guide future data collection efforts and to prioritize data most valuable and relevant to local and District water management issues.

Sponsor Name: Millard West High School**Nearest Town:** Omaha**Project Name:** Wetlands Rehabilitation**Project No:** 09-172R**Amount Requested:** \$14,710**Term of Project Request:** 1**Review Group:** Urban Habitat

This project will expand the learning environment for science and non-science students, including those with disabilities, by rehabilitating the school's wetland and creating an outdoor classroom. It will provide science students with authentic learning experiences of monitoring water and soil quality for classes. As well as monitoring for classroom work, the science students will collaborate with the U.S. Army Corps of Engineers to complete the required annual report documentation. Students in other subject areas will have the opportunity to learn in a natural setting. The project will increase community awareness of how wetlands contribute to the quality of life in the global environment. This includes educational components targeting students, parents, and the neighboring community to enhance awareness and understanding of sustainable water practices. The design is the result of conversations between the U.S. Army Corp of Engineers; Papio-Missouri Natural Resources District (NRD); Big Muddy Workshop, the architectural landscape firm contracted by the NRD; and Millard Public Schools. Based on those conversations, the rehabilitation will adhere to environmentally sound practices that follow federal mandates of the 1972 Clean Water Act. Project objectives are focused in the following three areas: 1) Wetland rehabilitation, while teaching students public policy and its value to conservation; 2) Constructing a rain garden to help maintain the rehabilitated wetland, 3) Expanding and enhancing the outdoor classroom to provide easier access for all students, including those who will monitor water and soil quality and those with disabilities. Millard West requests funding for half of the design fee and a portion of the construction costs. THE TRUST FUNDED THE INITIAL OUTDOOR CLASSROOM FOR \$30,000 IN 1994. THIS REQUEST WOULD BE A CONTINUATION OF THIS PROJECT.

Sponsor Name: National Wild Turkey Federation**Nearest Town:** Superior**Project Name:** Republican River Riparian Buffer Restoration**Project No:** 09-121**Amount Requested:** \$149,999**Term of Project Request:** 3**Review Group:** Rural Habitat

The NWTF's Stateline Strutters Chapter, located in Superior, Nebraska, will collaborate with NRCS, Nebraska Game & Parks Commission (NGPC) and U.S. Fish and Wildlife Service (USFWS) to restore wildlife habitat along the Republican River. Through the Republican River Riparian Buffer Restoration project, NWTF and its partners will remove undesirable tree species (including eastern red cedar, black locust and mulberry) and grasses (including smooth brome and downy brome) from the streamside area known as the riparian zone. Upon completion of woodland stand improvement, the partners will reestablish native grasses, native forbs and appropriate introduced legumes - creating nesting and brood rearing habitat for wild turkeys, northern bobwhite, and pheasants; and food and cover for white-tailed deer and small game species. The restored habitats will provide valuable habitat for rare or declining species by creating more open, diverse grassland habitats. In addition, water quantity and quality in the Republican River should increase as health of the riparian forest buffer improves.

Because it is difficult for most landowners to justify enrolling in WHIP and paying their 25% to 50% of the cost of restoration, the NWTF and its partners are requesting a grant from the Nebraska Environmental Trust to match the WHIP funds. This grant will enable the NWTF and its partners to provide private landowners with 90% cost-share assistance, ensuring increased participation in, and ultimately the success of, the Republican River Riparian Buffer Restoration project.

Sponsor Name: Nebraska Cattlemen **Nearest Town:** Statewide
Project Name: Leopold Conservation Award Video Project **Project No:** 09-168
Amount Requested: \$19,725 **Term of Project Request:** 3 **Review Group:** Education

Since 2006, Nebraska Cattlemen has partnered with Wisconsin-based Sand County Foundation to present the prestigious Leopold Conservation Award to a Nebraska landowner. These Leopold Conservation Awards recognize outstanding landowner achievement in conservation and land stewardship and showcase their achievements among their peers. The awards are designed as part of an overall conservation strategy to raise overall conservation literacy among landowners and the general public. After only two years, we can already see impact in the winners' immediate neighborhoods in the form of increased interest in putting conservation practices in place on the land. This is a proposal to leverage the awards even further by creating several video products of the winners' ranch and using the products to foster environmental education. The project involves a full day of crew time interviewing the landowner/winner and taping the conservation features s/he has put in place. The video will be professionally produced first as a stand-alone piece, shown at the Nebraska Cattlemen Convention and available elsewhere, and second as a series of 60-90 second pieces placed on YouTube.com, Google video, and so on. SIMILAR PROJECTS WERE SUBMITTED IN 2007 AND 2008 BUT NOT FUNDED. THIS PROJECT REQUESTS FUNDING FOR DIFFERENT COMPONENTS THAN PREVIOUS APPLICATIONS.

Sponsor Name: Nebraska College of Technical Agriculture **Nearest Town:** Curtis
Project Name: Biomass Energy System **Project No:** 09-184
Amount Requested: \$360,000 **Term of Project Request:** 1 **Review Group:** Waste Management

This project seeks funding for the installation of a biomass energy system at the Nebraska College of Technical Agriculture (NCTA) in Curtis, Nebraska. This system will be comprised of a biomass boiler system for steam heat. Woody biomass, usually in the form of wood chips, burned in a boiler, provides the thermal energy used for heating, cooling and/or power generation. NCTA currently pays \$120,000 per year for natural gas for heating and domestic hot water. Implementation of a biomass heating system will use a renewable energy source and reduce reliance on fossil fuels while also saving NCTA approximately \$50,000.00 per year in energy costs. There are more than 1,500,000 oven dry tons of live biomass in a 50 mile radius of NCTA. There are efforts to remove cedar trees in the Loess Canyons to the north and there is an ongoing tree removal program in the Republican River Basin to the south. There will be more than enough waste woody biomass from these two sources to supply the biomass needs at NCTA. The tree removal efforts in the Loess Canyons and along the Republican River basin are important components of comprehensive wildlife habitat improvement projects being administered by various conservation organizations. Currently, the vast majority of waste wood generated through these projects is piled and burned by private landowners, incurring a cost to them and resulting in undesirable carbon emissions. The completion of this project would be a great asset and complement to these conservation efforts by reducing their incidental negative environmental impact and increasing their longevity by providing an economically viable use for the invasive species effecting the two ecologically sensitive and important areas.

NCTA seeks funding of 47% of the cost of the biomass heating system. Additional infrastructure improvements will be made at NCTA in conjunction with this project but are not included in this request. The benefits of converting to a biomass energy system include: 1) Providing a 30-year market for woody biomass harvested from pasturelands overgrown with cedar, and from riparian areas with cedar and Russian olive trees; 2) Enhanced wildlife habitat and improved grazing land productivity; 3) Reduced risk of catastrophic wildfire; 4) Potential increased water flows in the Republican River; 5) Replacing new carbon producing fossil fuels with carbon-neutral wood; and 6) Increased rural economic development through job creation and increased income.

Sponsor Name: Nebraska Department of Agriculture **Nearest Town:** Statewide
Project Name: Nebraska Noxious Weed and Invasive Weed Initiative **Project No:** 09-151
Amount Requested: \$250,000 **Term of Project Request:** 3 **Review Group:** Rural Habitat

Invasive weeds are not native to Nebraska or the United States. They have no natural enemies to keep them in check. These plants compete for water and nutrients in grain crops and native grasslands throughout the state. Invasive weeds also compete with native plants, reducing the diversity of wildlife habitat. These invasive weeds are detrimental to Nebraska's agriculture, water quality, wildlife, and recreation. Invasive weeds can and will infest any type of land throughout Nebraska regardless of the land's use or value. Coordinated control measures across a large geographical area would alleviate some of the financial burden on private landowners in a control area. This concept would require participation from private and public landowners and managers. This would also allow participants to pool their resources and proceed in a coordinated manner in a large control area. Controlling invasive weeds over a large area would dramatically reduce the available seed bank, thus providing long-term control. Project funding would allow several counties or Weed Management Areas (WMA's) to work towards a common goal and outcome. All 93 counties would have the potential to participate and benefit from this project. THIS PROJECT WAS FUNDED \$250,000 IN 2005-2007. THIS REQUEST IS FOR A CONTINUATION OF THIS PROJECT.

Sponsor Name: Nebraska Department of Natural Resources **Nearest Town:** Statewide
Project Name: Riparian Vegetation Impacts on Water Quantity, Quality, and Stream Ecology **Project No:** 08-141-2
Amount Requested: \$199,470 **Term of Project Request:** 1 **Review Group:** Statement of Intent

This project's three year goal is to document and understand the complex behavior and response of river systems to riparian vegetation removal. It can help us to understand the effectiveness of various riparian vegetation management strategies in controlling consumptive water use in water short areas of the state, and especially in the Platte Basin above Columbus and the Republican Basin. This will help provide methods of improving ongoing efforts such as those funded through the Noxious Weed and Invasive Plant Species Assistance Fund and ultimately help us to better target efforts to provide maximum benefits in basins implementing limitations on water use. Specific objectives include: 1) Perform historical flood frequency analysis at select river basins to document changes in the disturbance regime. 2) Estimate maximum evapotranspiration (ET) in riparian areas across Nebraska's river networks. 3) Directly measure and quantify hydrologic fluxes and in-stream aquatic ecosystem health for two riparian-stream transects: (a) a control reach with invasive species, and (b) a reach with active invasive species removal. 4) Compare geomorphic controls on aquatic ecosystem health in control and treated stream reaches. 5) Adapt and implement a terrestrial ecosystem/land surface hydrology model across Nebraska's river basins to examine the regional water balance and potential impact of large-scale removal of riparian vegetation. 6) Compare and contrast historical river discharge with invasive species encroachment in order to estimate the in-stream flow regime required for maintaining a healthy riparian ecosystem. Project outcomes are expected to include: 1) Model based estimation of impacts of vegetation removal within riparian zones. 2) Analysis of impacts of vegetation removal on water quality, geomorphology and hydrology. 3) Basin-wide understanding and prediction of hydrologic impacts of riparian invasive species removal throughout Nebraska. 4) Analysis of minimum hydrologic disturbance regime required for maintaining riparian function and minimizing invasive species infestation. 5) Provide tools to better manage riparian vegetation for economic, social and environmental needs. An effort will be made to coordinate vegetation management efforts underway or about to begin for comparison and transects. UNL personnel are partnering on this effort and will carry out the needed work with significant off budget work expected to occur prior to receipt of any trust funds. THIS PROJECT WAS FUNDED \$224,490 IN 2008 WITH THE INTENT TO FUND UP TO \$199,470 IN YEAR TWO PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE SECOND YEAR REQUEST.

Sponsor Name: Nebraska Department of Natural Resources **Nearest Town:** North Platte, Clay Cent

Project Name: Quantifying Evaporation, Crop Evapotranspiration, and the Water Balance for Tilled and Untilled Fields **Project No:** 08-142-2

Amount Requested: \$179,906 **Term of Project Request:** 2 **Review Group:** Statement of Intent

The water managers of Nebraska are currently working very hard to reduce the consumptive use of water in the state so that we can sustain the use of our streams and aquifers for many years into the future. If these efforts are to be effective, we must accurately identify the causes of increased consumptive use. Many allege that the decrease in stream flows seen in many of the states streams are the result of conservation practices such as no-till farming. There are over eight million irrigated acres in the state and many of these are managed under no-till practices. Thus, the impacts of conservation measures on Nebraska's water supplies has become a key question facing water and land managers in the state. How much water use difference can be expected under different tillage practices? What is the seasonal and annual evaporation from a no-till field versus tilled field?

The benefits of no-till practices, such as energy savings, reduced dust emission, reduced wind and water erosion and enhanced soil quality have been documented for many years. However, one of the fundamental gaps in understanding the impacts of irrigated and dryland agriculture in Nebraska is the effect of the no-till practices on crop water use. The effect of different tillage practices on soil hydraulic properties and infiltration, runoff, deep percolation and other water balance components have not been sufficiently documented for Nebraska soil, climate and crop management conditions. Until we have this understanding we cannot be sure that we are focusing our management efforts in the right direction. In this project, the annual, seasonal, monthly and weekly ET losses from the no-till and conventional till fields will be quantified and the amount of surface evaporation difference between the two tillage practices will be determined. Differences in soil physical properties and hydrologic balance components of the two tillage practices for a center pivot-irrigated corn-soybean rotation will be measured. Methodologies will be developed to estimate ET from both fields using airborne and satellite remote sensing data. The project findings and knowledge will be transferred to clientele through appropriate means to help growers and their advisors to enhance irrigated and dryland agricultural productivity. SUMMARY TRUNCATED FOR SPACE. THIS PROJECT WAS FUNDED \$313,986 IN 2008 WITH THE INTENT TO FUND UP TO \$179,906 IN YEAR TWO AND \$180,268 IN YEAR THREE PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE SECOND YEAR REQUEST.

Sponsor Name: Nebraska Forest Service **Nearest Town:** Chadron

Project Name: Pine Ridge Stewardship and Legacy Project: Ferguson Property Acquisition **Project No:** 09-141

Amount Requested: \$240,000 **Term of Project Request:** 1 **Review Group:** Rural Habitat

We are requesting funding to acquire the 708-acre Ferguson property - a critical habitat located in the Pine Ridge of Dawes County. Acquisition and conservation of the property will enhance the network of conservation lands owned and managed by partners in the Pine Ridge, which include the Nebraska Forest Service (NFS), Nebraska Game and Parks Commission (NGPC), and the National Forest Service. Several public lands, including the Chadron Creek Ranch Wildlife Management Area (WMA), Chadron State Park and the Pine Ridge National Forest lay in close proximity to the Ferguson tract. The NETF was involved with the acquisition of the Chadron Creek Ranch WMA, and these areas serve as vital areas for conservation, recreation, public access, and conservation education.

The Ferguson property is critically important in that it:

- Falls within the Pine Ridge Biologically Unique Landscape, identified in the Nebraska Natural Legacy Plan as an area critical to Nebraska's biological diversity.
- Serves as critical habitat for mule deer, whitetail deer, elk, turkey as well as many other game and nongame species.
- Contains native plant communities including western mixed grass prairie, pine woodland, rock outcrops.
- Serves as habitat for native species including 5 Tier I and up to 28 Tier II species.

The Ferguson property is in imminent threat of urban development and if not protected, it will lose its ecological and cultural values. Conservation ownership is the only assurance that the site's native plant communities, wildlife, watershed values, air, and soil are protected in perpetuity. Acquisition of the tract would also allow for public recreation, conservation education, and will enhance the values of other surrounding public lands and investments (including those of the NET) made to acquire these lands.

We are requesting \$240,000 for acquisition and initial habitat improvement for the Ferguson property. The project partners will provide \$535,000 for acquisition including legal fees and closing costs. In addition, NGPC will contribute \$5,000 in habitat improvements.

Sponsor Name: Nebraska Game and Parks Commission **Nearest Town:** Statewide
Project Name: Nebraska Aquatic Habitat Rehabilitation Initiative **Project No:** 07-103-3
Amount Requested: \$175,003 **Term of Project Request:** 1 **Review Group:** Statement of Intent

The goal of the Nebraska Aquatic Habitat Rehabilitation Initiative is to conserve, restore and enhance water quality of aquatic ecosystems across the state using environmentally sound rehabilitation techniques. The Initiative goal will be accomplished through an ongoing program of project design, technical assistance and funding administration by the Nebraska Game and Parks Commission while working and cost sharing with private partners, local political subdivisions and municipalities. A major objective of this initiative is to facilitate completion of the aquatic rehabilitation projects that were submitted to and approved by the Legislature as part of the Aquatic Habitat Plan. The core of the Initiative's \$2,500,000 funding will be used to design, engineer and implement these water quality projects over a three year period. NGPC will match Initiative funds with Aquatic Habitat Stamp, Sport Fish Restoration, EPA Section 319, Bureau of Reclamation Title 28, Game Cash, Parks Cash and private monies to complete the projects. Potential project techniques include sediment/nutrient dikes, dredging, excavation, bank stabilization, offshore breakwaters, jetties, aeration, sediment by-passes, water level management, islands, submerged islands, riparian buffer zones, alum treatments, fringe wetland development and fish renovations. The Initiative will address the Trust's priorities for improving water quality and conserving water by rehabilitating lakes, reservoirs, rivers and streams in order to provide diverse, stable and productive habitats that support a greater diversity of flora and fauna. Associated human benefits would include high quality recreation and aesthetics. THIS PROJECT WAS FUNDED A TOTAL OF \$2,641,750 FROM 1997-2004. THIS PROJECT WAS FUNDED \$521,664 IN 2007 WITH THE INTENT TO FUND UP TO \$303,333 IN YEAR TWO AND \$175,003 IN YEAR THREE PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE THIRD YEAR REQUEST.

Sponsor Name: Nebraska Game and Parks Commission **Nearest Town:** Statewide
Project Name: Nebraska Natural Legacy Plan - Phase II Implementation **Project No:** 07-145-3
Amount Requested: \$285,000 **Term of Project Request:** 1 **Review Group:** Statement of Intent

The Nebraska Natural Legacy Plan (NNLP) is the state's first comprehensive wildlife conservation strategy. The plan included input from over 500 biologists, conservation practitioners, citizens and private landowners. A twenty-member Partnership Team, including representatives from major conservation, agricultural and tribal organizations guided the planning effort. This habitat-based plan identified over 500 at-risk species, key threats to those species, conservation actions needed to address those threats and 40 biologically unique landscapes (BULs) where conservation activities have the best chance to conserve the state's biological diversity. We are requesting \$850,000 of NET Funds for this three-year project. The project partners will provide \$705,000 in cash match. Our primary goal is to implement Legacy Plan flagship initiatives in seven selected BULs: 1) Wildcat Hills, 2) Middle Niobrara River Valley, 3) Pine Ridge, 4) Platte Confluence, 5) Sandstone/Southeast Prairies, 6) Indian Cave/Rulo Bluffs, and 7) Lower Platte River. Flagship initiatives are collaborative, community-supported enterprises that use voluntary and incentive-based conservation actions to address threats to at-risk species and natural communities, build awareness and support for conservation through education, initiate monitoring and research and support nature-based recreational opportunities. Presently, three flagship initiatives, partially funded by NETF, have been started in the Verdigre-Bazile Watershed BUL, Central Loess Hills BUL, and Loess Canyons BUL. Another goal of this project is to implement selected statewide conservation actions identified in the NNLP. Conservation actions, such as invasive plant control, prescribed fire, planned grazing, and wetland restoration will be implemented through voluntary, incentive-based programs, with the objective of conserving and managing at-risk species habitat, primarily on private lands. Project ranking, monitoring, and evaluation procedures are in place. The Nebraska Game and Parks Commission is the project sponsor and will conduct all project administration. We believe this project qualifies for the "Feature Program Bonus Points" and contains a water saving initiative. A REQUEST FOR PHASE I ACTIVITIES WAS SUBMITTED IN 2003 BUT NOT FUNDED DUE TO PLACEMENT ON THE RANK ORDER LIST. THIS PROJECT WAS FUNDED \$250,000 FROM 2005 THROUGH 2007. THIS PROJECT WAS FUNDED \$270,000 IN 2007 WITH THE INTENT TO FUND UP TO \$295,000 IN YEAR TWO AND \$285,000 IN YEAR THREE PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE THIRD YEAR REQUEST.

