



2013
PRELIMINARY SUMMARY
OF APPLICATIONS

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The Nebraska Environmental Trust entered the 2013 grant cycle receiving 109 applications. Applications were either emailed or postmarked on September 4th to meet the deadline. Requests in this twentieth year of grants totaled \$37,020,162. The Trust will announce recommendations for funding these applications in February, 2013, and will award grants in April, 2013.

A summary overview of each proposal, as composed by the applicant, is provided for you. Very few editorial changes were made in this information which was submitted in the application form in response to the question, "Provide an overview of the project for which you seek funding." Project names were assigned by the applicants. Project numbers are assigned by the Trust to facilitate record keeping.

The summaries are presented in alphabetical order by project sponsor name. The nearest town is also shown to indicate the approximate location of each project in the state.

The amount requested and the proposed term of each project is also noted in each summary. The Trust is authorized to fund a project for up to three years under one application review. The review group to which the application has been assigned is also noted in each summary.

In 2012, the Trust issued statements of intent to 47 projects, indicating continued funding for these projects on the basis of the 2011 and 2012 applications. Those projects are included in the summary descriptions. The project numbers of these applications begin "11" or "12" and end with a dash 2 (12-101-2) or dash 3 (11-101-3) to indicate the second or third year request. The total of the statements of intent from 2011 and 2012 is \$10,570,000. The total amount to be awarded including statements of intent from 2011 and 2012, and 2013 applications is \$47,590,162.

An index of applications by project number is also included with the materials presented in this booklet.

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Sponsor Name: American Cullet Supply, LLC **Nearest Town:** Omaha
Project Name: Develop a Nebraska Market for Container Glass **Project No:** 13-170
Amount Requested: \$820,000 **Term of Project Request:** 3 **Review Group:** Waste Management

This project will recover glass by comprehensively tackling collection, processing and marketing challenges to create a unique water saving and pollution reduction project, FilterPave Porous Pavement. American Cullet Supply, LLC (ACS) will enlist the Nebraska State Recycling Association to help create an in-state market for glass. Located in the Omaha area, the plant will crush, clean and pre-treat glass cullet to the specifications required in the making of FilterPave. A grant for \$250k will help finance the processing plant. If built using all new equipment it would cost upwards of \$2 million, however, ACS's owner, a successful Columbia, MO developer, is confident used equipment can be employed to substantially lessen that figure. This grant seeks another \$190K annually for 3-years to supplement ACS's total project discounts of almost \$600k for an equally critical need: the catalyst for a "closed loop" incentive program. Any new recycling enterprise is dually challenged by having to obtain sufficient material (the supply) to make its product, while at the same time building customers (demand) for the finished project. Nebraska communities can be that critical supply/demand link with NET's support. Such market development assistance is so necessary to ensure a successful launch, and the end result is the installation of almost 12 acres of porous paving utilizing recycled glass. NET will help towns reduce their costs and, for those without any form of recycling, total reliance on landfills, and combat urban runoff contamination. In short, this project represents a holistic solution to protect Nebraska's water quality and address solid waste disposal problems

Sponsor Name: Assistive Technology Partnership **Nearest Town:** Lincoln
Project Name: AT4ALL Reuse Capacity Building **Project No:** 13-180
Amount Requested: \$150,000 **Term of Project Request:** 1 **Review Group:** Waste Management

The Assistive Technology Partnership (ATP) would like to provide an opportunity to expand the reuse of assistive technology (AT) for Nebraskans with disabilities or decreased abilities. The project funding will allow the Assistive Technology Partnership to fund a limited number of contracts or agreements of up to \$30,000 to build the capacity of qualified organizations to accept donations and reassign used assistive technology to Nebraskans with disabilities or decreased abilities or for organizations to start a reuse program that will be sustained with other funding. Contracts or agreements will be made to programs statewide that will reassign assistive technology devices including durable medical equipment, communication devices, vision devices, hearing devices, mobility equipment or other assistive devices. Contract or agreement funding may be used for the purchase of equipment, supplies or actions that increase an organization's ability to clean, sanitize, repair and refurbish AT devices donated to their program. The goal is to generate a new use for no longer needed "nearly new" equipment and to eliminate equipment being stored in garages and basements and delivered to the landfill. The environment benefits from AT reuse by keeping waste and hazardous materials out of landfills. ATP will develop the AT Reuse Advisory Council to work with ATP to ensure timely, quality service from both ATP and grant/agreement recipients and work towards establishing a Reuse Network statewide. The Advisory Board's responsibilities will include: ongoing marketing of the service throughout communities, provide information to ATP for on-line posting, identify organizations to join the AT Reuse Network, and provide feedback regarding AT Reuse service provision. ATP is seeking \$120,000 for direct AT Reuse capacity building contracts/agreements statewide and \$30,000 for administration costs. Time and effort documentation (Nebraska Department of Education Time Sheets) will be done for the Environmental Trust Funding on a monthly basis.

Sponsor Name: Board of Regents, University of Nebraska - Lincoln **Nearest Town:** Multiple
Project Name: Tern and Plover Conservation Partnership: Protecting Imperiled Birds and their Habitat **Project No:** 12-127-2
Amount Requested: \$77,577 **Term of Project Request:** 3 **Review Group:** Statement of Intent

The Tern and Plover Conservation Partnership protects state and federally threatened Piping Plovers (*Charadius melodus*) and state and federally endangered Interior Least Terns (*Sternula antillarum athalassos*) in Nebraska. These imperiled birds nest in close proximity to people working at sand and gravel mines and living at lakeshore housing developments, situations where bird-people conflicts often develop, as on river sandbars. We work cooperatively with a diverse suite of partners to prevent and resolve these conflicts in ways that are successful for all parties, bird and human alike. The TPCP demonstrates that terns, plovers and people can share the sand productively--people generating income and jobs, with birds nesting successfully nearby. Our partners include the aggregate mining industry, businesses, local governments, property owners, NGOs, state and federal agencies and policy makers. We are now implementing our management strategy for the Lower Platte River--increase the amount of sandbar nesting habitat in the LPR, improve the LPR hydrograph through renovation of sandbars, integrate the LPR into range-wide efforts to protect terns and plovers and better integrate partners into our program. We are asking the NET to support our LPR sandbar renovation project which will increase the amount of safe nesting habitat available to the birds. Our outreach program works to improve our fellow Nebraskan's environmental literacy and commitment to conservation - providing benefits beyond terns and plovers. The TPCP is uniquely positioned to protect terns and plovers when they are in Nebraska. We believe that there is a need for the Tern and Plover Conservation Partnership to continue its mission of protecting terns, plovers and their habitats in Nebraska.

THIS PROJECT WAS FUNDED \$54,362 IN 2012 WITH THE INTENT TO FUND UP TO \$77,577 IN YEAR TWO AND \$58,880 IN YEAR THREE PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE SECOND YEAR REQUEST

Sponsor Name: Board of Regents, University of Nebraska - Lincoln **Nearest Town:** Lincoln
Project Name: Developing composites for automotive, furniture and construction industries from discarded carpets **Project No:** 12-129-2
Amount Requested: \$59,058 **Term of Project Request:** 2 **Review Group:** Statement of Intent

About 9 billion pounds of carpets are consumed and about 4 billion pounds of carpets are disposed in landfills every year in the USA. Carpets contain valuable synthetic polymers such as polypropylene and nylon that are derived from petroleum based resources. Nylon and polypropylene are expensive polymers with selling prices of \$1.80 and \$1 per pound, respectively. In addition to being expensive and obtained from non-renewable petroleum resources, polypropylene and nylon are non-biodegradable. Therefore, discarding carpets in landfills results in the waste of a valuable resource and also causes environmental pollution. It has been estimated that 10,000,000 BTU of energy can be saved and about 4,500 lbs diverted from landfills for every 1,000 square yards of carpet that is recycled (<http://www.brotex.com/carpetrecycling.aspx>). Utilizing carpets from high value composites will help to decrease the amount of carpets disposed in landfills, reduced the need for non-biodegradable synthetic polymers and therefore benefit the environment. In this research, we will study the potential of converting the disposed carpets into composites for the automotive, furniture and construction industries. Carpets will be directly compression molded into composites or mixed with other reinforcing or matrix materials. Utilizing a ton of carpets for composites would save at least \$2,200 in raw materials. There will be substantial value addition to discarded carpets if used as composites for the automotive, furniture and construction industries.

THIS PROJECT WAS FUNDED \$47,473 IN 2012 WITH THE INTENT TO FUND UP TO \$59,058 IN YEAR TWO PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE SECOND YEAR REQUEST

Sponsor Name: Board of Regents, University of Nebraska - Lincoln **Nearest Town:** McCook
Project Name: Centralized Water Use Database for Republican River Basin **Project No:** 12-153-2
Amount Requested: \$80,000 **Term of Project Request:** 3 **Review Group:** Statement of Intent

Currently ground water withdrawals in the Middle Republican Natural Resource District (MRNRD) are monitored from a network of about 200 metered irrigation wells. The MRNRD technicians read the meters once a year after irrigation season. The data are compiled and stored at the MRNRD offices. Manual recording of water meter readings is laborious, incurs significant driving expense, and is subject to human errors. In addition, taking readings only once a year after the irrigation season does not provide sufficient data on how water is used during the crop growing season in relation to crop water requirements. For effective irrigation water management, a more accurate and effective method for continuous data recording and documentation is needed. This project is requesting funds from the Nebraska Environmental Trust to implement a three-year pilot program on an automated water use data collection, documentation and analysis system. The project proposes to use a telemetry system for measuring and transferring irrigation water withdrawal data to a centralized database. The benefits of this project will be a significant savings in the cost of data collection and processing. When accurate and timely water withdrawal measurements are correlated with the crop water requirements, water usage by farmers can be reduced by as much as 20-40%. Ground water quality in the project area will also be improved through the reduction of deep percolation of irrigation water that carries nitrate nitrogen out of the root zone into the groundwater. Surface water quality will also benefit from this project as better water management will reduce irrigation water runoff that would impact streams with sediments laden with agricultural chemicals. These benefits will be achieved with training farmers in irrigation best management practices supported by data from this project.

THIS PROJECT WAS FUNDED \$110,000 IN 2012 WITH THE INTENT TO FUND UP TO \$80,000 IN YEAR TWO AND \$35,000 IN YEAR THREE PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE SECOND YEAR REQUEST.

Sponsor Name: Board of Regents, University of Nebraska - Lincoln **Nearest Town:** Holdrege, Geneva
Project Name: Impact of Tillage Practices on Corn and Soybean Transpiration, Crop Water Productivity, Nutrient Dynamics, and Groundwater Recharge **Project No:** 12-167-2
Amount Requested: \$210,675 **Term of Project Request:** 3 **Review Group:** Statement of Intent

Tillage practices play an important role in water balance, plant physiological functions (i.e., stomatal resistance, transpiration) and soil evaporation. In our previous large scale and extensive field research (funded by the NE Environmental Trust), we found that the cumulative actual crop evapotranspiration (ET_c) in a corn/soybean rotation disk-till vs. no-till fields. The cumulative ET_c measured from July 9, 2008 to April 30, 2011 before the growing season started was 2,096 mm (82.5 in) in the no-till field and 2,260 mm (88.9 in) in the disk-till field with ET_c being 164 mm (6.4 in) greater in the disk-till field than the no-till field. The largest difference in daily ET_c was measured on April 1, 2010 when disk-till field had 2.7 mm (0.11 in) greater ET_c. The total difference (6.4 in) in ET_c is a large difference one would assume that most of the difference is due to greater soil evaporation in disk-till field. However, the important question -- is any of the difference in ET_c due to differences in plant transpiration between the two fields? This question has not been investigated and our research will deploy detailed instrumentation to measure hourly transpiration rates for corn and soybean throughout the season to quantify any potential differences in daytime as well as night time transpiration differences between the no-till and disk-till fields.

Furthermore, there are other important questions related to the nitrogen and other nutrients dynamics and potential differences in their distribution and uptake rates in disk-till vs. no-till fields. Our project will measure the aforementioned components related to the transpiration and nutrient dynamic differences for three years in disk-till and no-till corn/soybean rotation fields and will provide scientifically-based research in formation to the growers, crop consultants, state agency personnel, and other interested parties through extensive education programs. The project will quantify field-scale recharge beneath irrigated and rainfed agriculture and will quantify the impact of no-till cropping and water management systems on recharge, return flows, and associated water quality (nitrates and phosphorus) in the semi-arid loess region of Nebraska. The project will result in good quality data and information that will help producers to better manage disk-till and no-till fields and will also enable Natural Resources Districts to better evaluate the impact of tillage practices on water resources and nitrogen management.

THIS PROJECT WAS FUNDED \$187,316 IN 2012 WITH THE INTENT TO FUND UP TO \$210,675 IN YEAR TWO AND \$140,818 IN YEAR THREE PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE SECOND YEAR REQUEST

Sponsor Name: Board of Regents, University of Nebraska - Lincoln **Nearest Town:** Statewide
Project Name: Nebraska Invasive Species Project; Developing a Network for Outreach and Monitoring **Project No:** 13-126
Amount Requested: \$198,968 **Term of Project Request:** 3 **Review Group:** Rural Habitat

As identified in Nebraska’s Natural Legacy Plan, invasive species represent a growing threat to Nebraska’s environment and economy, and can have widespread impacts for a variety of natural resource users, including: landowners, power industries, municipalities, and recreationalists. Species such as zebra mussels, leafy spurge, and common reed (Phragmites) are devastating ecosystems in Nebraska and neighboring states. To help mitigate these impacts, the Nebraska Invasive Species Projects seeks funding from the Nebraska Environmental Trust for a critical portion of several our projects that improve natural habitats in Nebraska and reduce stresses to native ecosystems. Our project objectives are to: 1) Decrease the risk of invasive species introduction and spread through volunteer training workshops and targeted messaging across multiple user groups; 2) Develop and implement a ‘next generation’ invasive species education strategy; 3) Evaluate the effectiveness of outreach in invasive species prevention through focused inventory and monitoring and through surveys designed to assess awareness; and 4) Increase local and regional collaboration in the prevention and control of invasive species.

This grant supports our proposed projects by providing a portion of the funds for outreach materials and activities (including those to support volunteer training workshops and K-12 teaching kits), monitoring and prevention equipment, and a portion of the salary needed for seasonal staff and related travel. The specific projects outlined below will provide a broader capacity for the prevention of invasive species in Nebraska and will be achieved through the collaborative efforts of various agencies and organizations (federal, state, and local), as well as private citizens. Through this three-year project, we estimate that over 20,000 individuals will receive direct beneficial information about invasive species prevention (through workshops, educational tools, surveys, and websites), providing a tremendous effort towards maintaining the health of Nebraska’s natural resources.

Sponsor Name: Board of Regents, University of Nebraska - Lincoln **Nearest Town:** Ogallala
Project Name: Prairie Restoration at Cedar Point Biological Station **Project No:** 13-135
Amount Requested: \$60,000 **Term of Project Request:** 3 **Review Group:** Rural Habitat

We request funding (Up to \$60,000 over 3 years) to enhance our current efforts in prairie restoration at Cedar Point Biological Station. This effort is primarily done by the hand removal of mature Eastern Red Cedar and some supplemental seeding of local native grasses and forbs. The product will be improved grassland habitat diversity and exemplary stewardship by UNL. Since our leasing of the site in 1976 and final purchase in 1996 through NET we have not had sufficient resources to consistently control the redcedar growth, and so we are requesting funding to supplement our annual costs in prairie maintenance. This modest proposal is for funds to pay for local vendors and students hired to assist in removal of eastern red cedar from the CPBS property. Students can also be hired to collect seeds from local sources for reseeding in areas the current redcedar population is particularly dense. We believe it would be most cost effective to spread this continued effort work over a 3 year period. Secondary end products include enhanced fire protection for the CPBS campus and surrounding research areas, it will facilitate implementation of a storm water management plan that will improve soil retention and water infiltration in the areas surrounding the campus, and provide funding for students on workstudy which will support improved undergraduate student access to CPBS. For more on CPBS see: <http://cedarpoint.unl.edu>

Sponsor Name: Board of Regents, University of Nebraska - Lincoln **Nearest Town:** North Platte
Project Name: Managing Invasive Plants Through Research and Education **Project No:** 13-137
Amount Requested: \$214,056 **Term of Project Request:** 3 **Review Group:** Education

Invasive plants can establish in diverse environments largely due to increasing human mobility. Control techniques are available, yet invasive plants continue to threaten both natural and agro ecosystems. It is possible that the underlying reasons for the success of invasive plants is the lack of 1) knowledge by land owners and managers on how to stop their spread and restore function to degraded ecosystems, and 2) scientific awareness by students on the ability of invasive plants to disrupt and harm natural systems and cycles. Two educational programs based on research have been created to better understand how and why invasive plants establish in order to develop more sustainable management strategies and educate future generations. The North American Invasive Plant Ecology and Management Short Course (NAIPSC), a 3-day field course on invasive plant basics (68 participants in the past two years), and the Invasive Plant Science (IPS) high school program (158 students from Lexington and North Platte schools last year) use a 7-acre field research demonstration site. The research at the site, including experiments on invasion resistance, revegetation, and restoration of a wetland area, goes hand-in-hand with the educational activities associated with the NAIPSC and IPS. Both programs have been successful, but additional support is needed to expand the research and enhance the educational activities. Funds are requested to pay for 1) a research study to determine the age required for a restored stand of native or desirable plants to successfully resist invasion, 2) the production of an educational comic book to make invasive plant science programs appealing to elementary students, and 3) partial scholarships (Nebraska residents) and materials for the NAIPSC. The encroachment of invasive plants has continued without a broad management approach that goes beyond short-term controls and temporary fixes. This project will be the first to do so.

Sponsor Name: Board of Regents, University of Nebraska - Lincoln **Nearest Town:** Lincoln
Project Name: Bat Movements Across Transforming Landscapes **Project No:** 13-138
Amount Requested: \$162,715 **Term of Project Request:** 3 **Review Group:** Rural Habitat

The origin of energy resources in the United States are in a flux. Perennial biofuel feedstocks, solar and especially wind power production are transforming rural landscapes. Wind power is a renewable energy that has been used for more than 30 years in the United States, yet the impacts on wildlife and their habitats are not fully understood and vary greatly upon the location of the wind energy facility. Installed wind power capacity in the United States has increased over 1000% between 1999 and 2011 with an increase in Nebraska from 3 to 337 megawatts during the same period. Nebraska has enormous wind energy potential and is also used year-round or during migration by greater than 600 species of wildlife, several which are considered at-risk and may be sensitive to wind energy development. The Nebraska Natural Legacy Project State Wildlife Action Plan identifies wind energy development as a potential threat to wildlife and their habitats. Thirteen species of bats are found in Nebraska, five of which are classified as either Tier I or Tier II in the Legacy Plan. The seven most common bat species found dead near wind turbines are all either resident or migratory bats found in Nebraska. Potential negative impacts of wind energy development on bats can be avoided or minimized through siting and operation that take into consideration bat presence and activity. Identifying bat migration and movement patterns is necessary to guide recommendations to minimize impacts of wind energy development. Currently, little is known about bat movements within and across Nebraska. Through the deployment of 20+ ultrasonic acoustic detectors throughout eastern Nebraska for two years, we plan to record bat presence and identify migration timing. Information gathered from this project can be used to further sound resource management practices in regards to wind energy development.

Sponsor Name: Board of Regents, University of Nebraska - Lincoln **Nearest Town:** Lincoln
Project Name: Composites and Regenerated Protein Fibers and Discarded Household Textiles **Project No:** 13-142
Amount Requested: \$111,407 **Term of Project Request:** 2 **Review Group:** Waste Management

An average American discards about 40 kilograms of textiles and it is estimated that about 12 million tons of textile waste are generated every year in the United States. Of the total textile waste generated, only about 1% is recycled or reused and the rest ends up in landfills. Since a majority of textiles used today contain synthetic fibers such as polyester, acrylic, polypropylene and nylon, disposing the textiles in landfills creates environmental problems due to the slow degradation rates of the synthetic polymers. Textiles also contain dyes and chemicals that could be harmful if they contaminate soil and water. In addition, disposing the textiles in landfills is waste of valuable polymers that have been originally generated from the non-renewable petroleum resources and/or from natural resources requiring the use of land, water and energy. Nebraska has a population of about 1.8 million which means about 55,000 tons of textile waste potentially ends up in landfills in Nebraska every year. If a ton of textile waste is processed into composites, it means a sale value of at least \$2000 based on the price of raw materials currently used for making composites. Even if 50% of the textile waste generated in Nebraska is processed into composites, a sale value of at least \$55 million can be realized every year. Similarly, wool containing textiles will be used to develop regenerated protein fibers that can sell for \$8-\$15 per lb.

Sponsor Name: Board of Regents, University of Nebraska - Lincoln **Nearest Town:** McCook
Project Name: Continuous Evapotranspiration and Consumptive Water Use Measurements of Various Cropping Systems and Natural Ecosystems **Project No:** 13-146
Amount Requested: \$713,030 **Term of Project Request:** 3 **Review Group:** Water

Evapotranspiration (ETa) is one of the most critical variables in agriculture and crop water productivity and in assessing the sustainability of natural ecosystems and agro-ecosystems. With the recent drought conditions and extensive irrigation practices, the quantification of ETa rates of "ALL" vegetation surfaces not only for the growing season, but also for the entire calendar year even during the non-growing (dormant) season became a necessity for complete water balance analyses of watersheds, basins, and eventually for the entire state. Thus, continuous measurements/quantification of water use rates will need to be made for more robust demand-use-transfer-feasibility and sustainability analyses for Nebraska's water resources. Without accurate quantification of Eta for various cropping systems and other natural resources, any efforts to increase crop water productivity to meet ever increasing demand for food and fiber cannot be achieved. Eta is a crucial variable in every water resources-related topic, including agricultural crop water productivity; developing crop yield-water use relationships; assessment of land use impact on water resources availability; planning, development, management, and allocation of water resources on a field, farm, watershed, and regional scales, and many other hydrologic and agro-ecosystem settings. Despite of the important water resources-related challenges in Nebraska, USA, and around the world, a network of comprehensive Eta and plant water productivity measurement infrastructure to provide short and long-term and improved Eta data for water resources policy-makers, planners, regulators, and users on a continuous basis does not exist. With the espousal of the state agency partners, the PI of this proposal has already invested multi-million dollars and significant efforts and time and established the largest and most comprehensive water and energy flux measurement network in the country [Nebraska Water and Energy Flux Measurement, Modeling, and Research Network (NEBFLUX)] that is operated by a single university. With this proposal, the principal investigator is seeking additional funds to enhance personnel resources to maintain the Network and enhance the practical application and scientific capacity and capability of NEBFLUX to address various issues related to determining long-term (historical, e.g., >120 years) trends and magnitudes of crop water productivity, Eta, and consumptive water use of various cropping systems and natural resources in Nebraska.

Sponsor Name: Board of Regents, University of Nebraska - Lincoln **Nearest Town:** Lincoln
Project Name: Source Reduction through Efficiency and Education **Project No:** 13-147
Amount Requested: \$38,136 **Term of Project Request:** 1 **Review Group:** Waste Management

The Source Reduction Through Efficiency and Education program consists of the installation of the Vulcan R-206 On-Board Weight System (OBWS) on the packer trucks used by University of Nebraska-Lincoln (UNL) for the collection of solid waste materials and recycling on campus. Individual accounting and auditing of the weight of solid waste produced and recycling collected for each building that the University of Nebraska-Lincoln (UNL) services within the university premises has never been conducted. Building residents and users that are the primary producers of solid waste and recycling efforts therefore, have not accurate information on how much waste they generate or the amount of recycling they collect. With the installation of the On-Board Weighing Scales (OBWS) on each of our three packer trucks used for solid waste and recycling materials collection, UNL can maintain a database of daily records for each building. The database will then be used to generate a solid waste and recycling profile. Through our communication channels such as the website, email and the newspaper publications, we plan on disseminating information to the university community and the general public on the university's solid waste management practices like the daily average for solid waste generation and recycling collections. Each user can go to our website to see if their building falls below or above the university's average and compare with other buildings. Such immediate feedback and individual accounting is a key to initiate better solid waste management practices and sustainable education. The use of the OBWS will also result in fewer trips to the landfill by taking full advantage of the weight capacity of the packer trucks used by the university. By transporting only full loads and making fewer trips to the landfill UNL would save time, fuel, and reduce the amount of CO 2 being produced.

Sponsor Name: Board of Regents, University of Nebraska - Lincoln **Nearest Town:** Lincoln
Project Name: University of Nebraska State Museum - Morrill Hall's Elephant Hall Lighting **Project No:** 13-153
Amount Requested: \$79,345 **Term of Project Request:** 1 **Review Group:** Air Quality

The University of Nebraska State Museum is seeking funding to replace obsolete and inefficient lighting systems in our "Elephant Hall" exhibit room. Elephant Hall is the museum's largest, most prominent exhibit and it displays what is considered the world's premier fossil elephant collection. Our goal is to increase power efficiency and lighting effectiveness simultaneously in a way that provides the University energy savings and presents our fossil elephant collection in the best possible light. Lighting technology has progressed to a point where this can be accomplished using the latest L.E.D. systems available, which is our intent.

Sponsor Name: Board of Regents, University of Nebraska - Lincoln **Nearest Town:** Statewide
Project Name: Nebraska Groundwater Tracers Project Phase II: Establishing relationships between land use and groundwater recharge across the State of Nebraska **Project No:** 13-165
Amount Requested: \$146,860 **Term of Project Request:** 3 **Review Group:** Water

Because rates of groundwater recharge determine aquifer sustainability, measurements of recharge are critical for Nebraska’s water resource assessments based on groundwater models and water balance. A recent collaborative project between UNL and Nebraska’s Natural Resources Districts (NRDs) have established statewide patterns of 1) groundwater recharge rates and 2) average seasonality of groundwater recharge, using natural chemical methods known as environmental tracers. While these results give important information about groundwater renewability statewide, a question remains about how land use practices affect recharge rates: how do differences in irrigation and tillage affect recharge rates? The proposed project will answer this question using an innovative field-scale tracer test that will be repeated in diverse settings across the state. A small volume of an inert, nontoxic chemical tracer (bromide) will be injected into the sub-soil beneath 36 sites that include western, central and eastern Nebraska; irrigated, rain-fed and grassland fields; and silty, sandy and clayey soil textures. Unsaturated zone soil cores will be collected and chemically analyzed two years later. The difference between initial and final depths of the bromide tracer will allow us to determine two-year recharge rates at each location. This extensive lateral survey will yield definitive answers about how land use affects recharge in Nebraska, helping NRDs to better plan for how land use changes may affect water availability and appropriation status. The proposed work can be undertaken on a statewide basis because tracer methods are very low cost in comparison to most other methods.

Sponsor Name: Board of Regents, University of Nebraska - Lincoln **Nearest Town:** Statewide
Project Name: Excellence in Ag Sciences: Water Resource Education **Project No:** 13-166
Amount Requested: \$157,300 **Term of Project Request:** 2 **Review Group:** Education

Water is essential for life to exist; however we often take it for granted. In Nebraska, 8.2 million acres of irrigated lands are extremely vital to the state’s economy. With the expected increase in the global population to reach 9 billion people by 2050 with the same resources available today, natural resource conservation is essential. Teaching the leaders of tomorrow how to be efficient with resources such as water will be essential to ensure enough crops are produced to feed our rapidly growing population. Agricultural education instructors have an influential role in shaping the lives of students interested in agricultural production. UNL Extension coordinates Excellence in Ag Sciences Day which is a one day conference held in 2 locations across Nebraska which transfers research-based, cutting edge technology into the hands of Nebraska agricultural education instructors. This conference aims to assist agricultural instructors with not only the knowledge and skills needed to transfer that information to their students, but the equipment needed for experiential learning to occur. Specifically, agricultural education instructors will become familiar and able to implement sustainable water conservation practices through active participation in the Excellence in Ag Sciences Day annual conference. Instructors will become aware of UNL programs and cutting edge research related to water conservation and water quality in order to better teach their students on water management. Curriculum, web materials and other resources will be created to help instructors teach students about water conservation. Participation in this program will provide agricultural education instructors the tools needed to aide their students in various FFA contests and events related to effective and efficient water use practices. Teaching youth how to both effectively and responsibly manage water is important as we move forward in agriculture and strive to feed an ever increasing global population.

