

Upper Big Blue

NATURAL RESOURCES DISTRICT

Programs BOOK 2022





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Introduction



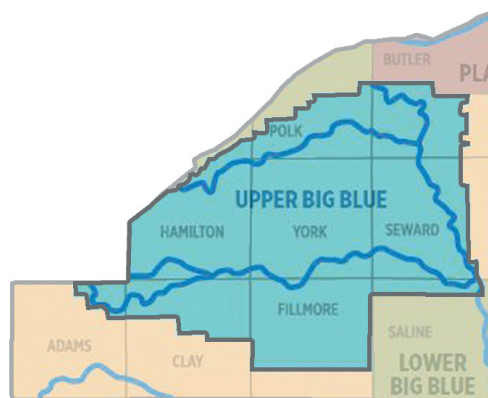
This book is prepared to profile and provide a description of the programs administered by the Upper Big Blue Natural Resources District to conserve and develop our natural resources. The district covers all of York County and parts of Adams, Butler, Clay, Fillmore, Hamilton, Polk, Saline and Seward Counties.

Within the NRD, specific programs fall under the supervision of individual departments. These departments are the Water Department, Projects Department, Forestry Department, Administrative Department and the Public Relations Department, with the General Manager and Assistant General Manager overseeing the departments. Because of the intricacies and the inter-relational cohesiveness of managing natural resources, there can be areas of overlapping function and responsibility. For instance, many land treatment programs contribute to surface and/or ground water quality but are not listed under the Ground Water Management Area section. Additionally, many programs that affect water quantity also impact water quality.

The Upper Big Blue NRD works closely with local, state and federal agencies to ensure coordination of conservation efforts. A key agency is the Natural Resources Conservation Service (NRCS). The NRCS often provides planning, technical aid, and inspections for joint projects and programs. NRCS field offices are located in Aurora, Clay Center, David City, Geneva, Hastings, Osceola, Seward, Wilber and York.

At the state level, the NRD frequently works with the Game and Parks Commission, Department of Agriculture, and the Department of Environment and Energy. Under some programs, the district works with both state and federal agencies.

Funding for natural resources conservation may be available to a landowner directly from the federal government. Most of these programs require a landowner to sign a contract of varying duration. Through the Environmental Quality Incentives Program (EQIP)—the Farm Services Agency and NRCS—can target locally-identified conservation concerns.



Introduction



Availability of funding for this program varies considerably from county to county, depending on several factors. (Please contact your county NRCS office for local Information. Other federal programs include the Conservation Reserve Program (CRP) for wildlife habitat improvement and soil erosion control, the Wetland Reserve Program (WRP), Partners for Wildlife for wildlife habitat enhancement and the USDA-WHIP for habitat development. (Contact the Farm Service Agency for information about CRP, the NRCS for information about the WRP and USDA-WHIP, and the U.S. Fish and Wildlife Service for information about Partners for Wildlife.)

State-sponsored conservation programs include the Nebraska Game and Parks Commission's Private Lands Wetland Initiative for wetland development. The Wildlife Shelterbelt Program, also administered by the Nebraska Game and Parks Commission, encourages shelterbelt planting. Each of these programs requires the landowner to sign a contract of varying duration.

The district also works with non-governmental groups. In addition to joint programs with Natural Resources Districts like Corners for Wildlife, Pheasants Forever and Ducks Unlimited programs provide incentives for creating habitat.

About the District

More than 56,000 citizens rely on the Upper Big Blue Natural Resources District (NRD) to provide direction and assistance in the wise use, conservation and development of our soil, water and related natural resources.

The NRD is dedicated to the conservation and careful development of natural resources to serve everyone's needs. The NRD system was created in 1972, following Nebraska legislation which consolidated 154 statewide special-purpose districts into 24 NRDs. The NRDs correspond to major river basins in Nebraska. NRDs carry the names of these rivers, hence the Upper Big Blue NRD is named after the uppermost portion of the Big Blue River.

NRDs are organized as governmental sub-divisions of the state. Local control is provided by a board of directors. At the Upper Big Blue NRD, a 17-member board of directors establishes policy. These directors are placed in office through the general election process and represent the community's interests in conservation.

Across the state, NRDs offer a major source of assistance to landowners in conservation and natural resources management. Not only do the board members make decisions about conservation programs at the district level, they also bring a wealth of local judgment and experience when adapting state and national programs to local situations. The NRD staff at York and the field clerks at the Natural Resources Conservation Service (NRCS) offices in each county are responsible for implementing NRD policy and regulations.