Sponsor Name: Nebraska Game and Parks Commission **Nearest Town:** Lincoln
Project Name: WILD Nebraska Program **Project No:** 08-150-2
Amount Requested: \$100,000 **Term of Project Request:** 2 **Review Group:** Statement of Intent

The Nebraska Game and Parks Commission and its' partners have been implementing the WILD Nebraska program on private lands in the state since 2000. This habitat based program has been widely accepted and received by ranchers and farmers throughout the state as a means of encouraging conservation and wildlife habitat on private lands. Currently, the agency allocates approximately \$250,000 towards WILD Nebraska and requests for these funds far exceed the annual allocation. With approval of this NETF grant, more funds will be available to private landowners fostering better stewardship on the landscape, creating better wildlife habitat, and increasing public use opportunities.

The main goal of WILD Nebraska is to increase and improve wildlife habitat on private land and public land not owned or controlled by the Commission to optimize recreational access opportunities. The program accomplishes its goal through 3 main objectives: 1) To increase quantity and quality of wildlife habitat in Nebraska to meet program and doctrine goals of the agencies strategic plan; 2) To evaluate current Nebraska Game and Parks Commission and non-Commission habitat programs and their impacts on regional habitat needs in Nebraska; and 3) To expand public access opportunities on private land and other publicly owned lands not currently open to public access.

The NETF grant request of \$300,000.00 (\$100,000.00 per year) will be distributed among habitat projects in approximately the following proportions: 40% to grassland/prairie projects; 40% to wetland projects; and 20% to woodland projects. Specific projects are not identified in this grant application so some latitude in project type will be necessary to maximize the grant outcomes. Acres resulting directly from NETF funding are estimated at 750-1200 grassland acres, 240-400 wetland acres, and 150-400 woodland acres. With partner contributions, the noted acreage estimates should be considered as minimum habitat benefits.

THIS PROJECT WAS FUNDED \$300,000 FROM 2004-2006. THIS PROJECT WAS FUNDED \$100,000 IN 2008 WITH THE INTENT TO FUND UP TO \$100,000 IN YEAR TWO AND \$100,000 IN YEAR THREE PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE SECOND YEAR REQUEST.

Sponsor Name: Nebraska Game and Parks Commission **Nearest Town:** Statewide
Project Name: Statewide Grassland Enhancement Project **Project No:** 08-157-2
Amount Requested: \$175,000 **Term of Project Request:** 2 **Review Group:** Statement of Intent

The objective of this project is to significantly improve habitat for grassland birds on 25,000 acres and provide public access to 250,000 acres of private land currently enrolled in the United States Dept. of Agriculture's (USDA) Conservation Reserve Program (CRP) across Nebraska annually for the next three years. These acres will provide nesting and brood-rearing cover for pheasants and other grassland birds of concern such as bobwhite quail, bobolinks, and dickcissels. Currently in Nebraska, 1.3 million acres are enrolled in CRP. For nearly 20 years, CRP has effectively provided water quality benefits, reduced soil erosion, and provided wildlife habitat. Water quality and soil erosion benefits have endured throughout the life of individual contracts but wildlife habitat benefits have decreased significantly as CRP grasslands have aged.

Approximately 70% of Nebraska's CRP is now over 13-years old. With time, plant diversity of CRP grasslands has decreased and many tracts have become monocultures of grass. This loss of plant diversity has resulted in a marked decrease in the amount of suitable nesting and brood-rearing habitat for grassland birds. Consequently, pheasant and other grassland bird populations have also decreased substantially. The Nebraska Game and Parks Commission (NGPC), Pheasants Forever (PF), private landowners, USDA, and other partners have been actively working to improve habitat and provide public access on CRP grasslands. Programs such as CRP-Management Access Program (CRP-MAP) and Focus on Pheasants (FOP) specifically address CRP grassland habitat enhancement and public access across the state.

However, the statewide need and requests for improvement of CRP grassland habitat greatly exceeds current program capacities. The additional acres of grassland habitat enhanced with Nebraska Environmental Trust funding for these programs will continue to generate many direct and indirect benefits not only to wildlife but landowners, hunters, birdwatchers, and local community economies as well. This is one of the most visible programs that involves Environmental Trust Funds. THIS PROJECT WAS NOT FUNDED IN 2004, BUT WAS FUNDED \$275,000 IN 2005 AND \$600,000 IN 2006 AND 2007. (TOTAL \$875,000)

THIS PROJECT WAS FUNDED \$225,000 IN 2008 WITH THE INTENT TO FUND UP TO \$175,000 IN YEAR TWO AND \$175,000 IN YEAR THREE PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE SECOND YEAR REQUEST.

Sponsor Name: Nebraska Game and Parks Commission **Nearest Town:** Multiple
Project Name: Prioritized Resource Areas in the Central Basins CREP **Project No:** 08-158-2
Amount Requested: \$175,000 **Term of Project Request:** 2 **Review Group:** Statement of Intent

The Nebraska Central Basins Resource Enhancement Project (CREP) is a voluntary, incentive based conservation program designed to address Nebraska's water quality and wildlife resource problems. The project encompasses 13 Natural Resources Districts, 4 river basins of significant concern and 37 counties in eastern Nebraska. Intensive agricultural production in this area provides significant challenges for maintaining and enhancing wildlife habitat, specifically for grassland wildlife. In spring of 2003, enrollment in the CREP began. Within the first 4 months of applications, landowners applied to enroll over 21,000 acres in the Prioritized Resource Areas and enrollment was halted. The enrollments were primarily pivot corners, and also included small fields (5-7 acres in size) that were considered difficult to farm or marginally productive by landowners. Those acres were planted to perennial grasses, legumes, and wildflowers to provide wildlife habitat, reduce soil erosion, and improve water quality for at least 10 years. Landowners continued to ask that additional acres and opportunities for enrollment in the Prioritized Resource Areas be offered, and in August of 2006 the Central Basins CREP agreement was amended to provide an additional 14,000 acres for this purpose. Because some landowners that applied for the initial 21,000 acres declined enrollment in the CREP when offered a contract, Nebraska has a current total of 16,271 acres that could be enrolled in the Prioritized Resource Areas. Given the demand by landowners, the acceptance and success of this practice in the past, and the wildlife benefits that have accrued, we would like to again open enrollment in order to meet the new goal of 35,000 acres of Prioritized Resource Areas in the Central Basins CREP. Under the CREP, the federal government pays the producer an annual (per acre) rental payment based on soil rental rates plus a 20% rental rate incentive, annual (per acre) maintenance payments, and 50% cost-share for establishing the grassland habitat. In order to open enrollment for these practices, Nebraska needs to provide 30% additional cost-share for establishing habitat, and provide incentive payments for enrollments of Prioritized Resource Areas (\$100 per corner or small fields 5-7 acres in size, plus an additional \$100 if all four corners of a pivot are enrolled). SUMMARY TRUNCATED FOR SPACE. THIS PROJECT HAS BEEN FUNDED \$600,000 FROM 2003-2007. THIS PROJECT WAS FUNDED \$175,000 IN 2008 WITH THE INTENT TO FUND UP TO \$175,000 IN YEAR TWO AND \$175,000 IN YEAR THREE PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE SECOND YEAR REQUEST.

Sponsor Name: Nebraska Game and Parks Commission **Nearest Town:** Kearney
Project Name: Fort Kearny State Recreation Area Wastewater System **Project No:** 09-135
Amount Requested: \$85,198 **Term of Project Request:** 1 **Review Group:** Water

Ft. Kearny State Recreation Area's RV dump station has passed its life expectancy and needs to be replaced. The Nebraska Department of Environmental Quality no longer allows the installation of septic tanks for trailer dump stations due to the toxicity of waste streams and requires a full treatment system. This project would provide this agency the System Analysis study needed to determine if a submerged wetland treatment system would work at this area due to the high groundwater table as well as the funds to implement this type of system. This would be a natural, environmentally safe way to dispose of the waste, protect the groundwater and assist in creating additional habitat at the State Recreation Area. This would also allow this agency to be educated in the system design and replicate this innovative technique of disposing waste at dump stations at other areas when the facilities are close to their life expectancy or fail. This will also provide opportunities to educate park users on "green" ways to dispose of waste as well as the waste management potential of wetlands in Nebraska.

Sponsor Name: Nebraska Grazing Lands Coalition **Nearest Town:** None
Project Name: Grazing Lands Monitoring Program for Plant Health and Soil Quality **Project No:** 09-182
Amount Requested: \$270,000 **Term of Project Request:** 3 **Review Group:** Soil Management

The Rancher Steward Rangeland Monitoring Project is a cooperative program among local rancher working groups and agriculture students that will provide Nebraska landowners with technical assistance and equipment to effectively monitor plant communities and soil resources on their land.

Most landowners are aware of existing systems designed to monitor land health. However, the application of these programs is often unpractical, cost-prohibitive and complicated, and they are not utilized. The Rancher Steward Rangeland Monitoring Project provides the next step for ranchers - on-site technical assistance and data analysis -so they can implement a scientific monitoring program.

The innovative and unique approach of this project is in the design of a simple range and soil quality monitoring program that ranchers can replicate and utilize to make informed grazing management decisions, which will improve ecosystem processes as well as economic stability of their enterprises.

Based on the theory of "Teach a man to fish," the program will provide, for a reasonable fee, an initial training session and assistance in establishing one monitoring site. This session will include:

complete monitoring equipment kit, on-site assistance of a trained university student, potential assistance from local high school students, potential assistance from a local rancher working group, and scientific data analysis of plant and soil samples.

The goal of this training session is to provide the landowner with the equipment and skills to replicate monitoring on additional sites, and eventually train other landowners through their local working group. The only additional cost to the landowner per monitoring site will be for data analysis.

This is a three-year project, with the goal of conducting 100 training sessions each year. However, the scope of the Rancher Steward Rangeland Monitoring Project is exponential - with potential for establishing continual, practical plant and soil monitoring programs throughout Nebraska through simplification and sharing.

Sponsor Name: Nebraska Partnership for All-Bird Conservation **Nearest Town:** Statewide
Project Name: Building Capacity for Effective Bird Conservation in Nebraska **Project No:** 09-148
Amount Requested: \$40,000 **Term of Project Request:** 1 **Review Group:** Rural Habitat

Local conservation efforts are responsible for some of the most effective and efficient conservation achievements in Nebraska, and are uniquely able to find and implement win-win solutions that meet the needs of area wildlife and local people. However, such local groups often struggle with capacity issues that limit what they can achieve. The Playa Lakes Joint Venture (PLJV) recognized the need for funds dedicated to building capacity among conservation organizations, and established its Capacity Building Grant program to help meet this need. This program provides \$20,000 annually to increase capacity for bird habitat conservation delivery in western Nebraska. Because of its unique role as a partnership of all entities with an interest in Nebraska's birds, the Nebraska Partnership for All-Bird Conservation (NPABC) has been given responsibility for administering these funds. Thus far these funds have enabled implementation of 18 projects in western Nebraska. Due to the great success of this program, the NPABC sought to expand its scope to include all of Nebraska. In 2007, the Nebraska Game and Parks Commission (NGPC) provided \$20,000 for this purpose. The program effectively doubled in 2008 with the addition of \$40,000 provided by the NET. We seek to continue the program at the \$80,000 level to aid in delivering projects in several locations across the state. The NPABC Steering Committee and workgroup members consulted their members/staff about current capacity building needs that could benefit from this program and were in-line with NPABC goals as established in our sideboards. Six proposals were received, and four were selected for which the NPABC is pursuing funding. These projects will yield tremendous benefits in the areas of biological planning, development of conservation program delivery tools, conservation delivery, education and outreach, and monitoring. Each project will build capacity for ongoing conservation efforts. A SIMLAR PROJECT WAS NOT FUNDED IN 2007. THIS PROJECT WAS FUNDED \$40,000 IN 2008. THIS REQUEST IS FOR A CONTINUATION OF THIS PROJECT.

Sponsor Name: Nebraska Partnership for All-Bird Conservation **Nearest Town:** Multiple
Project Name: Grassland Improvement Program **Project No:** 09-149
Amount Requested: \$200,000 **Term of Project Request:** 1 **Review Group:** Rural Habitat

Nearly every wildlife partnership and management plan in the state calls for the increased use of prescribed burns to reach their management and partnership goals. Despite those management plans, prescribed burning continues to be a difficult management option to apply. Four primary factors are identified as limiting its use on the landscape: 1) Access to prescribed burn equipment; 2) Prescribed burn training; 3) Man-power to conduct prescribed burns; and 4) Adequate fuel loads to conduct proper prescribed burns. This application seeks to replicate a unique, successful partnership that is working to improve grassland health and vigor by creating a synergy that addresses these limiting factors and increases the use of prescribed burning on the landscape of south central Nebraska. A lynch pin to being able to conduct prescribed burns on grasslands that are capable of controlling invasive tree and cool-season grasses is the ability to have a high enough fuel load. Adequate fuel loads are only attainable if the grassland is deferred from grazing for at least one full season. The Grassland Improvement Program will offer landowner grazing deferment incentives, access to prescribed burn equipment, biologists to write burn plans, landowner prescribed burn training, guide the formation of local prescribed burn associations, help provide assistance to conduct prescribed burns, experience conducting prescribed burns and follow-up with a monitor and evaluation program on projects. The unique synergy created through this partnership will help develop another biologically important region of the state where prescribed burning is increasingly used on the landscape, significant environmental benefits are obtained and the objective of the Nebraska Natural Legacy Project are implemented.

Sponsor Name: Nebraska State Recycling Association **Nearest Town:**
Project Name: Recycling Equipment Grant Coordination Project **Project No:** 07-179-3
Amount Requested: \$150,000 **Term of Project Request:** 1 **Review Group:** Statement of Intent

This project represents an extension of the “cluster” grant project originally funded in 1999, and re-extended in 2005-2006. In the past we have consistently reviewed the opportunities of collaborating with other entities such as the Resource Conservation and Development Districts, Natural Resources Districts, Nebraska Bankers Association, Nebraska Economic Developers Association and Nebraska Cornhusker Chapter of SWANNA (Solid Waste Association of North America) as well as other community leaders. By involving these entities we are able to develop the recycling infrastructure in Nebraska, and promote recycling as an environmental and economic benefit to communities and businesses. The goal is to foster recycling development and entrepreneurship as a way to strengthen a community’s economy and environment. The development of a “hub and spoke” recycling infrastructure and cooperative marketing of materials are just two examples of the success of this area. We anticipate further demand for recycling services which are directly related to the rise in oil prices, rise in landfill tipping fees and cost for solid waste services.

THIS PROJECT WAS FUNDED \$1,377,350 IN 1999-2006. THIS PROJECT WAS FUNDED \$150,000 IN 2007 WITH THE INTENT TO FUND UP TO \$150,000 IN YEAR TWO AND \$150,000 IN YEAR THREE PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE THIRD YEAR REQUEST.

Sponsor Name: Nebraska Statewide Arboretum**Nearest Town:** Statewide**Project Name:** ReTree Nebraska**Project No:** 08-137-2**Amount Requested:** \$333,321**Term of Project Request:** 2**Review Group:** Statement of Intent

ReTree Nebraska is a multi-partner, statewide initiative aimed at reversing the decline of Nebraska's community forests. Inventories conducted by the Nebraska Forest Service in over 200 communities reveal Nebraska has lost approximately half of its community tree resource since the late 1970s due to storms, drought and disease, with further losses anticipated from emerging disease and insect epidemics. The Nebraska Statewide Arboretum, Inc. (NSA) is requesting \$1 million in support of ReTree Nebraska, to create a three-year grant program that would provide funding for community forest restoration projects on public property including schools, parks, recreational fields, cemeteries, transportation corridors, and the grounds of libraries, courthouses, hospitals and other public buildings. This program would advance the Trust's priorities in the categories of Habitat and Surface and Ground Water by enhancing the quality and increasing the amount of wildlife habitat provided by Nebraska's community forests, and by promoting horticultural practices that conserve water and reduce the use of fertilizers and pesticides that contribute to surface and ground water degradation. The program also would foster sound resource management practices among the stewards of community tree plantings. An estimated 100 Nebraska communities would be served by the proposed project. THIS PROJECT WAS FUNDED \$332,717 IN 2006 AS A PILOT PROJECT.

THIS PROJECT WAS FUNDED \$332,510 IN 2008 WITH THE INTENT TO FUND UP TO \$333,321 IN YEAR TWO AND \$334,169 IN YEAR THREE PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE SECOND YEAR REQUEST.

Sponsor Name: Nebraska Water Center Foundation**Nearest Town:** Ogallala**Project Name:** Water for Communities**Project No:** 09-180**Amount Requested:** \$50,000**Term of Project Request:** 2**Review Group:** Education

Water for communities will be a comprehensive display highlighting informational facts about where drinking water comes from and the importance of water quantity and water quality in communities of all kinds. The display will be permanently housed at the Lake McConaughy Visitor/Water Interpretive Center and will include high quality, artistic exhibits that focus on the many varied uses of water in communities. Visitors will learn about importance of surface and ground water to communities for both domestic and commercial purposes and will stress the need for all people to conserve and protect both water quality and water quantity. A series of photographs will show the many varied uses of water by people of all ages and by different industrial and commercial facilities. A water quality display will focus on the concept that protecting and enhancing water quality is everyone's responsibility, and we all need to be aware of what harm our actions can do. A video kiosk will feature a short video about the virtues of the Lake McConaughy Visitor/Water Interpretive Center as a "green" building. Funding for the display is being requested of the Nebraska Environmental Trust and educational materials and programs related to the Water for Community display will be developed and funded by the Nebraska Water Center Foundation and supporting agencies.