Sponsor Name: Board of Regents: University of Nebraska Cooperative Extension **Nearest Town:** Grand Island/Lincoln
Project Name: Climate Masters of Nebraska: Community Stewardship Toward Environmental Sustainability **Project No:** 13-134
Amount Requested: \$92,720 **Term of Project Request:** 3 **Review Group:** Education

The Climate Masters of Nebraska pilot program started in 2010. The program goal is to assist the community in becoming knowledgeable and making informed decisions regarding climate change issues, which result in a more sustainable environment. Specific objectives to achieve the goal are: 1) educate 50 community members in southeast Nebraska regarding climate change and 2) evaluate the overall impact of this program by measuring the level of increased awareness and reduced greenhouse gas (GHG) emissions by volunteers as a result of this program. It is a 10-week training course where participants learn from experts how to reduce their emissions in everyday life. Participants then volunteer at least 30 hours educating the community through household consultations, outreach events, or other creative efforts they want to take to actively influence the community to reduce GHG emissions. The first group of Climate Masters volunteers have completed six household consultations, started a drip irrigation project, hosted an educational booth at two events, participated in an Adopt a Highway program, formed a Citizens Climate Lobby group and have worked with the City of Lincoln’s reEnergize outreach program. All of these projects positively impact the environment, reduce GHG emissions or both. We would like to continue this program and see a need for reducing personal GHG emissions in other regions of Nebraska in hopes of a cleaner, more sustainable environment. The current funding will end in 2013 and we hope to receive funding from the Trust to continue this important program.

Sponsor Name: Center for Rural Affairs **Nearest Town:** Statewide
Project Name: Women Connected to the Land **Project No:** 13-128
Amount Requested: \$349,720 **Term of Project Request:** 3 **Review Group:** Education

Our project seeks to empower women as good stewards of Nebraska’s environment through innovative soil, water, and habitat conservation education. Many women are decision-makers on Nebraska’s farmland, with numbers of women operators and landowners rising. These women take charge of a landscape with alternating extreme drought conditions and heavy rainfall; their use of conservation practices for soil, water, and habit is critical. Like the farm population overall, Nebraska’s women landowners are aging. Many are widows with little experience in land management decisions, having left those decisions up to husbands or tenants. These women often have strong conservation values; unfortunately, many lack the experience, knowledge and confidence to put best practices in conservation to work on their land. We will create local learning circles, an innovative form of training to provide groups of women landowners the tools they need to take control of conservation outcomes on their land for the health of the Nebraska environment. . Earlier pilot projects with learning circles have been especially effective with women landowners, resulting in markedly better outcomes than traditional lecture formats. Through a public-private partnership between the Center for Rural Affairs, NRDs, and NRCS, this project will reach our target audience with critical information and resources. We will reach out to 200 women in 18 communities across Nebraska and organize formation of up to 3-6 learning circles each year for three years. After initial community meetings to spread conservation information and recruit learning circle participants, each cohort will receive focused training in five additional sessions. Learning circle participants will create conservation goals for their land and develop conservation plans to put goals in place. We aim for the women trained through the project to voluntarily apply practices to approximately 8,000 acres, making a significant impact on preserving, restoring, and conserving Nebraska’s natural resources.

Sponsor Name: Central Platte Natural Resources District **Nearest Town:** Grand Island
Project Name: Groundwater Recharge, Central Platte River Basin **Project No:** 13-122
Amount Requested: \$154,240 **Term of Project Request:** 3 **Review Group:** Water

To help maintain critical flows in the Platte River and more effectively manage water resources in Nebraska, the Nebraska Platte River Cooperative Hydrology Study (COHYST) built a groundwater flow model to simulate current and future groundwater and surface-water interactions within the Central Platte River basin (CPRB). As a priority to improve the predictive accuracy of the model, COHYST identified the need for more accurate measurements of groundwater recharge. Therefore, the overarching goal of the proposed project is to obtain more accurate and long-term measurements and understanding of groundwater recharge rates and water quality beneath rangeland, irrigated, and non-irrigated (dryland) agricultural lands and the east to west precipitation gradient across the CPRB. Successful completion of this project will result in improved COHYST models, thereby providing improved estimates of groundwater and surface-water conditions that will lead to better informed decision-making by water resource regulators and planners.

To begin meeting the overarching project goals, a cooperative partnership was started in 2008 between the Central Platte Natural Resources District (CPNRD), U.S. Geological Survey (USGS) Nebraska Water Science Center (NWSC), and San Francisco State University (SFSU) to establish 8 new recharge assessments sites strategically located across the CPRB. Construction of the last 3 of 8 recharge sites was completed in June 2010, and all sites now have instrumentation that remotely and continuously track meteorological events and corresponding sub-surface water movement that becomes recharge. The requested 3-year funding will support the continued monitoring at the 8 recharge sites, which will provide valuable, long-term information about groundwater recharge and climate gradients and benefit future water management in Nebraska. Also, these sites will provide valuable information about the affect of land-use practices on the migration of agricultural chemicals and groundwater quality, which will help decisions about best management practices in the CPNRD and Nebraska.

Sponsor Name: City of Gothenburg **Nearest Town:** Gothenburg
Project Name: Lake Helen Water Quality Project **Project No:** 13-115
Amount Requested: \$308,301 **Term of Project Request:** 1 **Review Group:** Water

The NETF is being requested to fund a portion of a multi-agency effort to improve water quality and reduce public health risks at Lake Helen located in Gothenburg NE. Lake Helen comprises 30 surface acres and has a mean depth of only 4 feet. The lake has experienced extensive blooms of cyanobacteria (blue green algae) which, in addition to complete fish kills, gained the attention of state officials. NDEQ sampling results indicate the lake experiences low dissolved oxygen, high pH, high algal densities, high algal toxins, and extremely high concentrations of phosphorus and nitrogen, including ammonia.

Subsequently, Lake Helen has been placed on Nebraska's Section303(d) List of Impaired Waters. Planning funds provided by NDEQ and the NGPC were used to identify and quantify nutrient sources, develop water and nutrient budgets, develop and design corrective actions, estimate costs, and develop construction schedules, all of which are documented in a "Water Quality Management Plan for Lake Helen". Structural and non-structural measures identified in this application and in the management plan must be comprehensively implemented in order for the lake to meet state water quality standards and funding program requirements. Primary project components include: 1) re-shaping the current lake, 2) increasing mean depth, 3) waterfowl controls, 4) water source management, 5) reducing urban runoff, 6) rough fish exclusion, 7) nutrient inactivation, and 8) educational activities. Funding from the NETF would be utilized for lake deepening, the purchase and placement of rip-rap, and construction oversight.

Sponsor Name: Clean Green Chesapeake **Nearest Town:** Lincoln/S Sioux City
Project Name: Integrated Anaerobic Digestion With Algae Bioenergy and Green Aquaculture **Project No:** 12-190-2
Amount Requested: \$90,000 **Term of Project Request:** 2 **Review Group:** Statement of Intent

Microalgae will fulfill new roles as alternative feed for sustainable agriculture and aquaculture because of their biodiversity, basic growth requirements and high rates of productivity. Large-scale cultivation, however, will require new methods of regulating growth and maintaining culture integrity. Moreover, the sourcing of nutrients to grow these organisms will have an impact on the ultimate cost of the biomass produced. The objective of this proposal is to develop robust bioprocessing capabilities to produce algae using nutrient-rich anaerobic digester (AD) liquid effluent. The technical milestones of this proposal address the practical aspects involved in integrated algae cultivation. These include: control and management of pathogens in complex microbial populations; augmenting the productivity of conventional microalgal growth systems; and ensuring consistent composition of algae biomass as premium aquaculture feed. This research will explore operating parameters, decontamination measures, and quality control of biomass composition to achieve maximally efficient production. This research will set the stage for rigorous pilot scale field-testing of the integrated algae process in South Sioux City, Nebraska.

THIS PROJECT WAS FUNDED \$160,000 IN 2012 WITH THE INTENT TO FUND UP TO \$90,000 IN YEAR TWO PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE SECOND YEAR REQUEST

Sponsor Name: Community CROPS **Nearest Town:** Lincoln
Project Name: Establishing Gravity-Drip-Irrigation Infrastructure for Sustainable Food Production **Project No:** 13-145
Amount Requested: \$39,683 **Term of Project Request:** 2 **Review Group:** Education

Drip irrigation systems save water by applying it slowly and directly to crops, thereby minimizing wasted evaporation and runoff. Yet, even as gardeners struggle with this year's record heat and water restrictions, drip systems are rarely employed. We believe that the barriers preventing widespread use of drip systems are mainly installation, costs and maintenance. Since April 2012, Ginting LLC and Community CROPS have demonstrated in community gardens across Lincoln how cheap and easy these systems can be. To do this, we secured a PIE grant funded by NET. The benefiting plots have since generated a large amount of interest in drip irrigation systems. In order to scale up the momentum for this conservation project, we are proposing three new objectives: 1. Installation of ready-to-use gravity driven drip systems in several additional CROPS gardens as a first step toward implementation in all CROPS community gardens; 2. Expansion of the momentum generated from a recent PIE grant in facilitating the adoption of drip systems in the general public; 3. Realization of further water savings through the integration of collected rain water in existing systems Our long term goal is to foster widespread use of low-pressure, gravity-driven drip systems by demonstrating effectiveness and ease of use in a very public space. Through our efforts, we can conserve a great deal of water and water processing energy while cutting costs and creating a more sustainable food system.

Sponsor Name: Community CROPS**Nearest Town:** Lincoln**Project Name:** Growing Farmers Training Program**Project No:** 13-173**Amount Requested:** \$58,728**Term of Project Request:** 1**Review Group:** Education

Community CROPS, in collaboration with the University of Nebraska-Lincoln, is expanding workshop and experiential learning opportunities in sustainable, small-scale vegetable production for 60 beginning, immigrant, refugee and low-income farmers in southeast Nebraska over the next year. The goal of the project is to teach practical and profitable ways for beginning farmers to protect natural resources on their farms. Community CROPS will provide this training at Prairie Pines Environmental Education Center, a 145 acre property owned by University of Nebraska Foundation and operated by the School of Natural Resources in the Institute of Agriculture and Natural Resources. Topics covered will be efficient drip irrigation techniques and other water conservation practices, use of cover crops to mitigate soil erosion and improve fertility, effective use of high tunnels to increase production while conserving soil, and soil testing protocols. As part of the overall effort, we project that at least 30 farmers will adopt conservation practices on their farms in 2013. Additional environmental benefits will be realized by increasing the quantity of local food available to our community, thereby reducing transportation impacts and improving health.

Sponsor Name: Cornhusker Council, Boy Scouts of America**Nearest Town:** Humboldt**Project Name:** Camp Cornhusker Environmental and Conservation Education Center**Project No:** 12-184-2**Amount Requested:** \$150,000**Term of Project Request:** 3**Review Group:** Statement of Intent

The Cornhusker Council seeks funding for the development of a renewable energy Environmental and Conservation Education Center to be located in Richardson County. The Education Center will consist of the upper section of a one story walk out facility. The base section, a storm shelter, will be funded through NEMA. The Education Center will be 2,450 GSF, and will primarily house education facilities for environmental and conservation education as well as being a model facility for sustainability and LEED. The entire facility will be submitted for a minimum of becoming LEED Certified Building for New Construction and will have an overarching goal of Zero Net Energy design. The building will be used itself as a training tool during the design and construction phase, and then in future educational curriculum when teaching sustainability and conservation. HDR Inc. engineers and architects as partners and board members, will provide LEED accredited professionals for these educational components. The building will also be used to teach merit badges and leadership training, and overnight sleeping quarters. The facility will serve the more than 67,100 scouts and alumni that live in the 16 county service area that the Cornhusker Council serves. The facility will also be available to the general population for functions and will serve as a model through demonstration of renewable energy capabilities to the communities and people it serves in Nebraska.

THIS PROJECT WAS SUBMITTED IN 2011 BUT NOT FUNDED DUE TO PLACEMENT ON THE RANK ORDER LIST. THIS PROJECT WAS FUNDED \$50,000 IN 2012 WITH THE INTENT TO FUND UP TO \$150,000 IN YEAR TWO AND \$240,000 IN YEAR THREE PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE SECOND YEAR REQUEST

Sponsor Name: Crane Trust, The **Nearest Town:** Grand Island
Project Name: REACH - Research Experience to Achieve Conservation of Habitat **Project No:** 13-171
Amount Requested: \$340,000 **Term of Project Request:** 2 **Review Group:** Education

Private and public conservation groups have made substantial commitments to the restoration and enhancement of migratory bird habitat along the Platte River in Nebraska. In many cases, these efforts have focused heavily on implementation, with disproportionately little attention devoted to measuring and evaluating impacts on target species and goals. As such, there is a regional need to formalize evaluation of habitat projects to help improve them, as well as document and share approaches that lead to successful outcomes.

To this end, the Crane Trust proposes to develop and sustain a conservation-training program for college students and young professionals called REACH (Research Experience to Achieve Conservation of Habitat) to improve restoration of migratory bird habitat along the Platte River by directly involving participants in scientific evaluation, cross-site research, and educational outreach. The two-year development project will involve partnerships among the Nebraska Environmental Trust, Crane Trust, U.S. Fish and Wildlife Service, U.S. Geological Survey, the University of Nebraska at Kearney, as well as other academic institutions, conservation partners, and private landowners. Benefits of the REACH program will include a better understanding of outcomes of habitat restoration activities along the Platte River, especially as they relate to provision of resources used by whooping cranes, and educational and training opportunities for young professionals to develop as conservation leaders in Nebraska and beyond. The REACH program will continue beyond the duration of the initiating NET grant with support from the Crane Trust, regional colleges and universities, and conservation partners.

Sponsor Name: Creighton University **Nearest Town:** Omaha
Project Name: Water Resource Quality in Nebraska: A Biological and Genomic Base-Line Study Along the Proposed Keystone Pipeline Corridor **Project No:** 13-124
Amount Requested: \$859,188 **Term of Project Request:** 3 **Review Group:** Water

Water quality is critical to Nebraska's ranching, agriculture and recreation industries as well as to the urban population at large. This perpetual challenge to Nebraska that has recently become acute with the approaching expansion of oil pipelines crossing Nebraska. Preserving the quality of surface waters is a challenge requiring tools to detect habitat degradation in its early stages. Traditional methods include Rapid Bioassessment Protocols (RBP), that record the macroinvertebrates fauna of streams and lakes. The burgeoning field of environmental genomics is now creating more sensitive tools, using mass sequencing of environmental DNA to record biodiversity (paralleling RBP), and functional genomic studies that observe changes in the gene expression of indicator species to detect habitat degradation before it causes damage (and to monitor the success of remediation efforts). Nebraska has two ideal indicator species: *Daphnia* (water fleas) in lakes/ponds, and *Simulium vittatum* (a black fly) larvae in streams. *Daphnia* is a well developed system for environmental genomics, with documented gene responses to a wide variety of environments and stressors. *S. vittatum* is the focus of a large NIH-funded, Creighton University-led genome project that has made this species into a sensitive indicator of habitat health. This proposal will establish a base-line for future habitat monitoring by using RBP to calibrate environmental DNA biodiversity studies, and functional genomics of the two indicators species to create a database of genetic responses to habitat problems (such as oil contamination, increased siltation due to construction, etc.) for use in monitoring and habitat remediation. The Brockhouse lab (Creighton) leads the *S. vittatum* genome project, and Schalles (Creighton) has extensive research and teaching experience in Nebraska waters. The Pfrender lab (Notre Dame Univ.) is a leader in *Daphnia* genomics, and houses the Genomics Core Facility. McCreddie is an expert in aquatic macroinvertebrates and RBP.

Sponsor Name: Ducks Unlimited, Inc.**Nearest Town:** Lexington**Project Name:** Darr Strip Habitat Complex**Project No:** 12-169-2**Amount Requested:** \$127,215**Term of Project Request:** 2**Review Group:** Statement of Intent

The Darr Strip Habitat Complex Proposal consists of five individual projects that collectively will protect and restore 1,250 acres of central Platte River habitat within a 9 mile segment of the river in Dawson County. This reach of the river is incredibly important to migratory birds and historically, endangered species. Whooping cranes, least terns and piping plovers are federally protected species that once used these habitats for breeding and migration purposes. Several million waterfowl stop along the central Platte each spring, loafing on Platte River islands and foraging in shallow wetlands and backwater sloughs. The five projects included in this proposal will result in the restoration of nearly 7 miles of backwater sloughs and channels, clear 45 acres of invasive trees, install fencing to allow invasive species control via grazing, and permanently protect 1,040 acres through donated conservation easements. A signature project included in the proposal is the Darr Strip Wildlife Management Area. Not only will 65 acres of habitat be restored, but the project area is open to a variety of public uses and will be enjoyed by Nebraskans for many years to come. Located in Southwest District Five, the five targeted properties all fall within one of the priority geographic areas for the Trust. The Darr Strip Habitat Complex proposal is a prime example where individual acts of conservation strategically planned can have a landscape-level influence on the central Platte River. Additionally, three of the properties are protected through donated conservation easements while a third, Darr Strip WMA, is owned by Nebraska Game and Parks Commission, ensuring long-term benefits. THIS PROJECT WAS FUNDED \$224,140 IN 2012 WITH THE INTENT TO FUND UP TO \$127,215 IN YEAR TWO PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE SECOND YEAR REQUEST.

Sponsor Name: Ducks Unlimited, Inc.**Nearest Town:** Bridgeport**Project Name:** North Platte River Wetlands Conservation**Project No:** 12-185-2**Amount Requested:** \$168,293**Term of Project Request:** 2**Review Group:** Statement of Intent

The Platte River Wetlands Conservation project is a concerted effort of habitat partners to protect and restore five parcels of private land that contain or have the potential to restore sensitive wetland environments within the North Platte River watershed. This proposal will restore and protect large blocks of wildlife habitat containing critical habitat types needed along the North Platte River floodplain. While restoring diverse wetlands, the proposal also protects that investment long-term with conservation easements on three of the properties. The projects are unique in that they focus on properties that address terrestrial communities of concern for the Nebraska Game and Parks Commission and the U.S. Fish and Wildlife Service. The project will restore 3 ½ miles of river channel, backwater sloughs, and wet meadow habitat. Three conservation easements will also be secured totaling 724 acres of North Platte River habitat. Projects involve multiple partners, funding opportunities, restoration activities, and long-term protection options. For every NET dollar requested in this proposal, Ducks Unlimited and partners are matching more than \$3 dollars. With a request of \$304,010, matching funds equal \$973,306. From a project standpoint, the proposal is cost effective and does an excellent job at utilizing matching resources.

THIS PROJECT WAS FUNDED \$131,717 IN 2012 WITH THE INTENT TO FUND UP TO \$168,293 IN YEAR TWO PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE SECOND YEAR REQUEST.

Sponsor Name: Ducks Unlimited, Inc.**Nearest Town:** Hildreth**Project Name:** Wild Tract Restoration**Project No:** 13-107**Amount Requested:** \$78,180**Term of Project Request:** 1**Review Group:** Rural Habitat

Ducks Unlimited is requesting funds from the Nebraska Environmental Trust to assist with restoration activities on the "Wild Tract", formerly owned by Freda Wild. The 120-acre Wild property is a high priority "roundout" to the Ritterbush Waterfowl Production Area, an 80-acre tract of wetlands and native grassland in Franklin County. This proposal is supported by the Franklin County Commission. The Wild Property and Ritterbush WPA share a large, partially drained wetland basin. The acquisition of the Wild tract by Ducks Unlimited in June 2012 will now allow significant wetland restoration of this basin to be completed and greatly improve management capability. A total of 126 acres of wetland habitat will be restored and enhanced as a result of this project. An excavated pit on the Wild property and four pits on adjacent properties will be filled with compacted soil. By filling most of the pits in this wetland and the surrounding watershed, natural hydrology to the basin will be restored to this large basin. This wetland is located in the southwest corner of the Rainwater Basin, one of the most important wetland landscapes in North America. The Rainwater Basin hosts over 10 million waterfowl, shorebirds and other migratory birds each year. The location of this property is particularly relevant to whooping cranes. This property has been ranked as one of the 15 highest priority wetland complexes for whooping cranes in the Rainwater Basin. Ducks Unlimited will transfer this property to the U.S. Fish and Wildlife Service in approximately four years. Funding from NET is being requested to assist with the restoration costs of this project.

Sponsor Name: Ducks Unlimited, Inc.**Nearest Town:** Elm Creek**Project Name:** Cottonwood Ranch Platte River Wetland Restoration**Project No:** 13-177**Amount Requested:** \$124,067**Term of Project Request:** 2**Review Group:** Rural Habitat

Ducks Unlimited and its partners will conduct a habitat restoration project on property owned by the Cottonwood Ranch LLC consisting of over 140 acres of Platte River wet meadow habitat in Phelps County, Nebraska. The goal of restoration will be to restore important Platte River habitat in support of migrating waterfowl and other wildlife including federally listed species such as whooping cranes, piping plovers, and least terns. It further restores and complements a complex of wetland sloughs owned by the Nebraska Public Power District, the Platte River Recovery Implementation Program, and Ducks Unlimited. The parcel consists of degraded riparian slough and wet meadow habitat that is currently being farmed. To restore the property, the wetlands will be made functional by shallow excavations, the planting of native upland buffers, the removal of tile drains, tree removal, and the installation of water control structures to promote management of water levels for desirable plant species. Livestock fencing and watering facilities will be installed around the project. While being highly beneficial to wildlife on the property itself, conservation activities on Cottonwood Ranch will add further benefit to the large and contiguous Platte River habitat complex composed of both public and private landholdings.

Sponsor Name: Ducks Unlimited, Inc.**Nearest Town:** Sutton**Project Name:** Rolland WPA Roundout**Project No:** 13-178**Amount Requested:** \$117,140**Term of Project Request:** 2**Review Group:** Rural Habitat

The Rolland Waterfowl Production Area Roundout proposal seeks funding assistance from the Nebraska Environmental Trust to acquire and restore the Gemar property, an important "roundout" to the Rolland Waterfowl Production Area in Fillmore County, in the heart of Nebraska's Rainwater Basin. The 41.5 acre Gemar property lies adjacent to the 128 acre Rolland Waterfowl Production Area. The two properties share a common 87 acre wetland. Approximately 32 acres of the 87 acre wetland lies on the Gemar property. A large, excavated "pit" on the Gemar property partially drains the wetland. Acquisition of the Gemar property will allow the entire wetland to be fully restored and managed properly, providing significant habitat benefits to waterfowl, shorebirds, wading birds, resident wildlife, and many other species. Ducks Unlimited will acquire the property and hold the tract for several years before transferring the property to the U.S. Fish and Wildlife Service. The Fillmore County Commission supports this proposal. Prior to transfer to the Service, the wetland on the tract will be fully restored by placing compacted fill material into the pit and restoring the natural surface of the wetland basin

Sponsor Name: Ducks Unlimited, Inc.**Nearest Town:** Central City**Project Name:** Hannon WPA Roundout Restoration**Project No:** 13-181**Amount Requested:** \$74,550**Term of Project Request:** 1**Review Group:** Rural Habitat

The Hannon Wildlife Production Area, owned and managed by the U.S. Fish and Wildlife Service Rainwater Basin Wetland Management District (WMD), is a 687-acre tract just south east of Shelton, Nebraska in Hall County. The WMD manages the property primarily for sandhill and whooping cranes that commonly inhabit this part of the Platte Valley every fall and spring migration. A key 227-acre roundout to the WPA was identified and being purchased by Ducks Unlimited. Working with the WMD, the end goal for Ducks Unlimited will be to maximize the habitat on both the roundout and the Hannon WPA through the various conservation activities described in this proposal and ultimately transfer the property to the WMD. The addition of the roundout is providing a rare opportunity to add an additional mile to a contiguous block of floodplain habitat in the Central Platte River Valley. The addition will also allow a watershed approach to restoration of the north channel of the Platte River and many acres of degraded wet meadow habitat. In addition to the habitat benefits, the roundout will now be open to the public for recreational use and exposure to the importance of the Platte River Valley to cranes, waterfowl, and other Nebraska wildlife. The project will restore approximately 125 acres of wet meadow and shallow wetland habitat and enhance the 914-acre grassland and wetland complex through tree removal. The habitat types being proposed will increase suitable habitat for some of our imperiled and at-risk species while supplementing opportunities for the millions of migratory birds that depend on the Central Platte River Valley every spring and fall. In addition to improved habitat conditions, the general public will have the opportunity to utilize and enjoy the improvements conducted on public land.

Sponsor Name: Ducks Unlimited, Inc. **Nearest Town:** Central City
Project Name: Timberlake Ranch Habitat Project - Combining Conservation with Education **Project No:** 13-182
Amount Requested: \$144,225 **Term of Project Request:** 2 **Review Group:** Rural Habitat

Nebraska Rivers support one of the largest breeding piping plover and Interior Least Tern populations in North America. The Platte River is a critical portion of their current range in Nebraska. Unfortunately, the natural processes that maintained Platte River habitats are largely missing today. Despite these changes, the Platte River remains critical breeding habitat to these Tier 1 At-risk species. Located in the heart of plover and tern breeding range, the Timberlake Ranch Camp provides a unique opportunity to conserve valuable habitat and provide educational opportunities to thousands of children each year. Timberlake is a large, expansive piece of property used primarily as a youth camp. The tract has been encroached severely by eastern red cedar and the historic wetland sloughs are degraded and non-functioning. The restoration of habitat will provide an ideal opportunity to greatly increase tern and plover habitat that once existed along this stretch of river. The objective is to restore 60 acres of critical limiting habitat for at-risk species dependent upon the Platte River for some portion of their lifecycle. Through the proposed conservation actions, the project will then be utilized to expose the general public to Nebraska's natural resources in a fun and educational manner. Activities will be tailored to teach the next generation how important, critical and unique Nebraska habitat is and why it should be conserved. To balance habitat benefits of the project with the education phase, special precautions and non-access to sandbars on the river during the nesting season for species of concern will occur. THIS PROJECT WAS SUBMITTED IN 2012 BUT NOT FUNDED DUE TO PLACEMENT ON THE RANK ORDER LIST

Sponsor Name: Ducks Unlimited, Inc. **Nearest Town:** Kearney
Project Name: Platte River Wildlife Management Area Partnership **Project No:** 13-185
Amount Requested: \$135,315 **Term of Project Request:** 2 **Review Group:** Rural Habitat

The Central Platte River, considered by the many to be one of the most endangered waterways in the U.S., provides critical habitat to over 300 bird species. The Platte River hosts migration habitat to ½ million sandhill cranes and several million ducks and geese each spring. With ninety-seven percent of the land base in Nebraska is privately owned, outdoor recreation opportunities on the Platte River are more limiting than any other part of the state. The Nebraska Game and Parks Commission own a relatively large amount of real estate along the Platte River in Central Nebraska. However, NGPC lands have suffered the same habitat changes that most of the land along the river has realized. While these tracts currently provide many wildlife benefits, the planned conservation activities will greatly diversify habitat types and the species that utilize them. This proposal includes extensive public benefits through restoration activities planned on public land along the river. Four state-owned Wildlife Management Areas (Bassway Strip WMA, Dogwood WMA, Blue Hole WMA, and Martin's Reach WMA) will be targeted for restoration and enhancement activities, providing both improved habitat for migratory waterbirds and Nebraska wildlife, and increased outdoor opportunities for the general public. Shallow floodplain wetlands and backwater sloughs will be improved, invasive species will be removed, and a diversity of habitats will be realized for both wildlife and fellow Nebraskans.

Sponsor Name: Ducks Unlimited, Inc.**Nearest Town:** Stockham**Project Name:** Bergen Tract Restoration**Project No:** 13-190**Amount Requested:** \$83,275**Term of Project Request:** 1**Review Group:** Rural Habitat

Ducks Unlimited is requesting funds from the Nebraska Environmental Trust to assist with restoration activities on the Bergen Tract. This 160 acre property is owned by Ducks Unlimited. A 74-acre portion of the property was acquired as part of DU's "Revolving Habitat Program" and is planned to be restored through this proposal. The project includes the restoration of approximately 55 acres of seasonal wetland habitat and 19 acres of adjacent grassland and buffer habitat. The wetland on this tract is completely drained and will be restored through excavation of material from within the wetland and construction of a berm to restore hydrology on the site. The project offers a unique opportunity to fully restore a completely drained, shallow, ephemeral wetland in Nebraska's Rainwater Basin Region. The restored wetland will be approximately three to six inches deep when full, providing optimum foraging habitat to waterfowl, shorebirds and wading birds, particularly during spring migration. The project is located in the northeast part of Clay County in the heart of the Rainwater Basin, one of the most important wetland landscapes in North America. The Rainwater Basin hosts over 10 million waterfowl, shorebirds, and other migratory birds each year. The restored Bergen Property will be protected through a conservation easement placed on the property at a later date, providing perpetual protection for the restored habitat. Funding from NET is being requested to assist with the restoration costs of this project. The project will help meet the long-term wetland conservation goals of the Rainwater Basin Joint Venture (RWB JV). The U.S. Fish and Wildlife Service Partners for Fish and Wildlife Program and the RWB JV are partners in the project.