A major source of funding for projects, programs, and administration comes from a levy on taxable property within the district. Other sources include federal and state funding, as well as program fees. Certain projects may also be funded with a portion of other local, state, private and/or federal revenues. The NRD is empowered to coordinate land and water management programs with local, state and federal conservation organizations and other governmental units.

Introduction



District Responsibilities

The Upper Big Blue Natural Resources District is a multipurpose, local-unit of Nebraska government for the management, development and protection of the soil and water resources of the district. By structure, it is a political subdivision of the state. Basic responsibilities of the district, authorized by statute, are:

- Development, management, use, and conservation of ground water and surface water
- Soil conservation
- Erosion prevention and control
- Flood prevention and control
- Pollution control
- Water supply for any beneficial uses
- Prevention of damages from flood water and sediment
- Development and management of recreational and park facilities
- Forestry and range management
- Development and management of fish and wildlife habitat
- Drainage Improvement
- Solid waste disposal

A “special” project may be established by the board of directors by a majority vote. There are no limitations on the types of projects that may be termed ‘special.. Generally, a special project may be utilized for a particular need when no district program exists to address the situation. Special projects will be considered on a case-by-case basis, each on its own merit, providing that they fall under the guidelines and purposes of the district.

Funds Available to Cooperators

- NRD Cost-Share: Cost-share is determined separately for each case.
- State Cost-Share: Depends on type of project
- Federal Cost-Share: Depends on type of project

Sources of Funds

Funds come from local tax revenues and/or state and federal monies depending on the specific project.

Projects



Projects Process

All requests for new district projects, whether outdoor classrooms, wildlife habitat contracts, large flood control dams, recreation or other projects, are generally handled in the same manner. More complicated projects may require extensive efforts and, of course, additional time to achieve completion. The process starts with an idea presented to the district staff, as shown below:

1. An idea is presented to district staff.
2. The staff makes an initial investigation.
3. The staff prepares a preliminary feasibility report.
4. A committee of NRD board members adopts or declines the project. If adopted, the committee recommends the project to the entire board for consideration.
5. The board either declines or adopts the project.
6. The staff completes detailed planning.
7. The committee reviews, suggests changes and recommends the plan to the board.
8. The board reviews, suggests changes and approves the plan.
9. The board considers funding. Large projects could be funded with only NRD funds, or cost sharing with others, and could include funds from multiple sources.
10. The staff makes detailed construction drawings.
11. A contractor is hired.
12. Construction or implementation begins.
13. The board accepts work and authorizes payments.

Coordination with the landowners involved and affected cities, counties and other governmental entities and agencies takes place throughout the planning, construction and operation phases of a project. The NRD staff makes recommendations to the board of directors with respect to:

- Program criteria established by the board
- Feasibility
- Design
- Funding
- Construction
- Payments
- Operation and maintenance

All final decisions, including funding of cost-share projects, acceptance of contracts and the decision to build specific projects are made by the NRD's board of directors.

Project Funding

The district raises its locally-collected funds from a levy on all taxable properties throughout the district. Each NRD is limited by Nebraska law to a total tax of 5.5 cents per \$100 actual valuation for the general and sinking funds. The Upper Big Blue NRD's current levy is well below the maximum authorized by law. The monies raised from local taxes are used for program and project funding, as well as administration. Depending on the type of program or project, various federal, state, local or private funds may be used, in addition to district funds.

When permitted, the district expends funds from other funding agencies prior to committing NRD funds raised from local property tax on a project. For example, Nebraska Soil and Water Conservation Program funds are expended for cost share on conservation practices prior to committing Land Treatment Program funds raised from local property tax. Funding sources and arrangements can vary significantly depending on the size and complexity of the project.

For large projects that include multiple public benefits, such as flood control or flood hazard mitigation, the NRD could consider using funds from Federal agencies, such as the U.S. Army Corps of Engineers, the Federal Emergency Management Agency (FEMA), or Environmental Protection Agency (EPA).

The NRD could also consider applying for funding from State agencies such as the Nebraska Department of Natural Resources (NDNR), Nebraska Department of Environment and Energy, or Nebraska Game and Parks Commission. Availability of funds and percentages of cost share provided by Federal and State agencies is highly dependent on their respective budgets from year to year.