THIS PROJECT WAS FUNDED \$280,618 IN 1998 AND 1999; AND 2004 THROUGH 2006. THIS REQUEST IS FOR A CONTINUATION OF THIS PROJECT. THE "WATER FOR COMMUNITIES" EXHIBIT WAS EXCLUDED IN THE 2004 GRANT, BUT WE FUNDED 4 OTHER EXHIBITS.

Sponsor Name: Nebraska Weed Control Association**Nearest Town:** Kearney**Project Name:** 2009 NAWMA Conference**Project No:** 09-153R**Amount Requested:** \$12,500**Term of Project Request:** 1**Review Group:** Education

The Nebraska Weed Control Association will be hosting the 2009 North American Weed Management Association (NAWMA) Conference and Trade Show at Kearney, Nebraska September 21-24, 2009. NAWMA is a professional association of individuals interested in managing invasive plants. Their annual conferences highlight the efforts of the state or province of the conference location. The theme of the 2009 conference in Kearney, Nebraska is "Response to the Riparian Invasion - Improving the health of our riparian area." Riparian plant invaders present a unique challenge and threat across North America - very invasive weeds which can gobble up the narrow but extremely important riparian areas quite rapidly. These threats in Nebraska were addressed at the 2006 "Threats to Nebraska Rivers - Invasive Plants Conference" hosted by the Nebraska Weed Control Association and others with some funding from a NET grant. The follow-up promotion efforts and the support of many others resulted in the governor establishing a riparian vegetation management task force and the legislature providing \$4 million of grants for use in 2007 and 2008. With the help of these funds, grants from the Nebraska Environmental Trust and local funds weed management areas are expending about \$7 million to fight the invading riparian vegetation over this two year period. Conference attendees can hear about and see the results of this 2-year effort and learn about future planned actions including what we should be doing to get ready for the next riparian plant invaders. We expect this conference to assist Nebraska and others in North America in dealing with the current plant invaders and establishing a structure to prevent new invaders from getting a foothold. We are seeking funding for speaker and tour expenses.

Sponsor Name: Nebraska Wildlife Federation**Nearest Town:** Lincoln**Project Name:** Adopt A Stream - Citizen Water Monitoring Program**Project No:** 09-157**Amount Requested:** \$160,100**Term of Project Request:** 3**Review Group:** Water

The Nebraska Wildlife Federation seeks to take the next steps towards establishing a statewide citizen stream monitoring and conservation program designed for the local residents of Nebraska's 13 major watersheds. Adopt A Stream gets students, youth, civic groups, and other interested citizens outdoors, and teaches them to understand their local streams, lakes, and ponds. Over 200 people thus far have been trained to assess, monitor and conserve their streams in Nebraska since 1995. Over the next 36 months along with coordinating partners, we seek funding to put in place a growing network of Adopt A Stream teams in at least six Nebraska watersheds. Contacts and workshops will be coordinated by a local educator or biologist and administered by the Nebraska Wildlife Federation. The grant will cover costs associated with staff, equipment, travel, printing and mailing material. Partners include: Nebraska Dept. of Education - Learn and Serve Program, Attorney General's Environmental Settlement Fund, and Doane College. This program will focus volunteer stream conservation efforts in all watersheds, and will be used as an educational tool for the schools, youth groups and other volunteers forming teams. We are currently working with Doane College - Crete to develop a web-based program where stream teams can log onto the website and enter data, and other people can see and download data from their watershed or across the state. Eventually it would be ideal to cooperate with surrounding states to share data about our common water sources. Some schools and civic groups can start out with the basic tools to monitor benthic macro invertebrates with simple nets and low cost tools, such as water buckets, dilution containers, and ice cube trays for collecting the specimens. Some schools have the hand held computers with probes that give them immediate and scientifically accurate findings. Ultimately each group is studying the life and health of their local stream. By identifying the snails, fly larvae and other critters that live in streams, and understanding which ones are very sensitive to poor water quality, versus those that can live almost anywhere. THIS PROJECT WAS SUBMITTED IN 1996 AND 2002 BUT NOT FUNDED. THIS PROJECT WAS FUNDED \$56,000 IN 1997, 1998 AND 1999.

Sponsor Name: Nebraska Wildlife Rehabilitation, Inc. **Nearest Town:** Omaha, Blair, Louisville
Project Name: Eastern Nebraska Prairie Habitat Restoration and Education Project **Project No:** 09-183
Amount Requested: \$33,960 **Term of Project Request:** 3 **Review Group:** Education

The Eastern Nebraska Prairie Habitat Restoration and Education Project will be designed by environmental and education experts and implemented in Advanced Placement (AP) biology classrooms by selected teachers who have been trained in the Great Plains Curriculum. In cooperation with professors and students from Dana College in Blair, Nebraska, high school biology students and National Honor Society volunteers from Central High School will learn about Nebraska's native prairies, their importance, and how they can work to restore and maintain these ecological treasures. Once classroom curriculum and hands-on field experience and research has been completed on the Dana College prairie, the instructors and students from Dana College, along with AP biology teachers will use an advanced curriculum to direct the high school biology students and volunteers to restore a land parcel outside of Plattsmouth in eastern Nebraska to natural prairie habitat themselves. Each year, new students will join the program to maintain the existing restored prairie and expand the project into other areas of the region and state. Students will use advanced technology to learn and achieve their goals, including NASA DataSlate and iMovie technology. This project will not only restore native prairie in Nebraska and create new habitat for important native plant and animal species, it will also provide Nebraska students with the intellectual and hands-on skills needed to become good stewards of the earth and our natural environment.

Sponsor Name: Nebraska Wildlife Rehabilitation, Inc. **Nearest Town:** Omaha, Blair
Project Name: Great Plains Technology-Infused Habitat Curriculum Project **Project No:** 09-185
Amount Requested: \$27,650 **Term of Project Request:** 1 **Review Group:** Education

The Great Plains Technology-Infused Curriculum Project will be designed by environmental experts and implemented in ten fourth-grade classrooms by ten teachers who have been trained in the Great Plains Curriculum. These teachers, recruited from area universities, will be educated and trained by environmental and educational technology experts to implement the technology-infused projects in an active learning format. Each of the ten teachers will implement a six-week program to fourth-grade classes, one session per week. This curriculum will educate the children regarding native wildlife and ecosystems, including the importance of habitat and how its destruction and restoration impacts biodiversity on all levels. These children will actively participate by utilizing NASA satellite technologies (DATASlate) to study the environment, by creating habitat through the building of bat and bird houses and placing them in green spaces open to the public, and by documenting the results via iMovie. They will also participate in the planting of small areas of native flora that provide food and shelter for native wildlife. This curriculum will be placed on the NWRI web site for replication and accessibility to all educators and the community.

THIS PROJECT WAS SUBMITTED IN 2007 BUT NOT FUNDED DUE TO PLACEMENT ON THE RANK ORDER LIST.

Sponsor Name: Nemaha Natural Resources District **Nearest Town:** Johnson
Project Name: Big Muddy Creek Watershed Project **Project No:** 07-118-3
Amount Requested: \$180,500 **Term of Project Request:** 1 **Review Group:** Statement of Intent

For over 40 years, treatment in the Big Muddy Creek Watershed has been desperately needed. Years of non-treatment has turned this once small creek into a deep massive raging river in times of heavy rainfall and has caused negative environmental effects and havoc to local authorities and landowners. Negative environmental effects include impaired water quality and the loss of ecological diversity. Negative effects to local authorities and landowners include damages to bridges, roads, natural gas and rural water pipelines, and substantial loss of agricultural land.

Recently the Nemaha NRD formed a local watershed task force and hired a consultant to put together a watershed work plan. Completion of the Big Muddy Creek Watershed Work Plan by JEO Consulting Group and Mead & Hunt Engineering contained the study area description, study procedure, study findings, proposed improvements and associated probable opinion of cost.

The Big Muddy Creek Watershed Work Plan agreed with findings of the task force in that severe stream bed and stream bank degradation is occurring in the top fifth of this watershed and included the following objectives. 1.) Control Stream Bed and Stream Bank Erosion 2.) Prevent Further Damage to Public Infrastructure 3.) Prevent Further Damage to Public Utilities 4.) Improve Water Quality 5.) Improve Ecologic Diversity 6.) Prevent Further Loss of Agricultural Land Utilizing information from the Big Muddy Creek Watershed Work Plan, the Nemaha Natural Resources District, along with project partners are requesting \$566,000 from NETF over a 3-year period to assist with implementing 8-10 grade stabilization structures, 8-10 rock or sheet pile weirs and 1 road dam structure. The cost estimate to install these structures is \$662,000 for construction, \$300,000 for engineering, \$24,000 for project management, \$3,000 for information and education and \$3,000 for water quality and project monitoring expenses bringing total project costs to \$992,000. THIS PROJECT WAS FUNDED \$117,650 IN 2007 WITH THE INTENT TO FUND UP TO \$267,850 IN YEAR TWO AND \$180,500 IN YEAR THREE PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE THIRD YEAR REQUEST.

Sponsor Name: Nemaha Natural Resources District **Nearest Town:** Multiple
Project Name: High Capacity Groundwater Well Management **Project No:** 08-169-2
Amount Requested: \$20,000 **Term of Project Request:** 1 **Review Group:** Statement of Intent

The Nemaha Natural Resources District lies within the glacial drift groundwater region of Nebraska where the geology is a complex composition of fine to coarse grained glacial deposits containing localized interbedded sands and gravels. The principle aquifer systems are comprised of paleovalley, alluvial, bedrock and glacial drift aquifer units that range in saturated thickness from less than 50 feet to over 300 feet. Groundwater well yields throughout most of the District are generally less than 50 gallons per minute and the water is often highly mineralized. High capacity well development historically has occurred primarily in buried paleovalleys and alluvial stream valleys where the aquifers are the highest yielding but are of limited extent. Technological irrigation improvements have reduced the traditional capacity demand of center pivot irrigation systems permitting lower yielding aquifers to be developed. Development in these lower yielding aquifers along with several years of drought has created conflict between groundwater users.

The District is currently updating its Groundwater Management Plan and developing a groundwater model to better address groundwater quantity issues. The groundwater model will be used as a tool to define aquifer regions and corresponding sustainability. Results from a groundwater model are completely dependent upon the accuracy of the input data and collection efforts revealed that a large amount of geologic data was readily available however actual pumpage information from existing high capacity wells was lacking. The District is seeking assistance from the Nebraska Environmental Trust Fund to provide a voluntary cost-share program for the purchase of flow meters for high capacity wells. THIS PROJECT WAS FUNDED \$20,000 IN 2008 WITH THE INTENT TO FUND UP TO \$20,000 IN YEAR TWO PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE SECOND YEAR REQUEST.

Sponsor Name: Nemaha Natural Resources District **Nearest Town:** Peru
Project Name: Duck and Buck Creek Watershed Management Plan: Implementation of Best Management Practices **Project No:** 09-128
Amount Requested: \$250,000 **Term of Project Request:** 3 **Review Group:** Water

The Nemaha Natural Resources District (NNRD), along with landowners from within the District, will be working to develop a Watershed Management Plan to protect and reduce the amount of sediment entering the soon to be constructed Duck and Buck Creek Lakes. The watersheds are currently considered special emphasis areas by the NRCS which makes them a priority area for EQIP funding, as well as EPA Section 319 funds. This application is being made due to the large amount of interest already expressed by landowners in implementing Best Management Practices (BMP's) to reduce the amount of sediment that would enter these structures.

This plan will improve surface water quality, reduce the amount of sediment loading, and reduce non-point source pollution in both streams leading to the proposed lakes, and the lakes themselves. The plan centers around the implementation of BMP's, which will include the construction of flood/grade control structures, tile terraces, etc. Additional components of the plan include an information and education program to increase awareness and interest among watershed residents, lake users, and area youth. Another component of the plan would be the construction of a sediment basin in the tail-waters of each structure.

The NNRD is seeking a 3-year NETF grant for \$250,000 to assist in the implementation of BMP's, as well as to use the funds as a match to receive additional funds from other sources. The Nebraska Department of Environmental Quality (NDEQ) will provide \$360,000, with the possibility of additional funds if needed, along with engineering and technical assistance. The Natural Resources Conservation Service will provide technical assistance, and EQIP funding for practices (\$785,000). Landowners will provide the remaining amount of funding for the BMP's not covered by the cost-share program. The Nemaha NRD will contribute funds for project administration, technical assistance, monitoring, and engineering (\$151,000).

Sponsor Name: Niobrara Council **Nearest Town:** Valentine
Project Name: Preservation of Niobrara River Recreation: Tools and Education for Prevention of Bacterial Contamination **Project No:** 09-189
Amount Requested: \$545,400 **Term of Project Request:** 3 **Review Group:** Water

Tourism is an important part of the economy in north-central Nebraska. Much of this tourism is from visitors to the Niobrara River, tributaries, and surrounding lakes for outdoor recreational activities. However, tourists and other visitors to the Niobrara River and its tributaries are in contact with stream water that may be impaired by fecal bacteria contamination during outdoor recreational activities such as tubing, wading, fishing, and swimming. The project goal is to reduce the public health risk from waterborne pathogens of fecal origin to visitors of the Niobrara River, and thus maintain this resource for the benefit of the Nebraska economy and enjoyment of future generations. The proposed study area is Minnechaduzza Creek and the upper part of the reach of the Niobrara River designated as a National Scenic River between Minnechaduzza Creek on the west and Norden Bridge on the east - corresponding to the reach that is most frequently used for outdoor recreation. The objectives of the study are to: 1) determine the sources and potential subwatersheds where fecal bacteria in Minnechaduzza Creek may originate through the use of hydrologic, microbial, molecular, chemical, and modeling techniques to determine the sources of fecal bacteria, 2) utilize the surface-water model developed during this project as a tool for predicting conditions/periods when pathogen contamination is most likely that can be utilized by local, state, and federal resource managers in the area, 3) use the surface-water model developed for Minnechaduzza Creek to test potential best management practices (BMPs) that could reduce pathogen inputs into the stream, and 4) effectively communicate the study results and educate area agricultural producers and natural resource managers on best management practices that may be used to reduce pathogen loads to streams.

Sponsor Name: North American Grouse Partnerhsip - Nebraska Chapter **Nearest Town:** Multiple
Project Name: Nebraska Grassland and Prairie Grouse Conservation Initiative **Project No:** 09-147
Amount Requested: \$800,000 **Term of Project Request:** 3 **Review Group:** Rural Habitat

This project is designed to implement in Nebraska the conservation strategies identified in the Grassland Conservation Plan for Prairie Grouse (plan). The plan was developed by the North American Grouse Partnership in collaboration with state and provincial fish and wildlife agencies and with the assistance and input of numerous conservation agencies and organizations. Nebraska played a key role in the plan's creation. The plan was a 3-year strategic planning effort and was endorsed by the Association of Fish and Wildlife Agencies in March of 2008. The plan seeks to improve grassland habitat on over 65 million acres across the Great Plains of North America - including much of Nebraska - to meet the spatial needs of these three species (two in Nebraska) through conservation actions. The plan's purpose is to focus resources and actions from multiple entities on areas that are key to the recovery and conservation of habitats essential to prairie grouse and allied grassland species. Prairie grouse serve as a flagship species for other grassland dependent species and Partners in Flight has recognized 15 landbird species reliant on conservation efforts for prairie grouse due to their large spatial needs. Nebraska is one of the remaining strongholds for greater prairie-chickens and sharp-tailed grouse - two of the three main focal species of the plan. The grasslands that harbor these species also are critical for a host of other species of plants and animals. Through this application, we hope that Nebraska can be the first state or province to begin implementing the strategies of this historic plan. The success of the plan in Nebraska depends on implementing conservation strategies through technical and financial assistance to farmers and ranchers for grassland conservation, developing local partnerships, providing outreach & education, and implementing appropriate monitoring protocols. Our intent is to develop focus areas in parts of the state identified in the plan that have stressed prairie grouse populations. We intend to deploy a staff to foster the implementation process. NAGP will work closely with various partner agencies and organizations to help to build strong and enduring local conservation partnerships. Most important among those partners will be the Washington DC based Theodore Roosevelt Conservation Partnership (TRCP) that will help provide matching funds and in-kind services for this initiative.

Sponsor Name: North Platte Natural Resources District **Nearest Town:** Scottsbluff, Sidney
Project Name: Aerial Geophysical Survey of Selected Panhandle Aquifers **Project No:** 08-119-2
Amount Requested: \$350,000 **Term of Project Request:** 2 **Review Group:** Statement of Intent

This is a crucial time for management of water resources of western Nebraska and the North Platte NRD and South Platte NRD are asking the Environmental Trust to assist in gathering information to solve some of these problems. After eight years of sustained drought, aquifers in the panhandle have been strained to supply water to users and base flow to the North Platte River and Lodgepole Creek. Municipalities face challenges in providing adequate supplies of water. In numerous communities, uranium and arsenic concentrations in drinking water exceed federal maximum contaminant levels. Communities are under administrative order by the Nebraska Health and Human Services System. It is imperative to find a new source of water for these communities soon. Public water supplies also are threatened by non-point source pollution, unreliable local aquifers and other factors. Meanwhile, changes are in store for water management. Legislative Bill 962 requires that NRDs and the Dept. of Natural Resources develop integrated management plans for the North Platte and South Platte Basins.

For these reasons, it is vital to have accurate, affordable information about the geology affecting water supplies. This information could best be obtained through a program of geophysical mapping of subsurface geologic characteristics. Traditional methods, including surface geophysics and borehole logging, are needed for this work in order to calibrate the survey results, but they are inefficient to map an area of 252 square miles. An innovative, cost-effective, \$6 per acre, alternative is airborne geophysical mapping, performed by a helicopter carrying a sensor that analyzes geologic formations. The North Platte and South Platte NRDs are proposing to work together, using the expertise of the U.S. Geological Survey and the University of Nebraska Conservation & Survey Division, to take advantage of economies of scale and undertake a project to conduct geophysical mapping of priority target areas within each basin. THIS PROJECT WAS SUBMITTED IN 2004, 2005 AND 2007 BUT NOT FUNDED DUE TO PLACEMENT ON THE RANK ORDER LIST. THIS PROJECT WAS FUNDED \$450,000 IN 2008 WITH THE INTENT TO FUND UP TO \$350,000 IN YEAR TWO PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE SECOND YEAR REQUEST.