Sponsor Name: Five Rivers Resource Conservation and Development, Inc.
(RC&D)**Nearest Town:** Tecumseh**Project Name:** Native Grassland Protection Against Invasive Weeds II**Project No:** 13-192**Amount Requested:** \$138,750**Term of Project Request:** 3**Review Group:** Rural Habitat

Native Prairies are the most threatened ecosystem in North America. With the increase of invasive species present in the area we see its negative impacts on these remaining landscapes and losses to our other grazing lands and native habitat. The lack of control reduces the production, profitability and sustainability of grasslands and causes economic hardships. This has resulted in some grasslands being converted to row crop production because of difficulties and costs of controlling invasive weeds. Losing native prairies, oak woodlands, and plant diversity is resulting in significant impacts to our valuable native wildlife habitat, soil quality, water quality, and economic sustainability.

In 2011, the Five Rivers WMA received a total of sixteen applications from landowners in four different counties requesting aid in controlling the invasive species. Due to the higher than expected volume of applications from landowners seeking assistance, Five Rivers Weed Management Area had to request to reallocate funding from the Nebraska Environmental Trust Fund – Project Number 11-133, to include an increased amount dedicated to conservation implementation and a decreased amount of funding for education in order to meet the needs of local landowners and managers, which displays the interest and need for the cost share program in the designated region.

The WMA continues to educate landowners and managers and continually receives inquiries along with new applicants seeking aid in controlling the invasive weed species. Therefore, the Weed Management Area seeks a continuation request, extending the program for an additional three years. The WMA is seeking \$90,000 for a three year cost share program that would assist in making effective invasive weed species control affordable for landowners, land managers, and other entities. Seventy-five percent of the fees for the chemical and application would be funded through this grant. This program would be available on a rating basis; dependent on severity of invasion, type of invasive weed(s), native prairie in an identified Biologically Unique Landscape, and in kind or cash match (minimum requirement of 25%). A five year maintenance agreement will be required on any entity acquiring grant funds.

An additional \$21,000.00 is requested to fund three project promotional workshops (speakers, lunch, mailings, building rental, supplies) throughout the WMA area, totaling \$7,000 per year for three years, and \$27,750.00 for project/grant administration, divided into equal payments of \$9,250.00 a year for three years.

Sponsor Name: Fontenelle Forest Association **Nearest Town:** Bellevue
Project Name: Erosion Repair and Storm Runoff Reduction in the Childs and Mill Hollow Watersheds **Project No:** 12-131-2
Amount Requested: \$231,438 **Term of Project Request:** 2 **Review Group:** Statement of Intent

Fontenelle Forest Nature Center is a 1,400 acre natural area in northern Sarpy County, and is owned and managed by the Fontenelle Nature Association (FNA). Within the Forest upland are seven drainage basins, or watersheds which drain in a northeasterly direction toward the Missouri River. Three of the largest watersheds extend beyond nature center boundaries. Residential development in the upper reaches of these watersheds has changed the hydrology from its historic conditions; resulting in erosion and siltation, loss of water quality, damage to wildlife habitat and public safety concerns. In 2007, FNA and the City of Bellevue co-sponsored a grant request and received Nebraska Environmental Trust (NET) funds to match federal dollars to allow the U.S. Army Corps of Engineers (COE) to conduct a watershed Stabilization Study under the Section 22 program. The completed study is on file at NET. The study resulted in a detailed ground survey of each watershed, an analysis of the historical and post development hydrology of each, and conceptual recommendations for repairing problems. Repair of the easternmost watershed, known as Coffin Springs, was completed with NET funds in 2011. This request is for funds to repair storm runoff damage in the two remaining watersheds, Childs and Mill Hollows, over a two year period. The work in Childs Hollow is straightforward, while the Mill Hollow project will result in an extensive makeover of the present watershed drainage pattern. The NET is being asked to fund a portion of the repair project costs and the FNA, Bellevue, Lozier Foundation, Papio-Missouri River NRD and community donors are pledging monetary and in-kind contributions. A companion grant request is also being submitted to the Nebraska Department of Environmental Quality (NDEQ) for funds to build demonstration homeowner rain gardens in the Mill Hollow watershed. THIS PROJECT WAS FUNDED \$575,210 IN 2012 WITH THE INTENT TO FUND UP TO \$231,438 IN YEAR TWO PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE SECOND YEAR REQUEST

Sponsor Name: Friends of Heron Haven, Inc. **Nearest Town:** Omaha
Project Name: Educational Program and Wetland Facility Enhancements **Project No:** 13-175
Amount Requested: \$42,306 **Term of Project Request:** 3 **Review Group:** Education

The recent completion of a \$0.5 million USACE/Papio-Missouri NRD wetland restoration project greatly enhanced Heron Haven's unique wetland habitat. As a timely and mission-appropriate next step, Friends of Heron Haven requests funding for 9 projects that, in partnership with the NRD, will expand our nature and environmental education programs and accomplish a series improvements to our physical facilities that will enhance its educational potential, provide greater access for the disabled, improve public safety, and facilitate maintenance of the property by volunteers. Project 1 supports visits by school groups to participate in a combination of indoor and outdoor environmental education programs. Project 2 funds the annual Heron Haven Wetland Festival, which involves families in a variety of educational nature-related activities. Project 3 installs a series of full color, interpretive signs for our major attractions that will offer guidance in identifying common flora and fauna. Project 4 requests recycled plastic lumber for a post and rail security fence around a Dragonfly Pond. Project 5 replaces a worn cedar fence surrounding the Nature Center patio. This patio contains a bird-feeding station that provides opportunities for year-round bird observation and provides space for the annual Wetland Festival. Project 6 installs an irrigation system for the Butterfly Garden, Nature Center planters and patio garden. These gardens, which attract numerous visitors, provide opportunities for the study of native perennials and butterflies. Project 7 proposes to replace an obsolete utility shed that houses equipment and supplies used by volunteers to maintain the property. Project 8 installs a video security system for the area around the Nature Center. Finally, Project 9, which begins in Year 2, requests crushed rock to upgrade 600 feet of unimproved trail to provide access for the disabled to the viewing/photography blind, with installation to be provided by the NRD.

Sponsor Name: Gracie Creek Landowner's Association **Nearest Town:** Burwell
Project Name: Gracie Creek Implementation Project: Restoring Habitat for Priority Species **Project No:** 11-188-3
Amount Requested: \$60,000 **Term of Project Request:** 3 **Review Group:** Statement of Intent

The Nebraska Sand Hills serves as one of the last strongholds for Northern grassland birds that have suffered precipitous declines globally. This project will conserve and enhance habitat for key bird and plant species across a large privately-owned landscape for the benefit of these species and the public.

The project seeks funding to implement activities identified in an 18 month planning effort: it would improve ecological processes, conserve and protect native species and habitats, engage landowners in management, be livestock-friendly, build local expertise, and provide education and outreach. Because most Sand Hills lands are privately owned and managed for livestock production, conservation must work in partnership with private ranchers and maintain the productivity of their agricultural operations.

Ranchers on 50,000 contiguous acres in the Gracie Creek watershed and their partners will implement beneficial management practices over three years, including prescribed grazing, prescribed burning, and cedar tree removal, to enhance habitat for birds and other State of Nebraska priority species; the project will conserve habitat for Prairie Chickens and other species including Long-billed Curlew and Lark Bunting and promote the viability of the federally-endangered Blowout Penstemon. It aims to model a collaborative, habitat-sustainability project that could be replicated elsewhere in the Sand Hills and Nebraska and will provide outreach and public education including a ranch tour, public presentation, and media outreach. The project will begin on three ranches which together have been designated as an Audubon Important Bird Area; it will encourage the participation of other adjacent landowners, with the goal of including over 100,000 acres. This proposal builds on assessment and planning efforts over the previous 18 months funded in part by NABP (NETF) and with input from Nebraska Game and Parks and complements funding for species habitat conservation from the NRCS CCPI program.

A SIMILAR PROJECT WAS SUBMITTED IN 2010 BUT NOT FUNDED DUE TO PLACEMENT ON THE RANK ORDER LIST. THIS PROJECT WAS FUNDED \$90,000 IN 2011 WITH THE INTENT TO FUND UP TO \$60,000 IN YEAR TWO AND \$60,000 IN YEAR THREE PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE THIRD YEAR REQUEST.

Sponsor Name: Grand Island Area Clean Community System **Nearest Town:** Grand Island
Project Name: Household Hazardous Waste Facility **Project No:** 11-136-3
Amount Requested: \$75,000 **Term of Project Request:** 3 **Review Group:** Statement of Intent

The Grand Island Area Clean Community System (CCS) is seeking \$250,000 from the Nebraska Environmental Trust for leasing and modification of a 5,000 square foot Household Hazardous Waste (HHW) Facility for one-stop disposal of household hazardous waste, medications and recyclable products. The existing building has been vacant for two years, meets zoning requirements and leasing-reusing this building is more cost effective than new construction. The building will include a 3,000 square foot bay processing area, a swap shop, education/conference room and office space for the offices of the Grand Island Area CCS. The HHW Facility will be open year round and available to any Nebraska resident. Initially it will benefit approximately 125,000 residents and landfills of five counties in Central Nebraska; Adams, Hamilton, Merrick, Howard and Hall. It will provide a safe location for disposal of household hazardous waste materials and unwanted medications stored in homes, garages, basements, sheds, medicine cabinets and other personal property.

The education area will be used to teach children and adults about HHW, the environment and recycling. The swap shop will provide free materials to residents for reuse which will reduce the amount of waste that would otherwise require disposal fees. Computers, lead-acid batteries, televisions and other electronics will also be accepted and recycled.

THE CITY OF GRAND ISLAND SUBMITTED SIMILAR PROJECTS IN 2007 AND 2009 THAT WERE NOT FUNDED DUE TO PLACEMENT ON THE RANK ORDER LIST.

THIS PROJECT WAS FUNDED \$85,000 IN 2011 WITH THE INTENT TO FUND UP TO \$75,000 IN YEAR TWO AND \$75,000 IN YEAR THREE PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE THIRD YEAR REQUEST.

Sponsor Name: Green Recycling Enterprises, LLC dba Second Nature Public Recycling **Nearest Town:** Lincoln/Omaha
Project Name: Recycling on the Go! **Project No:** 13-109
Amount Requested: \$264,365 **Term of Project Request:** 2 **Review Group:** Waste Management

GRE is in the business of providing recycling containers at public events throughout Nebraska. During the two years, we have proven the demand for public recycling containers at over 97 (69 completed thru August, 79 confirmed) different events with additional 18 multiple events in Omaha, Lincoln, Papillion, West Point, La Vista, Nebraska City and Bellevue. Some events we conducted include: (1) College World Series; (2) Swim Trials; (3) Lincoln Marathon and the (4) Cox Classic golf tournament.

GRE will secure additional funding from sponsors for the Recycling on the Go campaign by providing a promotional opportunity via a full-color graphic display (17.5 in. x 28.5 in.) located on each side of the recycling containers. The program was extremely successful in 2011 and 2012. People were aware of the containers from previous years and used them to recycle more products. The event coordinators, staff and patrons were expecting the containers this year and were more open to our program. Our plan for 2013 and 2014 is to have the events help promote us in the setup of the event. NET's financial support will provide the stimulus to ensure the successful continuation of our campaign. These messages will educate over 1.5 million event participants about recycling. The NET can use these displays to promote its' mission and accomplishments.

The support of the NET will enable GRE to provide a turnkey recycling campaign for the State of Nebraska. Without the NET and private sponsors, GRE would not be able to provide this successful and proven program.

Sponsor Name: Gretna High School **Nearest Town:** Gretna
Project Name: Courtyard and Garden: An Educational Immersion Project Focusing on Conservation and Enhancement on Nebraska Ecosystems **Project No:** 13-105
Amount Requested: \$70,321 **Term of Project Request:** 1 **Review Group:** Education

Gretna High School requests funding for the Courtyard and Garden: an Education immersion Project Focusing on Conservation and Enhancement of Nebraska Ecosystems. This project will educate the public and students on ecologically appropriate plantings, ecosystem relationships, soil health, and resource sustainability. NETF dollars will help develop a new courtyard area and improve an existing outdoor classroom area. This would include plantings, soil amendment, permanent edging, seating, hardscape, irrigation, and equipment for maintenance of the two areas. A key component of this project is to immerse our staff and students in their environment by getting their "hands dirty and their feet wet." One of the goals of our school district is to challenge our students to discover, develop, and supply knowledge in a changing, complex society and to extend learning experiences designed to motivate individual creativeness and develop a positive self-image. Our project would accomplish this as well as enhance all curricular areas from the arts programs to science and math. Because of its cross-curricular use, students will understand that all academic areas are connected and not separate entities. This same connectedness is apparent in nature. From water, air, soil, and the life that uses them, there is a web of life we impact with our human activities. This project will help students understand humanity's impact on the environment and its responsibility in maintaining sustainability. The courtyard and garden will create a needed balance in students' lives, honing all five senses, providing academic and leisure pursuits, and developing a connectedness and concern for their outdoor environment. It will aid in the creation of good environmental stewards and help the public and students understand and see the beauty of our various ecosystems.

Sponsor Name: Gretna Sanitation, Inc. **Nearest Town:** Ashland
Project Name: Zero Waste Pilot Project **Project No:** 13-162
Amount Requested: \$628,288 **Term of Project Request:** 1 **Review Group:** Waste Management

The Zero Waste Pilot Project is an unprecedented public/private partnership between Gretna Sanitation, Inc. and the Gretna Public School District slated for the 2013-14 school year. The joint mission is to dramatically alter our culture’s approach to waste management by providing a radical example of positive change. Having successfully diverted thousands of cubic yards of yard waste from the landfill through its Resource Recovery and Landfill Reduction Project, Gretna Sanitation will partner with the Gretna Public School District to expand and incorporate food waste and organic materials accompanying food into its existing yard waste composting operation. The Company’s resource recovery mission aligns with the district’s philosophy to develop students to be creative, engaged and informed citizens in a complex society. The Zero Waste Pilot Project combines innovation with powerful environmental education. Students will witness their district taking responsibility for the environment, in essence walking the talk, demonstrating to students they can make a difference in the environment at home, at school and in the community. Food waste collected from approximately 3,428 students, faculty and staff will be transported to the composting facility introduced into windrows and composted. Gretna Sanitation will also collect the districts’ recyclable materials and trash at no cost for the 2013-2014 school year enabling the district to generate zero or minimal waste and save approximately \$25,000 in waste management fees. Gretna Sanitation respectfully seeks The Nebraska Environmental Trust’s support in expanding its composting facility. Composting food waste requires more attention than yard waste alone. Components key to safely and efficiently incorporating food waste include the development of infrastructure specifically a retention pond and a ground water monitoring system; the acquisition of permits; and the construction of a containment building to compost food waste during the winter months and inclement weather. Project execution relies on Trust funding.

Sponsor Name: Habitat for Humanity of Omaha ReStore **Nearest Town:** Omaha
Project Name: ReStore II **Project No:** 13-155
Amount Requested: \$485,000 **Term of Project Request:** 1 **Review Group:** Waste Management

In a continuing effort to serve low-income families and provide an efficient way to recycle usable building and home improvement materials, Habitat for Humanity of Omaha opened its second ReStore retail outlet (ReStore II) in August 2012 and is currently seeking funding to assist with start-up costs and building purchase. With the opening of ReStore II, Habitat will triple the materials recycled or reused and houses built through this program. That’s 4,800 tons of material recycled and 12 Habitat Omaha homes each year – the impact is significant. ReStore II makes this possible by accepting donations of new and used home improvement materials and selling them to the general public at a discount of 50-70% off retail value, allowing homeowners of every income level to make repairs and upgrades at an affordable price and promoting the maintenance and repair work that can reduce the incidence of substandard housing. Revenues generated by the store fund the construction costs of safe, decent, affordable and energy-efficient Habitat homes.

Sponsor Name: International Munitions & Technologies, INC., Demil Recycling Group **Nearest Town:** Auburn
Project Name: City of Auburn Recycling/Munitions Manufacturing Plant **Project No:** 13-169
Amount Requested: \$395,000 **Term of Project Request:** 2 **Review Group:** Waste Management

This is unique and very special proposal for consideration by the Nebraska Environmental Trust Fund. After approximately 25 years in the industry of manufacturing some of the finest loading/reloading products in the country today, and providing services to the largest ammunition manufacturers America. We are approached by the US military to attempt to come up with a solution to contaminated corroded and degrading live ammunitions American and with the winding down of the wars in Iran and Afghanistan will be will growing in Quantum Numbers.

National/International Recognition: 1) Environmental "Clean Up" Efforts; 2) Use of advanced Technology Systems Quantum Leap in Quality Environmental Clean Up / Safety & Effectiveness. A.) Continued Development of Advanced Recycling Technologies in the Areas of Metals, Glass, Paper, Plastic, and Unique Conversion of Sludge into Biodiesel. B.) Manufacturing of Recycling Equipment for World Distribution from the State of Nebraska. 3.) Replicable & Sustainable Pioneering Research & Development: Our company's research and development team pioneered America's first fully automated munitions Recycling Advanced Technology system, has improved functional operations by over 300%, improved safety, cost effectiveness and reduce staffing by over 75%. IMT is bringing our research and development team into a Partnership with the University Nebraska Department of Engineering. "State of Nebraska": Leader in New Generation of Advanced Environmental Technologies While Creating 345 New Clean / Green Environmentally Positive Jobs within our State. Sustainability: with all the Waste Materials that will need to be recycled with the US military alone this aggressively researching quantum leaps in our technology to be able to address the overwhelming magnitude of this environmental issue.

Sponsor Name: International Munitions & Technologies, INC., Demil Recycling Group **Nearest Town:** Omaha
Project Name: City of Omaha IMT Manufacturing Metals/Recycling Plant **Project No:** 13-187
Amount Requested: \$460,000 **Term of Project Request:** 2 **Review Group:** Waste Management

This is unique and very special proposal for consideration by the Nebraska Environmental Trust Fund. After approximately 25 years in the industry of manufacturing some of the finest loading/reloading products in the country today, and providing services to the largest ammunition manufacturers America. We are approached by the US military to attempt to come up with a solution to address a severe and serious environmental hazard, the disposal of 680 Million Tons of seriously contaminated corroded and degrading live ammunitions America and with the winding down of the wars in Iran and Afghanistan will be will growing in Quantum Numbers. National/International Recognition: 1.) Environmental "Clean Up "Efforts 2.) Use of Advanced Technology Systems Quantum Leap in Quality Environmental Clean Up I Safety & Effectiveness. A.) Continued Development of Advanced Recycling Technologies in the Areas of Metals, Glass, Paper, Plastic, and Unique Conversion of Sludge into Biodiesel. B.) Manufacturing of Recycling Equipment for World Distribution from the State of Nebraska. 3.) Replicable & Sustainable Pioneering Research & Development: Our company's research and development team pioneered America's first fully automated munitions Recycling Advanced Technology system, has improved functional operations by over 300%, improved safety, cost effectiveness and reduce staffing by over 75%. IMT is bringing our research and development team into a Partnership with the University Nebraska Department of Engineering. "State of Nebraska": Leader in New Generation of Advanced Environmental Technologies While Creating 345 New Clean I Green Environmentally Positive Jobs within our State. Sustainability: with all the Waste Materials that will need to be recycled with the US milita1y alone this would provide us at our current levels with almost 1,000,000 years of backlog. Therefore we have been aggressively researching quantum leaps in our technology to be able to address the overwhelming magnitude of this environmental issue.

Sponsor Name: Joslyn Castle Institute for Sustainable Communities **Nearest Town:** Statewide
Project Name: Strategic Communications Design for Sustainable Development **Project No:** 13-139
Amount Requested: \$328,000 **Term of Project Request:** 2 **Review Group:** Education

This is a two-year proposal for the development of a “strategic communications design for sustainable development” that will be developed from practice in previous and new target communities to discern best practices for communication strategy in other Nebraska communities. The final product will be an electronic handbook accessible to all communities. Context of the Proposal: The Joslyn Institute (JISC) is in the process of forming a three-way, long-term partnership with the new University of Nebraska Rural Futures Institute (RFI), and ongoing sustainability efforts at Creighton University. This proposal will be the first collaborative project between these three institutions. The new, reorganized Board of Directors for the JISC will include permanent seats from the University of Nebraska and Creighton, University while the JISC will retain its 501c3 non-profit status, and will carry primary management responsibility for this project. Design Strategy: Research and practice in the development of sustainable community solutions has repeatedly demonstrated that sustainability requires more than the application of science. Each problem-opportunity in the quest for sustainability is a local matter and, thus, requires a distinctive understanding of what will work in a particular place at a particular time. This capacity is built up in certain forms of deliberative and democratic communication that increases understanding, facilitates democratic skills and fosters positive community attitudes. Goal: To work with community partners to establish a framework for fostering appropriate, targeted and local communication strategies to address their specific problem and opportunities. The result will be robust, innovative practices that drastically increase a decision-making capacity on sustainability issues in a given community. Community Context of This Proposal: This project will be coordinated with a recently funded 2012 DEQ Waste Reduction and Recycling grant to the JISC for a one year study of “Creation of a Net-Zero Community Waste Management Template”. North Platte, South Sioux City, and Lincoln have been selected for surveys, modeling, and applications of a proposed template for waste management. These three cities will have extended engagement with the UN, JISC and Creighton team as models of communications concerning their planning.

Sponsor Name: Keep Alliance Beautiful **Nearest Town:** Alliance
Project Name: Recycling Education and Center Support **Project No:** 13-183
Amount Requested: \$98,247 **Term of Project Request:** 3 **Review Group:** Waste Management

Keep Alliance Beautiful, Inc. is requesting partial funding to retain personnel at the recycling transfer center and for educational personnel for 3 years to help promote recycling in the community of Alliance and Box Butte County. The recycling program falls within the Waste Management section of the Nebraska Environmental Trust category areas. The Center was opened three years ago through a prior Nebraska Environmental Trust grant (#10-132). Keep Alliance Beautiful, Inc. received \$15,858 in the sale of recycling commodities in 2011-12. The Alliance City Council instituted 50 cents of a 1% landfill fee increase in 2011 for recycling expenses. KAB is slated to receive \$6,000 a quarter for the recycling services provided in 2012-2013 budget year. Recycling has become a service that people and businesses in Box Butte County are becoming accustomed to. Environmental programs operating in the schools and for the benefit of the community and county have been part of the success of the program. KAB will continue educational programming through the three year period. As KAB’s recycling transfer center needs grow, keeping the program operational is necessary. Expectations are that the City of Alliance will play a larger role in meeting those needs. Currently the recycling center is housed in a small 18” x 75’ (1350 sq. ft.) building. We are now beyond subsistence and ready to grow but need help to make that happen. Financial assistance is necessary for KAB’s recycling program to move forward. During the next three year period, we expect to move to a larger building with storage and be able to secure additional funding locally. KAB must also continue waste management education focusing on reduction, reusing, repurposing, and recycling. Additional programs on “closing the loop” and purchasing recycled goods are also important.

Sponsor Name: Keep Nebraska Beautiful **Nearest Town:** B Bow/Utica/Schuyler
Project Name: Nebraska School Chemical Cleanout Campaign **Project No:** 13-198
Amount Requested: \$23,736 **Term of Project Request:** 1 **Review Group:** Waste Management

This grant will assist 3 schools (Broken Bow High School, Schuyler High School, and Centennial Public School) clean out chemicals that are highly hazardous, potentially explosive and radioactive. Getting these dangerous chemicals out of the schools will make it safer for students and staff.

Most Nebraska high schools have had chemicals that are outdated, unknown, highly hazardous, potentially explosive and radioactive until the start of this program. Many of the chemicals were purchased as early as the 1950s when the federal government provided excess funds to schools to enhance science curriculum and many of those legacy chemicals are still on school lab shelves. Chemicals have accumulated over the decades and have in many cases created potentially serious health and safety problems for students and staff.

In 2004, the U.S. EPA initiated the School Chemical Cleanout Campaign. After discovering the extent of the dangerous chemicals in Nebraska schools, Keep Nebraska Beautiful applied for a grant from the U.S. EPA in 2007 to develop the program. Our goals are to: 1) Remove inappropriate, outdated, unknown and unnecessary chemicals from schools; 2) Prevent future chemical mismanagement in schools through training, curriculum and policy change and long-term management solutions; and, 3) Raise awareness of chemical issues in schools and promote sustainable solutions. KNB has previously partnered with the Educational Service Units (ESUs) to seek grants to help high schools pay for initial cleanouts. Since initiating the effort in Nebraska, 213 schools have been cleaned out resulting in the removal of 20,151 chemicals including 10,397 lbs. of high haz, 1,488 lbs. of mercury, radioactives from 39 schools, and potential explosives from 103 schools. Keep Nebraska Beautiful is committed to continue to help more schools clean out chemicals and perhaps more importantly, to work with every school to develop a long-term, sustainable chemical management program.

Sponsor Name: La Vista, City of **Nearest Town:** La Vista
Project Name: Thompson Creek Watershed Restoration **Project No:** 13-110
Amount Requested: \$1,112,000 **Term of Project Request:** 3 **Review Group:** Bank Stabilization

Urban streams greatly improve the quality of life for communities, but they usually are too damaged to be an asset. Urban streams experience eroding banks, poor water quality, and poor habitat for aquatic life. The City of La Vista intends to restore Thompson Creek, an urban stream at the center of its community. Future park and other development plans will make Thompson Creek a recreation destination. The Thompson Creek Watershed Restoration implements this vision with a holistic watershed restoration approach phased over three years (with two additional years of monitoring). Implementing the 1,250-acre Watershed Restoration require \$2,689,750, with funding by the City, NDEQ 319 Grant, Papio-Missouri River Natural Resource District, and the Environmental Trust Fund. NET's contribution represents 41% of the total amount over three years.

Planned activities are: 1. Pre- and post-construction monitoring of water quality, stream stage, stream habitat and biota. Data will largely be collected by teacher and students, guided by contracted professionals. 2. Education and outreach through web and print-based communications, open houses, and volunteer activities, including engaging students and teachers in the Papillion-La Vista School District. 3. Cost-sharing and demonstration projects, targeting homes and apartments for runoff reduction and larger projects in commercial areas and public open space. 4. Reconstruction largely using bioengineering of 4,757 linear feet of eroding Thompson Creek, with engineered storm sewer outlet structures and created wetlands for pre-treatment.

The Watershed Restoration is expected to significantly improve water and habitat quality in Thompson Creek: 1. In-stream habitat conditions will significantly improve based on the USEPA's Rapid Bioassessment Protocol. 2. The first polluted stormwater flush will be treated for a significant portion of the watershed (with 100% in 10 years). 3. Peak flows for the 2-year, 24-hour event are expected to decrease by 25%. 4. Eroding banks will be reduced by 80%.

Sponsor Name: Lauritzen Gardens **Nearest Town:** Omaha
Project Name: Conservation Center/Demonstration Rain Garden **Project No:** 13-208
Amount Requested: \$800,000 **Term of Project Request:** 1 **Review Group:** Education

To promote our imperiled plant conservation efforts and to further our mission to educate our visitors to environmentally sensitive stewardship issues, Lauritzen Gardens will establish a Plant Conservation Center and laboratory connecting to an imperiled plants greenhouse; and construct a demonstration rain garden. This conservation initiative will allow our almost 200,000 annual guests to learn about the need to conserve our biological heritage; understand the natural water purification process, and see how this process can be implemented in their own homes.

To build the Conservation Center, an addition will be constructed on the south side of the garden’s existing administration complex. We are requesting funding from the Trust for 1/3 of the construction cost: \$200,000. Within the Conservation Center will be a laboratory to assist in ex situ plant conservation efforts including but not limited to seed banking, plant propagation studies, a research library and more.

Connected to this Conservation Center will be an imperiled plants greenhouse, a conservatory devoted entirely to the preservation and display of our region’s imperiled plant population. The greenhouse facility will be open to the public and serve as an education center for our visitors highlighting the key role plants play in maintaining basic ecosystem functions. The greenhouse facility is estimated to cost \$150,000 to build. Immediately to the east of the greenhouse will be our demonstration rain garden. Visitors will have easy access to our conservation center, the rain garden and imperiled plants greenhouse from our existing garden. The important issue of natural water purification, its impact on the health and wellbeing of our community and the economic cost to our municipalities and states who build and maintain water treatment facilities will be presented. The rain garden will cost \$500,000.