The district cooperates with municipalities and counties to develop locally led projects. For these, the NRD can act as Lead Agency, when requested to do so. As Lead Agency the NRD can provide leadership in project planning, design, funding, and coordination with state and federal agencies.

If a local entity requests the district to provide a project planning study costing more than \$2,500, the district will fund 50% of the study cost and the requesting entity, and any other co-sponsors, will be responsible for funding the remaining 50% of study cost. Before a study is initiated, the NRD and requesting entity would enter into an Interlocal Agreement. If the entity does not proceed with implementation of the project being proposed in the planning study, within a time limit to be specified in the Interlocal Agreement, the entity must refund 50% of the study cost to the NRD.

Minimum Payment Policy

It is the district's policy that payments for cost share on any project or program will not be made in amounts less than \$100.

Projects



Projects Funding (cont.)

District Programs Available

As mentioned above, the NRD has access to various funding sources. Generally, funds established for a project or program will be available until obligated, or until the project or program is terminated. Unless funds are established for a specific project or program, applications for funding will be taken on a first-come-first-served basis (i.e., the Land Treatment and Nebraska Buffer Strip Programs). For more specific details concerning any program, contact the district office in York. The programs are described in detail in the following sections.

Improvement Project Areas

The district has the authority to establish Improvement Project Areas for both revenue producing and non-revenue producing projects that provide direct benefits to landowners in a specified area. An Improvement Project Area is initiated by petition of the landowners in the specified area. If petitioned, the district conducts a public hearing to receive testimony on the proposed project. After reviewing the hearing testimony, the district board of directors may establish an Improvement Project Area. If established, the district becomes the project sponsor and is responsible for planning, construction, operation, and maintenance of the project. The decision as to whether or not the project proceeds to the construction and operation phase rests with the benefiting land owners; those land owners with at least 50% of the calculated benefit units must provide written objection to the project in order for the project not to proceed.

Revenue Producing Projects

Projects such as irrigation water supply or rural water distribution systems are considered to be revenue producing, since fees can be collected for these services. For these types of projects, those benefiting receive water delivery for either agricultural production or domestic water supply. Each customer supplied is assigned a number of units based on the volume of water received. Only those within the designated service area are eligible to receive water from the project. The value of each unit of water supplied is determined by dividing the project cost by the total number of water units the system can supply. Benefiting water users on the system are billed based the number of units of water received multiplied by the value per unit. The district has the authority to collect unpaid accounts through a special property tax assessment.

Non-Revenue Producing Projects

Projects such as flood control or drainage improvements are considered to be non-revenue producing. For these types of projects, the benefited lands include those parcels that experience a reduction in flood damages due to project construction. Each parcel of land benefited is assigned a number of units of benefit based on the amount and frequency of flood damage reduction; lands with greater damage reduction will be assigned a higher number of benefit units per acre than those lands with less damage reduction. Only those lands receiving direct benefit from the project can be assigned units of benefit. The value of each unit of benefit is determined by dividing the project cost by the total number of benefit units for the project. Benefiting landowners are assessed for project costs in proportion to their number of units of benefit. These dollars are collected through a special property tax assessment.

>>Funds Available to Cooperators

The district will stand the cost of planning and engineering, only if the project is constructed. Otherwise, the landowners who would have benefited from the completed project will be assessed the planning and engineering costs. NRD, state and federal funds for construction and land rights costs are considered on a case-by-case basis and then only when the general public will benefit.

>>Sources of Funds

Improvement Projects are a legal mechanism for landowners who want to establish a joint project under the guidance of the district. The landowners can expect to pay the bulk of the necessary land rights and construction costs. The district funds for Improvement Projects come from district tax revenues. State and federal funds may come from several sources depending on the type of project. Drainage projects are seldom eligible for state or federal funding.

Drainage Projects

Drainage projects include reclamation of either urban or rural lands currently subject to frequent inundation due to poor surface water drainage or a high groundwater table. The district has adopted a cost-share policy on any studies needed for larger projects within the district. If the cost of the study will exceed \$2,500, the district will pay 50% of the cost with the co-sponsor or co-sponsors paying the remaining share. Co-sponsors may be other governmental bodies or individuals. Approval from the NRD board of directors is required before a study will be undertaken.

Administration

If requested by the project sponsors, the district will act as lead agency for the purposes of coordinating project planning, engineering, construction, operation and maintenance and collection and disbursement of funds.

Projects



Projects Funding (cont.)