Sponsor Name: Northeast Community College**Nearest Town:** South Sioux City**Project Name:** College Center**Project No:** 09-123**Amount Requested:** \$528,100**Term of Project Request:** 2**Review Group:** Water

The project is a stream and wetland restoration and enhancement project, which will be constructed concurrently with and on the same site as a college campus. The vision of the restoration project is to create a natural amenity which benefits the environment and provides value for the residents of northeast Nebraska.

Sponsor Name: Northeast Nebraska RC&D**Nearest Town:** Plainview**Project Name:** Invasive Species Control on Ecologically Sensitive Sites**Project No:** 08-122-2**Amount Requested:** \$25,000**Term of Project Request:** 2**Review Group:** Statement of Intent

Invasive species are cited frequently as significant threats to biological diversity in Nebraska's Natural Legacy Project planning document (NNLP). To address those issues, NNLP recommended development of collaborative conservation efforts to seek effective control measures, increase awareness of biological diversity, and implement strategies addressing specific issues in biologically unique landscapes (BUL's) identified in the plan. One such group is the Northeast Nebraska Weed Management Area (NNWMA) who seeks innovative, collaborative, and effective means to reduce ecological and economic impacts of noxious weed infestations. NNWMA's diverse group of partners covers 8 counties and 4,610,212 acres of private, public and tribal land whose northern boundary is the Missouri National Recreational River.

Eight BUL's with ecologically significant riverine, woodland, wetland, and grassland habitats are partially or wholly within NNWMA boundaries. These include prairies that contain federally threatened Western Prairie Fringed Orchid and state listed Small White Lady Slipper Orchid as well as habitats that are home to 34 other Tier 1 plant, mussel, fish, insect, bird, and mammal species (NNLP).

Beginning in 2008, NNWMA proposes to acquire biological control agents (insects) to control noxious weeds on ecologically sensitive areas. Releases will be prioritized and targeted at places where herbicide use is not desired (i.e. high diversity grasslands, wetland/riverine habitats, rangeland with organic designations, etc.).

Targeted plants are Purple Loosestrife, Leafy Spurge, Spotted Knapweed and Canada Thistle. Appropriate insects will be acquired for each weed species. Releases will occur in a variety of locations within the NNWMA over a 3 year period. Each release will be marked using GPS and photo points will be established to monitor progress. Outreach is a key component to this effort. A Project Coordinator will maintain communication with all partners, schedule activities, assist with outreach activities, and work with the RC&D Council on fiscal matters.

THIS PROJECT WAS FUNDED \$30,000 IN 2008 WITH THE INTENT TO FUND UP TO \$25,000 IN YEAR TWO AND \$25,000 IN YEAR THREE PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE SECOND YEAR REQUEST.

Sponsor Name: Northeast Nebraska RC&D**Nearest Town:** Statewide**Project Name:** Organic Farming Statewide**Project No:** 08-147-2**Amount Requested:** \$90,250**Term of Project Request:** 2**Review Group:** Statement of Intent

This project fills a serious gap in Nebraska's ability to reduce non-point source pollution while building a resilient soil and stronger economic base. The training provided will enable farmers and ranchers to produce profitable grain, forage and livestock products while increasing soil carbon, reducing soil erosion, and lowering the threat of fertilizer and pesticide contamination.

The NRCS EQIP Organic Transition Program offers financial incentives to offset feared yield losses. However that cannot overcome the social pressure and personal risk farmers face when they choose non-conventional farming practices. The expertise and guidance from the organic specialists provided through this project is very important to their success. This project will provide farmers and ranchers with the knowledge base and skills they need to confidently adopt practices that do not rely on chemical fertilizer and pesticides - the cause of most non-point pollution in Nebraska. It will train NRCS and others too so they can provide better service through EQIP.

This project provides long-term benefits without continued funding. The 3-year life of the project coincides with the 36-month history of chemical-free production needed for access to premium markets by qualifying for Natural Organic Program (NOP) certification. Providing support at the local level through RC&Ds will mean continued and expanded participation by other farmers.

At the end of the project, Nebraska will have a base of trained, knowledgeable farmers and resource professionals who will continue to search for management solutions to pest and fertilizer problems long after the financial incentives terminate. These changes will have long lasting effects on the land.

A statewide planning committee has been working together several months and this project is a result of their vision. The EQIP financial incentives, valued at over \$1,320,000 for this project, are critical to getting over 17,000 acres into a program of doing without chemicals. FUNDED SIMILAR PROJECT FROM 2005-2007 WITH THE CENTER FOR RURAL AFFAIRS FOR \$78,000. THIS PROJECT WAS FUNDED \$100,250 IN 2008 WITH THE INTENT TO FUND UP TO \$90,250 IN YEAR TWO AND \$141,000 IN YEAR THREE PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE SECOND YEAR REQUEST.

Sponsor Name: Northern Prairies Land Trust**Nearest Town:** Multiple**Project Name:** Tallgrass Prairie Conservation on Private Lands III**Project No:** 09-134**Amount Requested:** \$650,000**Term of Project Request:** 3**Review Group:** Rural Habitat

Tallgrass prairie is one of the most threatened ecosystems in North America. Over 98% of Nebraska's tallgrass prairie has been lost. Most remaining prairies are on private lands, making cooperation between landowners and conservationists essential.

In 2003 an affiliation of public and private conservation groups formed the Nebraska Tallgrass Prairie Partnership (Tallgrass Partnership). The Tallgrass Partnership has received two Nebraska Environmental Trust Fund (NETF) grants over four years to implement tallgrass prairie habitat management projects on private lands and coordinate prairie management seminars. In 2007, the Tallgrass Partnership determined not to apply for additional grants and to gradually turn over their project implementation role to the Nebraska Natural Legacy Flagship Initiatives and their partners. The Southeast Flagship Initiative (SE Flagship) overlaps the Tallgrass Prairie NETF grants in the region served (southeast Nebraska) and conservation practices implemented. Also, within both partnership organizations, Northern Prairies Land Trust (NPLT) serves to coordinate and implement all habitat management projects and prairie management seminars. Together these two partnerships improved 15,534 acres of tallgrass prairie and oak woodland in cooperation with 71 landowners and 14 renters. They also implemented the Nebraska Tallgrass Prairie Management Seminar for four years with 320 attendees. This work is being completed through Tallgrass Partnership NETF grants which are in their final year of funding. Through this application, NPLT is applying for \$650,000 over three years to increase capacity to meet increased demand for new and existing conservation projects. These funds will be used primarily for conservation projects on 4,000 acres of private lands (\$504,000), such as invasive tree clearing and conservation easements, and a three year private lands biologist position (\$143,706), which will place special emphasis on habitat management and easement projects on high quality native hay meadows. Project partners will provide approximately \$309,300 in cash and in-kind match. The Nebraska Game and Parks Commission will be the grant managers as with the previous Tallgrass Partnership proposals. THIS PROJECT WAS FUNDED \$900,000 UNDER THE NEBRASKA TALLGRASS PRAIRIE PARTNERSHIP IN 2005-2008. THIS REQUEST IS FOR A CONTINUATION OF THIS PROJECT.

Sponsor Name: Omaha Paper Stock **Nearest Town:** Omaha
Project Name: Nebraska Material Recovery Center **Project No:** 09-165
Amount Requested: \$3,292,242 **Term of Project Request:** 2 **Review Group:** Waste Management

The Omaha Paper Stock Company, in partnership with The North Omaha Economic Development Project intends to design, construct, and implement a Single Stream Material Recovery Facility in the Northern Omaha targeted economic zone. This innovative project is designed to stimulate economic growth and increase jobs in North Omaha while providing a convenient recycling opportunity for communities, households and businesses throughout the state. Omaha Paper Stock Company (OPSC) will recover landfill materials from surrounding Greater Omaha communities and businesses as well as businesses and communities surrounding the OPSC Grand Island Plant. These materials will be processed through a 25,000 square foot facility housing a single stream recyclable recovery system. The outcome will be a recycling collection increase of approximately 40,000 tons annually from our landfills, provide 25 or more jobs to the North Omaha Community, bring additional revenue to the North Omaha Schools, and create new recycling efforts where none existed previously. We anticipate the 25 jobs will create taxable & discretionary spending income of \$600,000 annually. The Nebraska Material Recovery Center is innovative and unique in that it creates new recycling recovery efforts in otherwise non-serviced surrounding communities and businesses. New collection techniques in this project will allow businesses, schools, government facilities, and apartment communities the ability to recover commingled recyclable materials that currently are destined for landfill disposal.

Sponsor Name: Omaha Zoological Society **Nearest Town:** Multiple
Project Name: Nebraska Amphibian Conservation and Education Project **Project No:** 09-191
Amount Requested: \$933,300 **Term of Project Request:** 3 **Review Group:** Rural Habitat

Globally, we are facing an amphibian crisis. Of the close to 6,000 known species of amphibians living in our world, almost 2,000 species are threatened with extinction (Boyle and Grow, 2008). There are growing concerns that the serious decline of amphibian species are like "canary in the coal mine," with the decline in a class of animals more sensitive than most, potentially signaling an impending environmental calamity (Boyle and Grow, 2008). Research indicates that amphibians are disappearing due to habitat loss and degradation; increased pollution resulting in increases in parasitic flat worm populations and frog infection rates; and the spread of the Chytrid fungus. In response, scientists, zoos, and aquariums have united to establish conservation rescue sites across the globe, with the purpose of beginning an educational awareness campaign that develops an understanding of how this mass decline of amphibians will affect the balance of nature and to conduct research to slow and inevitably prevent such an impactful decline. Omaha's Henry Doorly Zoo has become one of the leaders in developing a global educational awareness campaign, establishing amphibian conservation rescue facilities in Johannesburg, Africa and Omaha. In addition, the Zoo actively participates in research to determine how Chytrid fungus is spread. To aid in conservation efforts of amphibians in Nebraska, Omaha's Henry Doorly Zoo Foundation, in cooperation with the Nebraska Game and Parks Commission (NGPC), the University of Nebraska-Lincoln (UNL), and the United States Geological Survey (USGS), is proposing a study that will include infrastructure improvements and programming for the creation of a Nebraska Amphibian Conservation Center. Programming supported through this proposal will include enhancements to a statewide education effort targeting high school teachers and students, as well as an assessment of amphibian populations and related water-quality parameters in wetlands across Nebraska.

Sponsor Name: Omaha, City of**Nearest Town:** Omaha**Project Name:** Cole Creek Demonstation Project**Project No:** 09-120**Amount Requested:** \$436,705**Term of Project Request:** 2**Review Group:** Water

Stream corridors in Omaha provide an important function in storm water control and contribute to the quality of life in the City. Urbanization has had a profound impact on the ability of many urban streams, such as Cole Creek, to function as natural, healthy streams. Urban areas are characterized by a great amount of impervious surface and urban streams are forced to carry more water than nature intended. Over time the stream banks become unstable, and the stream channel becomes deeply incised. The result is the degradation of water quality, the public amenity, riparian habitat, and property. Many aspects of this project are consistent with the Trust's mission to conserve, enhance and restore the natural environments of Nebraska. The Cole Creek Demonstration Project runs from Sorensen Parkway to Hartman Avenue, and it offers a unique opportunity to restore an urban corridor to a natural, healthy state. This project will allow the City to work collectively with a number of partners to stabilize this section of the stream, to provide a pathway to access the stream, to educate the public about sensible resource management (water and waste), and to encourage the community to take responsibility for our urban assets so they will go forward as stewards of the land and continue to enhance the places where we live, work and play. Therefore, the project not only includes stream stabilization measures such as removing invasive vegetation, creating meanders, establishing flood banks but also developing interpretive signs, installing a recycling center, demonstrating pervious pavements, producing educational audio-tours, and facilitating public participation and involvement. The result will demonstrate the value of conserving, enhancing and restoring a natural stream environment in an urban setting.

Sponsor Name: Papio-Missouri River Natural Resources District**Nearest Town:** Bellevue**Project Name:** Whitted Creek Stream Restoration Project**Project No:** 09-104**Amount Requested:** \$300,000**Term of Project Request:** 1**Review Group:** Bank Stabilization

The Whitted Creek Stream Restoration project site is located in Bellevue, Nebraska southeast of the intersection of 25th Street and Capehart Road. This urban stream reach includes approximately 3,500 feet of Whitted Creek and its riparian zone from 25th Street downstream to the confluence with Papillion Creek. This project was developed to address concerns about the bank erosion, channel incision, and degraded aquatic habitat. The condition, location, and size of this project site provide an opportunity to implement several stream restoration bio-engineering techniques. The project includes channel restoration using innovative hydraulic engineering and fluvial geomorphic principles; including cross section adjustments (channel reshaping), bank stabilization (geotextiles and vegetation), and longitudinal profile adjustments (grade control). The objectives of the project include: 1) reducing the reach's bank erosion (reducing suspended solids and sediment-bound pollutants such as bacteria and nutrients; 2) arresting channel bed erosion through the use of low profile rock structures; 3) improving the study reach's aquatic habitat condition; and 4) providing an educational opportunity for P-MRNRD maintenance staff and technical staff, and the general public.

Maintenance staff can learn techniques for the proper installation and maintenance of these technologies. Technical staff can continue to gain information about how these technologies are designed and constructed, where their installation will be most effective, and how they should perform. The site is easily accessible to the public and can be used for guided educational tours, or (with the aid of education signage) self guided tours. This project can be used as a demonstration project site to demonstrate a variety of bio-engineering techniques that can be applied elsewhere in the watershed. The Whitted Creek Stream Restoration project will benefit the public in the surrounding community by helping the stream attain its primary contact and aquatic life beneficial uses.

Sponsor Name: Papio-Missouri River Natural Resources District **Nearest Town:** Hubbard
Project Name: Pigeon/Jones Creek Site 15 **Project No:** 09-179
Amount Requested: \$3,000,000 **Term of Project Request:** 3 **Review Group:** Dam Construction

Site 15 is a component of the "Pigeon/Jones Creek Watershed Special Erosion and Sediment Control Project," a watershed-wide project prepared in cooperation with the Papio-Missouri River NRD and NRCS in 2002. This watershed project worked with multiple agencies and individuals to optimize available resources including inter-local agreements, multiple funding sources and private property donations. The watershed plan calls for 20 flood control/grade stabilization structures to control approximately 68% of the watershed area. Site 15 is the only multi-purpose (grade stabilization, sediment control, flood control and recreation) site included in the plan and is the 6th structure to be built as a result of this watershed plan. In addition to grade control and sediment control benefits normally provided by a dam structure, the Site 15 project will result in the creation of wildlife habitat, wetlands, water-based habitat, and soil conservation improvements. Public education elements will also be included in the public recreation area surrounding the lake, including a Wetland Study Area, a Savannah Study Area, and a Prairie Study Area, all of which will provide handicapped accessibility. To date, the Site 15 project planning and design process has included representatives from Dakota County, the City of Hubbard, NDEQ, NGPC, Drainage District #5, the NRC, UN-L and Nebraska Loess Hills Resource Conservation and Development Group. A Watershed Advisory Group was established at the beginning of the planning phase, a Technical Advisory Council was formed to provide input to the design phase and ultimately, a Watershed Advisory Council will be established to provide input and recommendations for a Community-Based Watershed Management Plan. The Community-Based Watershed Management Plan is a collaborative document developed to recognize the values and goals of the community throughout the watershed, which will ultimately contribute to the attainment and sustainability of long term resource objectives.

Sponsor Name: Pheasants Forever - Little Blue River Chapter **Nearest Town:** Hastings
Project Name: No-Till Grass Drill **Project No:** 09-115R
Amount Requested: \$15,000 **Term of Project Request:** 1 **Review Group:** Equipment

This grant application seeks funding from the NET to purchase a no-till grass drill to be used by landowners to establish wildlife habitat. Currently, there are few no-till drills available in the state and those that are available are owned and rented out by private businesses. A no-till grass drill made available to interested landowners would increase both the quantity and quality of wildlife habitat established. Significant increases in wildlife habitat plantings in the area through programs like: Conservation Reserve Program, Conservation Reserve Enhancement Program, Continuous Conservation Reserve Program, Corners For Wildlife, CRP-MAP, etc. have greatly increased the need for this type of specialized equipment. Matching NET moneys with that of the Little Blue River Pheasants Forever chapter would purchase the no-till drill. The purchase price of a no-till grass drill is approximately \$30,000 to \$32,000. Gartner Farms, Inc. of Hastings, NE will oversee the operation, maintenance and rental of the drill. A fund will be set up to pay for routine maintenance of the drill as well as any repairs needed to keep the drill in top operating condition. The drill will be available for any landowner in the area to use at a nominal fee. A no-till grass drill is needed to handle the fluffy seeds associated with many warm-season grasses, wildflowers and legumes. These fluffy seeds are not effectively planted with conventional drills. By establishing more wildlife habitat to a higher quality habitat provided by these seed mixtures, wildlife will benefit.

Sponsor Name: Pheasants Forever - Nemaha Valley Chapter**Nearest Town:** Auburn**Project Name:** No-till Grass Drill**Project No:** 09-107R**Amount Requested:** \$15,000**Term of Project Request:** 1**Review Group:** Equipment

This grant application seeks funding from the NET to purchase a no-till grass drill to be used by landowners to establish wildlife habitat. Currently, there are few no-till drills available in the state and those that are available are owned and rented out by private businesses. A no-till grass drill made available to interested landowners would increase both the quantity and quality of wildlife habitat established. Significant increases in wildlife habitat plantings in the area through programs like: Conservation Reserve Program, Conservation Reserve Enhancement Program, Continuous Conservation Reserve Program, Corners For Wildlife, CRP-MAP, etc. have greatly increased the need for this type of specialized equipment. Matching NET moneys with that of the Nemaha Valley Pheasants Forever chapter would purchase the no-till drill. The purchase price of a no-till grass drill is approximately \$30,000 to \$32,000. Brewer Construction of Humboldt, NE will oversee the operation, maintenance and rental of the drill. A fund will be set up to pay for routine maintenance of the drill as well as any repairs needed to keep the drill in top operating condition. The drill will be available for any landowner in the area to use at a nominal fee. A no-till grass drill is needed to handle the fluffy seeds associated with many warm-season grasses, wildflowers and legumes. These fluffy seeds are not effectively planted with conventional drills. By establishing more wildlife habitat to a higher quality habitat provided by these seed mixtures, wildlife will benefit.