Sponsor Name: Lewis & Clark Natural Resources District **Nearest Town:** Hartington
Project Name: Upper Missouri Tributaries Hydrogeologic Framework and Groundwater Monitoring Network **Project No:** 13-193
Amount Requested: \$275,500 **Term of Project Request:** 3 **Review Group:** Water

The Lewis and Clark Natural Resources District (LCNRD) located in the northeast corner of Nebraska has a complex assemblage of aquifers which supply most of the water used for irrigation and drinking. The LCNRD is looking to the Trust for funding to drill test holes, record down-hole data, construct monitoring wells and install dedicated water-level readers and two dedicated pumps to establish baseline information about groundwater quality, quantity, and aquifer composition. At this time the LCNRD has only a limited number of monitoring wells, located in a Groundwater Management Area in Knox County. The establishment of a monitoring network will allow for year-round monitoring, providing a more complete picture of the groundwater resource, now and over the long-term. To develop a reliable groundwater management tool in Northeast Nebraska, it is first necessary to develop a complete regional hydrogeologic overview. The first step is establishing the hydrogeologic framework through test hole drilling and down-hole geophysical logs. From that data, a groundwater monitoring program will be developed, to support planning and management. Drilling test holes and analyzing geophysical logs provides a geologic basis to design and construct monitoring wells in the aquifers of current irrigation development and secondary aquifers where potential for development is high. With the information gathered from this research, the District will have the tools necessary to assess the current groundwater condition, identify areas which may require regulation, and identify areas of concern which will benefit from further monitoring or additional research. Water quality data is an important function of the District and dedicated monitoring wells provide unaltered samples from distinct zones in the aquifer. Hydrogeologic characterization from test holes, stratigraphic analysis, water chemistry, and water-level information will be a great advancement for the District in improving the water management plan and protecting water resources.

Sponsor Name: Lincoln Parks Foundation **Nearest Town:** Lincoln
Project Name: Revitalizing Nebraska's Centennial Mall **Project No:** 11-143-3
Amount Requested: \$200,000 **Term of Project Request:** 3 **Review Group:** Statement of Intent

Located in the heart of downtown Lincoln, Nebraska, Centennial Mall was installed in 1967 to honor the State's 100th birthday. The mall was designed to be an urban oasis where people could relax and meet in a park-like setting. Over the years, Centennial Mall has served as the State Capitol's "welcome corridor" for visitors. The mall is a unifying structure tying State government, the City of Lincoln and the University of Nebraska together. Over the last decade, Centennial Mall, which is maintained and managed by the Lincoln Parks & Recreation Department, has started to crumble. Its infrastructure is made primarily of cement, which cannot hold up under the onslaught of Nebraska's tough winters. Trees were placed in planters. Growth has caused tree roots to bust apart the planters and make the sidewalks unsafe. Most of the fountains gracing Centennial Mall have been filled in with sod due to safety concerns. Centennial Mall, once the pride of Nebraska, is now an eyesore. Additionally, the mall does not conform to modern accessibility requirements.

The proposed project will raise a total of \$10.0 million (includes \$1.5 million for a maintenance endowment, \$8,419,488 million for demolition, design, construction and contingencies, and \$180,512 in campaign expenses) to renovate Centennial Mall. The City of Lincoln has committed \$3 million toward the project with the University of Nebraska Foundation providing another \$2,000,000, the Lancaster County Board of Commissioners providing \$100,000, and State Energy Program providing \$97,500 for a total of \$5,197,500 in committed funds. This leaves \$4,802,500 to raise. Our request to NET is for \$754,500. A capital campaign led by Lincoln Parks Foundation will raise the remainder. We plan to announce the public portion of campaign in second quarter of 2011 and complete fund raising by second quarter of 2012. Construction will begin third quarter of 2012 and be completed in 2014.

THIS PROJECT WAS FUNDED \$60,000 IN 2011 WITH THE INTENT TO FUND UP TO \$250,000 IN YEAR TWO AND \$200,000 IN YEAR THREE PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE THIRD YEAR REQUEST.

Sponsor Name: Lincoln, City of **Nearest Town:** Multiple
Project Name: Eastern Saline Wetlands Project - 2012 **Project No:** 12-139-2
Amount Requested: \$730,000 **Term of Project Request:** 3 **Review Group:** Statement of Intent

The Eastern Saline Wetlands Project 2012 will conserve the most imperiled natural community in Nebraska. The targeted eastern saline wetland 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 five 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 Wetland Coordinator. 4. By restoration and management work on the wetlands. 5. By developing area conservation plans. 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 continue to implement the Conservation 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 2012 qualifies for the feature program bonus. THIS PROJECT WAS FUNDED \$2,750,000 FROM 2002 TO 2009. THIS REQUEST IS FOR A CONTINUATION OF THIS PROJECT.

THIS PROJECT WAS FUNDED \$360,000 IN 2012 WITH THE INTENT TO FUND UP TO 730,000 IN YEAR TWO AND \$310,000 IN YEAR THREE PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE SECOND YEAR REQUEST

Sponsor Name: Lincoln, City of - Parks and Recreation Department **Nearest Town:** Lincoln
Project Name: Prairie Corridor on Haines Branch Implementation Project **Project No:** 13-116
Amount Requested: \$300,000 **Term of Project Request:** 3 **Review Group:** Rural Habitat

BACKGROUND: The project vision is to expand prairie and riparian habitat areas, build recreational and educational connections, and promote enhancement and preservation of one of southeast Nebraska's most valuable resources - tallgrass prairie - in and around Lincoln and Lancaster County. Through local grants, the City of Lincoln was able to complete the Salt Valley Greenway and Prairie Corridor Master Plan, July 31, 2012, that details the steps to achieve this vision. The next step is phased implementation of the master plan. This proposal focuses on Phase I of implementation. **PURPOSE:** The Salt Valley Greenway is a ribbon of open space and greenway links within the Salt Valley drainage basin within Lincoln and Lancaster County. One of the key greenway links is the Prairie Corridor on Haines Branch, connecting Pioneers Park and Spring Creek Prairie, valuable parcels of tallgrass prairie and key resources for environmental education. Implementation of the master plan will begin with the Prairie Corridor to provide early protection and enhancement of this high priority area while serving as a model for implementation of the entire Salt Valley Greenway master plan. The City of Lincoln will serve as the lead agency. Partners include the Lincoln Parks Foundation, Lancaster County, Lower Platte South Natural Resources District, Spring Creek Prairie Audubon Center, Nebraska Game & Parks Commission, and others. The City will pursue a series of grants, including this application requesting \$300,000 per year for three years to fund land acquisition, conservation and habitat development of prairie, riparian habitat, saline wetlands, and related areas that comprise the Prairie Corridor. Matching funds will assist with these activities and the installation of a trail and trail corridor. The NET grant will be used to leverage additional grants to fully fund the Prairie Corridor. The first phase of implementation will cost approximately \$1.84 million.

Sponsor Name: Lincoln-Lancaster County Health Department **Nearest Town:** Lincoln
Project Name: Nebraska MEDS Disposal Program - Protecting Nebraska's Water & People **Project No:** 13-199
Amount Requested: \$306,208 **Term of Project Request:** 2 **Review Group:** Waste Management

Now, in its sixth year of working to confront the environmental and public health challenges of emerging contaminants/unwanted medications in our state, the Nebraska MEDS Coalition and the Lincoln-Lancaster County Health Department are prepared to maintain and to expand their targeted efforts to develop and test efficient and effective approaches to better manage unwanted, expired, and excess pharmaceuticals in Lancaster County and across the state of Nebraska. With the primary objective of protecting the natural environment and human health, the Nebraska MEDS Coalition is uniquely positioned to create a uniform, comprehensive and long term model for the safe and legal management of pharmaceutical waste. With support of several key stakeholders (Nebraska Pharmacists Association, Lancaster County Sheriff's Office, Nebraska Regional Poison Center, and the Groundwater Foundation), the Nebraska MEDS Coalition aims to take the lessons learned from the ongoing, Trust-funded Local Pharmacy Medication Disposal Pilot Project and apply them to the collection of controlled substances all the while expanding educational and proper disposal efforts in the other sectors challenged by varying quantities of unwanted and expired medications. Program expansion will include activities that aim to identify, evaluate, strengthen and share successful disposal practices and educational approaches with other concerned communities, small businesses, organizations, public sector agencies and consumers. The Nebraska MEDS Disposal Program will leverage critically-needed partner expertise (public/private), associated partner networks and resources to achieve measureable environmental and public health benefits. This will be accomplished by building the capacity of Nebraskans to understand the risks of emerging contaminants like pharmaceuticals in addition to giving them safe, legal and convenient disposal options for waste medications that can be found in every Nebraska community.

Sponsor Name: Little Blue Natural Resources District **Nearest Town:** Seward, York, Geneva,
Project Name: Watershed Restoration to Enhance Rainwater Basin Wetlands **Project No:** 13-119
Amount Requested: \$405,000 **Term of Project Request:** 3 **Review Group:** Rural Habitat

The Little Blue Natural Resources District, Nebraska Game and Parks Commission, U.S. Fish and Wildlife Service, and Ducks Unlimited together as part of the Rainwater Basin Joint Venture Partnership are applying for this Nebraska Environmental Trust grant to restore watershed functions of wetlands throughout the Rainwater Basin Region of south-central Nebraska. The primary objective is to fill at least 60 irrigation reuse pits in priority watersheds. Emphasis will be placed on irrigation reuse pits in close proximity to the wetlands and irrigation reuse pits with a large storage capacity. Filling pits provides a “win-win” situation for the producer and wetland dependent wildlife. Many irrigation systems in past years have been converted from gravity, where water is recycled using the irrigation reuse pits, to more efficient center pivot irrigation where the pits are no longer needed. This grant will enable producers to eliminate pits thereby acquiring additional farmable acres while allowing natural runoff to flow to the wetlands on a more regular basis. These activities will not only increase wetland function and provide reliable wildlife habitat, but will also benefit local residents and area producers as a result of the groundwater recharge that naturally occurs through Rainwater Basin wetlands. Functional Rainwater Basin Wetlands are critical especially during spring migration when an estimated 8.6 million waterfowl stage in this area to rest and replenish nutrient reserves before continuing migration. The Little Blue Natural Resources District is submitting this grant on behalf of the Rainwater Basin Joint Venture Partnership the RWBJV is a conservation partnership of state, federal, and local agencies, conservation organizations, and private landowners who have joined together of direct wetland habitat conservation in Nebraska’s 6,100 square mile Rainwater Basin landscape.

Sponsor Name: Loup Basin Resource Conservation and Development Council **Nearest Town:** Burwell
Project Name: Pollination = Preservation **Project No:** 13-164
Amount Requested: \$226,659 **Term of Project Request:** 2 **Review Group:** Education

The insects that pollinate native plants and crops are essential components of Nebraska’s habitats and ecosystems. Pollinator habitat, and many wild pollinators are disappearing from Nebraska’s landscape. Presence of wild pollinators can equal preservation of rare plants. This project aims to increase pollinator populations and public awareness of pollinator protection through pollinator habitat development and restoration along the Loup Rivers Scenic Byway. We will educate local residents and visitors on the importance of pollinators and their role in the ecosystem. Butterfly/pollinator gardens will be developed to attract and sustain pollinators, resulting in improved wildlife habitat. Technical assistance will be provided as communities and individuals develop their gardens. The project will add ecotourism options to the Nebraska’s Junk Jaunt® tourism promotions to recruit participants and to attract and educate visitors from other towns and states. Activities will include community outreach, meetings and educational workshops on pollinators and habitat development. Fifteen pollinator gardens will be developed and will receive subsidized plant materials. Schools and youth groups will be included in activities. Information on water quality and quantity and soil conservation will be provided by NRD and NRCS partners, and trainers will include experts in the field, i.e. Xerces Society, the Center for Rural Affairs, etc. A strong media component will bring attention to the project and attract tourists who will also learn the importance of pollinators and their role in the ecosystem. Participating communities will be able to earn a Certified Butterfly Garden certificate. Materials gathered and developed will be available in the Burwell Butterfly Pavilion. The project will result in increased pollinator populations and improved habitat for wildlife, enhance economic development of the region, and reach beyond local communities as tourists visit and learn. The project will serve as a model for the rest of the state.

Sponsor Name: Lower Elkhorn Natural Resources District **Nearest Town:** Amelia/Arnold/Chamber
Project Name: New Approach to Detailed, Integrated Water Budgets in East-central Nebraska Drainage Basins **Project No:** 13-167
Amount Requested: \$185,380 **Term of Project Request:** 3 **Review Group:** Water

This project will construct an annual water budget for two drainage basins in different topographic regions, one in the Sand Hills and one in the Dissected Plains, and includes a quantitative analysis of the most important components of the water budget – groundwater recharge and stream base flow. Numeric models will be used to analyze the integrated water budget on a local scale to determine the components of the budget and how it relates to the regional flow system. A detailed annual water budget is vital for effective integrated water management, particularly in river valleys where streamflow and crop demands are key components. This project will provide a new approach to water budget analysis by 1) quantifying groundwater recharge and stream base flow, and relating these to soil type, land use, and hydrogeology, and 2) separating the contribution of local base flow from regional base flow. This detailed approach will enhance our understanding of the interaction between groundwater and surface water and will improve our ability to develop water budget analyses. The results of the project will be used to redefine the methodology used in new areas by determining which methods work best and are most economical for completing a water budget that will help protect water and ecosystem resources. The project will take three years, with recharge point measurements made during the first year, streamflow and groundwater measurements taken during the first two years, and numerical model development and analyses over all three years. The Lower Elkhorn NRD, in cooperation with the Lower Loup, Upper Loup, Upper Elkhorn and Lower Platte North NRDs, the USGS, NDNR and UNL, requests funds in the amount of \$185,380 over three years to complete this project.

Sponsor Name: Lower Loup Natural Resources District **Nearest Town:** Ord
Project Name: No-Till Drill **Project No:** 13-108
Amount Requested: \$20,000 **Term of Project Request:** 1 **Review Group:** Equipment

A no-till grass drill will be used by landowners within the Lower Loup Natural Resources District (LLNRD) boundaries for promoting the establishment of cool and warm season grasses for soil conservation, water quality and wildlife habitat. Eligible landowners will reside in one of the 16 counties that make up the Lower Loup NRD. The Lower Loup NRD covers 5,070,720 acres, approximately 10% of the state's land area. The Lower Loup NRD has on one no-till drill to serve all the cooperators in the entire District. An additional drill will allow more cooperators access to drill during peak planting times. The drill identified would be an 8 foot no-till drill capable of sowing native grasses. The cost of a Truax OTG 7512 no-till drill is \$30,000.00. The Lower Loup NRD would provide a third of the cost of the drill (\$10,000.00). Grassland plantings can act as a filter to decrease water contaminants. These grasslands will also assist in reducing CO₂, assisting with carbon management and helping to slow global warming. The use of no-till would optimize moisture retention in drought stressed areas. Fuel savings have been demonstrated by the elimination of primary tillage such as plowing and seedbed preparation. There have been significant increases in prairie type plantings in the area through programs like CRP (Conservation Reserve Program), Continuous CRP, CREP (Conservation Reserve Enhancement Program), CSP (Conservation Stewardship Program), WRP (Wetland Reserve Program), EQIP (Environmental Quality Incentive Program), Buffer Strip Program, Corners for Wildlife and Wild Nebraska. These programs have greatly increased the need for another no-till grass drill.

Sponsor Name: Lower Loup Natural Resources District **Nearest Town:** Albion
Project Name: Pibel Lake Renovation Project **Project No:** 13-194
Amount Requested: \$300,000 **Term of Project Request:** 3 **Review Group:** Lake Rehabilitation

The Lower Loup Natural Resources District (LLNRD) is seeking funding from the Environmental Trust Fund to assist with renovation and modernization of Pibel Lake Recreation Area in central Nebraska. Pibel Lake is a 53-acre recreation area now under ownership of the LLNRD. The LLNRD will be partnering with the Nebraska Game and Parks Commission and the Pibel Lake Bible Camp to renovate critical portions of the lake and improve accessibility. The lake comprises 24 acres and is formed from an impoundment structure on Clear Creek, located in the eastern portion of the Sandhills. Pibel Lake is highly susceptible to sedimentation and nutrient inflow from the Clear Creek drainage and the current design of the spillway is insufficient to safely handle flood events and is contributing to erosion problems downstream. The LLNRD is seeking a multi-year Environmental Trust Grant to assist with the renovations and improvements to Pibel Lake. The renovation will feature a sediment control structure located on the inflow of Clear Creek to Pibel Lake in order to control nutrient inflow and sedimentation. The spillway system at Pibel Dam will also be renovated, the outflow culverts redesigned, and armored with riprap in order to prevent stream-bank erosion to Clear Creek. Funding is also being sought for improvements to the picnic and parking areas and a portion of the funds would go to improving accessibility to the lake for those with disabilities through installation of a fishing platform and pier and construction of handicap parking areas. During the later portions of this work, the entire Clear Creek watershed would be integrated into a Watershed Management Plan with further financial assistance sought from the Department of Environmental Quality (NDEQ) through a 319 Grant.

Sponsor Name: Lower Platte River Corridor Alliance **Nearest Town:** Yutan/Valley
Project Name: Removal of Abandoned Bridge Piers in the Platte River near Two Rivers State Recreation Area **Project No:** 13-104
Amount Requested: \$354,000 **Term of Project Request:** 1 **Review Group:** Rural Habitat

The Lower Platte River is a unique and important resource to the state of Nebraska. The river serves as critical habitat for three federally listed species: the endangered interior least tern, endangered pallid sturgeon, and threatened piping plover. Restoring and sustaining the river and its associated resources is not only essential for these species but also for the health, safety and well being of the large percentage of the state's population that resides and recreates in the lower Platte River area. One important step towards restoring the river, providing habitat, mitigating flooding threats and improving public safety is removing the abandoned bridge piers that were left following the decommissioning of railroad tracks and highways. The Lower Platte River Corridor Alliance identified 12 sets of obstructions from Plattsmouth to Columbus. The LPRCA has successfully removed two of the 12 sets in previous years and has been planning for the removal of the abandoned piers near Two Rivers State Recreation Area. The objective of this grant is to provide additional funds to increase the number of concrete, metal and wood piers that can be removed. The LPRCA is committed to providing funding for the removal of 5 "standing" piers near Two Rivers SRA and will be providing 57% of the project costs. The remaining 43% of the funds are requested from NET and would allow the project to also encompass the removal of at least 5 "buried" piers in the middle of the Platte River channel to provide ecosystem restoration and habitat benefits.

Sponsor Name: Lower Platte River Corridor Alliance **Nearest Town:** Multiple
Project Name: Spatial and Temporal Dynamics of Sandbars in the Lower Platte River **Project No:** 13-136
Amount Requested: \$296,000 **Term of Project Request:** 3 **Review Group:** Water

The height and area (geometry) of emergent sandbars (sandbars) are primary measures of on-river nesting habitat quality in the lower Platte River important to the interior Least Tern and Piping Plover (tern and plover), bird species that are state and federally listed as “endangered” and “threatened,” respectively. Currently, little is known about the physical processes controlling sandbar geometry, nor how human activities affect the abundance, persistence, and distribution of emergent sandbars. This lack of information reduces the efficiency and viability of planning and permitting processes in the lower Platte River corridor, because NRD managers are often faced with predicting impacts on tern and plover habitats from proposed development and infrastructure construction, as well as future depletions of streamflow. The proposed project will implement a sandbar monitoring program along 103-miles of the Platte River downstream from the confluence with the Loup River to 4 miles upstream from the Missouri River. Surveys will characterize the location, and geometry of all mid-channel sandbars larger than 2 acres. The project has two primary goals: (1) quantify channel morphologic and hydraulic conditions that favor high-quality tern and plover sandbar habitat, and (2) map the along-stream potential for quality tern and plover sandbar habitat formation in the lower Platte River.

The proposed project builds on projects previously funded by NET for the Lower Platte River Cumulative Impact Study Phase 2. A pilot sandbar monitoring study, funded by Lower Platte South NRD, has already been implemented in the lower Platte River between U.S. Highway 77 near Fremont, and highway 75 near Plattsmouth, and has been ongoing since 2010. The initial findings of the pilot study indicate that there is good potential to statistically relate channel morphologic and hydraulic characteristics to sandbar geometries, which is key to the second objective of proposed study.

Sponsor Name: Lower Platte South Natural Resources District **Nearest Town:** Multiple
Project Name: ENWRA Aquifer and Framework Study **Project No:** 13-114
Amount Requested: \$590,000 **Term of Project Request:** 3 **Review Group:** Water

This project will map portions of the hydrogeological framework of eastern Nebraska using airborne time domain electromagnetic (TDEM) surveys. The survey and ancillary activities will dramatically improve understanding of relationships between groundwater, surface water, and bedrock. These relationships are complex in eastern Nebraska and very difficult to resolve using existing data.

This project consists of flight transects and blocks (Fig. 1). The proposed transect route crosses 12 counties and more than 70 river and stream segments, and comes within one mile of 21 towns. Development and management of water supplies is a challenge in this area due to the complex glacial geology and numerous cattle feeding operations. The transect locations were select to align with existing Conservation and Survey Division test holes. Data from the transects would be used to improve the accuracy of the current conceptual hydrogeologic framework and help identify areas which would benefit from additional future investigation. Transects have been used successfully in airborne electromagnetic surveys in western Nebraska (Smith and others, 2010).

Sponsor Name: Lower Republican NRD **Nearest Town:** Alma
Project Name: Water Conservation Using Soil Moisture Sensor Technology **Project No:** 13-102
Amount Requested: \$309,500 **Term of Project Request:** 2 **Review Group:** Water

The Lower Republican Natural Resources District (LRNRD) seeks to implement a project in partnership with irrigators in the five county area of our district under which modern, successfully-tested soil moisture sensor technology will be installed at field level on 80,000 irrigated acres to conserve water by more efficiently managing water use. This technology enables the timing of irrigation to be driven by measurement of soil moisture at actual crop root depth rather than by traditional "hand-feel" measurement at the surface. The technology has been shown in testing conducted by soil and water resources engineers at the University of Nebraska-Lincoln, in collaboration with the Nebraska Corn Board and partner irrigators statewide, to conserve 1-2 inches of water per acre annually in irrigated fields with no negative--and sometimes positive--impact on yields. The project includes proactive actions to educate irrigators and the general public regarding the use and effectiveness of this modern technology and the availability of cost-share assistance to implement the technology through this project, if funded.

Sponsor Name: Metropolitan Community College **Nearest Town:** Omaha
Project Name: Bioretention Demonstration Garden Shelter and Informational Signage **Project No:** 13-163R
Amount Requested: \$15,000 **Term of Project Request:** 1 **Review Group:** Education

Metropolitan Community College will create a green roof shelter for stormwater management best practices demonstration and teaching. The green roof shelter of 12' x 11.5' will be used for instruction in MCC's Horticulture program, public tours, business workshops, and community education.

Sponsor Name: Metropolitan Utilities District **Nearest Town:** Omaha
Project Name: Driving Omaha Natural **Project No:** 13-196
Amount Requested: \$749,500 **Term of Project Request:** 3 **Review Group:** Air Quality

Driving Omaha Natural will facilitate the expanded use of Compressed Natural Gas (CNG) fueled vehicles in the Omaha Metro Area. The Metropolitan Utilities District of Omaha (MUD) will sponsor and coordinate this project. CNG is the cleanest burning alternative fuel commercially available today and represents an environmentally-friendly alternative to petroleum-based fuels. CNG offers an immediately available solution to make substantial reductions in air pollutants from vehicles. The Omaha area is uniquely impacted by air quality issues and is at risk of violating the National Ambient Air Quality Standard (NAAQS) established by the Environmental Protection Agency. The project will create a CNG Fleet Fund to offset the initial vehicle costs for Omaha area fleet operators establishing or expanding their use of CNG fueled vehicles. Several public and private organizations including the City of Omaha, Douglas County, University of Nebraska at Omaha and Backlund Plumbing will partner in this project by purchasing and deploying CNG vehicles in their fleets. Additional partners including Eastern Nebraska Human Services, Eastern Nebraska Office on Aging and Creighton University plan to apply for vehicle funding assistance through the project's CNG Fleet Fund. Adding CNG vehicles and fueling stations is a sound strategy which will have a positive impact on the effort to reduce our region's ozone-forming emissions and there is strong multi-agency support for this effort. This project will establish a new CNG fueling station to supplement the two existing stations MUD opened in 2011. MUD will be responsible for financing the station. The project will also include a Fleet Education & Outreach Campaign designed to inform fleet operators of the opportunities and challenges involved in utilizing CNG vehicles. Through a combined and coordinated effort this project will enable fleets in and around Omaha to drive forward using a clean alternative fuel.

Sponsor Name: Middle Niobrara Natural Resources District **Nearest Town:** Ainsworth
Project Name: Long Pine Creek Comprehensive Watershed/Stream Evaluation and Restoration Plan **Project No:** 13-148
Amount Requested: \$250,000 **Term of Project Request:** 2 **Review Group:** Water

The Long Pine Creek Watershed is located primarily in Brown County and encompasses 332,300± acres. The watershed includes the communities of Ainsworth and Long Pine and various Nebraska Game and Park properties, including the Long Pine State Recreation Area. Long Pine Creek is longest self-sustaining trout stream in state and a popular destination for anglers. Five named tributaries flow into Long Pine Creek: Sand Draw Creek, Bone Creek, Willow Creek, Spring Branch Creek, and Short Pine Creek. Over the years, the Long Pine Creek and its tributaries have experienced significant stream bank erosion problems, threatening structures and further impairing hydrological and biological functions of the stream. Stream bank and gully erosion contribute large sediment loads to the Niobrara River that ultimately deposited into Lewis and Clark Reservoir. In addition, Long Pine Creek is listed in the 303 (d) impaired waters list for E. Coli. High nitrate concentrations are found in ground water in the irrigated portion of the watershed.

A detailed Watershed Management Plan will be developed for the Long Pine Creek Watershed. It will include a stream assessment/evaluation for the entire watershed and a stream restoration plan for the Sand Draw Creek subwatershed. The watershed management plan will identify and prioritize management actions to improve water quality and aquatic habitat throughout the area. The watershed management plan will also frame the work needed to address water quality and aquatic habitat impairments in the entire Long Pine Creek Watershed with a goal of removing it from 303 (d) list. The restoration plan will focus on hydrologic, biological ecological and aquatic life restoration through various in-stream engineering practices in lower reach of the Sand Draw Creek. The in-stream measures may be based around raising the stream bed through series of grade control structures. Raising the stream bed would allow reconnecting the stream to a floodplain and restoring the hydrology of the stream to allow fish passage upstream of the Highway 7 Bridge.

Sponsor Name: Midland Recycling **Nearest Town:** Lincoln
Project Name: Lincoln Small Businesses Recycle **Project No:** 13-174
Amount Requested: \$67,342 **Term of Project Request:** 1 **Review Group:** Waste Management

We are looking at the small business market in Lincoln to start an aggressive project which will provide local small businesses, such as restaurants, retail stores and nursing homes, with recycling containers and carts for cardboard, paper, single stream or comingled recyclables and any other recycling materials. We are requesting funds to purchase one hundred 95 gallon carts, fifty 2-yard rear load containers, twenty 3 yard rear load containers, twenty 4 yard rear load containers and ten 6 yard rear load containers, which will help us meet our goal of 100 new small business customers in the Lincoln area for the funding year of 2013 to 2014. This program will help divert recyclable materials from the Lincoln Landfill by providing small business with education and the equipment necessary to recycle items that would normally go into the trash.