Sponsor Name: Pheasants Forever, Inc.**Nearest Town:** St. Paul**Project Name:** Corners for Wildlife**Project No:** 07-150-3**Amount Requested:** \$200,000**Term of Project Request:** 1**Review Group:** Statement of Intent

This application is a continuation of a partnership funded by the Trust from 1994 to 2006. The program successfully partners money from the Trust, Pheasants Forever, Inc., Pheasants Forever Chapters, Natural Resources Districts and landowners throughout the state to establish permanent wildlife habitat. In the twelve years the program has been offered to the public, Trust funds have been partnered with over \$896,332 from materials from 45 Pheasants Forever chapters, 16 Natural Resources Districts and private landowners on 1,091 projects throughout the state. With "in-kind" contributions included, the level of partnership in the program exceeds \$3,462,587.

Landowners enrolling in Corners for Wildlife agree to establish wildlife habitat on center pivot irrigation field corners. Corners are established to one of two available cover practices. Landowners receive a per acre rental payment for a five-year contract. Materials to establish cover practices are cost-shared 75% by Pheasants Forever chapters with landowners responsible for 25% of material costs. In some cases, the cover practices are established with a 100% cost share by the participating Natural Resources Districts.

This program is very successful at establishing permanent wildlife habitat as landowners have averaged 514 trees and shrubs per corner in the program. Every year the program has been offered, there has been more interest in enrollment than the program can fund. The history, innovativeness and success of this program laid the cornerstone for the USDA Conservation Reserve Enhancement Program (CREP) offered in Nebraska where 21,000 acres of center pivot irrigation field corners were enrolled in wildlife habitat. In addition, the success of this program is serving as the model for proposed modifications to the Platte-Republican CREP that is currently being enrolled in southwestern Nebraska. These factors are a clear sign of the acceptance, generated results and long-term success of the Corners for Wildlife program.

THIS PROJECT WAS FUNDED \$1,940,000 FROM 1994-2006. THIS PROJECT WAS FUNDED \$300,000 IN 2007 WITH THE INTENT TO FUND UP TO \$200,000 IN YEAR TWO AND \$200,000 IN YEAR THREE PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE THIRD YEAR REQUEST.

Sponsor Name: Pheasants Forever, Inc.**Nearest Town:** Curtis**Project Name:** Loess Canyons Rangeland Restoration and Enhancement**Project No:** 09-188**Amount Requested:** \$150,000**Term of Project Request:** 1**Review Group:** Rural Habitat

The Loess Canyons Grassland Restoration and Enhancement Project seeks to bolster and expand upon current collaborative efforts to preserve the cultural and biological heritage of the Loess Canyons landscape through cooperative habitat projects, educational and outreach programs, innovative partnerships, and shared learning. The Loess Canyons landscape, located SE of North Platte, was identified in Nebraska's Natural Legacy Project (NNLP), the statewide blueprint for wildlife conservation, as a "biologically unique landscape" (BUL) which supports a great diversity of flora and fauna and presents an excellent opportunity for wildlife conservation through landscape-scale habitat management and cooperation. The most pressing threat to the biodiversity of the Loess Canyons is the rapid and wide-spread encroachment of eastern red cedar trees into what was previously a mosaic of open grasslands and hardwood draws with a significant shrub component. Red cedar encroachment also threatens the primary land use in the landscape, cattle ranching, by reducing the availability of grass as well as increasing the difficulty of moving cattle. The dovetailing interests of wildlife managers and ranchers in this working landscape set an ideal stage for NNLP implementation to make significant and long-lasting changes in the Loess Canyons. Attitudes and behaviors are already changing in the landscape because of the powerful examples that NNLP projects have provided. We propose to expand upon the successes of the NNLP through the development of 10-year habitat management agreements that remove red cedar trees, restore open grasslands and native hardwood draws, promote healthy grassland communities through prescribed grazing, and habitat maintenance with prescribed burning. Management workshops, wildlife tours, and other educational programs will increase public awareness and knowledge both within the BUL and the surrounding communities. This project will support and facilitate efforts to achieve greater sustainability in land management through the development of uses for red cedar trees.

Sponsor Name: Platte River Basin Environments, Inc.**Nearest Town:** Henry**Project Name:** Centennial Creek Acquisition**Project No:** 09-124**Amount Requested:** \$537,390**Term of Project Request:** 2**Review Group:** Rural Habitat

The Centennial Creek Acquisition project represents an outstanding opportunity to conserve 146 acres of Platte River habitat near Scottsbluff. The project will permanently protect over one mile of riparian habitat, including over 1/2 mile of river frontage and approximately 1/2 mile of Centennial Creek. The property lies adjacent to both the Horse Creek tract, owned by Platte River Basin Environments, Inc., and the Stateline Island Unit of the North Platte River National Wildlife Refuge. The acquisition of this property is an ideal expansion of these previously protected properties. The addition of the 146-acre Centennial Creek property will result in a contiguous block of 757 acres of protected and restored Platte River habitat. The property is located just south of Henry, Nebraska, about 1/2 mile from the Wyoming state line. This project will result in the acquisition and restoration of important wildlife habitats that provide benefits to waterfowl, shorebirds, raptors, fish, deer, turkeys, and many other species of wildlife. Tens of thousands of waterfowl use this particular stretch of the Platte River as migration and wintering habitat, loafing on river sandbars and feeding in nearby sloughs and crop fields. Bald eagles are common along this stretch of the river. Over 225 species of migratory birds use Platte River habitats in this area. This project falls within the North Platte River Wetlands ecoregion, a Biologically Unique Landscape identified in the Nebraska Natural Legacy Plan. The Plan identifies the fee title acquisition of key properties as one of the conservation strategies necessary to protect and restore important habitats. This project will also include the removal of Russian olive trees and other invasive species, and the restoration of wetland habitat. Partners will provide over \$319,000 towards this proposal, which represents approximately 35% of total project costs.

Sponsor Name: Platte River Whooping Crane Maintenance Trust, Inc. **Nearest Town:** Elm Creek
Project Name: John's Restoration **Project No:** 09-138
Amount Requested: \$202,400 **Term of Project Request:** 1 **Review Group:** Rural Habitat

The main purpose of this project is to restore and reestablish Whooping and Sandhill Crane roosting and feeding sites at the same time that some other migratory bird such as Least Terns and Piping Plovers nesting sites are created. Riparian areas are highly susceptible to woody species encroachment reducing land value as bird habitat and wet meadow. We plan to restore wet meadows through the clearing of these woody species. We will also treat recent infestations of Musk Thistle and clear Russian Olive invaded meadows. The site for this project is a 492 acre tract known as John's property that has been owned by the Platte River Whooping Crane Maintenance Trust since 1985. The maintenance of these sensitive areas represents a high conservation value as roosting sites for Whooping Cranes and nesting for Terns and Plovers. Especially during dry years, Whooping Cranes have been continuously using this area to roost when some other wetlands as Funk Lagoon are dry. Also, tree clearing and adequate river sand management can promote nesting sites for Terns and Plovers. In 2008, just one year after restoration, in Dippel Farm (funded by NET) 10+ pairs of Least Terns and Piping Plovers were recorded nesting on sand bars next to former Cottonwood forest. Funding in the amount of \$202,400 is sought from the Environmental Trust, while the Platte River Whooping Crane Maintenance Trust will provide \$53,500 (in-kind) for a 21% match, to restore 370 acres of brush invaded meadows, clear 150 acres of Russian Olive encroached areas and control Musk Thistle from another 100 acres.

Sponsor Name: Playa Lakes Joint Venture **Nearest Town:** Statewide
Project Name: Nebraska Landcover Accuracy Assessment **Project No:** 09-177
Amount Requested: \$62,615 **Term of Project Request:** 1 **Review Group:** Rural Habitat

The Playa Lakes Joint Venture (PLJV), U.S. Fish and Wildlife Service (USFWS), and Rainwater Basin Joint Venture (RWB JV) recently developed a unique state-wide geospatial landcover layer for Nebraska. The purpose of this landcover layer is to provide natural resource managers with a single consolidated source of the most current conservation-pertinent spatial data available. This landcover layer is currently being used by multiple entities throughout Nebraska to analyze wildlife habitat for conservation and management. However, the accuracy of the landcover layer is unknown and the layer does not provide sufficient information on the conditions of the habitats it maps. Accuracy estimates provide statistical measures of confidence and error that help determine the reliability and appropriate uses of the data. Detailed habitat condition data allows managers to better associate wildlife species with the mapped habitats (conditions can greatly influence suitability to species). This project proposes a state-wide, scientifically designed accuracy assessment of the landcover that will fulfill three needs: 1) an accuracy estimate of the landcover that provides a quantitative measure of confidence, 2) a spatially explicit collection of habitat condition data that provides insight to suitability for various wildlife species, and 3) a protocol and dataset that can be used in understanding the Nebraska's landscape and will greatly improve our ability to deliver effective conservation planning and management. Our methods for the assessment follow published, peer-reviewed guidelines that ensure an appropriate level of power and rigor. The assessment will be conducted in the spring of 2010 when field technicians will collect habitat data at approximately 2,000 randomly distributed points across the state. All data resulting from the project will be packaged along with the landcover layer and will be made available to the public. This project will be completed by the PLJV in conjunction with the USFWS and RWB JV.

Sponsor Name: PrairieLand RC&D Council **Nearest Town:** Lindsay, Newman Grov
Project Name: Shell Creek Watershed Improvement Project **Project No:** 07-109-3
Amount Requested: \$150,000 **Term of Project Request:** 1 **Review Group:** Statement of Intent

The Shell Creek Watershed Improvement Project's (SCWIP) goal is to increase the use of resource conservation practices and to restore a conservation ethic within the Shell Creek Watershed. A very dedicated volunteer watershed board, which received a World Herald Master Conservationist award in 2005, partners with public and private entities to educate land users and the public about conservation practices and to offer incentives for implementing best practices. Renewed funding of this aggressive informational/educational and conservation-practice-incentive program will generate significant positive contributions to surface and groundwater quality, waste management, soil management, habitat and air quality, both within and beyond the Shell Creek Watershed.

The education component of the SCWIP consists of land user and public education, and water quality. NET funds, in conjunction with grant funds from the Nebraska Department of Environmental Quality, support educational meetings and field tours, led by UNL Extension and Natural Resources Conservation Service personnel, to educate landowners about the watershed project. Over 1800 land users receive the quarterly SCWIP Newsletter.

Water Quality Teams, students at Newman Grove and Schuyler High Schools, complete comprehensive water testing throughout Shell Creek and report findings to project stakeholders. The Newman Grove Water Quality Team has received the World Herald Master Conservationist Award and recognition from the Nebraska State and the Western RC&D Associations. The monitoring program encourages community buy-in for the project and commitment to environmental issues.

In conjunction with support from other sources, NET funds provide conservation incentives to stimulate increased landowner participation in several conservation programs on thousands of acres in the Shell Creek watershed. Increased no-till crop management will decrease soil erosion and stream contamination by nutrients and pesticides. Newly established vegetative buffers will provide filtering of sediment and pollutants and increase wildlife habitats.

THIS PROJECT HAS BEEN FUNDED \$255,000 FROM 2004-2006. THIS PROJECT WAS FUNDED \$150,000 IN 2007 WITH THE INTENT TO FUND UP TO \$150,000 IN YEAR TWO AND \$150,000 IN YEAR THREE PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE THIRD YEAR REQUEST.

Sponsor Name: PrairieLand RC&D Council **Nearest Town:** Madison
Project Name: Nebraska Continuous No-Till Project **Project No:** 07-160-3
Amount Requested: \$110,000 **Term of Project Request:** 1 **Review Group:** Statement of Intent

This is a state-wide project that will organize and coordinate more than 4 public and 7 private partners to build upon and expand existing efforts in order to increase the adoption and sustainable use of Continuous No-Till (CNT) by 1 million acres. At this time, CNT is THE single best cropland practice to implement. It will result in tremendous positive improvements to Soil, Water, Air, Plants, Animals, and Humans. It will provide an economic benefit to individual farmers of as much as \$50/acre or more. It will be extremely cost-effective at less than \$1/acre. The practice of Continuous No-Till (CNT) works across the entire state of Nebraska. Soil erosion can be reduced by an average of 4 to 14 tons/acre or more, bringing erosion down to less than 1 ton/acre. CNT can sequester high amounts of Carbon. CNT can reduce pesticide runoff by an average of 70%, water runoff by 69%, and soil erosion by 93%. As much as 10-15 inches per acre or more of irrigation water can be saved each year. CNT can increase wildlife numbers and crop yields. Fossil fuel use can be cut by up to 50% or more. NET funds will be used to fund all or part of the following: a UNL Extension No-Till Specialist, a Western Nebraska No-Till Specialist, a project Coordinator-Administrator-Marketer, host a website, host state-wide/regional/local CNT events, provide opportunity for participants to attend key in-state and out-of-state CNT events, develop and distribute I&E materials, & other. THIS PROJECT WAS FUNDED \$110,000 IN 2007 WITH THE INTENT TO FUND UP TO \$110,000 IN YEAR TWO AND \$110,000 IN YEAR THREE PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE THIRD YEAR REQUEST.

Sponsor Name: Prescribed Burn Task Force **Nearest Town:** Kearney, Broken Bow,
Project Name: Prescribed Burn Task Force Education and Expansion Project **Project No:** 08-107-2
Amount Requested: \$47,329 **Term of Project Request:** 2 **Review Group:** Statement of Intent

In 1996, interest in prescribed fire among land users was increasing. The need for safe uses of fire as a management tool became evident. Out of that need a group of volunteer fireman, federal and state agency personnel and private organizations partnered together to form the first of it's kind in Nebraska: The Prescribed Burn Task Force (PBTF). The PBTF encompassed four counties in south central Nebraska: Buffalo, Custer, Dawson and Lincoln. The partnership has grown over the years and new members have joined or moved on, but the focus of the group remains the same: To facilitate cooperation among landowners/land managers to enhance grassland resources through education, demonstration and application of prescribed burning and related management techniques. The health and productivity of Nebraska's rangelands, the largest land use in the state, is jeopardized by encroaching Eastern Red Cedar trees. Prescribed fire is an effective, economical tool to be used in the management of grasslands; restoring native prairie and grassland bird habitat. In eleven years the PBTF has successfully taught 1255 people at our spring burn schools and completed demonstration burns on 28,780 acres. The PBTF Tool Caches that were purchased with previous grants and donations have helped immensely, but there are not enough Tool Caches to meet the needs. Interest has increased so much that more Tool Caches are needed for use by the 4 county's producers and those land owners in nearby counties. With the help of the Environmental Trust Fund grant, PBTF hopes to continue quality schools and the purchasing of 5 additional Tool Caches. The fact that PBTF's influence and success has gone from four counties to 34 Nebraska counties and 9 in Iowa and South Dakota (see Area of Influence Map in the Narrative section) speaks for the cooperation between public and private entities. THIS PROJECT WAS FUNDED \$5,300 IN 1997, AND \$130,000 FROM 2004-2006 UNDER CENTRAL PLATTE NRD. THIS PROJECT WAS FUNDED \$51,550 IN 2008 WITH THE INTENT TO FUND UP TO \$47,329 IN YEAR TWO AND \$20,900 IN YEAR THREE PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE SECOND YEAR REQUEST.

Sponsor Name: Quail Forever **Nearest Town:** Statewide
Project Name: A Mobile Prescribed Burn Unit **Project No:** 09-119
Amount Requested: \$60,000 **Term of Project Request:** 1 **Review Group:** Equipment

This application seeks funding to continue the process of building Mobile Prescribed Burn Units (MPBU), forming prescribed burn associations, hosting landowner prescribed burn workshops and increasing the use of prescribed burning on the landscape. Nearly every wildlife partnership and management plan in the state calls for the increased use of prescribed burns to reach their management and partnership goals. Despite those management plans, prescribed burning continues to be a difficult management option to apply. Four major factors are consistently identified as limiting its use on the landscape: 1) Access to prescribed burn equipment; 2) Prescribed burn training; 3) Man-power to conduct prescribed burns; and 4) Prescribed burn liability coverage. Quail Forever is working closely with the Nebraska Natural Legacy Project to implement its management goals and employs 14 biologists in the state with Pheasants Forever that are working directly with the plan. The creation of MPBU's is directly benefiting the NNLP by creating a set of tools that can quickly be transported to whichever Nebraska Natural Legacy Project Biologically Unique Landscape was ready for its use and the weather conditions made burning possible. The unique aspect of this mobile unit is that the necessary prescribed burn equipment could be available in any region of the state in less than a day. Quail Forever has begun the process of identifying the four prescribed burning limitations and is working to overcome them. Seven different scenarios are outlined in this application that are specifically working to remove limitations and increase the use of prescribed burning on the landscape. The requested NET Funds will be matched with those of Quail Forever to purchase, maintain and administer MPBU's in strategic locations throughout the state, develop prescribed burn associations and provide landowner training workshops. THIS PROJECT WAS FUNDED \$13,275 UNDER PHEASANTS FOREVER IN 2008.

Sponsor Name: Quail Forever - Wachtel fur Immer**Nearest Town:** Eustis**Project Name:** No-till Grass Drill**Project No:** 09-108R**Amount Requested:** \$15,000**Term of Project Request:** 1**Review Group:** Equipment

This grant application seeks funding from the NET to purchase a no-till grass drill to be used by landowners to establish wildlife habitat. Currently, there are few no-till drills available in the state and those that are available are owned and rented out by private businesses. A no-till grass drill made available to interested landowners would increase both the quantity and quality of wildlife habitat established. Significant increases in wildlife habitat plantings in the area through programs like: Conservation Reserve Program, Conservation Reserve Enhancement Program, Continuous Conservation Reserve Program, Corners For Wildlife, CRP-MAP, etc. have greatly increased the need for this type of specialized equipment. Matching NET moneys with that of the Wachtel Fur Immer Quail Forever chapter would purchase the no-till drill. The purchase price of a no-till grass drill is approximately \$30,000 to \$32,000. Bellamy, Inc. of Eustis, NE will oversee the operation, maintenance and rental of the drill. A fund will be set up to pay for routine maintenance of the drill as well as any repairs needed to keep the drill in top operating condition. The drill will be available for any landowner in the area to use at a nominal fee. A no-till grass drill is needed to handle the fluffy seeds associated with many warm-season grasses, wildflowers and legumes. These fluffy seeds are not effectively planted with conventional drills. By establishing more wildlife habitat to a higher quality habitat provided by these seed mixtures, wildlife will benefit.

Sponsor Name: Rainwater Basin Joint Venture**Nearest Town:** Exeter**Project Name:** Hiebner Working Landscape Easement**Project No:** 08-134-2**Amount Requested:** \$30,300**Term of Project Request:** 1**Review Group:** Statement of Intent

The Hiebner Working Landscape Easement proposal will permanently restore 318.4 acres of wetlands and grasslands within the Rainwater Basin in south-central Nebraska. This project is an extension of the "working landscape" proposal approved by the Nebraska Environmental Trust in April 2007. The proposal offers several significant benefits, including: restoration of important wildlife habitat, including habitat that will benefit rare and at-risk species, the conservation of both ground water and surface water, soil conservation, the improvement of air quality, and an increase in wildlife-dependent recreation. In addition, the proposal focuses on the conservation of habitat as part of a "working landscape", ensuring that rural economies remain an important component of the project. The conservation easement will require the restoration of native grasslands and wetlands, providing significant benefits to migratory birds, resident wildlife and many other wildlife species.

Unlike many "retirement" programs, landowners continue to utilize properties as part of the "working landscape" program. In this case, 318 acres of irrigated farmland will be restored to non-irrigated grasslands and wetlands. The property will be managed by haying and/or grazing in the future. As part of the proposed easement, the landowner will retain the rights of grazing and haying on the property. The restoration of this property, and retirement of two center pivot irrigation systems, will eliminate groundwater use, recharge groundwater supplies, reduce soil loss and improve water quality in Indian Creek, a tributary to the West Fork of the Big Blue River. Several partners have been identified who are willing to hold this conservation easement, including the Upper Big Blue Natural Resource District, Ducks Unlimited, Inc. and the U.S. Fish and Wildlife Service. Funds from the Nebraska Environmental Trust Fund are requested to assist with the purchase of the conservation easement and the implementation of habitat restoration plans. Partners will provide approximately 50% of the overall project costs.

THIS PROJECT WAS FUNDED \$316,174 IN 2008 WITH THE INTENT TO FUND UP TO \$30,300 IN YEAR TWO PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE SECOND YEAR REQUEST.

Sponsor Name: Rainwater Basin Joint Venture **Nearest Town:** Hastings, York, Clay Ce
Project Name: South-Central Nebraska LiDAR Project **Project No:** 08-148-2
Amount Requested: \$28,000 **Term of Project Request:** 1 **Review Group:** Statement of Intent

The Rainwater Basin Joint Venture (RWBJV), in cooperation with multiple state and federal partners is applying for Nebraska Environmental Trust funding to acquire Light Detection and Ranging (LIDAR) data for the Rainwater Basin, Platte River, and Republican River areas of South-Central Nebraska (Figure 2). LIDAR is a proven technology that has been used extensively in natural resource applications. Several states have acquired LIDAR for their entire range, and Iowa is currently acquiring LIDAR across the entire state. The LIDAR process develops extremely accurate topographic elevations by precisely measuring the time it takes for a laser pulse transmitted from an aircraft to be reflected from the ground surface. The LIDAR data will be used to create a highly-detailed 1-2 foot resolution Digital Elevation Model (DEM) which will replace the outdated and inaccurate 10-meter DEMs currently available. The more detailed elevation data will allow conservation planners to integrate the detailed topographic information with existing GIS layers to create accurate spatial models, conservation plans, and provide strategic and targeted decision support tools to partner field staff. Partner conservation program delivery staff such as: NRCS, Nebraska Game & Parks, US Fish and Wildlife Service, Nebraska DNR, and Ducks Unlimited among others, can then also incorporate the detailed elevation data into the project design process resulting in greatly improved accuracy, staff efficiency, and budget savings. For the Rainwater Basin region, LIDAR-elevation data will be integrated with the wealth of GIS data currently assembled to improve spatial habitat modeling and decision support tools for protecting and restoring wetland habitats. The RWBJV is developing a Wetland Restoration Index (WRI) for every historic Rainwater Basin wetland to calculate the cost to restore the wetland's natural function. Without detailed elevation data, completion of this tool is not possible. This tool will be used to prioritize protection and restoration efforts by partners to maximize restoration dollars to achieve the greatest biological bang for the conservation dollar. LIDAR-derived elevation data would be of incalculable benefit to numerous conservation agencies and disciplines in the order of staff time, field visits, and engineering costs including but not limited to: engineering of conservation practices, soils mapping, flood plain mapping, surface water to groundwater hydrologic modeling, among many others. SUMMARY TRUNCATED FOR SPACE. THIS PROJECT WAS SUBMITTED IN 2007 BUT NOT FUNDED DUE TO PLACEMENT ON THE RANK ORDER LIST. THIS PROJECT WAS FUNDED \$560,000 IN 2008 WITH THE INTENT TO FUND UP TO \$28,000 IN YEAR TWO PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE SECOND YEAR REQUEST.

Sponsor Name: Rainwater Basin Joint Venture **Nearest Town:** Shickley
Project Name: Mae Carey Estate Working Landscape Easement **Project No:** 09-129
Amount Requested: \$183,489 **Term of Project Request:** 1 **Review Group:** Rural Habitat

The Mae Carey Estate Working Landscape Easement proposal will permanently restore 320 acres of wetlands and grasslands within the Rainwater Basin in south-central Nebraska. This project is an extension of the "working landscape" proposal approved by the Nebraska Environmental Trust in April 2007. The proposal offers several significant benefits, including: restoration of important wildlife habitat, including habitat that will benefit rare and at-risk species, the conservation of both ground water and surface water, soil conservation, the improvement of air quality, and an increase in wildlife-dependent recreation. In addition, the proposal focuses on the conservation of habitat as part of a "working landscape", ensuring that rural economies remain an important component of the project. The conservation easement will require the restoration of native grasslands and wetlands, providing significant benefits to migratory birds, resident wildlife and many other wildlife species.

Unlike many "retirement" programs, the landowner will continue to utilize this property as part of the "working landscape" program. On the Mae Carey Estate, 87 acres of cropland, including 76 acres of irrigated cropland will be restored to native grassland. An additional 67 acres of cropland will be restored to wetland. The balance of the property contains additional drained wetlands and is currently used for hay production. A total of 185 acres of drained wetlands will be restored on the Mae Carey Estate. Future agricultural uses allowed on the property will include haying and grazing. The U.S. Fish and Wildlife Service owns the adjacent property and will hold the easement on this tract. The proposed restoration work will significantly enhance an additional 200 acres of wetlands on the adjacent Fish and Wildlife Service property. Funds from the Nebraska Environmental Trust Fund are requested to assist with the purchase of the conservation easement and the implementation of habitat restoration plans. Partners will provide approximately 53% of the overall project costs. SIMILAR EASEMENT PROJECTS WERE FUNDED \$1,096,474 FROM 2007-2009. THIS REQUEST IS FOR A CONTINUATION OF THIS PROJECT.

Sponsor Name: Rainwater Basin Joint Venture **Nearest Town:** Multiple
Project Name: Rainwater Basin Spring Waterfowl Habitat Survey **Project No:** 09-175
Amount Requested: \$143,000 **Term of Project Request:** 3 **Review Group:** Rural Habitat

The Rainwater Basin Spring Waterfowl Habitat Survey Project (Habitat Survey) is one part of a comprehensive biological & landscape planning effort intended to focus limited partners resources used to protect, restore, and enhance wetlands in the Rainwater Basin Wetland Complex. The Habitat Survey was initiated in the spring of 2004 in an effort to document the contemporary presence of wetlands remaining on the landscape despite widespread historic draining. The Habitat Survey has been continued to capture the annual hydrologic variability of the Rainwater Basins under differing climate/precipitation patterns. Due to natural climate cycles and wetland's ephemeral nature not all wetlands provide the same habitat each spring. With additional funding through the NE Environmental Trust, in order to capture the wide range of climate conditions contributing to spring wetland function, the Habitat Survey is planned to continue through 2011. It is estimated that seven years of data documenting habitat conditions under variable wet/dry climatic conditions, should provide a baseline from which a predictive model can be built to forecast spring habitat conditions. The seven years of Habitat Survey data will inform and refine RWBJV habitat protection, restoration, and enhancement goals required to meet the habitat needs of approximately 9.8 million waterfowl that migrate through the Rainwater Basins each spring. The Habitat Survey will also be used in conjunction with biological and spatial datasets to create individual wetland watershed restoration/management plans for all perpetually-protected wetlands. These plans will prioritize wetland restoration and enhancement activities to maximize the habitat gain returned for the staff and restoration dollar. This work is a continuation of the RWBJV's ongoing planning efforts to maximize the habitat gained for the conservation dollar invested. The RWBJV is requesting Trust funding for a portion of aerial photography acquisition costs, which is needed to annually conduct habitat monitoring efforts.

Sponsor Name: Rainwater Basin Joint Venture **Nearest Town:** Multiple
Project Name: Wetland Habitat Restoration, Protection, Enhancement **Project No:** 09-176
Amount Requested: \$2,250,000 **Term of Project Request:** 3 **Review Group:** Rural Habitat

The Wetland Restoration and Management Project will restore, enhance, and protect wetland and associated upland habitat within the Rainwater Basin landscape in south-central Nebraska. The project entails wetland restoration on lands either owned by private individuals, acquired from willing sellers, or through purchased easements. The project will increase the amount and quality of habitat through restoration of hydrology, vegetation, and wetland functions. Incentive programs assist landowners in water and vegetation management in wetlands they own. Partnerships with federal, state, and local government and non-governmental conservation organizations will facilitate long term protection & restoration of wetland resources. Ten-year land use and transition payments will assure sustainable changes in the use of the land. Lands acquired for wetland restoration and protection will be restored and managed for wildlife habitat and recreational activities associated with upland and waterfowl birds. The Joint Venture Management Board will allocate grant funds between the private lands and public lands programs. THIS IS A CONTINUATION OF WORK DONE BY THE RAINWATER BASIN OVER THE LAST 12 YEARS - THEY HAVE BEEN FUNDED A TOTAL OF \$4,885,000 FROM 1994-2008. THIS IS A CONTINUATION OF THIS PROJECT.

Sponsor Name: Riparian Vegetation Management Task Force **Nearest Town:** Kearney, Darr, Brady
Project Name: Demonstration and Applied Research Project of Integrated Management of Invasive Riparian Vegetation in Nebraska **Project No:** 09-152
Amount Requested: \$381,800 **Term of Project Request:** 3 **Review Group:** Rural Habitat

Invasive plant species in riparian areas have numerous negative effects. Among the most notable are reduced conveyance of water, reduction of native plant species utilized for wildlife, and reduced recreational activities. This project will enhance and improve current control activities as well as provide proven control data to be used in all areas of the state. All riparian areas, regardless of ownership, can benefit from this study, as it will assist landowners and land managers with the correct tools to effectively maintain a healthy riparian ecosystem. Research has shown that a single control measure does not provide long term, sustainable, control of invasive plant species. Therefore, control programs should be based on an integrated approach, which includes the use of a variety of mechanical, cultural, herbicide, and biological control methods. We propose a three year demonstration and applied research project with the following objectives: 1) to demonstrate an integrated approach for riparian invasive plant species control based on a variety of mechanical, biological and herbicide control methods, 2) to develop "Best Management Practices" for long-term integrated control of riparian invasive plant species, 3) evaluate cost-effectiveness of integrated control methods, 4) develop a proven method to survey, map and monitor riparian areas, and 5) print, publish and distribute public awareness material to be utilized in future projects. For the 2008 calendar year this project is being funded by the High Plains Weed Management Association through an Environmental Trust Grant (North Platte River Invasive Species Control Project). This request will complement the study by providing two years of additional data to better understand invasive plants, their control and how these species impacts one of our states most natural resource. Year three will be used as a cleanup year of the study site and will incorporate the best known control methods derived from the study to control invasive vegetation in and around all test plots and the study area. A GRANT WITH THE HIGH PLAINS WEED MANAGEMENT ASSOCIATION #08-118 HAS \$60,000 INVESTED IN THIS STUDY FOR TEST PLOTS. THIS GRANT WOULD COMPLEMENT THE STUDY STARTED UNDER THE HIGH PLAINS GRANT.

Sponsor Name: Rocky Mountain Bird Observatory **Nearest Town:** Multiple
Project Name: A Comprehensive approach to shortgrass prairie education in the panhandle of Nebraska **Project No:** 07-115-3
Amount Requested: \$73,236 **Term of Project Request:** 1 **Review Group:** Statement of Intent

Rocky Mountain Bird Observatory (RMBO), in partnership with the Nebraska Game and Parks Commission (NGPC) have outlined conservation and educational activities and actions that will inform and educate students, teachers, landowners, and resource professionals about the shortgrass prairie and ponderosa pine ecosystems of the panhandle of Nebraska. We will hire a full time Nebraska Shortgrass Prairie Education Coordinator to design, implement, and coordinate education and outreach activities that will focus on wildlife habitat and water conservation needs critical for the long-term viability of the panhandle and address at-risk species conservation. We will take a bottom-up and top-down approach working at the individual, classroom, and workshop levels for conservation and coordinate to develop a team of educators that can help inform and educate the different publics in the panhandle about the target habitats. We will use successful education models from Colorado (Education and Bird Banding Stations) and Saskatchewan (Eco-X) to promote use of our shortgrass prairie education trunks, schoolyard habitat projects, and demonstration sites at Riverside Zoo. We will build on the successful Nebraska Prairie Partners effort to continue outreach to landowners and resource professionals for conservation and integrate this with youth education to create consensus within the region. With support from the Nebraska Environmental Trust we anticipate reaching at least 7,500 students and an additional 500 landowners, resource professionals, and educators in western Nebraska. Efforts will promote experiential and place-base education for all learners. Proposed actions will make significant strides toward priority strategies outlined in the Nebraska Environmental Trust, the Nebraska Natural Legacy Project, and the Nebraska Environmental Education Master Plan. THIS PROJECT WAS FUNDED \$72,140 IN 2007 WITH THE INTENT TO FUND UP TO \$68,277 IN YEAR TWO AND \$73,236 IN YEAR THREE PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE THIRD YEAR REQUEST.

Sponsor Name: Rocky Mountain Bird Observatory **Nearest Town:** Kimball
Project Name: Habitat Conservation in the Kimball Grasslands Biologically Unique Landscape **Project No:** 09-190
Amount Requested: \$79,496 **Term of Project Request:** 1 **Review Group:** Rural Habitat

Nebraska Prairie Partners, a cooperative of Rocky Mountain Bird Observatory and Nebraska Game and Parks Commission, is seeking support from the Nebraska Environmental Trust to lay the groundwork for transitioning the successful Mountain Plover Nest Conservation program into a landowner lead initiative and developing a local conservation working group within the Kimball Grasslands Biologically Unique Landscape. The success of the Mountain Plover nest conservation program has exceeded all partner expectations. Landowner involvement and willingness to allow nest marking has grown exponentially since the programs inception in 2004. The opportunities are ripe to empower the local producers to take this program over and train them to identify and avoid nests destruction. This grant will allow us to start implementing this transition phase. A phased strategy will be critical for maintaining landowner interest and buy-in for the program and ensuring its long-term sustainability. In addition, NPP has been engaging producers in western Nebraska for eight years and has been working cooperatively to find win:win solutions for conservation and agricultural production. A foundation of trust and relationships has been built. NPP has also helped create consensus with resource partner agencies about priority conservation needs. Thus, NPP is well suited to work with partners on developing and implementing a Kimball County Conservation Working Group. This grassroots group will identify and work cooperatively to address priority conservation concerns within the Kimball Biologically Unique Landscape. It will create a forum for local partners to meet on a regular basis to share concerns and pool local knowledge and resources to address any concerns. PREVIOUS GRANTS TO RMBO FROM 2002-2007 TOTALING \$316,670 SUPPORTED THE MOUNTAIN PLOVER NESTING PROGRAM.

Sponsor Name: Rowe Sanctuary **Nearest Town:** Statewide
Project Name: Platte River Education Project **Project No:** 09-103
Amount Requested: \$309,837 **Term of Project Request:** 3 **Review Group:** Education

Many Nebraska students know more about the rainforest than they do the Platte River, the ecosystem that not only impacts their daily lives but is critical to endangered whooping cranes, least terns and threatened piping plovers and other wildlife. To begin to reverse this trend, Audubon's Rowe Sanctuary and its partners seek funding to develop and implement an innovative, multifaceted environmental education program for middle and high school students, and educators called the Platte River Education Project (PREP). The goals of this three year project are to 1) provide students and educators with the tools needed to increase awareness and understanding of Platte River ecosystems and the wildlife/human relationships to those systems; 2) develop a conservation ethic within the community of middle and high school students and educators; and 3) expand knowledge of the Platte River and the importance of conservation to members of the public beyond the classroom and Nebraska's borders.

These goals will be accomplished by 1) developing, producing and airing three live, interactive webcasts focusing on central Platte River habitats, endangered and invasive species that will be viewed by at least 7,000 teachers and students on an educational resource website; 2) archiving webcasts on the website in English and Spanish; 3) involving pre-service teachers (undergraduate students) in developing educational activities and lesson plans to supplement the webcasts; 4) conducting three educator camps; 5) sponsoring up to sixty student citizen science and stewardship projects; and 6) developing a recruiting and marketing plan to reach at least 100,000 people worldwide. PREP will build upon the highly successful Crane Cam technology currently available on the National Geographic Magazine's website and Rowe Sanctuary's web-based educational videos for elementary students and families.

Sponsor Name: Schuyler, City of**Nearest Town:** Schuyler**Project Name:** South Park Lake Restoration**Project No:** 09-140**Amount Requested:** \$803,800**Term of Project Request:** 3**Review Group:** Lake Rehabilitation

The South Park Lake Project proposal consists of restoration of an existing park lake which will include excavation of the lake bottom, re-shaping of the banks, creating a better fishery, modify an existing fishing jetty, create fishery habitat and create a wetland area. This is located on public property and is owned by the City of Schuyler, Nebraska, except for a small portion that abuts the City owned golf course. In recent years the lake has become a nuisance with large algae blooms, lowered water levels and stagnant water.