Sponsor Name: National Wild Turkey Federation **Nearest Town:** Chadron
Project Name: Forest Stand Restoration on Pine Ridge Wildlife Management Areas **Project No:** 13-117
Amount Requested: \$250,000 **Term of Project Request:** 3 **Review Group:** Rural Habitat

The proposed project is a partnership endeavor between the NWTF, NGPC, and the NFS for forest stand improvement on four western WMAs (Metcalf WMA, Ponderosa WMA, Bighorn WMA, and Chadron Creek Ranch WMA). Project goals include habitat restoration for wildlife species, specifically five At-risk, Tier 1 species (including bighorn sheep) and 45 Tier II species, reducing the threat of large-scale catastrophic wildfires, & testing new, innovative equipment and forest management techniques. The recent wildfires along the Niobrara River in Nebraska are a vivid reminder of the real costs of wildfires. This project should reduce the catastrophic impacts of fires should they occur, impacting wildlife and humans at the landscape level and directly enhance 817.5 acres. The project also will include an outreach –education component to share successes and knowledge gained with landowners & land managers of similar properties. The NWTF will coordinate this effort through field staff located in the Chadron area. The NWTF and NGPC currently have a partnership supporting a cooperative forester, an NWTF employee, working out of the Ponderosa WMA NGPC office. The NWTF will continue its support of this position and budget 50% of the forester's time and travel for implementation of this project. Since this position was created in 2011, NWTF and NGPC staffs have worked to identify the critical forest health issues and management needs for the proposed WMAs. Now that the needs have been identified and plans prepared for future management, we are seeking the financial assistance of a Nebraska Environmental Trust grant to assist with implementation of needed forest management practices. Matching funds will be provided through NWTF, NGPC, and NFS sources, which include Nebraska NWTF funding, NWTF-National funding, and fuels reduction NFS funds via USFS.

Sponsor Name: Nebraska Bird Partnership **Nearest Town:** Statewide
Project Name: Building Capacity for Successful Local and Regional Conservation Efforts **Project No:** 11-121-3
Amount Requested: \$40,000 **Term of Project Request:** 3 **Review Group:** Statement of Intent

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. Since 2003, the Nebraska Bird Partnership (NBP) has garnered funding from various sources including the Nebraska Environmental Trust (NET) to implement our Capacity Building Grant Program to assist local conservation partnerships. To date, 25 projects have received \$275,000 total funding assistance from our Capacity Building Grant Program. NET funding remains a critical component enabling us to continue to support this valuable conservation capacity building effort statewide.

The NBP Grant Committee annually releases a request for proposals (RFP) from conservation partnerships with current capacity building needs consistent with established NBP goals and criteria. Two proposals were selected for funding in the most recent grant round. These projects will yield tremendous benefits in the areas of biological planning, development of conservation program delivery tools, conservation implementation, education and outreach, and monitoring. Each project will build capacity for ongoing conservation efforts. Selected projects for 2011 include: 1) Northern Prairies Prescribed Fire Capacity Building, 2) A Conservation Strategies Assessment to Guide Conservation Delivery to Achieve RWBJV Wetland Conservation Objectives.

In addition to these 2011 projects, these NET funds will support future projects which we will select through our annual grant proposal and review process in 2012 and 2013. Future projects will be similar in nature to the 27 projects approved in the past and will also meet NBP established goals and criteria.

THIS PROJECT WAS FUNDED \$40,000 IN 2008, \$40,000 IN 2009 AND \$43,500 IN 2010. A SIMILAR PROJECT WAS NOT FUNDED IN 2007.

THIS PROJECT WAS FUNDED \$30,000 IN 2011 WITH THE INTENT TO FUND UP TO \$40,000 IN YEAR TWO AND \$40,000 IN YEAR THREE PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE THIRD YEAR REQUEST.

Sponsor Name: Nebraska Cattlemen **Nearest Town:** Statewide
Project Name: Leopold Conservation Award Video Project **Project No:** 13-130
Amount Requested: \$30,000 **Term of Project Request:** 3 **Review Group:** Education

In his influential book, A Sand County Almanac, Aldo Leopold called for an ethical relationship between people and the land they own and manage. This land ethic lives on in farmers and ranchers across Nebraska and nationwide who are committed to the enhancement of the land, water and wildlife in their care. Since 2006, Nebraska Cattlemen and Sand County Foundation have presented the Leopold Conservation Award to families who internalize this land ethic and are dedicated to leaving their land better than they found it. Since 2010, the Leopold Conservation Award Program has benefited from Nebraska Governor Dave Heineman's Earth Day Announcement of the award recipient at the State Capitol. Governor Heineman's involvement brings increased media interests to the award program, including three Nebraska television stations, both major Nebraska Newspapers, and numerous other print and online publications. The Associated Press picked up the Omaha World Herald's story both years, vastly expanding its reach to media outlets as far away as The Boston Globe.

The Nebraska Leopold Conservation Award Video Project seeks to capture the landowners' ethic in their own words and images, giving the recipients an opportunity to share their story. Visual media are essential for not only archival purposes but are also important for educating the general public on the types of innovative conservation practices occurring every day on Nebraska's agricultural lands. Aside from actually setting foot on these operations, we view these video profiles as the next best way to experience the exceptional efforts of these families. The project involves a full day of crew time interviewing the landowner and filming the conservation features they have put in place. The video will be professionally produced first as a stand-alone piece to be shown during speaking engagements, conventions, and trade shows, and second as a piece to be placed on Sand County Foundation's YouTube channel, award partner and sponsor websites, and other online video outlets, as appropriate.

Sponsor Name: Nebraska Cattlemen **Nearest Town:** Lincoln
Project Name: Leopold Conservation Award Symposium **Project No:** 13-160
Amount Requested: \$90,000 **Term of Project Request:** 1 **Review Group:** Education

Nebraska Cattlemen, in partnership with Nebraska Land Trust, University of Nebraska – Lincoln’s Center for Grassland Studies, and Sand County Foundation, seeks to host a symposium focused on the public value of conservation on private lands in Lincoln in July 2013. The symposium will convene Leopold Conservation Award recipients from across the nation, including all of Nebraska’s award recipients. The overall purpose of the interaction between award recipients, landowners, and representatives from a variety of agricultural and environmental sectors is to discuss and educate on a wide range of conservation issues and identify practical recommendations on those matters that are of critical importance to both Nebraska’s and America’s farmers, ranchers, and foresters. Since 2006, Nebraska Cattlemen has partnered with Sand County Foundation to present the Leopold Conservation Award to high achieving landowners in Nebraska who, in the spirit of renowned conservationist Aldo Leopold, are committed to the enhancement of land, water, and wildlife that are in their care. There are several goals for this symposium. First, it will provide an opportunity for Nebraska’s Leopold Conservation Award recipients, other landowners, award partners and sponsors to educate, interact, and exchange ideas with award recipients from other states, while showcasing the strength of Nebraska’s agricultural and environmental sectors. Second, we see tremendous value in bringing Leopold Conservation Award recipients, who are some of the best and brightest landowner conservationists in the nation, together to address challenges and identify innovative solutions and opportunities involved in private lands conservation. We believe this interaction will help foster a sense of community among the award recipients and generate ideas of how they, as a growing national group, could tackle important agricultural and environmental issues. Third, we believe the symposium will bring national attention to Nebraska and highlight the importance of cooperative private land conservation. Our fourth goal is to develop education and communications materials that incorporate the themes and discussions covered during the conference, allowing participants to carry the information beyond the symposium in online and offline forums useful across Nebraska and the nation.

Sponsor Name: Nebraska Department of Natural Resources **Nearest Town:** Multiple
Project Name: Platte Basin Water Management Action Initiative **Project No:** 12-119-2
Amount Requested: \$3,300,000 **Term of Project Request:** 3 **Review Group:** Statement of Intent

The project is three year's allocation of funding for the Water Resources Cash Fund (WRCF) pursuant to the legislative mandate of LB 229, 2011, and as required by Neb. Rev. Stat. 61-218(7)(a). All funds obtained through the allocation will be used for the purposes of the WRCF as set out in Neb. Rev. Stat. 61-218(7)(b). The WRCF was established by LB 701 in 2007 to fund the State's contingent water resources remediation needs in fully and overappropriated basins. The WRCF has funded various projects since its inception in 2007. One project is the Platte Basin Habitat Enhancement Project (PBHEP), that is currently also funded with Nebraska Environmental Trust (NET) dollars. The "Platte Basin Water Management Action Initiative" (Initiative) described below is an anticipated evolution of the PBHEP, expanding on other methods and water projects; shifting the focus from the purchase of easements to other projects that achieve the same goal. The purpose of the Initiative is to plan, implement, and monitor activities that result in more effective water management, remediating for current depletions caused by past actions. The Initiative will assist the Department of Natural Resources and the Platte Basin Natural Resources Districts (NRDs), in cooperation with other partners to optimize timing and efficiency of water use, enhance streamflows, and reduce water consumption in fully and overappropriated areas. The Initiative described in this application is a portion of the currently intended uses for the WRCF. Other projects will be carried out under the auspices of the WRCF with available funds as well. Projects include both in-progress and new projects such as: surface water storage projects, groundwater retiming, leasing or purchasing water, conjunctive management of water, conservation easements, and other water use efficiency measures that would optimize water use in the basin. THE PBHEP PROJECT MENTIONED ABOVE WAS AWARDED IN 2009 IN THE AMOUNT OF \$3,000,000.

THIS PROJECT WAS FUNDED \$3,300,000 IN 2012 WITH THE INTENT TO FUND UP TO \$3,300,000 IN YEAR TWO AND \$3,300,000 IN YEAR THREE PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE SECOND YEAR REQUEST

Sponsor Name: Nebraska Forest Service **Nearest Town:** Plattsmouth
Project Name: Creating a Forestry Demonstration/Education Center **Project No:** 12-128-2
Amount Requested: \$93,321 **Term of Project Request:** 3 **Review Group:** Statement of Intent

This project will leverage \$250,000 in recent investments and convert the 240-acre Horning State Farm Demonstration Forest in Plattsmouth from a limited-access forestry research facility to a broadly accessible and critically needed Forestry Education Center. The Center will serve a broad clientele including woodland and acreage owners, producers, conservation and green industry professionals, and urban residents. It will demonstrate and promote sustainable forest, agroforest and urban tree management practices appropriate across eastern Nebraska. This facility will be the only tree, forest and agroforest management-focused educational center in Nebraska. It combines 1) field-based demonstrations, 2) an established forested facility with mature and diverse forests, 3) a location that is central to a large population of forest landowners, producers, urban/acreage owners and residents, and 4) a powerful link to technical assistance programs and field personnel of the NFS- facilitating landscape-scale replication across eastern Nebraska. Our unmanaged eastern forests are in poor and declining condition. Management is essential for healthy, diverse, resilient forests that produce cleaner air and water, improve wildlife habitat, sequester carbon, and generate many other environmental and economic benefits. Unfortunately, these stressed resources are facing formidable threats such as highly destructive invasive species (Emerald Ash Borer, Thousand Canker Disease of walnut, honeysuckle, garlic mustard, etc.), other forest pests (Pine Wilt, Oak Wilt), and severe weather events, all exacerbated by a changing climate. This Center will serve as a vital resource to minimize, through improved forest management, the negative impacts of these threats. It will do so by developing a field-based demonstration facility and associated partner-based outreach and education programs. These assets, combined with the rural and urban forestry technical assistance capacity of the NFS, will train and support landowners and practitioners in implementing improved practices on their own land, fostering improved forest/agroforest management and urban tree care across eastern Nebraska.

THIS PROJECT WAS FUNDED \$70,105 IN 2012 WITH THE INTENT TO FUND UP TO \$93,321 IN YEAR TWO AND \$83,558 IN YEAR THREE PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE SECOND YEAR REQUEST

Sponsor Name: Nebraska Game and Parks Commission **Nearest Town:** Ponca, Auburn
Project Name: Oak Woodland Enhancement at Ponca and Indian Cave State Parks **Project No:** 11-154-3
Amount Requested: \$35,000 **Term of Project Request:** 3 **Review Group:** Statement of Intent

The oak woodlands at Ponca State Park (SP) and Indian Cave SP are two of the largest and highest quality remnants in Nebraska and they support numerous at-risk species. Both parks are included in Biologically Unique Landscapes identified by the Nebraska Natural Legacy Project and improved management of the parks' woodlands is a specific Legacy strategy. Since settlement, lack of fire in our once open-canopied, fire-adapted oak woodlands has allowed proliferation of fire-intolerant shrubs and trees, such as elms. The now dense canopies have shaded out many native grasses and wildflowers, degrading wildlife habitat in the process, and inhibited the regeneration of the sun-loving oaks. As older oaks die they are not being replaced by young trees. At-risk species, such as the purple milkweed, dwarf chinkapin oak and southern flying squirrel, that depend on open oak woodlands are in decline. Without implementation of tree thinning and prescribed fire to decrease tree densities the parks' oak woodlands will eventually be lost.

The NGPC has begun a prescribed burning program in both parks to decrease brush and tree sapling densities. We are seeking \$235,000 in NETF funds for this two-year project to clear smaller (< 6 inch diameter), shade-tolerant trees from 600 acres of oak woodlands at Ponca SP (CA 200 ac) and Indian Cave SP (CA 400 ac). At present the project partners, the Nebraska Game and Parks Commission, Nebraska Forest Service and National Wild Turkey Federation, have committed \$119,400 in cash and in-kind match.

Nebraska's conservationists and private landowners have little experience managing oak woodlands, and this project will serve as a demonstration for sound oak woodland management. Combined the two parks receive nearly one million visitors annually who will be exposed to this project and the work of the NETF. We will install signage at both parks detailing our project and hold field tours in the parks regarding woodland management.

THIS PROJECT WAS FUNDED \$60,000 IN 2011 WITH THE INTENT TO FUND UP TO \$140,000 IN YEAR TWO AND \$35,000 IN YEAR THREE PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE THIRD YEAR REQUEST.

Sponsor Name: Nebraska Game and Parks Commission **Nearest Town:** Statewide
Project Name: Statewide Grassland Enhancement Project **Project No:** 12-140-2
Amount Requested: \$340,000 **Term of Project Request:** 3 **Review Group:** Statement of Intent

The objective of this project is to complete grassland habitat improvements on 25,000 acres across Nebraska over the next three years, with the majority of these habitat improvements coming on private and public lands. Nebraska has been a leader in undertaking grassland management activities to improve the wildlife habitat benefits on grassland acres. With time and an absence of management, plant diversity of grasslands has decreased and many tracts have become monocultures of grass. This loss of plant diversity has decreased the amount of suitable nesting and brood rearing habitat for grassland birds. Grassland management activities on these acres can restore diversity and productivity for wildlife, especially for grassland songbirds, greater prairie chickens, bobwhite quail, and pheasants. The Nebraska Game and Parks Commission (NGPC), Pheasants Forever (PF), private landowners, USDA, and other partners have worked together to improve habitat and provide public access on grasslands. Programs such as CRP-Management Access Program (CRP-MAP), Open Fields and Waters (OFW), and Focus on Pheasants (FOP) specifically address important grassland habitat enhancement and public access needs across the state. With CRP expiration this fall Nebraska is poised to drop below the 1 million acre mark for only the second time since 1988. Over 40% (>400,000) of Nebraska's current CRP acres will expire during the next 3 years, so active grassland management is going to be more important on non expiring CRP to maintaining wildlife habitats and populations. This grant will assist in making habitat improvements and evaluating success of those efforts, and it is our intent to use other funds for making access payments. The additional acres of grassland habitat enhanced with Nebraska Environmental Trust funding for these programs will generate many direct and indirect benefits not only to wildlife, but also to landowners, hunters, wildlife viewers, and local economies for years after the enhancements are completed. THIS PROJECT WAS SUBMITTED BUT NOT FUNDED IN 2004 AND 2011, AND WAS FUNDED \$1,450,000 FROM 2005 THROUGH 2010. THIS REQUEST IS FOR A CONTINUATION OF THIS PROJECT. THIS PROJECT WAS FUNDED \$255,000 IN 2012 WITH THE INTENT TO FUND UP TO \$340,000 IN YEAR TWO AND \$255,000 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: Missouri River Post-Flood Habitat Recovery **Project No:** 12-141-2
Amount Requested: \$103,600 **Term of Project Request:** 3 **Review Group:** Statement of Intent

This grant application seeks funding to renovate Missouri River floodplain habitats on public and private lands impacted by flooding. Landowners owning land in the Missouri River Valley are currently facing an unprecedented flood. They will soon be looking at land use options for lands impacted by the flood of 2011. Agricultural landowners will need economically viable alternatives for lands they deem unfarmable. Recreational landowners, both public and private, will need support renovating floodplain habitats. State-owned lands are limited in the Missouri River Valley of Nebraska, but 60% of the State's population lives within an hour of the Missouri River. The habitat and recreational opportunities provided by these lands are extremely valuable to Nebraskans. Current flooding on the Missouri River will likely have reconfigured these areas, requiring post-flood renovation activities to maximize public use benefits. Private landowners have shown interest in USDA wetland and floodplain habitat programs since their introduction in the late 1990s. One hundred sixty-seven landowners have voluntarily enrolled twenty-two thousand acres of Missouri River floodplain into USDA programs like Wetlands Reserve Program (WRP), WREP, and EWP. Additional acres have been enrolled into USDA's CRP. Funds from this grant may be used to incentivize existing USDA programs like CRP and WRP, do habitat renovation work on EWP sites, leverage additional USDA WREP funding for Nebraska, or meet other landowner habitat development requests. THIS PROJECT WAS FUNDED \$85,000 IN 2012 WITH THE INTENT TO FUND UP TO \$103,600 IN YEAR TWO AND \$11,400 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: Crop Stubble Management, Wildlife and Water Conservation **Project No:** 13-201
Amount Requested: \$3,600,000 **Term of Project Request:** 3 **Review Group:** Rural Habitat

Through the Crop Stubble Management, Wildlife and Water Conservation project, we will be offering incentives to agricultural producers to encourage them to leave their wheat and/or milo stubble taller and standing in place to provide valuable habitat for pheasants, quail and other wildlife. Tall standing stubble provides additional benefits for landowners. It captures and holds more snow during winter storms, allowing landowners to increase their soil moisture by the equivalent of three inches of precipitation going into the next growing season. It also helps reduce topsoil loss to wind and water erosion and reduces runoff, which itself keeps silt, fertilizer and agricultural chemicals from entering our waterways. Through this project we hope producers will realize the benefits of having taller wheat and milo stubble and that they will continue to leave taller stubble long after the incentives end. From 2010 to 2012 we offered these incentives through our Focus on Pheasants Program, to landowners within the Southwest Focus on Pheasants Focus Area in and around Hitchcock County, along with incentives to allow public hunting access. These incentives were well received by landowners and hunters alike and now we are looking to offer these incentives to producers in other portions of the state. We will be offering the incentives across portions of the state where groundwater supplies are considered to be over or fully appropriated, and where there is already a reasonable amount of wheat and/or milo being produced. We hope to enroll 100,000 acres in this program each year from 2013 to 2015 in the project area. We will also be conducting eight "Ag and wildlife" workshops at key locations within the project area, where experts in crop stubble management, crop production and wildlife biology will discuss the benefits of tall stubble with wheat and milo producers.

Sponsor Name: Nebraska Game and Parks Commission **Nearest Town:** Multiple
Project Name: Nebraska Central Basins Resource Area CREP **Project No:** 13-202
Amount Requested: \$600,000 **Term of Project Request:** 3 **Review Group:** Rural Habitat

The Nebraska Central Basins Resource Area (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 the spring of 2003, enrollment in the CREP began. Producers within the CREP area have readily accepted the Prioritized Resource Areas (mainly pivot corners and small fields) option, which resulted in over 22,000 acres of perennial grass cover in highly productive agricultural landscapes. These acres have primarily contributed to creating additional wildlife habitat in the CREP area, while also reducing soil erosion, improving water quality, and reducing water usage on these pivot corners. In addition to Prioritized Resource Areas over 2,200 acres were enrolled in filter and buffer strips, and 440 acres in wetland practices. 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, and 50% cost-share for establishing the grassland habitat. Nebraska needs to provide incentive payments for enrollments of Prioritized Resource Areas (\$100/acre for dryland acres, \$175/acre for irrigated acres), and 10% cost share for wetland restoration practices. Currently, state and local funds are unavailable to meet these requirements. We request \$600,000 in funds from the Nebraska Environmental Trust over the next 3 years to enable the enrollment of approximately 5,000 acres in CREP, provide additional incentive payments to landowners, and build on the established resource success of this program. Trust funds will be leveraged against \$1,674,858 in contributions by USDA, the Nebraska Game and Parks Commission, and Pheasants Forever.

Sponsor Name: Nebraska Land Trust **Nearest Town:** Gretna
Project Name: Schramm Bluffs/Patterson Farm Preservation Project **Project No:** 13-112
Amount Requested: \$1,045,633 **Term of Project Request:** 2 **Review Group:** Rural Habitat

In eastern Nebraska, few areas match the biological diversity, water resources, rich soils, and scenic beauty of the Schramm Bluffs in Western Sarpy County. Locally rare oak/hickory woodlands in the bluffs are so important for migrating birds that the Audubon Society has designated Schramm State Park as an Important Bird Area. As part of the Lower Platte River BUL, the bluffs are also among the most threatened natural landscapes in Nebraska, located just off I-80, between Omaha and Lincoln, in our fastest growing county.

The Nebraska Land Trust tackled land preservation in 2008, thanks to a \$1.1 million grant from NET. To maximize public benefits derived from this grant, the NLT and partners developed resource-based criteria and assessed 13 properties to prioritize projects. By a wide margin, the 694-acre Patterson Farm topped the list.

Multiple criteria factored into this ranking including size, as it is one of the largest unfragmented properties in the bluffs, where a person could walk from one end to the other and never cross a road. Along the way, they might follow spring-fed, boulder strewn streams under a canopy of old oaks, see abundant wildlife, cross old wagon trail ruts, the stone ruins of an early farm, or climb steep hills of productive soils that have been farmed for 1,000 years.

Sponsor Name: Nebraska One Box Foundation **Nearest Town:** Broken Bow
Project Name: Nebraska One Box Habitat Regeneration **Project No:** 13-123
Amount Requested: \$50,000 **Term of Project Request:** 2 **Review Group:** Equipment

The Nebraska One Box Pheasant Hunt is a non-profit organization that is seeking funding to assist with the purchase of two new Great Plains 10' No-till Habitat Drills. The organization currently works with land owners, Pheasants Forever, Inc, and the Nebraska Game and Parks to establish nesting habitat, grass cover and food plots for pheasants, quail and other wild game birds. The One Box organization needs to purchase the new no-till habitat drills to plant new plots. The addition of a Farm Bill Wildlife Biologist in Custer County has enabled the number of habitat projects to increase in number creating a back log of habitat projects. Plains Equipment Group in Broken Bow, NE will store and maintain these new drills. The goal of the One Box is to improve nesting habitat, grass cover, CRP cover and winter food plots to significantly increase the wild game bird population in central Nebraska.

Sponsor Name: Nebraska State Irrigation Association **Nearest Town:** Multiple
Project Name: Water Leaders Academy **Project No:** 12-115-2
Amount Requested: \$54,822 **Term of Project Request:** 3 **Review Group:** Statement of Intent

The Association began planning for a water leadership education program in 2009. The first Water Leaders Academy was introduced in 2011. It sought applicants from all backgrounds and interests which relate to water resources. Individuals selected for 2011 fulfilled that goal. Participants commit to attend six week end programs across the State. The program provides tours, discussions and structured presentations about Nebraska water laws, political structures responsible for water resources management decisions, water sciences, water economics and water policy planning. Sessions also include a strong program of leadership training activities. Leadership techniques that emphasize cooperation and collegiality to solve complex water issues are employed in the training. Participants are assigned projects to be completed between week end sessions and are teamed into work groups to develop independent study projects related to water resources subjects. Presentations are then prepared and presented to the Academy with the goal of ultimately being used in public education efforts. It is expected that academy graduates will remain connected to the Academy in the future and will assist in development and implementation of future Academy programs. It is also expected that the graduates will apply their water education and leadership skills training in water policy decision making positions at the local, regional, state and national levels. Informed water leaders are essential to sound water resources decisions now and into the future. The Nebraska Environmental Trust needs to be an active partner in this critical preparation of tomorrow's leaders in Nebraska water policy decisions and this grant request for the continuation and growth of the Academy project is the opportunity to be that significant partner.

THIS PROJECT WAS FUNDED \$41,190 IN 2012 WITH THE INTENT TO FUND UP TO \$54,822 IN YEAR TWO AND \$41,302 IN YEAR THREE PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE SECOND YEAR REQUEST

Sponsor Name: Nebraska State Recycling Association **Nearest Town:** Multiple
Project Name: Recycling Equipment Grant **Project No:** 12-117-2
Amount Requested: \$250,000 **Term of Project Request:** 2 **Review Group:** Statement of Intent

This recycling equipment grant will help NET build our recycling infrastructure across Nebraska by continuing the "smaller grants" program we have done through NET for 10 years. Eligible applicants are municipalities, other government entities, non-profits, and recycling processors. Eligible equipment can include pickup-towable recycling trailers with compartments, semi-trailers, balers, recycling carts, utility trailers, forklifts, skid-steer loaders, trucks, lift-gates for pickups or straight trucks, glass crushers, dumpsters, carts, indoor & outdoor bins, compactors, cart tippers and the like. While there are recycling programs across Nebraska there are still many communities who have no recycling program or have a limited program they wish to expand. Even in Nebraska's large urban areas there are still those, for instance, apartment dwellers, who do not have easy access to recycling. Municipalities and recycling processors across Nebraska tell us regularly that without grants they would have no recycling program, or it would be limited. They have aging equipment for handling recyclables that is worn out and can no longer be fixed or used safely. Budget constraints for municipalities, non-profit organizations and recycling processors often make it difficult or impossible to buy needed recycling equipment. Ours is a quick-turnaround grant program where application-to-approval can be accomplished in under a month.

THIS PROJECT WAS FUNDED \$315,450 IN 1999, SUBMITTED BUT NOT FUNDED IN 2000, FUNDED \$662,900 FROM 2001 TO 2003, SUBMITTED BUT NOT FUNDED IN 2004, FUNDED \$850,000 FROM 2005 TO 2009, SUBMITTED BUT NOT FUNDED IN 2010, AND FUNDED \$200,000 IN 2011 (TOTAL FUNDING: \$2,028,350). THIS PROJECT WAS FUNDED \$240,000 IN 2012 WITH THE INTENT TO FUND UP TO \$250,000 IN YEAR TWO PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE SECOND YEAR REQUEST

Sponsor Name: Nebraska Statewide Arboretum **Nearest Town:** Statewide
Project Name: Trees for Nebraska Towns (TNT) **Project No:** 11-132-3
Amount Requested: \$400,000 **Term of Project Request:** 3 **Review Group:** Statement of Intent

Trees for Nebraska Towns (TNT) is a statewide, three-year initiative aimed at reversing the decline of Nebraska's community forests by promoting and investing in intensive tree planting, sound resource management, community capacity building and public education. Inventories reveal that Nebraska has lost up to 50% of its community tree resource in recent decades due to weather events, diseases, insects and human neglect. Replanting has not kept up with the loss and now a near-perfect storm of emerging diseases and insects, including emerald ash borer, threatens to decimate the resource even further if actions are not taken soon. The Nebraska Statewide Arboretum, Inc. (NSA) is requesting \$955,775 to fund the Trees for Nebraska Towns (TNT) Initiative. TNT will provide funding and technical assistance for tree planting, public education and sustainable community forest management practices in participating communities. Specifically, the program will enable at least 100 different projects; plant up to 15,000 large-maturing trees (with eventual annual benefits of up to \$1,140,000); educate at least 5,000 Nebraskans about proper tree planting and management practices; and engage and empower at least 1,000 volunteers and resource professionals in proper planting. Ultimately the program will establish the groundwork for increased sustainability of Nebraska's community forests. The program will be a multi-partner collaborative including NSA, the Nebraska Forest Service, the Nebraska Community Forestry Council, natural resources districts, Nebraska's green industry and participating communities statewide. If funded, the program will leverage up to \$1,500,000 in matching funds from a wide-variety of sources and partners. The program will advance each of the Trust's funding priorities with a special emphasis on Surface and Ground Water and Air Quality. THIS PROJECT WAS FUNDED \$332,717 IN 2006 AS A PILOT PROJECT AND \$1,000,000 FROM 2008 THROUGH 2010. THIS PROJECT WAS FUNDED \$205,000 IN 2011 WITH THE INTENT TO FUND UP TO \$300,000 IN YEAR TWO AND \$400,000 IN YEAR THREE PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE THIRD YEAR REQUEST.