PROPOSAL: A) Excavate the lake bottom by dredging to deepen the lake, over one-quarter (27%) of which will reach depths of 10 to 12 feet. Some of the excavated materials can be re-distributed on-site and some will be hauled away. B) The western section of the lake (Golf Course area) would remain at the present water elevation and would be supplemented by ground water pumping. C) Create wetlands and plant native vegetation species in approximately 2 acres within the existing lake boundary. D) Stabilize the shorelines after excavation. E) Modify the existing fishing jetty. F) Construction and ADA compliant fishing pad and sidewalk. G) Construct a new fishing jetty. H) Create an earthen pathway along the south side of the lake for wildlife viewing and lake access. I) Re-seed the banks and disturbed areas. J) Plant trees to replace those that were removed for bank shaping.

GOALS: A) Increase the water depth for recreational purposes and improve water quality. B) Enhance lake fisheries with spawning and rearing habitat. C) Enhance wildlife and bird habitats. D) Separate the lake into two lakes to reduce ground water pumping costs and pump maintenance. E) Reshaping of the banks will also include a bench along the South Park Road for a future trail for increased additional recreational possibilities.

Sponsor Name: South Platte Natural Resources District**Nearest Town:** Sidney**Project Name:** Southern Panhandle Grass Drill**Project No:** 09-167R**Amount Requested:** \$15,000**Term of Project Request:** 1**Review Group:** Equipment

The South Platte NRD encompasses the southern one-third of the Nebraska Panhandle (Deuel, Cheyenne and Kimball Counties). Specialized equipment, such as a grass drill, is necessary for many wildlife-focused conservation practices. In 2001, the Nebraska Environmental Trust generously funded a grass drill for the Sidney, Neb. High Plains Chapter of Pheasants Forever. Used extensively in Cheyenne, Kimball and Deuel Counties, this drill has planted 3,802 acres, resulting in extensive and increasingly frequent repairs. Although the existing drill will remain available for smaller plantings, a new, reliable grass drill is needed for larger tracts of Conservation Reserve Program (CRP) land enhancements. With the CRP Enhancement requirement, CRP cooperators in the Southern Panhandle will be required to conduct mid-contract enhancement of their CRP acres, resulting in approximately 226,000 acres requiring the use of a no-till grass drill. The South Platte NRD is an evident choice for producers to rent a certified grass drill to conduct such operations. The NRD would like to provide conservation-program cooperators with a 10-ft. drill to efficiently accomplish larger practices. The drill will be available to producers in Kimball, Banner, Cheyenne, Morrill and Deuel Counties. A grass drill is essential equipment for CRP enhancements, Corners for Wildlife plantings, wildlife food plots, buffer strip plantings and Wellhead Protection Area grass plantings. The partnering agencies will assist in the promotion of the drill. THE TRUST PURCHASED A DRILL FOR PHEASANTS FOREVER - ANTELOPE VALLEY CHAPTER IN 2000 FOR USE IN DEUEL COUNTY AND ONE FOR THE PHEASANTS FOREVER - HIGH PLAINS CHAPTER IN 2001 FOR CHEYENNE, DEUEL AND KIMBALL COUNTIES. THIS PROJECT WAS SUBMITTED IN 2006 BUT NOT FUNDED DUE TO PLACEMENT ON THE RANK ORDER LIST.

Sponsor Name: Southwest Nebraska Weed Management Area **Nearest Town:** Cambridge
Project Name: Republican River Riparian Improvement Project **Project No:** 09-127
Amount Requested: \$499,658 **Term of Project Request:** 1 **Review Group:** Rural Habitat

This project will extend our efforts and accomplish invasive riparian species control in the Nebraska Republican River corridor. The control efforts will be done in a holistic manner using the most appropriate and cost effective option, whether that is mechanical, biological or chemical. Stream management will improve stream flow and function while protecting and improving wildlife habitat and water quality. A second and equal goal is to increase public awareness of the impact of invasive plants on the river system and of best management practices to protect river function and wildlife and grazing uses of the associated lands. This project has been partially funded by the Nebraska Department of Agriculture, but needs additional funding to clear the properties of all landowners previously signed up. Southwest Weed Management Area is newly formed in 2006 and includes as members: county weed superintendents, Southwest Nebraska RC&D Inc., the Upper and Middle Republican NRDs, NRCS field office personnel, and other agencies and private land owners. The group coordinates and assists efforts to identify and control noxious weeds and invasive plants. The primary targets of this project are saltcedar and phragmites within the channel and red cedar and Russian olive within the 100 foot corridor on the stream banks. Field days will be held in each affected county to educate the public and encourage land owners to maintain the control efforts.

Sponsor Name: Spencer Area Development Corporation **Nearest Town:** Spencer
Project Name: Spencer Pond Renovation Project **Project No:** 09-122
Amount Requested: \$316,043 **Term of Project Request:** 1 **Review Group:** Lake Rehabilitation

The Spencer Pond was a WPA Project which was constructed in the 1930's. In the 1950's a flood caused extensive sediment washing into the lake which has contributed to its demise. The capacity for aquatic habitat has diminished. In 2004 after several years of an extensive drought the pond was completely dry. Currently the lake which covers about 7 acres is approximately 3 feet deep at its deepest point and has provided little recently in the way of wildlife habitat. The property in which it is situated was privately owned for many years but in 2004 was acquired by a private group which formed the Spencer Area Development Corporation, a non-profit entity. This group purchased approximately 79 acres of which this pond or lake is situated on the South side. The property is immediately adjacent to and to the West of the city limits of Spencer, Nebraska. The entire 79 acres could provide the potential for extensive habitat, environmental benefits, recreational and economic opportunities. In addition to the proposed lake renovation future plans include walking trails, park amenities and greenery, as well as access to the fair grounds and athletic fields immediately to the east of the property. The additional land could provide room for expansion for the fair grounds and athletic fields including much needed parking. The Lake Renovation is estimated to cost approximately \$376,043 for construction which is exclusive of land, master plan development and plants and wildlife. An amount of \$140,000 of cash and in kind contribution would be provided by the development group. Renovation operations would include site preparation, additional engineering and design work, lake draining, staking and layout, sediment removal, construction of a lake level control system, installation of clay lake liner, installation of fish habitat, an aeration system, fishing pier/breakwater, lake vegetation seeding and planting, lake management plans, and a handicapped accessible earthen fishing pier. Fish and wildlife would be added. Funds would be received and all work would be done during the construction season of 2009. Benefits are primarily those of a habitat or environmental improvement that would include the plant, fish and wildlife which would be preserved by a newly revitalized lake environment. Much of the shoreline will remain for aquatic vegetation that will support amphibians, insects and plants that provide food for other aquatic life. Long term benefits also include: Recreational opportunities for local residents as well as visitors to the area. The town is located on the Hwy 281 and Hwy 12 corridor in North central Nebraska which is the gateway to the Sandhills area. SUMMARY TRUNCATED FOR SPACE. THIS PROJECT WAS SUBMITTED IN 2008 BUT NOT FUNDED DUE TO PLACEMENT ON THE RANK ORDER LIST.

Sponsor Name: The Nature Conservancy**Nearest Town:** Alda**Project Name:** Leaman Tract Easement**Project No:** 09-171**Amount Requested:** \$90,648**Term of Project Request:** 1**Review Group:** Rural Habitat

The Nature Conservancy seeks \$90,648 to fund a conservation easement on the 153.25-acre Leaman Tract. This property provides critical buffer protection for existing wetland and prairie habitats on nearby and adjacent conservation sites, while also being part of a major sandhill crane roost site along the Platte River. The easement helps meet the goals of the multi-year, multi-agency effort within the Big Bend Reach to protect a total of 29,000 acres for the benefit of cranes and other species and natural communities at-risk. TNC acquired the property to protect against conversion of the tract to sand and gravel mining extraction or housing development. Our subsequent sale of the tract subject to an easement ensures that future use will not diminish its value to migratory birds while allowing it to remain in private ownership and row-crop production. Additionally, the easement complements and buffers from incompatible development on an adjacent, existing complex of lands under conservation ownership and management - a complex at least 10 times the size of the easement where dollars have already been invested by public and private partners to conserve and restore valuable natural habitats. One barrier to conservation work on the Platte River has been a concern over competition between agriculture and wildlife conservation. This project directly addresses this concern by demonstrating the mutual benefits that a conservation easement can provide; it allows traditional agriculture uses on productive soils while restricting future development that threatens the long-term interests of both farmers and conservation groups. To maximize these benefits, the Conservancy gave preference to the bid of a local producer with whom we feel a strong partnership can be maintained, and who is willing to help the Conservancy foster a greater understanding of this tool with other producers in the region. THIS PROJECT WAS SUBMITTED IN 2007 BUT NOT FUNDED DUE TO PLACEMENT ON THE RANK ORDER LIST.

Sponsor Name: The Platte River Habitat Partnership**Nearest Town:** Columbus, Gothenburg,**Project Name:** Evaluation, Enhancement, and Expansion of Private Lands Conservation**Project No:** 07-117-3**Amount Requested:** \$131,261**Term of Project Request:** 1**Review Group:** Statement of Intent

The Nature Conservancy and the Nebraska Game and Parks Commission are currently cooperating on the Platte River Habitat Partnership (PRHP). The PRHP is working on a community-scale habitat restoration project within the Big Bend Reach of the Platte River (from Gothenburg to Columbus), with a focus on grassland and wetland habitats on private lands. The goals of the PRHP are to encourage sound land stewardship, conserve and enhance existing native grasslands, restore functional native grassland systems, and emphasize long-term sustainability. After five years of successful private lands projects, with 49 signed agreements on over 6,500 acres, the PRHP has come to a point where evaluation and innovation are critical for its long-term growth. The PRHP requests support to: establish a "rent for rest" program (potentially on publicly owned lands that are not in conservation ownership) to offer landowners high-value forage while they rest overgrazed pastures and meadows -expand program capacity by adding a Platte River Partnership Conservation Assistant to assist with development and implementation of private lands agreements, to conduct landowner workshops, and to coordinate evaluation components -engage a third-party contractor to assess and report on the experiences and beliefs of participating landowners (who have signed agreements) and those who have declined to enroll, to determine what is working and what can be improved-information that will benefit ALL community-based private lands endeavors in the valley - develop outreach materials, including printing copies of the popular "Guide to Native Grassland Management in Nebraska", improving the website, and other materials. The Platte River Habitat Partnership is confident that these activities will add value to an already highly successful project. The NETF has supported the PRHP in the past, and continued confidence will ensure that the Partnership moves forward in innovative ways that balance ecological, economic, and social values. THIS PROJECT WAS FUNDED \$141,261 IN 2007 WITH THE INTENT TO FUND UP TO \$141,261 IN YEAR TWO AND \$131,261 IN YEAR THREE PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE THIRD YEAR REQUEST.

Sponsor Name: Tri-Basin Natural Resources District **Nearest Town:** Holdrege
Project Name: Rainwater Basin Conservation Easements **Project No:** 09-130
Amount Requested: \$514,130 **Term of Project Request:** 2 **Review Group:** Rural Habitat

The Rainwater Basin Conservation Easements proposal will permanently restore 320 acres of wetlands and native grasslands. The proposal is a "working landscape" effort modeled after other projects underway in the Rainwater Basin. Under this proposal, 320 acres of irrigated cropland will be restored to grasslands and wetlands. Wetlands will be restored by plugging drain ditches and removing sediment. Grasslands will be restored by re-seeding former croplands with a mixture of native grasses and forbs. The proposal will have many benefits, including: restoration of important wildlife habitat for migratory birds, rare and at-risk species, and resident wildlife, retirement of irrigated cropland to reduce groundwater use, improvement of water quality, soil conservation, improvement of air quality, and an increase in wildlife-dependent recreation. Properties restored through this proposal will remain privately-owned land and be used for haying and grazing purposes, protecting rural economies and providing a means to manage restored habitats. The easements will require the restoration of native grasslands and wetlands, providing benefits to migratory birds and other wildlife. Initially, suitable sites in Phelps and Kearney counties will be targeted. If suitable sites are not secured in those counties, then the focus will expand to the entire Rainwater Basin.

Landowners who accept this easement will continue to use the properties for haying and grazing. These practices are very compatible with habitat management, particularly with efforts to maintain habitat for migratory birds during spring migration. Approximately 108 acres of wetlands and 212 acres of native grassland will be restored. The specific properties to be included in the proposal have not been identified. Once the grant is secured, potential properties will be identified and carefully evaluated by project partners. Funds from the Nebraska Environmental Trust Fund are requested to assist with the purchase of the conservation easements and the implementation of habitat restoration plans.

Sponsor Name: Tri-Tails District, Longs Peak Council, Boy Scouts of America **Nearest Town:** Crawford
Project Name: Fort Robinson Tree Replant **Project No:** 09-101R
Amount Requested: \$15,000 **Term of Project Request:** 1 **Review Group:** Rural Habitat

The Fort Robinson State Park Tree Replant is a joint venture between the Nebraska Game and Parks Commission and the Boy Scouts of America to replace ponderosa pine tree seedlings in a nearly 50,000 acre burn that occurred in 1989. Each year since then Boy Scout volunteers from a five-state region have met the first weekend in April to plant trees. The Nebraska Game and Parks Commission has verbally agreed to continue. The grant is for \$15,000 to purchase seedlings for the April 2009 replant.

THIS PROJECT WAS FUNDED A TOTAL OF \$142,500 FROM 1997-2008. THIS REQUEST IS A CONTINUATION OF THIS PROJECT.

Sponsor Name: U.S. Geological Survey - Nebraska Water Science Center **Nearest Town:** Kearney
Project Name: Quantifying the hydrologic conditions associated with and sandbar habitat impacts of the invasive common reed, *Phragmites australis*, on the channel of the Central Platte River **Project No:** 09-174
Amount Requested: \$264,421 **Term of Project Request:** 3 **Review Group:** Rural Habitat

The project seeks to quantify and understand the hydrologic conditions and river habitat changes associated with the invasion of the wetland plant species, *Phragmites australis*, on the Central Platte River from North Platte to Grand Island, Nebraska (project area). The temporal scope of the project will be water years (WY) 1990 to 2006, but will have a focus on WY 1999 to 2006, which is generally regarded by weed managers in the region as the period of most aggressive *Phragmites* invasion. The project is based on the premise that understanding the hydrologic conditions that were conducive to *Phragmites* invasion and its associated impacts, will serve to inform ecologic, economic, and water resource models, and provide managers and stakeholders with a sound scientific basis for developing long-term, sustainable, river-management solutions to *Phragmites* control and river-corridor maintenance. The project involves three main investigative elements: 1) detailed analysis of stream gaging station data; 2) geographic information system (GIS) analysis of three sets of existing aerial photos for the project area; and 3) compilation of anecdotal evidence from resource managers. The hydrologic analysis will focus on a detailed hydrologic analysis of three recent time periods, WY 1990-1994 (dry), WY 1995-1999 (wet), and WY 2000 to 2006 (extremely dry), and analysis of serial differences between individual years for the time period 1999 to 2006. The GIS analysis will consist of delineation and quantitative measures of the non-vegetated channel area as depicted in each of three sets of aerial photos acquired during 1999, 2003, and 2006. Time series data for river channel characteristics through time (1999-2006) and space (North Platte to Grand Island) will be constructed from the GIS and compared to the detailed hydrologic analyses. Anecdotal evidence will be compiled through interviews with resource managers, and will serve in parallel for comparison with quantitative results.

Sponsor Name: University of Nebraska - Cooperative Extension **Nearest Town:** Lincoln
Project Name: Reducing Carbon Dioxide and Other Emissions Through Residential Energy Efficient Practices **Project No:** 09-173
Amount Requested: \$74,040 **Term of Project Request:** 2 **Review Group:** Education

This educational project addresses energy efficient practices to reduce residential energy and natural resource use. The expected result is improvement in air quality and particularly reduction of carbon dioxide. Burning fossil fuels to operate homes and to create electricity produces CO₂ and pollutants that contribute to global warming and greenhouse gases. Buildings account for 36% of the total U.S. primary energy consumption and 30% of greenhouse gas emissions (U.S. Dept. of Energy, DOE, 2000). We will develop an interactive energy education web-based curriculum and deliver it directly to consumers, and to extension educators and other professionals to enhance their educational efforts in bringing about changes in energy efficiency practices. Increased knowledge and adoption of energy efficient practices, materials and equipment/appliances and technology can result in reduced CO₂ and air emissions through increased energy efficiency. Educating housing, energy and human service professionals allows for more rapid dissemination of information to the public. Phase I: The curriculum will include ten web-based interactive modules focused on: Purchasing energy efficient materials/appliances, weatherization/insulation, structural envelop/design, low-cost measures, windows, lighting, landscaping, energy rating labels, managing and selecting heating/cooling equipment for optimum performance, and ensuring healthy environments. Modules will be available to all Nebraskans on UNL's website and through county extension offices. Interactive modules and activities will provide information to bring about informed decisions and practice change to reduce energy use and increase efficiency. Phase II: Embedded module evaluations and Survey Monkey will be used to assess viewers' knowledge, behavior and practice changes, and to assess the curriculum impact when used by educators, and energy and housing related professionals. Impact: Of those accessing modules, 20% will adopt efficient measures to reduce resource and energy use and contributions to global warming. Participants (30%) will choose at least two measures to increase energy efficiency in their home. A SIMILAR PROJECT WAS SUBMITTED IN 2000 BUT NOT FUNDED DUE TO PLACEMENT ON THE RANK ORDER LIST.

Sponsor Name: University of Nebraska - Lincoln **Nearest Town:** Multiple
Project Name: Advancing Tern and Plover Common Sense Conservation into the Future **Project No:** 08-104-2
Amount Requested: \$70,000 **Term of Project Request:** 2 **Review Group:** Statement of Intent

The Tern and Plover Conservation Partnership (TPCP) is recognized, nationally and internationally, as the model for proactively resolving endangered and threatened species controversies and conflicts. The TPCP has demonstrated that by working cooperatively with commercial interests, local communities, and government agencies, effective conservation and management measures can be implemented. This strategy can work in situations well beyond the TPCP's stated mission to protect and secure the future of endangered interior least terns (*Sternula antillarum athalassos*) and threatened piping plovers (*Charadrius melodus*) in Nebraska. In addition to their federal Endangered Species Act status, least terns and piping plovers are identified by the Nebraska Legacy Project as Tier 1 At-Risk Species, indicating the critical need to increase their reproductive success and population size. The least terns and piping plovers nesting along the Platte, Loup and Elkhorn rivers are utilizing several of Nebraska's Unique Biological Landscapes, as identified by the Nebraska Legacy Project. By working in these areas, the TPCP has the additional opportunity to protect those habitats that multiple species depend on while we are protecting the terns and plovers. The TPCP has four principal goals. 1) Continue our primary mission of effective, responsive on-the-ground conservation and management of least terns and piping plovers. 2) Develop and implement an adaptive management framework to make the TPCP's activities as scientifically sound, effective and cost-efficient as possible. 3) Develop and implement an educational program appropriate for a range of audiences. 4) Develop and implement sustainable management solutions for least terns, piping plovers and other species along the lower Platte, Loup and Elkhorn rivers, which include protecting their habitat. We believe we can build upon our past successes. To do this, we must broaden and develop our Partner community, expand our education program, build a scientifically sound adaptive management framework and become more cost-efficient. SUMMARY TRUNCATED FOR SPACE. THIS PROJECT WAS FUNDED \$166,000 FROM 1999-2001 FOR THE NEBRASKA GAME & PARKS COMMISSION: \$105,000 FROM 2002-2004 AND \$222,513 FROM 2005-2007 UNDER THE TERN AND PLOVER CONSERVATION PARTNERSHIP. THIS PROJECT WAS FUNDED \$130,000 IN 2008 WITH THE INTENT TO FUND UP TO \$70,000 IN YEAR TWO AND \$70,000 IN YEAR THREE PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE SECOND YEAR REQUEST.