Sponsor Name: Nebraska Statewide Arboretum **Nearest Town:** Multiple
Project Name: Sustainable Schoolyard Partnership **Project No:** 12-116-2
Amount Requested: \$193,827 **Term of Project Request:** 3 **Review Group:** Statement of Intent

Sustainable Schoolyard Partnership (SSP) is a statewide, three-year initiative aimed at dramatically improving the natural environment of school grounds through innovative development and management of green infrastructure as well as equipping schools to better care for the landscape via inquiry-based education and demonstration. This effort will target 20 partner schools to implement and demonstrate landscape level improvements to maximize energy/water efficiencies and conservation practices as well as training 100 educators and engaging up to 30,000 students in conservation education principles. Research shows most school landscapes lack the green infrastructure to reap the educational, environmental, and physiological benefits of green spaces. Current research also demonstrates that American youth are increasingly disengaged from nature. Use of electronic media has increased over the last five years to 50 hours a week; obesity and other health related risks continue at epidemic rates among children and youth; and science test scores are below acceptable levels. The SSP seeks to reverse many of these negative trends while creating landscapes that are more useful, manageable, and sustainable. The Nebraska Statewide Arboretum (NSA) is requesting \$519,004 to fund on-the-ground projects of the SSP program. Federal assistance has been requested to fund the educational component. SSP will provide funding for landscape improvements and technical assistance to reduce water use, improve water quality, increase habitat and empower students, teachers, parents, administrators and community volunteers to take responsible action on behalf of the environment. SSP will be a multi-partner collaborative effort including NSA, Nebraska Forest Service, UNL Department of Agronomy and Horticulture, Groundwater Foundation, Verdis Group, local NRDs, and participating schools statewide. If funded, the program will leverage an additional \$700,000 in matching funds from other sources and partners. The program will advance each of the Trust's funding priorities, with a special emphasis on Surface and Ground Water and Habitat. THIS PROJECT WAS FUNDED \$158,129 IN 2012 WITH THE INTENT TO FUND UP TO \$193,827 IN YEAR TWO AND \$157,048 IN YEAR THREE PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE SECOND YEAR REQUEST.

Sponsor Name: Nebraska Water Balance Alliance **Nearest Town:** North Platte, Scottsbluff
Project Name: Water Utilization Assessment and Curriculum Development **Project No:** 13-158
Amount Requested: \$467,000 **Term of Project Request:** 3 **Review Group:** Water

Ecosystem health and water availability are inseparable. In Nebraska, the largest user of water is agriculture. Agriculture is also a cornerstone of social and economic health. As Nebraskans we must seek a balance between our use of our natural resources and their effective conservation. To assist in that understanding it is critical for agriculture to have solid knowledge of its water use relative to water availability. Agriculture in Nebraska is changing rapidly with the advancement of technology. Producers are using new technology and new practices that allow them to make better use of their natural resources, especially water. These efficiencies aren't being accounted sufficiently in large scale watershed management. This project will: Collect the information gathered with a water budgeting methodology. Verify the water conservation practices used on farm for their contribution to watershed/groundwater sustainability. Promote the increased use and accounting of such measure in agriculture to promote a landscape where sound groundwater levels, healthy rivers and a solid farm economy are the norm and not the exception. The process uses market ready tools such as ET gages, soil probes and weather stations to continuously monitor the utilization of water to establish a baseline for producers. This baseline will guide decisions about cropping practices, residue management, tillage practices, irrigation and/or crop selection based on what their water budget will allow. The data collected from this project will help bring clarity and current practice data to watershed scale modeling by adding a real time utilization level of analysis. It will also help producers to see the value of irrigation performance through better scheduling and use of best management practices. Finally, this project will build an accreditation pilot program to engage additional producers on how to use a water budget tool kit to make more sustainable on farm water management decisions.

Sponsor Name: Nebraska Weed Management Area Coalition **Nearest Town:** Kearney
Project Name: Early Detection and Rapid Response on Invasive Vegetation within Nebraska **Project No:** 13-195
Amount Requested: \$916,000 **Term of Project Request:** 3 **Review Group:** Rural Habitat

This grant will help build a statewide coalition of weed management areas – Nebraska Weed Management Area Coalition. Weed management areas are local partnerships working to control invasive vegetation. Invasive vegetation poses one of the largest threats to biodiversity and a major threat to rivers and streams in Nebraska. Initial grant objectives are 1) Create a shared understanding of effective vegetation management in Nebraska, 2) Create a statewide monitoring/evaluation plan for vegetation management, 3) Coordinated use of state vegetation management plan, 4) Build a tailored communication strategy, 5) Build a comprehensive budget structure for effective vegetation management. Grant will affect over ½ of Nebraska and will assist landowners in sustaining long-term control on invasive vegetation and build a statewide coalition with many partnering agencies. Grant funds along with partner funds will ensure thousands of river miles are monitored and detected infestations controlled along with a goal of 5,000 acres of upland habitat enhanced. Riverine and upland invasive species will be controlled through local WLMA's implementing cost share incentives. This grant will provide the initial pulling together of all Nebraska WMA's to work in a larger landscape, facilitate process of sharing/learning from each other, promote early detection and rapid response, and get higher landowner involvement with invasive plant species control.

Sponsor Name: Niobrara Council**Nearest Town:** Ainsworth**Project Name:** Brown County Conservation Easement Project 2012**Project No:** 13-209**Amount Requested:** \$126,500**Term of Project Request:** 1**Review Group:** Rural Habitat

The Niobrara Council (Council) is submitting a "shovel ready" conservation easement project to the Nebraska Environmental Trust's (NET) competitive grant process for consideration. The Council was originally hopeful that this particular project would have been funded by NET grant dollars it received in 2006, but since it was the second conservation easement project the Council was trying to complete with one grant (from 2006) and by December of 2010, was deep into extensions related to the first and second projects, and still awaiting county board approval, denial of the Council's request for an extension that ended the road for this project at that time. Unspent funds were returned to the NET, and the project went unfunded. We requested that the NET reconsider their decision to reject our request for an additional extension to our project when the Brown County Board finally approved the project in February of 2011, but were unsuccessful. The Council sought funding for the project through a USF&WS fund handling mitigation dollars to offset the Keystone Pipeline project, but we have no positive news on that funding source either. Timing has come around regarding the NET grant cycle and the Council decided to give this project another try. We are working hard for our landowner in this situation; it is the dying wish of her husband that their property along the Niobrara be preserved in perpetuity. She is adamant that we press on, and as her advocate, we are re-submitting her project for consideration. We have a signed memorandum of understanding, signed conservation easement document, 2010 appraisal (that will be updated and available October 2012), survey plat of the building envelope, and a completed baseline inventory (prepared by NPS Resource Management Specialist). We graciously ask that this project be able to reach completion through NET grant funding.

Sponsor Name: Northeast Nebraska RC&D**Nearest Town:** Plainview**Project Name:** Integrated Management of Noxious Weeds in Biologically Sensitive Areas by the Northeast Nebraska Weed Management Area **Project No:** 12-189-2**Amount Requested:** \$24,733**Term of Project Request:** 3**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 issues with invasive species, NNLP recommended development of collaborative conservation efforts to seek effective control measures, increase awareness of biological diversity, and to implement strategies that address specific issues in biologically unique landscapes (BUL's) identified in the plan. One such group is the Northeast Nebraska Weed Management Area (NNWMA). Established in 2004, they seek innovative, collaborative, and effective means to reduce ecological and economic impacts of noxious weed infestations. NNWMA is composed of a diverse group of partners. The area of responsibility covers 8 counties and 4,610,212 acres of private, public, and tribal land. Eight BUL's 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. Historic flooding has occurred on 3 major river systems during the last 2 years, likely creating habitat that will be conducive for noxious weed growth. Beginning in 2012, NNWMA proposes to conduct aerial mapping surveys, acquire biological control agents (insects) to control noxious weeds on ecologically sensitive sites, and conduct annual education and outreach tours and workshops. Releases will be prioritized and will be 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, Salt Cedar, and non-native Phragmites. Appropriate insects will be acquired for purple loosestrife and leafy spurge. Releases will occur in a variety of locations within the NNWMA over a 3 year period and will be marked using GPS equipment. THIS PROJECT WAS FUNDED \$21,133 IN 2012 WITH THE INTENT TO FUND UP TO \$24,733 IN YEAR TWO AND \$24,134 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 IV **Project No:** 12-107-2
Amount Requested: \$265,500 **Term of Project Request:** 3 **Review Group:** Statement of Intent

Tallgrass prairie and oak woodlands are among the most threatened ecosystems in North America. Most remaining prairies and woodlands are privately owned, making cooperation between landowners and conservationists essential for their conservation. In 2003, public and private conservation groups and landowners formed the Nebraska Tallgrass Prairie Partnership (NTPP) whose mission is to conserve and enhance tallgrass prairies in the state. In 2007, the Nebraska Natural Legacy Project endorsed NTPP's efforts in southeastern Nebraska as the Southeast Flagship Initiative. Partners in the Initiative include the Northern Prairies Land Trust (NPLT), Nebraska Game and Parks Commission (NGPC), Southeast Nebraska Grazing Association, United States Fish and Wildlife Service, Audubon Nebraska, Natural Resource Conservation Service, and others. Over the past eight years, using primarily NET and USFWS Landowner Incentive Program (LIP) and State Wildlife Grant (SWG) funds, the NTPP/Southeast Flagship has worked with 131 landowners to enhance over 31,200 acres of tallgrass prairie and oak woodland, primarily through implementation of invasive tree clearing, prescribed fire, planned grazing and reseeding prairie. Additional NET funds are critical to continued success of our now well-developed initiative. Due to restricted Federal budgets, LIP funds have been discontinued and SWG funds greatly reduced. We must now rely more heavily on in-state conservation monies to maintain our infrastructure and increase our capacity to meet demand for native habitat conservation in southeast Nebraska. We are seeking \$706,000 from the NET for this three-year project. The project partners will provide approximately \$212,500 in cash match. The NPLT will lead the project and NGPC will conduct funds management and reporting. NET funds will be used to enhance 8,000 acres of tallgrass prairie on private lands through tree clearing, prescribed fire, etc. in southeast Nebraska and continue our Annual Tallgrass Prairie Management Seminar for landowners. THIS PROJECT WAS FUNDED \$1,550,0000 FROM 2005-2011. THIS REQUEST IS FOR A CONTINUATION OF THIS PROJECT. THIS PROJECT WAS FUNDED \$220,500 IN 2012 WITH THE INTENT TO FUND UP TO \$265,500 IN YEAR TWO AND \$220,500 IN YEAR THREE PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE SECOND YEAR REQUEST

Sponsor Name: Omaha Children's Museum **Nearest Town:** Omaha
Project Name: Tinkering Studios **Project No:** 13-188
Amount Requested: \$30,000 **Term of Project Request:** 1 **Review Group:** Waste Management

Omaha Children's Museum respectfully requests funding to create a Tinkering Studio and Recycling Exhibit within the Museum. This exhibit will provide children with a chance to use recycled materials to create their own devices and explore different scientific phenomena. The exhibit will teach children about recycling with an interactive Recycling 101 exhibit piece, which will feature an electric recycling truck where children can learn more about the recycling process and what materials can be recycled.

Sponsor Name: Omaha, City of **Nearest Town:** Omaha
Project Name: Saddle Creek Stormwater Wetlands and Detention Basins **Project No:** 12-144-2
Amount Requested: \$230,366 **Term of Project Request:** 3 **Review Group:** Statement of Intent

The City of Omaha (the City) requests funding for construction of the wetland and stormwater detention components of a natural stormwater treatment system to reduce flooding and improve water quality in the Saddle Creek basin. The project’s Green Solutions (directing stormwater into natural treatment areas) components include: wetlands; dry detention ponds with pretreatment basins; and restoration of an open channel. The overall project also includes sewer separation, for which the City is not requesting grant funding. The stormwater quality improvement and peak flow reduction components of this Combined Sewer Overflow (CSO) project go beyond the requirements of the Nebraska Department of Environmental Quality (NDEQ) and USEPA by providing treatment of stormwater prior to discharge to the Little Papillion Creek, which is currently on the list of State waters not meeting quality standards. The project is supported by the Papio-Missouri River Natural Resource District (P-MRNRD) and the NDEQ. This project will accomplish multiple objectives that, when achieved, will provide a wide range of the benefits to the community including:

- Increasing wildlife habitat. •Improving water quality in the stream and reducing pollutants reaching the Little Papillion Creek. •Addressing permitting requirements while maximizing mitigation opportunities. •Maximizing sewage treatment with existing and proposed wastewater treatment facilities.
- Reducing capital costs for the CSO Program for sewer fee payers. •Providing public education opportunities via a demonstration project for Green Solutions. The project will demonstrate Best Management Practices for stormwater management in an urban setting and the incorporation of Green Solutions for improving water quality. The project will also reduce combined sewer overflows to Little Papillion Creek, and thereby reduce the financial impact on Omaha’s sewer rate payers; currently 1/3 of the State population.

THIS PROJECT WAS FUNDED \$577,134 IN 2012 WITH THE INTENT TO FUND UP TO \$230,366 IN YEAR TWO AND \$10,000 IN YEAR THREE PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE SECOND YEAR REQUEST

Sponsor Name: Omaha, City of **Nearest Town:** Omaha
Project Name: Spring Lake Park Pond Restoration, Phase 4 **Project No:** 12-146-2
Amount Requested: \$683,000 **Term of Project Request:** 3 **Review Group:** Statement of Intent

The City of Omaha and its Partners, request funding to fulfill the restoration visions for Spring Lake Park that began in 1939: construction of a natural stormwater treatment system in an urbanized area. The planned construction includes more elements than originally conceived: wetlands; fishing pond; dry detention facilities; pretreatment basins; rain gardens; infiltration basins; and a restored stream are being evaluated for feasibility.

The construction will be phased to coordinate with concurrent sewer separation projects and associated funding. This request is for construction of Phase 4 (Phases 2 and 3 were partially funded by previous NET grants). The City is requesting NET funding for only the stormwater related components of the project. The overall Missouri Avenue Sewer Separation project also includes sewer separation, for which the City is not requesting grant funding. These improvements will provide peak flow reduction and stormwater treatment prior to discharge to the Missouri River. The project will enhance the habitat for wildlife that already frequent Spring Lake Park and the surrounding areas, as well as provide a pond able to sustain a reproducing population of fish and other aquatic species. The project has a high level of support from partners ranging from grass roots neighborhood organizations to the Papio-Missouri River Natural Resource District and Nebraska Game and Parks Commission. The City will provide the project site on dedicated park ground and therefore the investments made will remain in the public trust in perpetuity. The partners will provide extensive in-kind support to the project including coordinating communications about the project and supporting annual park clean-ups. The project will demonstrate best practices for stormwater management in an urban setting through the incorporation of “Green Solutions”. The project will also reduce combined sewer overflows to the Missouri River, and thereby reduce the financial impact on Omaha’s sewer rate payers, currently 1/3 of the State population. CITY OF OMAHA RECEIVED \$15,000 FOR PHASE 2 AND \$325,000 FOR PHASE 3 OF THE SPRING LAKE PARK POND PROJECT.

THIS PROJECT WAS FUNDED \$7,000 IN 2012 WITH THE INTENT TO FUND UP TO \$683,000 IN YEAR TWO PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE SECOND YEAR REQUEST

Sponsor Name: Omaha, City of **Nearest Town:** Omaha
Project Name: Hell Creek Rehabilitation Project **Project No:** 13-118
Amount Requested: \$1,400,000 **Term of Project Request:** 3 **Review Group:** Bank Stabilization

The City of Omaha (City) will rehabilitate a concrete-lined urban stream that is nearly devoid of aquatic habitat. These actions will result in a sustainable community amenity that can support aquatic life. The project includes rehabilitating a 3,300-foot reach of Hell Creek (about a mile west of the I-80 and I-680 interchange), creating a more natural state by removing a failing concrete liner with threatened structural integrity, compromised functionality, and minimal capacity to support aquatic life—this reach also provides no environmental benefit and is a general eyesore. The channel will be rehabilitated using bio-engineering principles that incorporate a combination of vegetation and low profile rock grade control structures to promote channel stability. Significant site constraints, including the presence of 75 nearby homes and critical utility infrastructure (overhead power and sanitary sewer utilities), limit rehabilitation options and increase costs to design and construct the project.

The aesthetically pleasing improvements will provide environmental enhancements to restore aquatic life habitat and improve water quality while creating a community amenity. This project wouldn't be possible without the City's commitment to implementation of green infrastructure. The City worked proactively with the developer working upstream to incorporate improvements along Hell Creek, improving the channel's connection to the flood plain and reducing peak flows. Doing so accommodates rehabilitating the channel with vegetation while not adversely impacting the flood elevations or increasing risk to area residents. The improvements will be similar to those implemented on the Whitted Creek Stream Restoration project, a Nebraska Environmental Trust (NET) grant-funded project in Sarpy County and a tour location during the July 2011 NET board meeting. While the Whitted and Hell Creek projects drain watersheds of similar sizes, the Hell Creek project will be constructed within a more developed area that has less than half the width of the Whitted Creek corridor.

Sponsor Name: Omaha, City of - Department of Parks, Recreation and Public Property **Nearest Town:** Omaha
Project Name: Gene Leahy Mall and Lagoon Renovation **Project No:** 12-120-2
Amount Requested: \$150,000 **Term of Project Request:** 2 **Review Group:** Statement of Intent

The Gene Leahy Mall is a twelve-acre oasis in the middle of downtown Omaha. Constructed in the 1970's and 1980's, it was conceived to be an impetus to economic redevelopment of the area. Since then, the Mall has been connected to subsequent recreational development, first to Heartland of America Park, and then to the Riverfront, Bob Kerrey Pedestrian Bridge and on into Iowa. The Mall is unique to Omaha and draws visitors from all over the region. It features a lake, fountains, waterfalls, a trail, decorative lighting, custom slides, and numerous sculptures. Special events attract up to 100,000 people to the Mall and surrounding area. The lake is in need of renovation, in terms of water quality and a deteriorating infrastructure. A deteriorated pond liner results in over 6 million gallons of water loss annually. Incandescent bollard lighting is obsolete compared to new energy efficient technologies. The irrigation system is inefficient compared to new, water-conserving systems. The environmental benefits of new and efficient lighting, irrigation and lake water retention are goals of this project. It is for these items that the City of Omaha is requesting funding from the Trust. This project is part of a \$3 million effort to improve the Mall. Other projects will include upgrading of the rest of the lighting, playground expansion, a new shade structure, and trail, boardwalk and retaining wall rehabilitation. The City is committing \$1,000,000 and is requesting \$1,046,977 from the Trust. The Omaha Parks Foundation, in partnership with Omaha by Design, has already begun a fundraising campaign and is approaching the first set of potential donors. These organizations are confident of raising an additional \$1,000,000 for these projects. The NET grant, if awarded, will be used to build excitement in the community and challenge the Private/Public campaign for raising additional funds.

THE TRUST FUNDED A 12,800 SQUARE FOOT NATIVE PLANTING ON GENE LEAHY MALL FOR \$74,000 TO OMAHA BY DESIGN IN 2006.

THIS PROJECT WAS FUNDED \$375,000 IN 2012 WITH THE INTENT TO FUND UP TO \$150,000 IN YEAR TWO PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE SECOND YEAR REQUEST

Sponsor Name: Omaha's Henry Doorly Zoo **Nearest Town:** Omaha
Project Name: Impact 1.5 Million: Zoo Recycling Expansion **Project No:** 13-121
Amount Requested: \$23,333 **Term of Project Request:** 1 **Review Group:** Waste Management

As a conservation-oriented organization with 1.5 million visitors per year—making it the largest tourist destination in the state—Omaha’s Henry Doorly Zoo & Aquarium can play a significant role in diverting materials from the landfill while promoting conservation behaviors to its guests. Currently, recycling is available only in limited areas or on a limited basis. This project will expand the opportunity to recycle by deploying 106 (53 are covered as part of this proposal) standard recycling containers and recycling-related education signage across Zoo grounds. Doing so will make recycling an easier choice for guests while they help conserve resources by diverting their waste from the trash to the recycling stream. This project will expand the opportunity for guests to recycling by improving access to recycling containers and educating guests about what can be recycled. The Zoo currently has a goal to improve its diversion rate from 8.4% to 20% by 2016. In fact based on recent waste characterization study, the Zoo has the potential to eventually divert up to 30% of its materials. This project will play a key role in helping the Zoo reach its 20% diversion goal, and in the process keep 350 tons of materials out of the landfill. This project will also help the Zoo live out its conservation mission, and demonstrate to 1.5 million annual guests annually that recycling is a valuable conservation activity.

Sponsor Name: Panhandle Resource Conservation & Development, Inc. **Nearest Town:** Scottsbluff
Project Name: Increasing Net Profits Through Soil Health Management **Project No:** 13-154
Amount Requested: \$120,180 **Term of Project Request:** 3 **Review Group:** Soil Management

This project will fill a serious gap in the Panhandle RC&D to reduce non-point source pollution while building healthy soils and sustainable agriculture, community forestry and turf management. Training made available focuses on an education and information program to improve soil health for the sustainability in farming/ranching operations. The best management practices for soil health are applicable to turf and urban forestry management as well. Soil health is one of the key factors in addressing savings of input costs, water conservation and the reduction of weed and insect pressures. The expertise and guidance from soil health specialists, coupled with support groups is important to the success of new and continued organic farming and ranching; conventional farming and ranching; no till operations; community forestry and turf management. Proper soil testing for nutrients and the available biology in support of a strong soil food web is an opportunity for success in reducing input costs (fertilizer, herbicides, pesticides, and water application and aeration practices). Soil tests currently identify available nutrients and nutrients tied up. These elements are usually 1,000 times more in abundance can be broken down by healthy soil biology regimes reduce the need for commercial fertilizers. Soil health provides another tool for water conservation. Opportunities to conserve water use with timely applications are needed in an over appropriated watershed. Farmers and Ranchers facing drought conditions can utilize soil health management as a tool to soften the impacts of a drought. Healthy soils show a lower surface temperature than conventional operations. The expertise and guidance from soil health specialists and support groups provided through this project is important. Proper soil testing for nutrients and the biology in support of a strong soil food web is an opportunity for success in reducing input cost (fertilizer, herbicides, pesticides, water use and aeration practices).

Sponsor Name: Papio-Missouri River Natural Resources District **Nearest Town:** Bellevue
Project Name: Sarpy County Missouri River Buyouts **Project No:** 13-140
Amount Requested: \$282,660 **Term of Project Request:** 1 **Review Group:** Rural Habitat

The Papio-Missouri River Natural Resources District, Sarpy County, and the City of Bellevue have agreed to combine their resources to acquire floodprone properties which were flooded during the 2011 Missouri River Flood event. The Elbow Bend and Iske Park Neighborhoods are located in eastern Sarpy County, immediately adjacent to the Missouri River. Both Elbow Bend and Iske Park are located within the floodplain and floodway of the Missouri River. The proposed project seeks to buyout property owners, removing people and property from flood-prone areas, and returning land to its pre-development state. The project will eliminate the risk of flooding to approximately 35 structures and 36 properties within the floodway and floodplain through acquisition and demolition. The properties will be maintained as open space in perpetuity. The proposed project will increase habitat along the river, and lessen the public burden during flooding events for emergency response and associated recovery costs.

Sponsor Name: Papio-Missouri River Natural Resources District **Nearest Town:** Gretna
Project Name: Elkhorn River Chute and Backwater Enhancement Project **Project No:** 13-161
Amount Requested: \$498,480 **Term of Project Request:** 1 **Review Group:** Bank Stabilization

This application seeks 24% (\$498,480) of the total project costs to support construction of a chute within the Elkhorn River floodplain for the purpose of long-term bank protection and restoration of shallow backwater habitat in the river. The project is located near 240th Street northwest of the City of Gretna in an area where previous bank stabilization measures have failed. The project construction involves a unique concept to relocate the main channel of the Elkhorn River to a more stable alignment, and to allow the existing alignment to become a low velocity meander. Construction of the project will involve conversion of: (1) 5,400 linear feet of Elkhorn River channel to 51 acres of shallow backwater habitat, and (2) 23 acres of riverine floodplain forest to 1,800 linear feet of Elkhorn River channel. The biological benefits resulting from this chute and backwater project are substantial and include increasing limited habitat for the federally endangered pallid sturgeon (as well as state endangered sturgeon chub and state threatened lake sturgeon), increasing temperature diversity, improving water quality, creating more spawning areas for native fish, increasing submerged aquatic vegetation, creating refuge from high river velocities and an increasing the diversity of depths.

Sponsor Name: Papio-Missouri River Natural Resources District **Nearest Town:** Bellevue
Project Name: Missouri River R-613 Levee Setback **Project No:** 13-207
Amount Requested: \$2,000,000 **Term of Project Request:** 3 **Review Group:** Rural Habitat

This application seeks funding to support construction of a setback levee at the confluence of the Platte and Missouri Rivers for the purpose of environmental restoration. The project would move a portion of the levee back from the river and would result in the reconnection of former floodplain bottomlands (currently protected by the levee) with the active river floodplain. The construction of this unique project will provide approximately 400 acres of land that can foster the environmental interests of many local, state and federal agencies. The project is located within the existing R-613 Federal Levee which begins in southeast Sarpy County on the left bank of the Platte River at the intersection US Highway 75 (US 75). R-613 continues east along the left bank of the Platte River levee until it intersects the right bank of the Missouri River levee. The levee continues north until it intersects the right bank of the Papillion Creek levee, and continues north and west along that levee until west of US 75. The existing R-613 levee was constructed in 1971 and currently provides protection for approximately 3,000 acres. Recent modifications to FEMA requirements for levee accreditation have required the Papio-Missouri River Natural Resources District (P-MRNRD) to evaluate significant modifications on this levee. During the evaluation, P-MRNRD coordinated with several private, local, state and federal agencies to locate a possible setback of the existing R-613 alignment for the purpose of restoration of river floodplain. Strong interest was expressed in the project due to a wide range of potential environmental benefits which are expected to include:

- Sediment Retention
- Nutrient Removal
- Production Export
- Fish and Shellfish habitat
- Wildlife Habitat
- Endangered Species
- Recreation
- Educational and Scientific Value
- Uniqueness and Heritage
- Visual Quality and Aesthetics

Sponsor Name: Pheasants Forever, Inc. **Nearest Town:** Multiple
Project Name: Corners for Wildlife **Project No:** 12-171-2
Amount Requested: \$325,000 **Term of Project Request:** 3 **Review Group:** Statement of Intent

This application continues a partnership funded by the Trust from 1995 to 2011. The program successfully partners money from the Trust, Pheasants Forever, Inc., Pheasants Forever (PF) and Quail Forever (QF) chapters, Natural Resource Districts, Nebraska Game & Parks Commission and landowners throughout the state to establish permanent wildlife habitat. In the 16 years the program has been offered, Trust funds have been partnered with over \$1.7 million for materials from 45 Pheasants Forever chapters, 16 Natural Resource Districts, the Nebraska Game & Parks Commission and private landowners on 1,378 projects throughout the state. With “in-kind” contributions included, the level of financial partnership being combined with Trust funds currently exceeds \$5.3 million. Landowners receive a rental payment for a five-year contract to establish and maintain high diversity wildlife habitat on center pivot irrigation field corners. Materials to establish cover practices are cost-shared 75% by PF and QF chapters with landowners responsible for 25% of the material costs. In some cases, the cover practices are established with a 100% cost share by the participating Natural Resource Districts. This program is very successful at establishing permanent wildlife habitat as landowners have averaged 334 wildlife shrubs and/or trees per corner in the program. Every year the program has been offered, there has been more interest in enrollment than the program can fund. Projects are established to cover practices that promote high quality nesting, brood-rearing and/or pollinator habitat for native wildlife species of concern. The habitat established on projects is specifically designed to meet the goals of the Nebraska Natural Legacy Project and many of the species and habitat types of concern identified in the statewide wildlife plan. By establishing and managing for highly diverse native habitat, the needs of native wildlife that are imperiled by the loss of diverse and undisturbed grasslands is being addressed. THIS PROJECT WAS SUBMITTED IN 1997 AND 2010 BUT NOT FUNDED DUE TO PLACEMENT ON THE RANK ORDER LIST AND AVAILABILITY OF FUNDS. THIS PROJECT WAS FUNDED \$2,842,000 FROM 1994-2011. THIS REQUEST IS FOR THE CONTINUATION OF THIS PROJECT. THIS PROJECT WAS FUNDED \$280,000 IN 2012 WITH THE INTENT TO FUND UP TO \$325,000 IN YEAR TWO AND \$280,000 IN YEAR THREE PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE SECOND YEAR REQUEST

Sponsor Name: Pheasants Forever, Inc. **Nearest Town:**
Project Name: Grassland Improvement Program **Project No:** 13-159
Amount Requested: \$900,000 **Term of Project Request:** 3 **Review Group:** Rural Habitat

This application seeks to continue a unique, proven and successful partnership called the Grassland Improvement Program that has changed the culture of prescribed burning on private lands in the areas it has been offered in the past. The program works to improve grassland health and vigor by creating a synergy that overcomes these limiting factors and increases the use of prescribed burning on the landscape of Nebraska. A lynch pin to being able to conduct prescribed burns on grasslands that is 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 additional biologically important regions of the state where prescribed burning is increasingly used on the landscape, significant environmental benefits are obtained and the objectives of the Nebraska Natural Legacy Project are implemented.

Sponsor Name: Platte River Basin Environments, Inc. **Nearest Town:** Multiple
Project Name: North Platte River Valley Habitat Restoration and Enhancement Partnership **Project No:** 13-189
Amount Requested: \$154,000 **Term of Project Request:** 3 **Review Group:** Rural Habitat

The North Platte River has long been the lifeblood for a large portion of Western Nebraska. Dozens of communities, thousands of farmers, ranchers, and recreationists; and millions of individual plants and animals depend on and utilize the river and its waters and habitats. Unfortunately the wetland and upland habitats of the North Platte River have become degraded over time, making them of drastically reduced quality and availability to wildlife and private landowners alike. A partnership has been forged between the Platte River Basin Environments, Inc. (PRBE), the Nebraska Game and Parks Commission; and the U.S. Fish and Wildlife Service to address the degrading factors impacting North Platte River Valley habitats. Targeted specifically on private and non-profit conservation entity owned lands, this effort will implement habitat projects to address the species and habitat stressors of the area. The conservation actions to be implemented will not only address habitat needs, but will have important water, soil, economic, private lands, and public benefits. This partnership's objective is to restore, enhance, and manage the wetland and associated upland habitat values of North Platte River Valley wetlands and to find win-win solutions for integrating wildlife habitat into land management operations. This will be achieved by (1) providing financial assistance for restoring, enhancing, and managing wetlands and associated uplands on private lands and privately owned conservation entity properties, (2) providing education and high quality technical assistance to private landowners in the restoration and long-term management of their habitats and integration of habitat into their land management operations, and (3) using demonstration sites to exhibit the numerous environmental, wildlife, and economic benefits of wetlands. Utilizing NET grant funds, PRBE will offer cost-share to landowners in addition to funds available from conservation entities to expand the scope and quantity of restoration projects.

Sponsor Name: Platte River Whooping Crane Maintenance Trust, Inc. **Nearest Town:** Alda
Project Name: Nebraska Prairie Trail and Bison Project **Project No:** 12-183-2
Amount Requested: \$72,000 **Term of Project Request:** 3 **Review Group:** Statement of Intent

The Platte River Whooping Crane Critical Habitat Maintenance Trust (Crane Trust) respectfully requests your consideration of a grant in the amount of \$385,000. This three-year request includes funding for the NE Nature & Visitor Center (NNVC) & a trail system with bison with a budget that is over \$1,100,000. The Crane Trust & its partners will insure the success of the over-all budget of the program. NNVC & the Crane Trust have entered into an agreement to merge operations. This will result in a large, stable organization that will deepen both existing & new opportunities for good science, land management, communication & education in NE's native habitats. This is a unique opportunity that will have a significant impact on conservation & outreach in NE, as well as an economic impact within the central NE region. The Crane Trust was formed in 1978 as part of a court-approved settlement of Grayrocks Dam on a tributary of the Platte River in WY. It was funded by a payment from the MO Basin Power Project, & income from the endowment is used to further the Trust's mission. Three trustees are appointed by the three participants in the settlement to administer the Trust. The NNVC, established in 1989 as a private, 501c3, non-profit organization, was reorganized on 1/31/07 under the direction of a five-member BD, a group of successful business leaders committed to re-establishing the NNVC as a center for environmental education. The result of the merger will mean that the NNVC will operate within the structure of the Crane Trust. Key aspects of this proposal include: 1 Creation of a ten-mile nature trail network that is available to the public. 2 Facilitating a bison herd on Crane Trust ground that is accessible to the public. 3 Continued operation of the NNVC through sound business operations. Central NE is the fortunate site of the annual migration of the sandhill crane, one of the world's great natural phenomena, as well as a fragile yet beautiful ecosystem, the native prairie & Platte River habitat. The Crane Trust is uniquely positioned to manage & showcase these environmental wonders & educate a new generation of environmentally committed Nebraskans. The goal of this proposal & the merger of these two organizations is to create a unique & exciting destination point in central NE. We are planning on building up to 10 miles of trails & with bison being reintroduced and people from around the Midwest will come to the Nature Center. We will have the opportunity to show everyone how NE truly looks. The bison will draw tourist off the interstate & all will learn more about NE. THIS PROJECT WAS FUNDED \$42,000 IN 2012 WITH THE INTENT TO FUND UP TO \$72,000 IN YR TWO & \$42,000 IN YR THREE PENDING AVAILABLE FUNDS & SATISFACTORY PROGRESS. THIS IS THE SECOND YEAR REQUEST

Sponsor Name: Prairie Plains Resource Institute **Nearest Town:** Marquette
Project Name: Sherman Land Acquisition, Hamilton County **Project No:** 13-132
Amount Requested: \$450,000 **Term of Project Request:** 3 **Review Group:** Rural Habitat

The Sherman Ranch contains an unusual Platte River landscape in northern Hamilton County. Its 650 acres include a mile of Platte River frontage, ecologically diverse wet meadow bottomland and prairie-covered loess hills and canyons. Such ecological, topographic and scenic attributes are rare in a large single ownership tract in eastern Nebraska. The Sherman Ranch is located within a Biologically Unique Landscape area (Central Platte BUL, Nebraska Legacy Plan). It also has exceptional potential for public recreation. PPRI will develop access for hunting, fishing, birdwatching, hiking, biking, camping, canoeing and trail riding compatible with prairie and wildlife management. The land will remain in agricultural use as native hay and rangeland. Purchase of the Sherman Ranch is urgent. Most likely it will end up subdivided into acreages if PPRI cannot raise necessary funds. No other entity will have the opportunity for undivided purchase. If not acquired by PPRI, huge public benefit will be lost. Nearly 1.2 million people live within two hours of this property and could benefit from its recreational potential. There are few parks or wildlife areas between Grand Island and Ashland, a river distance of 130 miles. Nothing in that stretch is as striking and diverse or offers as much public value as the Sherman Ranch. Prairie Plains Resource Institute (PPRI) is requesting \$450,000 from NET to assist in the acquisition of the Sherman Ranch - approximately 20-25% of estimated \$2 million total price. Substantial match will be required from other sources yet-to-be-determined. DU will partner on the wetland portion, contingent on NAWCA funding; USFWS will assist in restoration and stewardship. Future opportunity may exist to connect Sherman Ranch to Griffith Prairie (NET-funded in 2002) located a mile west, creating a block of recreational prairie land greater than 1,700 acres situated along 2.7 miles of Platte frontage.

Sponsor Name: PrairieLand RC&D Council **Nearest Town:** Multiple
Project Name: Continuous No-till and Soil Health Education **Project No:** 13-179
Amount Requested: \$300,000 **Term of Project Request:** 3 **Review Group:** Education

This statewide educational project will build on and expand existing efforts to increase the adoption and sustainable use of Continuous No-till (CNT) by one million acres. More than a dozen partners will combine and coordinate their efforts to deliver educational programs to inform producers and the public about the benefits of CNT, cover crops, and improved soil health. CNT is the single best practice for producers to reduce risks to the environment and improve profitability. Adding cover crops helps protect the soil, builds soil structure, feeds soil biological life, provides wildlife habitat, improves water quality and management, and can provide livestock grazing. Improved crop rotations, cover crops, and biological diversity improve the soil system and minimize pest problems, greatly reducing pesticide use and nutrient losses. With improved soil health, crop production becomes more sustainable and the resulting crops are healthier. This project will be extremely cost-effective, about \$0.62/acre for the million acre goal, or about \$25/producer if half of Nebraska’s producers adopt or increase their use of CNT, saving them \$50/acre or more. Five to 12 inches of water can be saved per acre, reducing irrigation needs and greatly improving dryland yields. Soil erosion by wind and water are greatly decreased, reducing blowing dirt, surface water pollution, and erosion below the allowable soil loss level. CNT can sequester large amounts of carbon, especially when used with cover crops and livestock manure management. CNT, residue cover, and cover crops increase wildlife habitat, numbers, and diversity. NET funds will be used to fund all or part of the following: an Extension No-till Specialist, a Western Nebraska No-till Specialist, and a project administrator; many in-state educational programs, networking activities, opportunities for producers to attend key out-of-state no-till events; and the development and distribution of I&E materials.

Sponsor Name: Prescribed Burn Task Force **Nearest Town:** Ord
Project Name: Central Nebraska Fire Partnership Program **Project No:** 13-131
Amount Requested: \$53,702 **Term of Project Request:** 1 **Review Group:** Rural Habitat

Throughout our existence, the Prescribed Burn Task Force has continually sought opportunities to foster the relationship between regional fire departments and the prescribed fire community. The Central Nebraska Fire Partnership Program provides an opportunity to further develop this relationship and provide technical and financial assistance to these departments as they promote prescribed fire in their district and apply it to their training regimen. In the wake of the wildfires that raged through the middle Niobrara River valley in 2012, many central Nebraska fire departments are reconsidering prescribed fire as a means to reduce excessive fuel loads, reducing the occurrence of destructive wildfires in their districts. Prescribed fire also offers a safe venue for fire departments to practice more contemporary and regionally relevant firefighting techniques that are better suited for areas with heavy eastern red cedar concentrations. Many departments have been considering acquiring their own gear and equipment for prescribed fire. The Central Nebraska Fire Partnership Program is being proposed as a timely opportunity to foster the relationship between regional fire departments and the prescribed fire community. This program will also provide technical and financial assistance to these departments as they promote prescribed fire in their district and apply it to their training regimen. The Central Nebraska Fire Partnership Program involves a three stage process for participating fire departments that includes attending training sponsored by the PBTF, the acquisition of equipment and participation in a live-fire prescribed burn scenario. Because fire departments are ultimately responsible for issuing burn permits, establishing and maintaining successful partnerships between them and the prescribed fire community will yield a multitude of benefits into the future. We estimate between 10 and 25 area fire departments will participate in the Central Nebraska Fire Partnership Program.

Sponsor Name: Quail Forever **Nearest Town:** Multiple
Project Name: Mobile Prescribed Burn Unit & Education Outreach **Project No:** 13-156
Amount Requested: \$80,000 **Term of Project Request:** 1 **Review Group:** Rural Habitat

This application seeks funding to continue the process of building Mobile Prescribed Burn Units (MPBU), forming prescribed burn associations, conducting landowner education outreach events, producing landowner education materials 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 and expanded education regarding conservation programs to reach their management and partnership goals. Despite those management plans, prescribed burning continues to be a difficult management option to apply.

Quail Forever is working closely with the Nebraska Natural Legacy Project (NNLP) to implement its management goals and employs 17 Biologists in the state with Pheasants Forever that are working directly with the plan. The creation of MPBU's and expanding educational outreach is directly benefiting the NNLP by creating a set of tools and events that can quickly be directed to whichever NNLP Biologically Unique Landscape was the focus. The unique aspect of a MPBU 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 limitations of prescribed burning on private lands and is working to overcome them. Five different scenarios are outlined in this continuing partnership that are specifically working to expand outreach education to private landowners and increase the use of prescribed burning on the landscape. The requested Trust Funds will be matched with those of Quail Forever, Pheasants Forever and the US Fish & Wildlife Service to purchase, maintain and administer MPBU's and Continuing Education equipment in strategic locations throughout the state, develop prescribed burn associations and provide expanded and improved landowner educational events and materials across the state.

Sponsor Name: Rainwater Basin Joint Venture **Nearest Town:** Multiple
Project Name: Development of Grazing Infrastructure to Support the RWB Working Lands Initiative **Project No:** 12-166-2
Amount Requested: \$112,838 **Term of Project Request:** 3 **Review Group:** Statement of Intent

If funded, this grant will provide funding that will be leveraged with partner funds to work with local producers to develop infrastructure that will facilitate grazing on abandoned wetlands throughout the Rainwater Basin Landscape. These projects will provide demonstration sites that will showcase both the biological and economic benefits of grazing Rainwater Basin wetlands. As agriculture production increased throughout the Rainwater Basin, many of the remaining wetlands under private ownership were abandoned. With the lack of disturbance these sites transitioned to monocultures of invasive/exotic vegetation (reed canary grass, river bulrush, and hybrid cattail). Once these vegetation communities are established, waterfowl, waterbird, and shorebird use is negligible. Successful implementation of this project will require three stages: 1) producers with abandoned wetlands in high quality wetland complexes will be contacted about this opportunity to integrate grazing back into their operation, 2) funds from this grant will be matched with partner dollars to construct necessary infrastructure (perimeter fence, cross fence, and livestock watering) to facilitate grazing, and 3) landowner tours will be conducted at several demonstration sites throughout the Rainwater Basin Region. These tours will be coordinated by the Nebraska Cattlemen and Sand County Foundation to ensure an open dialogue between landowners and biologists. This dialogue will help both biologists and the producers develop better projects in the future, more clearly understand the win-win for production agriculture and wildlife. Developing infrastructure at these sites will ensure cost effective long term management of these sites through prescribed grazing. This management will significantly increase the habitat value of these wetlands for the estimated 8.6 million waterfowl that depend on these wetlands during spring migration, as well as provide optimal habitat for Whooping Cranes, Buff-breasted Sandpipers, King Rails, and nearly 20 other priority species identified in Nebraska's Natural Legacy Plan that depend on RWB wetlands.

THIS PROJECT WAS FUNDED \$41,419 IN 2012 WITH THE INTENT TO FUND UP TO \$112,838 IN YEAR TWO AND \$87,838 IN YEAR THREE PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE SECOND YEAR REQUEST.

Sponsor Name: Rainwater Basin Joint Venture **Nearest Town:** Seward, York, Geneva,
Project Name: Rainwater Basin Wetland Management for Improved Migratory Bird Habitat **Project No:** 13-120
Amount Requested: \$225,000 **Term of Project Request:** 3 **Review Group:** Rural Habitat

This project will address the management of aggressive and invasive vegetation negatively effecting wetlands in the Rainwater Basin region of south-central Nebraska. Waterfowl and shorebird habitat are negatively impacted by dense, monotypic stands of vegetation including reed canary grass, river bulrush, hybrid cattail, and phragmites. In addition wetland invasion by wood species like cottonwood, willow, and green ash is also negatively impacting habitat. A shortage of funds to pay for needed materials and equipment and to hire contractors for management such as disking, herbicide spraying, prescribed burning, mechanical tree removal, installation of fences, and roto-tilling are limiting these actions on both private and public wetlands resulting in a significant degradation of migratory bird habitat.

Sponsor Name: Rainwater Basin Joint Venture **Nearest Town:** Seward York Geneva CI
Project Name: Wetland Habitat Enhancement and Restoration in Nebraska's Rainwater Basin **Project No:** 13-125
Amount Requested: \$1,250,000 **Term of Project Request:** 3 **Review Group:** Rural Habitat

The "Wetland Habitat Enhancement and Restoration in Nebraska's Rainwater Basin" project will develop unique opportunities to restore and enhance wetland and associated upland habitats in the Rainwater Basin landscape. On private lands, this project will result in implementation of conservation programs that allow producers to integrate these restored wetlands into their operations through haying and grazing. The drought of 2012 has demonstrated the importance of diversified farm operations and the need for additional forage to maintain Nebraska's cattle industry. In addition to providing cattle forage, these wetlands will contain desired habitat conditions for the millions of wetland dependent migratory birds and resident species that rely on this region since grazing and haying are extremely effective wetland management techniques. On public lands, project funds will be used to maximize habitat conditions on these unique and highly valued lands.

A recent assessment by Nebraska Game and Parks Commission highlighted the recreational value of these lands. This assessment suggested over 80,000 hunter days in the RWB by migratory waterfowl and upland bird hunters. In addition to game species, RWB wetlands provide optimal habitat for Whooping Cranes, Buff-breasted Sandpipers, King Rails, and nearly 20 other priority species and vegetation communities identified in Nebraska's Natural Legacy Plan. The Rainwater Basin wetlands and associated uplands do not just provide habitat and recreational opportunities. These wetlands benefit all Nebraskans through the numerous ecosystem services provided by playa wetlands. Research by the University of Nebraska Lincoln and Oklahoma State University has documented groundwater recharge, nutrient cycling, carbon sequestration, and flood storage. Actions funded through this grant will help ensure that, as Nebraskans, we will continue to have reliable groundwater for both agricultural and municipal uses. To successfully implement this project, Rainwater Basin Joint Venture partners have leveraged over \$2.38 million dollars in matching funds.

Sponsor Name: Robert J Hamilton **Nearest Town:** Superior
Project Name: Superior Nebraska Recycling Center **Project No:** 13-186
Amount Requested: \$182,295 **Term of Project Request:** 1 **Review Group:** Waste Management

Superior, Nebraska is a small community located in Nuckolls County in South Central Nebraska. Neither Nuckolls County or Superior currently have recycling programs in place. I am seeking funding to provide this area of 4500+ people with a full scale Recycling Center. I will be able to provide a service of collecting paper, cardboard, plastics, magazines, glass, aluminum, tin and other recoverable materials.

Sponsor Name: Rocky Mountain Bird Observatory **Nearest Town:** Kimball
Project Name: Landowner Stewardship for Grassland Habitat and Bird Conservation in the Kimball Grasslands Biological Unique Landscape **Project No:** 13-143
Amount Requested: \$511,036 **Term of Project Request:** 3 **Review Group:** Rural Habitat

Nebraska Prairie Partners, a partnership between Rocky Mountain Bird Observatory and Nebraska Game and Parks Commission has been successful at conserving grassland and cropland species in western Nebraska for 10 years. Private landowners have been the driving force behind successful conservation for the Mountain Plover (*Charadrius montanus*) (MOPL), a Tier 1 species under the Nebraska Natural Legacy Project and a state “threatened” species. In western Nebraska, MOPL nest on agricultural or disturbed lands. By marking nests, landowners drive tractors around the nests avoiding accidental tillage. Landowners receive payments for such conservation action through state incentive programs. However there is risk of losing those incentives. In 2012, 42% of marked nests were located and marked by landowners, the highest proportion since the project’s inception. To keep this momentum sustainable and to ensure viable populations of MOPL and other grassland obligate birds remains in western Nebraska NPP proposes to 1). Continue marking Mountain Plover nests with landowners, increase the number of landowners participating in the program, and implement strategies for sustainable nest marking after Landowner Incentive Program funds cease 2). Implement management practices to promote nesting habitat in rangeland and Conservation Reserve Program lands 3). Continue with Kimball County Conservation Cooperative (KCCC) meetings; develop a steering committee to guide landowners toward self-sufficiency 4). Evaluate the use and success of raptor nest platforms erected through previous grant activities. 5). Survey Kimball Grasslands BUL for open-capped irrigation pipes, seal openings and install wildlife escape ladders for stock tanks, and 6). Monitor nesting plovers through remote cameras and generate video for future outreach to landowners and schools. We anticipate reaching 800 residents and school children, enrolling an additional 20 landowners and 20,000 acres in our nest- marking program and habitat enhancement projects, and installing 500 pipe caps and ladders to reduce threats to grassland birds.

Sponsor Name: Rocky Mountain Bird Observatory **Nearest Town:** Scottsbluff
Project Name: Enhancing Habitat Management in the Nebraska Panhandle Through Conservation Education **Project No:** 13-191
Amount Requested: \$341,912 **Term of Project Request:** 3 **Review Group:** Education

Nebraska Prairie Partners (NPP), a partnership between the Rocky Mountain Bird Observatory (RMBO) and the Nebraska Game and Parks Commission (NGPC), has outlined conservation goals that, through outreach and education programs, will address threats to at-risk species and to the shortgrass prairie and ponderosa pine habitats of the Nebraska panhandle. With support from the Nebraska Environmental Trust, NPP will continue to support a full-time Wildlife Education Coordinator who will plan and implement education and outreach activities focused on at-risk wildlife and their habitat needs for long-term ecosystem viability. Building on the education work that NPP has achieved over past years, we will continue to implement successful education programs while introducing new programs to augment those already in existence. By continuing and expanding NPP's experiential and placed-based education program, students of all ages will continue to develop awareness of, appreciation for, and decision making skills regarding the biologically unique communities and landscapes in western Nebraska as identified by the Nebraska Natural Legacy Plan. Thirty percent of students in the panhandle are reached biennially through NPP with many receiving multiple environmental education experiences. We will also continue NPP's efforts in outreach to landowners and resource professionals through conservation and education workshops that address current issues in the panhandle. With support from the Nebraska Environmental Trust we anticipate reaching 2,000 students and 150 landowners, resource professionals, and educators in western Nebraska each year. We will continue our successful activities, including educator and landowner workshops, educational bird banding stations, PEEP, nature clubs, family nature programs, an Earth Day Festival, and add new programs: "Pennies for Plovers", RMBO Naturalists and a citizen science project focusing on swift fox. We believe that life-long conservation education curricula targeting K-12 students, resource professionals, and area landowners and ranchers is an integral part of conserving Nebraska's biologically unique landscapes.

Sponsor Name: Sandhills Task Force **Nearest Town:** Taylor
Project Name: Price Ranch Conservation Easement **Project No:** 12-133-2
Amount Requested: \$125,000 **Term of Project Request:** 3 **Review Group:** Statement of Intent

This application seeks funding to complete the acquisition of a conservation easement on approximately 25,450 acres of Sandhill grassland and wetlands in Loup County. In January of 2011, the Price family and the Sandhills Task Force (STF) signed a letter of intent to pursue funding for the easement. A grant application was submitted to the Natural Resources Conservation Service. NRCS determined the ranch qualified for their Farm and Ranchland Protection Program and agreed to fund approximately 50% of the value of the easement. The Price family has agreed to contribute 25% of the easement value. The Sandhills Task Force is currently raising the remaining 25% to complete the purchase. We have allocated a large amount of our funds toward the project, as well as secured a significant contribution from the Nebraska Land Trust. Because of the large size of this easement, additional funds are still needed. The proximity of the property to the headwaters of the Elkhorn River and the Calamus River elevates the importance of this unique landscape. Both the Elkhorn headwaters and the Upper Loup River tributaries have been identified in the Nebraska's Natural Legacy Plan (NNLP) as significant areas of biological diversity. In addition, Audubon has identified the Price ranch as the first privately-owned Important Bird Area (IBA) in Nebraska. Recently, the ranch became a core part of a landowner-driven association focused on enhancing habitat for grassland bird and plant species. This landowner-driven conservation is expected to be the model for similar efforts throughout the Sandhills and around the nation. The Price families' leadership and commitment to sound ranching practices coupled with a holistic approach has resulted in a conservation ethic that will provide a lasting legacy for the citizens of Nebraska. Placement of a conservation easement on this property will ensure that this area remains an intact landscape in the eastern Sandhills.

THIS PROJECT WAS FUNDED \$175,627 IN 2012 WITH THE INTENT TO FUND UP TO \$125,000 IN YEAR TWO AND \$80,000 IN YEAR THREE PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE SECOND YEAR REQUEST

Sponsor Name: Sandhills Task Force **Nearest Town:** Multiple
Project Name: Sandhills Native Ecosystem Project **Project No:** 12-134-2
Amount Requested: \$180,000 **Term of Project Request:** 3 **Review Group:** Statement of Intent

The Sandhills Task Force has been the recipient of several NET grants since the conception of the Trust. The monies received have been strategically used with grants from other sources to complete much needed conservation projects within the Sandhills. By its nature, the region is sparsely populated with large individual ownerships. Within many of these ownerships exists water quality and wildlife habitat concerns that are far from public view and lack local communities to support conservation. Landowners are reluctant to seek government involvement or submit individual grants. The result is stream erosion, overgrazing, and decline in grasslands which remain unaddressed. Our organization is working on behalf of Sandhill landowners to protect natural resources. This grant will be used to build capacity to enhance the entire ecosystem-its abundant surface and ground water, its grasslands, and its wildlife. Our approach will build trust among landowners and conservation groups and address isolated resource problems. Work will be done to complete about 40 projects that restore grassland health and diversity; restore degraded streams and wetlands; increase public awareness of the Sandhills; control of invasive plants (primarily eastern redcedar); and encourage proper use of fire to control tree encroachment of grasslands. To accomplish this work, each project will be field inspected and evaluated according to its resource value and feasibility. Qualifying projects will be surveyed, designed, and completed using matching partnership funds from landowners, Federal and State agencies, and non-profit organizations. Each project will have a 10-year contract with the landowner and other participating partners. Monitoring and follow-up will be conducted by the Sandhills Task Force and its partners (primarily the Fish and Wildlife Service, Nebraska Game and Parks Commission, and Natural Resource Conservation Service). This project addresses the resources of the Sandhills' Biologically Unique Landscapes identified by Nebraska Game & Parks. SANDHILLS TASK FORCE HAS BEEN AWARDED \$1,000,500 THROUGH THREE GRANTS FROM 1997 THROUGH 2011. THIS PROJECT WAS FUNDED \$95,000 IN 2012 WITH THE INTENT TO FUND UP TO \$180,000 IN YEAR TWO AND \$45,000 IN YEAR THREE PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE SECOND YEAR REQUEST.

Sponsor Name: Sargent Irrigation District **Nearest Town:** Milburn
Project Name: Erosion Management and Recovery **Project No:** 13-103
Amount Requested: \$127,764 **Term of Project Request:** 3 **Review Group:** Water

The proposed project would involve constructing a series of Jetties above our Milburn Diversion Dam, in an effort to divert waters of the Middle Loup River, away from a seriously eroding bank and back towards the gates of the Dam. The erosion of the west bank, upstream of our Diversion Dam is becoming closer every year to our Diversion Dam. This is alarming because of the location in which the bank is cutting away, is outside of the original construction of our Dam and any rip rap. If it were to continue, the River would breach our Dam, creating a new path for the River and not allow for our facility to be able to provide irrigation to farmland for over 14,287 acres in Custer and Valley Counties. Furthermore, on the west side of the Dam, is also a Fish-way bypass that was constructed in 2005 by the Nebraska Game and Parks Commission. Sargent Irrigation District received funding through a grant from the Nebraska Environmental Trust in 2006 to stabilize the bank in which this Fish-way exists. This structure allows fish to migrate upstream and enhance fish and wildlife as well as recreation. If action is not taken, the ability for the Fish-way to operate as intended could also be in jeopardy. For these reasons, we feel that this project needs to be a priority, in which we are requesting funding, because it is threatening to the operation of our irrigation project of the Fish-way bypass. In addition, we have contacted Game and Parks as well as the Army Corps of Engineers to receive suggestions, information and permits as needed. With the help of the Nebraska Environmental Trust, we can assure that this project will be complete as needed.

Sponsor Name: Seward County Bridges **Nearest Town:** Seward
Project Name: Independence Landing **Project No:** 13-152
Amount Requested: \$249,511 **Term of Project Request:** 1 **Review Group:** Lake Rehabilitation

Incorporated in 1998, Seward County Bridges is a Nebraska nonprofit corporation and tax-exempt charitable organization under IRS Section 501(c)(3). Bridges participates in projects that have underlying charitable and educational purposes. Its stated purposes are to solicit, obtain and provide resources, financial support, information and services for the benefit of Seward County residents in the areas of education, behavioral health, public health, family services and economic development.

Bridges plays a unique role in the community. It serves as a connecting point for like-minded individuals to form partnerships and implement community betterment strategies. Since its inception, Bridges has been the launching pad for programs such as Seward County Court Appointed Special Advocates, Seward County Team-Mates and Seward County Economic Development. Bridges supports approximately 25 programs and projects yearly include alcohol and drug abuse prevention, suicide prevention, afterschool clubs and recycling.

Independence Landing is collaboration between Bridges, the City of Seward, Nebraska Game and Parks Commission, University of Nebraska Extension in Seward County, Seward County Economic Development and private donors. The project will dredge, drain and restore a sustainable aquatic wildlife habitat at the City of Seward pond. It builds a fishing pier and adds handicap-accessible features. The project achieves: enhancing a community habitat emphasizing native and ecologically appropriate plantings which provide food and shelter for wildlife; taking action to preserve a water body from degradation and depletion; and providing a recreational opportunity for the county's 16,750 residents, with particular focus on the elderly and physically-challenged. The project includes an educational component to educate residents about the benefits of harvesting rainwater, utilizing native plant species and wildlife recreation maintenance.