Sponsor Name: University of Nebraska - Lincoln **Nearest Town:** Lincoln
Project Name: Reusing Disposed Textiles for Composites **Project No:** 09-117
Amount Requested: \$147,677 **Term of Project Request:** 2 **Review Group:** Waste Management

This project will utilize discarded household textile wastes such as apparels, furnishings and carpets to develop high value composites for the construction, furniture and automotive industries. About 55,000 tons of textile waste generated in Nebraska ends up in landfills every year. A major portion of textile waste contains synthetic polymers that are not easily degradable. Textiles also contain harmful dyes and chemicals that could potentially pollute the land and water and create health hazards. Utilizing the textile waste for composites will not only reduce the amount of landfills but also provide an opportunity to recycle/reuse expensive polymers that have been derived from petroleum sources or produced using valuable natural resources. A ton of textile waste processed into composites will have a minimum sale value of \$2,000 and processing 50% of the textile waste produced in Nebraska every year will lead to the creation of \$55 million sale value to a currently waste product. In this research, we will study the potential of using the textile wastes to develop composites for various applications. The composites developed will be characterized for their properties and the properties of the textile waste composites will be compared to materials such as wall panels, ceiling tiles, office partitions, desk tops and other similar applications in the construction, furniture and automotive industries.

Sponsor Name: University of Nebraska - Lincoln **Nearest Town:** None
Project Name: Hand-Held GPS and GIS Tools for In-Field Watershed and Stream Assesments for Surface Water Quality Protection **Project No:** 09-142
Amount Requested: \$56,800 **Term of Project Request:** 3 **Review Group:** Water

Much of the pollutant load of surface waters originates from small parts of watersheds, including stream bank or bed cutting. Good targeting of best management practices (BMPs) for reducing pollutant loading is important for cost effective surface water quality protection. Programmable GPS and computer tools are available for more accurate and efficient assessment of streams and watersheds. UNL Extension is a frequent partner with NRDs, agencies and other stakeholders in water quality protection. We propose to enable these partnerships to use more spatial technology in identification of critical source areas, evaluation of BMPs, and assessment of impact. Under this project, Extension will procure three sets of GPS units and tablet computers which will be used by Extension, NRD, and agency personnel in eastern Nebraska as needed. This equipment will utilize interface forms developed by Iowa DNR. Technical support and training in the use of the equipment and interfaces and in spatial data presentation, analysis and interpretation, will be provided by the Lincoln-based firm GIS Workshop. Five in-field, hands-on training events, with five trainees each, will be conducted for agency, NRD and Extension personnel in the use of these assessment tools and presentation and printing of the results in map form. An additional three events will enable 15 ArcGIS users to conduct spatial analysis and interpretation of the assessment information using GIS tools for better targeting of practices. Ten watershed stakeholder meetings will be supported during which results of the assessments will be reported and integrated into the watershed management plan. Currently targeted watersheds include Aowa, Duck, Little Sandy, Logan, Shell, Sand, Snow and Ironhorse Creeks. The project will be funded solely by this grant but will complement watershed efforts supported by >\$1 million federal, state and NRD funding and much staff time investment.

Sponsor Name: University of Nebraska - Lincoln **Nearest Town:** Lincoln
Project Name: Satellite Remote Sensing Based Estimation of Evapotranspiration for Water Management for Nebraska **Project No:** 09-162
Amount Requested: \$493,728 **Term of Project Request:** 2 **Review Group:** Water

The project goal is to accurately quantify evapotranspiration (ET) for different crops by processing Landsat 5 and Landsat 7 images for the year 2005 across the Republican and Platte river basins in the state of Nebraska. This can help Nebraskans better understand the range and magnitude of management options that can help maintain a sustainable balance of water uses and supplies. ET maps will be developed by Dr. Ayse Irmak and her team at the University of Nebraska-Lincoln using the Mapping Evapo Transpiration with High Resolution and Internalized Calibration (METRIC) algorithms developed by Dr. Rick Allen at the University of Idaho (UI). The University of Nebraska will work with the Nebraska Department of Natural Resources to adopt the ET mapping process for purposes of planning, managing and regulating groundwater resources. The tools/products to be developed and demonstrated include: (1) Developing instantaneous and seasonal ET maps for areas irrigated by groundwater sources and surface water across the Republican and Platte river basins in NE. (2) Sampling of project area to refine locally calibrated Kc curves for specific crops (alfalfa, wheat, corn, soybeans, sorghum), and (3) Producing maps of net differences in ET from irrigated agriculture and rain-fed (dryland) agriculture in the study area. The project will develop capability to interpret ET maps for water balances and will develop crop coefficient curves for specific crops to delineate irrigated and non-irrigated acres for 2005. The net water use during 2005 will provide information that can help Nebraskans to conjunctively manage ground and surface water through integrated management plans as mandated by Nebraska Law LB962. Because integrated management plans are intended to achieve a sustainable balance between water uses and supplies, understanding how the water budget is affected by varying evapotranspiration rates can be critical in understanding the full range of options that will maintain that balance.

Sponsor Name: University of Nebraska - Lincoln **Nearest Town:** Lincoln
Project Name: Invasive Species Partnerships in Management, Outreach, and Research **Project No:** 09-163
Amount Requested: \$260,798 **Term of Project Request:** 3 **Review Group:** Rural Habitat

Biological invasions are a threat to both human enterprise and ecological systems, and are economically and ecologically detrimental, causing billions of dollars of damage every year in the United States. The Nebraska Natural Legacy Project identifies invasive species as a key stressor in Nebraska. In 2006, as a response to these threats, stakeholders identified a need to coordinate the communication and efforts among those involved in invasive species management and research. This developed into a partnership among multiple agencies and organizations across Nebraska. The goal of the Nebraska Invasive Species Project is to protect Nebraska's inhabitants and ecosystems from the negative economic and ecological impacts of invasive species. Stakeholders of the project include Nebraska citizens, landowners, and public and private organizations.

We will build upon the success of the Nebraska Invasive Species Project, which includes distributing information on identification, management, and research, providing maps of invasive species, maintaining a web-portal, and providing outreach and education opportunities. Outreach will be in the form of interpretive displays, publications and presentations, and two Nebraska Invasive Species Conferences focused on management and research.

We will inform decision-makers and the public through the development of a Nebraska Invasive Species Council. The Council will serve as a forum for management and research for the prevention and detection of plant and animal invasions. The Council will develop an Adaptive Management Plan for Invasive Species that will mitigate the negative ecological and economic impacts of invasive species. This plan will be supported by scientific research and management techniques designed to increase learning and reduce uncertainty, and will provide a framework for decision making. We will conduct an economic assessment on the costs of invasive species to Nebraska.

THIS PROJECT WAS FUNDED \$325,081 FROM 2006 THROUGH 2008. THIS REQUEST IS FOR A CONTINUATION OF THIS PROJECT.

Sponsor Name: University of Nebraska - Lincoln **Nearest Town:** Lincoln
Project Name: Nebraska Master Naturalist Program: Recruitment, Training, and Management of Conservation Volunteers **Project No:** 09-164
Amount Requested: \$192,639 **Term of Project Request:** 3 **Review Group:** Education

The Nebraska Master Naturalist Program (NMNP) is a public/private partnership that will recruit, train, manage, and provide incentives for volunteers participating in habitat conservation, environmental education, citizen science, and ecotourism in Nebraska. The program will be modeled after Master Naturalist Programs that have been successful in over 25 states since 1998. A task force of representatives from natural resource organizations in Nebraska determined that the need for a program to train and coordinate conservation volunteers is high. An Advisory Committee will provide guidance and oversight of statewide activities and a full-time coordinator will develop and facilitate the program. Natural resource professionals will provide a curriculum that includes training modules on 17 program areas, including: ecological principles, geology, botany, mammalogy, herpetology, conservation biology, interpretation and communication, and scientific methodology. Volunteers must participate in 20 hours of professional training and conduct at least 20 hours of approved volunteer work annually. The objective of the program is to certify a minimum of 100 volunteers and accrue at least 4,500 hours of volunteer time annually within three years. A database will be developed to track volunteer training and hours, and used to match the needs of conservation agencies and organizations with the skills and availability of trained volunteers. The NMNP will be most closely associated with the "Habitat" Funding Category (conservation, enhancement, and restoration of natural environments in Nebraska), but volunteers will also be informed and educated on other Categories, including air, soil, and water. The NMNP will become an essential source of volunteers for the Nebraska Natural Legacy Project. Trained volunteers will become valuable members of the natural resources community and in time, will provide millions of dollars in salary savings. We anticipate that the program will be long-term and self-sustaining through user fees, external grants, contributions, and volunteer support. UNL-COOPERATIVE EXTENSION AND NE GAME & PARKS COMMISSION PREVIOUSLY SUBMITTED A PIE APPLICATION FOR A FORUM TO LEARN ABOUT THE PROGRAM, BUT IT WAS NOT FUNDED TO PLACEMENT ON THE RANK ORDER LIST.

Sponsor Name: WasteCap Nebraska**Nearest Town:** Lincoln**Project Name:** Take-it-Back Nebraska**Project No:** 09-161**Amount Requested:** \$439,842**Term of Project Request:** 2**Review Group:** Waste Management

Electronics and fluorescent lighting fall under federal universal waste rules due to toxic materials (mercury, lead, cadmium, etc.) contained in these products. For the past three years, WasteCap Nebraska has had funding from the Nebraska Environmental Trust to educate businesses and households about universal waste recycling and to collect these materials for recycling through local recycling collection events. Through these events and others, WasteCap has planned and executed 17 collection events serving 1,354 households and businesses in 9 communities and collected 249,657 pounds of recyclables since 2001. In addition, over 230 businesses were educated on e-waste and universal waste regulations. WasteCap is currently in the final stages of developing a CFL recycling program and has started another grant that will create educational and marketing materials for electronics recycling and develop a small grant program for electronics collection events. This grant application is intended to build upon both of those grants by expanding the educational campaigns into full, branded marketing campaigns, working with local retailers to develop a Take-it-Back Network and continuing with the small grant program to fund local collections. These campaigns and programs will be based on successful programs from throughout the country.

This grant will allow WasteCap to fill the void for both electronic and CFL recycling funding. Through our research and experience, we have found that given a "free" recycling option, households will recycle about 2 pounds of electronics per capita in a recycling event versus 0.4% when there is a fee. CFL programs throughout the country have recycled an average of 40 CFL and 150 linear lamps per month at retail locations. We anticipate that this grant will allow us to host 12 electronics recycling collection events through the small grants program and establish 100 fluorescent lighting collection locations through local retailers over a two-year period.

WE FUNDED \$120,000 IN 2005-2007 FOR COLLECTION EVENTS, WORKSHOPS AND OUTREACH. WE FUNDED YEAR 1 OF A 2008 SUBMISSION TO DEVELOP MINIMUM PERFORMANCE STANDARDS FOR ELECTRONICS RECYCLERS.

Sponsor Name: Wayne, City of**Nearest Town:** Wayne**Project Name:** South Logan Creek Bank Stabilization and Restoration**Project No:** 09-105**Amount Requested:** \$87,450**Term of Project Request:** 1**Review Group:** Bank Stabilization

The South Logan Creek Bank Stabilization & Restoration project will make repairs to prevent stream degradation and refuse exposure of the adjacent former "Kardell Landfill," located within the zoning jurisdiction of the City of Wayne, Nebraska. The city conducted a Phase II Environmental Site Assessment of the former landfill that concluded soil and ground water contamination have occurred in the vicinity of the site. The former landfill abuts the bank of South Logan Creek. Cover over the landfill in the vicinity of the stream bank crest has begun to erode away due to natural and man-made impacts. An Environmental Mitigation Concept Plan was prepared to define alternative repairs. Rock riprap will be used to stabilize approximately 300 feet of stream bank length, provide in-stream channel stability, and provide a stabilized outlet below concentrated flows. Clay fill materials will be compacted over the exposed landfill surface to mitigate surface infiltration to the maximum extent possible. The area of the bank crown will be elevated slightly above the surrounding area to redirect flow to the south along an established drainage path. The area will be seeded with dense native grasses to trap sediment and disperse flow.

Sponsor Name: West Central Weed Management Area **Nearest Town:** Kearney
Project Name: Invasive Species Control Along the Platte River **Project No:** 09-118
Amount Requested: \$2,888,807 **Term of Project Request:** 3 **Review Group:** Rural Habitat

The Platte River of south central Nebraska is known for its wildlife habitat and for a diverse range of flora and fauna. Historic and present water development on the Platte River and its tributaries has altered the river's hydrology, reducing flows and changing flow chronology. These changes have had a detrimental effect on wildlife habitat available and the vegetation community that is present. Within the Platte River valley invasive species such as phragmites, salt cedar, reed canary grass, Russian olive, and purple loosestrife are present and have out-competed native vegetation. These species have reduced biodiversity by out-competing native vegetation and forming monoculture stands.

The PVWMA and WCWMA are proposing a three year plan on removing dead phragmites that were chemically treated in 2008 by NDA funds and controlling invasive species throughout the rest of the project area. The project will incorporate an integrated weed management philosophy and an applied research approach that is supported by the state's Riparian Vegetation Management Task Force.

The primary goal of this project is to improve native wildlife habitat and river channel flow conveyance through the eradication and clearing of invasive vegetation species. Long Term management will be done by working with the landowners to implement grazing systems focusing on maintaining native wildlife habitat. A secondary goal is to develop a long-term set of "best management practices" for phragmites based on efficacy of treatments, cost effectiveness and wildlife habitat benefits. A "Best Management Guide for Invasive Species" will be published and given to landowners that will explain management options while also maximizing wildlife habitat and forage quality for grazing.

By combining these objectives in a regional watershed approach the project will help restore water conveyance and critical wildlife habitat for game and non-game animals along the Platte River in Nebraska.

Sponsor Name: Wild Rose Woods, Inc. **Nearest Town:** Lincoln
Project Name: Land Acquisition **Project No:** 09-116
Amount Requested: \$125,000 **Term of Project Request:** 1 **Review Group:** Rural Habitat

Wild Rose Woods, Inc. (WRW) is seeking funding to purchase real estate. The acquired property will be maintained as a nature preserve and used solely as a four-season classroom for nature education programs for children. WRW is proposing to acquire an approximately 20-30 acre parcel in Lancaster County for the establishment of a nature preserve to be used solely as a children's' nature education venue. The ideal site will include a variety of habitat types, or have the potential for restoration of native plant communities. Desired features include woodlands, grasslands, and wetlands, as well as at least one water source such as a creek, spring or dam. Other desired site features include elevational relief, a rural location, and minimal impact from highway noise and/or visual intrusion. A diversity of site conditions will allow for a greater variety of program activities and will enhance the children's' experience of nature. WRW programs seek to promote awareness and understanding of nature and conservation in elementary and middle school children. Program curriculum will include materials from many sources. WRW plans to utilize the Stop, Look and Learn about our Natural World, a Nebraska Natural Resources Elementary Education Guide published by the Nebraska Natural Resources Commission. WRW is a newly formed Nebraska non-profit corporation and is actively seeking tax-exempt status from the IRS. There have been no past activities or programs. The nature education programs of WRW will begin when a parcel of rural real estate is identified and purchased. The founding directors of WRW are actively seeking a parcel of unimproved land in Lancaster County, Nebraska.

Sponsor Name: Willa Cather Pioneer Memorial and Educational Foundation **Nearest Town:** Red Cloud
Project Name: Restoration of the Willa Cather Memorial Prairie **Project No:** 08-168-2
Amount Requested: \$4,200 **Term of Project Request:** 2 **Review Group:** Statement of Intent

The Willa Cather Memorial Prairie is a botanical treasure consisting of 608 acres of never-been-plowed native prairie. We strive to return this land to its pre-1900 conditions, a time before overgrazing and the encroachment of man and foreign plant species. To complete the restoration, we are asking for help from the Nebraska Environmental Trust to continue removal of non-native Chinese Elm and Red Cedar trees; cut walking paths for education; re-establish the ecosystem; restore flowing water to the prairie; plan controlled burn areas; build additional solar fences; and control growth through moderate grazing. The Cather Foundation's committee of biologists, agriculturists, and ecologists oversees the restoration process, which focuses on plant and animal habitat, as well as surface and ground water management. The area is classified as loess, mixed-grass prairie, which marks several transition points that bring together species at the southern edge of their range as well as those at the northern edge of their range. We estimate the existence of 250 reliant plant species, including the rare Fremont's evening primrose and Fendler's aster - both potential candidates for "threatened" status by the Nebraska Natural Heritage Program. Also, this transitional location affects the species of birds, mammals, reptiles and amphibians as well as invertebrates. This restoration project is integral in fostering the mission statement of the Cather Foundation. We see the preservation of the prairie as part of a holistic approach to the study of America's art, history, and culture through the works of Willa Cather, who was a great champion of prairie lands. As John Bergson observes in *O! Pioneers*, "the land wanted to be left alone, to preserve its own fierce strength, its peculiar, savage kind of beauty, its uninterrupted mournfulness;" we strive to be a part of the land's struggle back to itself.

THIS PROJECT WAS FUNDED \$10,159 IN 2008 WITH THE INTENT TO FUND UP TO \$4,200 IN YEAR TWO AND \$4,200 IN YEAR THREE PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE SECOND YEAR REQUEST.