The estimated project cost is \$400,000. We are seeking \$249,511 from the trust for geotechnical services, earthwork, rain gardens, fish habitat, fishing jetties, excavation, shore stabilization, landscaping, education and fiscal agent services.

Sponsor Name: South Sioux City, City of **Nearest Town:** South Sioux City
Project Name: Crystal Cove Educational Wildlife Observatories **Project No:** 13-127
Amount Requested: \$47,000 **Term of Project Request:** 1 **Review Group:** Education

The City of South Sioux will enter an agreement with Iowa State College to do this project. The architectural students will design and build a floating fishing observation room that is compatible with and can be connected to the existing city fishing dock. They will also design a wildlife observation lookout to be used for viewing all types of wildlife including, birds, deer, etc. that live in and around this beautiful park having both wooded and wetland areas.

Sponsor Name: Southwest Weed Management Area **Nearest Town:** McCook/ Benkelman
Project Name: Republican River Riparian Project VI **Project No:** 13-149
Amount Requested: \$396,900 **Term of Project Request:** 1 **Review Group:** Rural Habitat

This project will continue to build upon the current work of the Western Republican Riparian Improvement Project. It will also continue to compliment the work completed on eastern half of the Republican River by the Twin Valleys Weed Management Area. With the eventual completion of the Upper Republican River NRD Augmentation pipeline, as well as the planned use of Colorado's Republican River Augmentation pipeline, preservation and restoration of our vital river corridors becomes even more important. SWWMA plans on continuing to restore the riparian corridor to a condition better suited to increased biologic diversity. This will most certainly return the river bed to a more water friendly condition. We feel that it is important for SWWMA to continue to demonstrate its leadership role in riparian restoration as well as water conservation. Southwest Weed Management is also seeing a return to the drought conditions that precipitated the need for river restoration in the early 2000s. With reduced river flows and greater demands for dwindling water supplies, invasive species continue to place stress on our already fragile river systems. Southwest Weed Management plans to continue removing invasive species from the channel of the Republican River as well as its tributaries. We have also expanded the scope of our efforts to include the flood plain. It is our belief that removing this excess vegetation in these vital areas aids in increased water flows and a healthier stream bed. Southwest Weed Management Area was 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 river channel and red cedar and Russian olive within or contiguous to the flood plain.

Sponsor Name: Spencer Area Development Corporation **Nearest Town:** Spencer
Project Name: Spencer Pond Renovation Project **Project No:** 12-161-2
Amount Requested: \$121,659 **Term of Project Request:** 2 **Review Group:** Statement of Intent

The goal of the project is to rejuvenate the wildlife habitat of a 9.7 acre pond by dredging to an acceptable depth in order to create sufficient capacity to sustain fish and other aquatic wildlife. In addition the renovation will enhance native plant species which will support other native wildlife both in and around the pond. The pond will have features that create a natural environment as well as include erosion control features so that the lake will last indefinitely for many years to come. Grant funding of \$322,835 is sought for 2012 and \$112,954 for 2013 for a total of \$445,789. Total project costs are \$924,672 with significant contribution by Boyd County and Spencer Development Group. In addition to the proposed lake renovation future plans include walking trails, park amenities and greenery, as well as access to the fairgrounds and athletic fields immediately to the east of the property. The earthen dam and road structure on the south end of the property have eroded badly and with no remedial attention would continue to deteriorate. The Boyd County Board of Supervisors are responsible for maintaining the roadway and culvert and they will be contributing \$418,884 to the project. A partnership letter confirms the County's commitment. The lake renovation and dam repair is estimated to cost \$924,672 and would be completed in 2012 and 2013. It addresses removal and replacement of the roadway and box culvert as well as the lake dredging and installation of features that promote aquatic wildlife and control erosion. An amount of \$140,000 of cash and in kind contributions are to be provided by the sponsor. 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. Many canoeists, hunters, campers and fisherman travel through this area on their way to recreational areas on the Niobrara River. This project would provide another recreational amenity along the way. A resolution was adopted by the Village of Spencer confirming that they will take ownership of the pond area and will be responsible for the long term maintenance. A SIMILAR PROJECT WAS SUBMITTED IN 2008, 2009, AND 2010 BUT NOT FUNDED DUE TO PLACEMENT ON THE RANK ORDER LIST. THIS PROJECT WAS FUNDED \$284,551 IN 2012 WITH THE INTENT TO FUND UP TO \$121,659 IN YEAR TWO PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE SECOND YEAR REQUEST

Sponsor Name: St. Augustine Indian Mission

Nearest Town: Winnebago

Project Name: Outdoor Classroom

Project No: 13-144

Amount Requested: \$15,000

Term of Project Request: 1

Review Group: Education

St. Augustine Indian Mission (SAIM) School will develop an Outdoor Classroom to be used by the 120+ students of the K-8 St. Augustine Indian Mission School, as well as the students of the Winnebago Public School, located next to SAIM. The community of Winnebago, where the schools are located, will also have access to the classroom. The Classroom will be located on the SAIM campus, and will encompass approximately 10,000 square feet. Different learning areas will accommodate the educational needs and styles of children of all ages. The design includes a gathering area, garden area, nature art area, building area, open area for larger gatherings, a music and movement area, project area, adventure platforms, construction area and a water and fire feature. NET funding is sought for site work and planters that will promote soil management; rain barrels that will address surface/ground water usage; signage that will provide educational information about habitat.

Sponsor Name: The Groundwater Foundation

Nearest Town: Multiple

Project Name: Bridging the Gap in Source Water Protection

Project No: 12-163-2

Amount Requested: \$42,559

Term of Project Request: 3

Review Group: Statement of Intent

The major source of Nebraskans' drinking water is groundwater. The quality of our drinking water is largely dependent on our actions; while some contamination occurs naturally the majority of source water pollution is due to human actions. To reverse the paradigm the Groundwater Foundation (GF) proposes the "Bridging the Gap in Source Water Protection" project. The project will foster groundwater protection and conservation actions in Nebraska homeowners. It will create awareness of best management practices by showcasing efforts with proven environmental benefits and will provide homeowners with tools to replicate the practices. The GF will accomplish this by selecting proactive sites (from the GF's vast network of partners and program participants) where the GF will incorporate educational activities into events. By proactive sites the GF intends businesses, places and communities that have implemented water conservation and protection efforts into their practices. For example the GF will provide workshops for employees at proactive businesses (i.e. training sessions to employees at Assurity Life Insurance Company to highlight efforts that Assurity has adopted to protect water quality and quantity) or educational booths at site events (an example is incorporating a Test Your Well opportunity at a Spring Creek Prairie event, since this is a practice that Spring Creek Prairie utilizes to monitor their water quality). The GF will also develop educational materials; handouts for site visitors, online resources and a smart phone app. The GF anticipates participating in up to 40 site events (workshops, training sessions, educational/activity booths), therefore estimates directly working with 5,000-8,000 people. The GF anticipates distributing the handouts to approximately 25,000 visitors and the online resources will reach an unlimited audience. In-kind services are secured from ISL company (website development company) and Trust funds will be matched by additional funding sources. THIS PROJECT WAS FUNDED \$52,784 IN 2012 WITH THE INTENT TO FUND UP TO \$42,559 IN YEAR TWO AND \$23,203 IN YEAR THREE PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE SECOND YEAR REQUEST

Sponsor Name: The Groundwater Foundation **Nearest Town:** Multiple
Project Name: LEAP into Groundwater **Project No:** 12-164-2
Amount Requested: \$74,895 **Term of Project Request:** 3 **Review Group:** Statement of Intent

The Groundwater Foundation (GF) is requesting funding from the Nebraska Environmental Trust for a collaborative project with Girl Scouts Spirit of Nebraska. The GF is a nonprofit organization that educates people and inspires action to ensure sustainable, clean groundwater for future generations. The GF has over 25 years of experience in educating youth about groundwater. Girl Scouts Spirit of Nebraska is the largest girl serving organization in Nebraska with more than 25,000 girl and adult members. The project, to integrate experiential-based learning activities about water into the Girl Scouts program, is an opportunity for the GF to utilize its expertise and reach a vast new audience across the state. The timing is ideal; Girl Scouts USA has developed a new series of books dedicated to the environment. The series addresses important issues facing our environment, but it does not offer the opportunity for hands-on learning, nor for girls to take action in their local community. The Girl Scouts Spirit of Nebraska asked the GF to develop tools to integrate these components into the new environmental series. The GF has developed a three-year comprehensive plan to integrate activities that will complement the structure of the Girl Scouts. The GF is requesting funding from the Nebraska Environmental Trust towards implementation of this plan. The GF has secured matching funds from the Nebraska Department of Environmental Quality. The project while initially will be developed for the Girl Scouts Spirit of Nebraska, has the potential to be expanded to Girl Scouts USA and will be explored during this project.
 THIS PROJECT WAS FUNDED \$59,075 IN 2012 WITH THE INTENT TO FUND UP TO \$74,895 IN YEAR TWO AND \$48,700 IN YEAR THREE PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE SECOND YEAR REQUEST.

Sponsor Name: The Groundwater Foundation **Nearest Town:** All
Project Name: Growing Groundwater Awareness in Nebraska Phase II **Project No:** 13-150
Amount Requested: \$120,000 **Term of Project Request:** 3 **Review Group:** Water

Groundwater is Nebraska's most important natural resource; a clean sustainable supply is critical to continued prosperity in our state. Yet there is much misunderstanding about the resource and how our actions impact its availability to sustain life, livelihood and the natural environment. The Groundwater Foundation is requesting funding for phase II of the Growing Groundwater Awareness in Nebraska (GGAN) program to effectively expand the groundwater conservation and protection work to more communities. During phase one the program has done much more than generate awareness in the ten target communities, it has generated awareness across the state and it has positioned the target communities to continue long-term protection efforts. Phase II of the program will continue the statewide awareness building and bring long-term protection and conservation work to 10 additional Nebraska communities. What is especially advantageous is that the tools and resources have already been developed; therefore the continued work will not have costs associated with development. Additionally, the Groundwater Foundation has had numerous communities recognize how the program would further their efforts to protect their water. These communities are dealing with non-point source pollution, point source pollution or quantity issues.
 Funding from the Nebraska Environmental Trust will enable the GGAN program to take place in 10 communities. It will assist them to engage the public and set up the structure to implement long-term protection and conservation efforts well past the time frame of the grant. (These desired outcomes have been verified by the work of the target communities in phase I of the program). The Groundwater Foundation has secured the continued support of its media partners (KOLN-KGIN 10/11, KRVN and Nebraska Educational Television and Radio), and has requested matching funds from the Nebraska Department of Environmental Quality.

Sponsor Name: The Groundwater Foundation **Nearest Town:** Multiple
Project Name: Hydrogeology: Water for the World **Project No:** 13-151
Amount Requested: \$116,250 **Term of Project Request:** 3 **Review Group:** Water

The Groundwater Foundation is seeking funding for Hydrogeology: Water for the World, a science event that challenges secondary school students to research and identify solutions to eliminate or mitigate groundwater degradation. The launch of Hydrogeology: Water for the World will be through the Science Olympiad program (a national science competition for secondary students). The timing is especially exciting since the University of Nebraska, Lincoln will be hosting the 2015 national tournament. As such, Hydrogeology: Water for the World will be developed and piloted in secondary schools in Nebraska. The experience gained by Nebraska students will serve to promote implementation of the event by students across the nation. This will set the stage for it to be a widely competed and successful event at the 2015 national tournament. This is an excellent opportunity to engage local secondary students in investigative learning about groundwater, have them apply the knowledge in order to seek solutions to pollution and other threats and gain an understanding of further academic and career opportunities. Therefore the project will effectively reach tomorrow's decision-makers, with needed education about groundwater and the impacts our actions have on its quality and quantity. NET funds will be used for the development of the science competition event, piloting of the event in up to 30 teams in Nebraska, developing training materials and resources for coaches as needed to ensure the event is widely competed at the national tournament in Nebraska and remains in the lineup for tournaments well beyond the timeframe of the grant. The Groundwater Foundation has proposals for additional funding into NDEQ (319 funds), Lincoln Community Foundation to cover work done in Nebraska. The Robert B. Daugherty Foundation is interested in the project and has requested a grant proposal; this funding would be used primarily for work outside of the state.

Sponsor Name: The Nature Conservancy **Nearest Town:** Multiple
Project Name: Learning from the 2012 Niobrara Fire **Project No:** 13-176
Amount Requested: \$333,446 **Term of Project Request:** 3 **Review Group:** Rural Habitat

The July 2012 wildfires that burned more than 76,000 acres in north-central Nebraska have created an unprecedented set of opportunities: to learn about wildlife; to study the impacts of controlled burns on plants and wildlife; to train firefighters; and most importantly, to apply what is learned to transform future management practices across the state. Over three years, the Conservancy will: 1) Train 120 fire personnel from the private sector, from federal and state government, and from non-governmental organizations through fire training exchanges. 2) Through the course of training, safely execute prescribed fires (approximately 10,000 acres per year over three years for a total of 30,000 acres, weather conditions permitting) in the Middle Niobrara and the Central Loess Hills to maintain ecological structure and function for the management of native species through fire training exchanges. 3) Integrate a host of stakeholders to conduct community outreach and promote best fire practices during the fire training exchanges. 4) Convene researchers from interested colleges and universities to identify the most pressing evaluation questions, coordinate efforts, share information, and develop short and long-term studies. In years two and three, research will begin. The information will be collected and distributed by The Nature Conservancy's Fire Learning Network for anyone to learn from and use. 5) Share images from six time-lapse cameras to be installed on the Niobrara Valley Preserve to enhance research efforts and to educate the public about the positive ecological impacts of fire.

These activities will result in: better habitat for wildlife, including several species at risk; better management on land used by the public; pockets of prescribed fire expertise across the state; greater understanding of the effects of wildfire that will inform future land management; a better informed citizenry; and, ultimately, prevention of catastrophic wildfires.

Sponsor Name: The Transit Authority of the City of Omaha d/b/a Metro **Nearest Town:** Omaha
Project Name: Enhanced Paratransit (MOBY) Service Using Hybrid Sedans **Project No:** 13-184
Amount Requested: \$52,000 **Term of Project Request:** 1 **Review Group:** Air Quality

The American Disabilities Act (ADA) mandates federally funded public transit systems operate complementary paratransit service for persons who cannot independently use fixed route service because of a disability.

Metro intends to procure (5) hybrid sedans in order to provide quality, environmentally friendly paratransit service while working with local partners to promote air quality in the Omaha area which is close to reaching federal air quality non-attainment status.

MOBY is an advance reservation curb-to-curb transportation service for residents of the metropolitan area and American with Disabilities Act (ADA) eligible persons visiting within Omaha's city limits, who, as a result of their disabilities are unable to use conventional fixed-route service. Metro currently operates (23) cutaway paratransit vans and schedules taxi cab rides, when required by capacity constraints, for MOBY service.

The introduction of hybrid sedans to this fleet would allow Metro to dramatically increase fuel economy and reduce the emission of pollution and greenhouse gases in the Omaha area. Each of Metro's MOBY service vehicles is driven an average of 40,000 miles per year. The addition of just (5) hybrid sedans to this fleet would allow Metro to use an estimated 26,048 fewer gallons of gasoline/diesel fuel per year, create 253 fewer tons of greenhouse gases annually, and release 111 fewer pounds of pollution per year.

This project will be joint-funded with a formula capital grant from the Federal Transit Administration. Wheelchair accessible service will continue to be available via the cutaway vans and Metro will utilize its advanced scheduling software to efficiently schedule MOBY rides while increasing productivity and user convenience. Many studies have shown that elderly and disabled paratransit users who are ambulatory prefer the convenience, comfort and ease of access to sedans.

Sponsor Name: Tri-Basin Natural Resources District **Nearest Town:** Bertrand
Project Name: Cottonwood Ranch Rainwater Basin Wetland Restoration **Project No:** 13-141
Amount Requested: \$60,479 **Term of Project Request:** 1 **Review Group:** Rural Habitat

The Tri-Basin Natural Resources District (NRD) and its partners will facilitate the restoration of approximately 160 acres of Rainwater Basin wetlands and native prairie uplands on private lands in Phelps County. This restoration provides the opportunity to restore portions of two Rainwater Basin wetlands in southcentral Nebraska. The Rainwater Basin region is recognized as providing critical habitat to millions of migrating birds, particularly during the spring migration period when forage and resting areas are most limited. The end goal of this project will be to restore habitat to benefit wetland and upland species of wildlife at a local and continental scale, and produce a sustainable project by reducing soil erosion, limiting encroachment of undesirable plant species, and protecting the land with a conservation easement.

To restore the property, partners will restore hydrologic function to the wetland areas to the greatest extent possible by removing sediment, filling concentration pits built for irrigation and drainage, filling ditches, smoothing the soil surface to a natural grade, and promoting native plant species. The NRD and partners will also restore the uplands by removing nonnative plant species, tree removal, and planting native species of grasses, forbs, and shrubs. Grazing is a desirable management tool in this region of Nebraska that helps to keep native grasslands and wetlands healthy. To promote grazing, fencing and livestock watering facilities will be installed. The NRD and its partners need the Trust's assistance in funding the aforementioned aspects of the restoration process. A perpetual conservation easement will ensure that this investment and this habitat will be protected forever.

Sponsor Name: Tri-Trails District, Longs Peak Council, Boy Scouts of America **Nearest Town:** Crawford
Project Name: Fort Robinson Tree Replant **Project No:** 13-106
Amount Requested: \$15,000 **Term of Project Request:** 1 **Review Group:** Education

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 2014 replant.

Sponsor Name: Twin Valley Weed Management Area **Nearest Town:** Oxford, Alma, Franklin,
Project Name: Eastern Republican and Little Blue Riparian Improvement Project **Project No:** 13-113
Amount Requested: \$568,000 **Term of Project Request:** 1 **Review Group:** Rural Habitat

The Eastern Republican and Little Blue Riparian Improvement Project continues ongoing efforts to control invasive riparian plants along the Republican River and its tributaries and adds similar efforts along the Little Blue River within six of the Twin Valley Weed Management Area (TVWMA) counties. Control efforts are conducted in a holistic manner, utilizing a full range of mechanical, biological and chemical tools to eradicate invasive species and control vegetation in stream channels. TVWMA has undertaken this project over recent years to improve stream flow along the Republican River to help enable Nebraska to meet its water delivery obligations to Kansas under the 1943 Republican River Compact, to restore and maintain a healthy river system and prevent wasteful degradation of water resources, and to increase public awareness of the best practices that can be used to properly manage riparian lands. In addition, TVWMA and its partner organizations are implementing a plan, with input from landowners adjoining the river, for future river maintenance, and we are this year adding a project element to further improve riparian habitat by planting beneficial species in the project area.

Sponsor Name: University of Nebraska - Board of Regents **Nearest Town:** Statewide
Project Name: Conserving Water Through Informed Irrigation Management **Project No:** 11-150-3
Amount Requested: \$30,000 **Term of Project Request:** 3 **Review Group:** Statement of Intent

Conserving water through irrigator education is the focus of this proposed project. Conservation will be accomplished through a water management educational program by providing irrigators and water managers with the knowledge and skills needed to obtain maximum benefit from water applied to crops. Ongoing programs that have reached a limited audience have demonstrated that irrigation applications can be reduced by at least two inches annually when the irrigator uses scientific methods for managing irrigation applications. If a similar average savings can be realized across all irrigated acres in Nebraska, the total water applied (and volume pumped) could be reduced by more than 1.4 million acre-feet annually; for comparison this potential savings is equal to 82% of the total capacity of Lake McConaughy. However, these ongoing programs have reached a limited number of irrigators; ways to reach a broader audience are needed. A partnership of the University of Nebraska Extension in the Biological Systems Engineering Department and the Nebraska center pivot manufacturers, Lindsay Corporation, Reinke Manufacturing Company, Inc., T-L Irrigation Company, and Valmont Industries, Inc., provides access to a larger audience of irrigators through the manufacturers' dealer networks. Further, by holding an irrigation school at Husker Harvest Days the partnership will also have access to an audience not previously reached, and the manufacturers will be able to reinforce the learning by providing supplemental information at their exhibits. Additionally, four, two-day irrigation short courses providing more in-depth management education will be offered each year at selected locations across Nebraska. Areas with ongoing water management challenges, e.g., the Republican River Basin and the Platte River Basin upstream of Kearney, will receive special attention. This project will rely heavily on input from the industry partners, the center pivot manufacturers, to determine the correct level of technical content and to reach previously unreached irrigators.
 THIS PROJECT WAS FUNDED \$215,000 IN 2008.
 THIS PROJECT WAS FUNDED \$30,000 IN 2011 WITH THE INTENT TO FUND UP TO \$30,000 IN YEAR TWO AND \$30,000 IN YEAR THREE PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE THIRD YEAR REQUEST.

Sponsor Name: University of Nebraska - Board of Regents **Nearest Town:** Wood River
Project Name: Developing Adaptive Prairie Management Using Monitoring Data **Project No:** 11-175-3
Amount Requested: \$10,000 **Term of Project Request:** 3 **Review Group:** Statement of Intent

Remnant and restored prairies are a key habitat upon which a diverse collection of native plants and animals depend. A variety of techniques by a variety of agencies and private land owners have been used in Nebraska to protect remnant native prairies and to restore abandoned fields; a number of these efforts have been funded by the Nebraska Environmental Trust. However, very little effort has been made to evaluate the success and cost-effectiveness of different management techniques. Thus we don't know if our restorations efforts are maximizing the potential of these sites. In addition, sites differ strongly in productivity, species composition, history and soil and we do not know the importance of these factors in determining grassland quality. Protecting and restoring grasslands is essential as these are key habitats for endangered species and a sustainable resource for livestock operations. To that end we must evaluate our restoration efforts so that Nebraskans can adopt economical and effective management techniques. We will monitor vegetation dynamics using a simple, cost-effective protocol in order to evaluate management techniques in use on prairies in critical wildlife habitats along the Platte River valley. Our recommendations will be disseminated to governmental agencies, non-profits, and private ranchers and farmers managing prairies in Nebraska.
 THIS PROJECT WAS FUNDED \$25,000 IN 2011 WITH THE INTENT TO FUND UP TO \$10,000 IN YEAR TWO AND \$10,000 IN YEAR THREE PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE THIRD YEAR REQUEST.

Sponsor Name: University of Nebraska - Omaha - Board of Regents **Nearest Town:** Omaha
Project Name: Glacier Creek Watershed Initiative **Project No:** 12-122-2
Amount Requested: \$442,000 **Term of Project Request:** 3 **Review Group:** Statement of Intent

The Glacier Creek Watershed Initiative will purchase approximately 105 acres (the West Watershed) to extend the western boundary of Allwine Prairie so as to incorporate the entire upper drainage of the Glacier Creek watershed. This purchase, in conjunction with purchase of the north viewshed which is presently in progress, will create a truly unique prairie preserve that encompasses an entire drainage which, after restoration, will encompass a significantly expanded diversity of native terrestrial and aquatic ecosystems. A portion of the cost of land acquisition is being requested from the Nebraska Environmental Trust with this proposal. Because of its location within 30 minutes of the Omaha metropolitan area, the expanded preserve will provide unique regional educational opportunities for local and watershed-level environmental experience for individuals, classes, and organizations. From a broader perspective, this initiative will take land once preliminarily platted for development and (1) restore natural upland and aquatic features and vegetation which will also (2) reduce soil erosion, (3) improve local surface water quality, and (4) reduce water flow into the Big Papillion Creek while also (5) ensuring the long-term viability of a dynamic preserve with diverse habitats for wildlife and with regional opportunities for environmental education for future generations.

THIS PROJECT WAS FUNDED \$390,000 IN 2012 WITH THE INTENT TO FUND UP TO \$442,000 IN YEAR TWO AND \$340,000 IN YEAR THREE PENDING AVAILABLE FUNDS AND SATISFACTORY PROGRESS. THIS IS THE SECOND YEAR REQUEST

Sponsor Name: Upper Loup Natural Resources District **Nearest Town:** Thedford
Project Name: Groundwater Irrigation Management Program **Project No:** 13-101
Amount Requested: \$100,000 **Term of Project Request:** 1 **Review Group:** Water

Funding is being sought from the Environmental Trust to help provide a portion of the monies needed to offer flowmeters and crop water sensors to irrigators. Having this technology in place will help to increase understanding of groundwater irrigation occurring in the Upper Loup Natural Resources District (ULNRD) as well as help irrigators to conserve water by managing water application practices. This project addresses several of the trust's priorities in regards to fostering best management practices, conserving water and efficiently and effectively managing water use. There is limited information available regarding the total amounts of irrigation taking place across the District. Due to the increasing demands of water for irrigation it is important that long-term water usage is managed in a sustainable and equitable way. Effective groundwater irrigation management begins with accurate water use measurements. Quantifying the amount of groundwater utilized for irrigation is essential for water and nitrate management. Currently data is manually recorded by farmers resulting in irregular reporting and is subject to human errors. We are looking at the Trust to help provide funds for the flowmeter portion of this project. The placement of flowmeters on wells, which qualified District personnel will read, will ensure the accuracy of the data collected. The ULNRD is also involved with the Elkhorn Loup Modeling (ELM) Project, which heavily relies on irrigation pumping figures and having accurate data is absolutely imperative to ensuring the accuracy and replicability of the numerical groundwater model. The ULNRD wants to use the best scientifically-based management practices to deal with current and future ground-water management needs and feels that this project will provide key information when developing groundwater policy.

Sponsor Name: WasteCap Nebraska **Nearest Town:** Multiple
Project Name: Zero Waste Community Planning **Project No:** 13-172
Amount Requested: \$309,363 **Term of Project Request:** 2 **Review Group:** Waste Management

This project will educate local community leaders and businesses about the need for a Zero Waste approach in Nebraska. It will create a template for Zero Waste education and outreach to community leaders. Four strategies will be implemented to provide sufficient data, resources and support for this project in communities: 1.Develop a baseline comparison study of various solid waste management models and infrastructure in selected Nebraska communities and their impact on participation rates.. A case study and fact sheet will be created for each community. 2.Meet face to face with elected officials, community and business leaders in up to five communities to educate about Zero Waste management strategies. Following these meetings, several stakeholders will be brought together for regional training on Zero Waste Strategies. 3.Development and implementation of a large-scale educational campaign for the general public. Local volunteers will be trained to share the Zero Waste message at businesses, schools and other public gatherings. The project will also include a workshop and Zero Waste Certification program for local community and business leaders. 4.Work with one community to begin the Zero Waste planning process for the 10-year Bridge Strategy to Zero Waste. This will include determining infrastructure needs, educational needs, and potential funding sources for planning, education and equipment. Write a case study and develop a planning template on this project.

Sponsor Name: Water Vulnerability International, Inc. **Nearest Town:** Statewide
Project Name: Statewide vulnerability assessment of groundwater to nitrate: Improving best management practices **Project No:** 13-129
Amount Requested: \$195,000 **Term of Project Request:** 2 **Review Group:** Water

Nebraska’s groundwater is vulnerable to nonpoint-source (NPS) contamination from natural and anthropogenic sources. Nitrate (NO3–) is the most ubiquitous NPS contaminant of groundwater resources in Nebraska and worldwide, and poses well-known ecological and human-health risks. Health concerns, including methemoglobinemia or “blue baby” disorder, spontaneous abortion, and increased risk of non-Hodgkins lymphoma, have been linked to drinking water with nitrate concentrations as low as 2.5 to 4 mg/L (nitrate as nitrogen). The annual cost for U.S. water treatment to meet federal nitrate standards has been estimated in the hundreds of millions to billions of dollars. Although considerable management efforts from local land owners to Natural Resource Districts and other State and Federal agencies have helped to reduce the loading of nitrate to groundwater, NPS nitrate contamination of groundwater remains a substantial problem that will likely increase in the future because of nitrate that is already present in the subsurface from natural sources and previous land-use activities. To help preserve and restore Nebraska’s groundwater from degradation due to nitrate contamination, the proposed project will use publically available data to build and disseminate groundwater vulnerability models and maps that delineate the probability of detecting elevated NPS nitrate in the used groundwater resource that supplies water to irrigation, drinking, livestock, and ecosystems. The proposed implementation plan is based on sound science and extensive previous experience developing similar groundwater vulnerability products that have proven to be valuable in designing and fostering best management practices across other regions of the High Plains and U.S. The dissemination of these products, including an improved understanding of the governing natural and anthropogenic factors of groundwater vulnerability to NPS nitrate contamination in Nebraska, is critically important to develop effective local to statewide management practices and policy to protect groundwater as a clean and safe source of water across Nebraska.