Planning and Engineering

It is the district's policy that the district's share of planning and engineering costs for agricultural land drainage projects be repaid to the district if the project is not constructed. Repayment of planning and engineering costs for urban drainage projects will be decided on a case-by-case basis.

Funds Available

The district does not include funding for drainage improvement projects in any annual budget, unless a specific request has been approved by the NRD board of directors. Construction funds for drainage improvement projects can be obtained by establishing an Improvement Project Area as discussed above.

Water Storage and Flood Control Program

Water storage and flood control projects usually involve several landowners and/or agencies. Projects for individuals are considered under the Land Treatment Program.

Projects developed through this program generally include multiple benefits and require detailed planning, engineering, and coordination with all the parties concerned. For this reason, a project of this nature requires two or more years of lead time before construction can be expected to begin. Sites must be investigated, feasibility studies completed, agreements reached, designs completed, funding arranged, land rights and permits acquired, and construction funds authorized. The district is limited in the number of these projects that it can actively handle at any time. The NRD board of directors has established a priority list of active projects to effectively manage the district's efforts.

District As Lead Agency

The district has the authority to act as the Lead Agency (i.e., local sponsoring body) for projects. As Lead Agency, the district administers planning and feasibility studies, engineering design, construction, operation and maintenance, coordination with other sponsors, negotiating agreements, and any other aspects of the project. The district is authorized by Nebraska Statutes to enter into agreements with local, State, and Federal agencies, and to apply for local, state and/or federal funding. Acting as Lead Agency, the district would apply for and hold, on behalf of the sponsors, all permits, water rights, easements, and land titles for the project.

It is the district's policy that as Lead Agency, the district will operate and maintain the project on behalf of the sponsors. Any costs of operation and maintenance will be shared by the sponsors in accordance with the project Interlocal Agreement. Public access to project lands will be considered on a case-by-case basis as each project is developed. The district does have eminent domain authority for projects, although it is rarely used. Decisions to proceed with each phase of project development, or to terminate a project, are made by sponsoring bodies in accordance with the project Interlocal Agreement.

If another entity will be acting as Lead Agency for the project, the district may elect to serve as one of the project sponsors with responsibilities as specified in the project Interlocal Agreement. In this capacity, the district may assist the Lead Agency by providing engineering services, grant application and management support or other technical assistance.

Water Conservation Dams

The district's Water Conservation Dams Program provides assistance for planning, design, and construction of dams designed to provide "active" water storage for some beneficial use, such as irrigation. These dams generally have a cost exceeding \$15,000, are designed to control runoff from drainage areas greater than 640 acres, can involve single or multiple landowners or agencies, and are not eligible for funding under the district's Land Treatment Program. Benefits that can be designed into these projects include flood control, groundwater recharge, irrigation water storage and use, erosion control, recreation and wildlife habitat. The use of the project and project lands is granted to the project sponsors in accordance with the project Interlocal Agreement and as determined according to each sponsor's share of project cost.

Project Engineering

Unless otherwise specified in the project Interlocal Agreement, the planning, design, and construction inspection for Water Conservation Dams will be provided by either district or NRCS.

Land Acquisition

Two options are available for obtaining land to construct, operate and maintain water conservation dams. Easements or title may be donated to the project, contributing to the donor's financial share of project costs, or the district may purchase easements or title, contributing to the sponsors' financial share of project cost.

Assignment of Benefits

Benefits derived from water conservation dams will be assigned to the district and sponsors in proportion to their respective financial responsibility. Benefits that can be assigned in this manner are water use for irrigation, private hunting and fishing and improvement of aesthetics for residential sites. General public benefits to be considered are reduction of flood damages, sediment storage and erosion control, ground water recharge, public recreation and wildlife habitat. The district will determine the estimated economic value of these benefits as part of project feasibility determinations.

Projects



Water Storage and Flood Control Program (cont.)

Project Maintenance

Responsibility for project maintenance will be determined on a case-by-case basis. In general, the party with the majority of benefits will be responsible for maintenance. Maintenance costs will be estimated as part of project cost and will be used in the determination of financial share.

Project Feasibility

Technical, financial and environmental feasibility must be shown before a water conservation dam is constructed under this program. Technical feasibility includes site suitability, conformance with Nebraska Department of Natural Resources dam safety requirements, analysis of watershed yield and reservoir operation to determine adequacy of water supply for the intended purposes. Financial feasibility includes comparison of benefits and costs and determination of potential funding sources.

Project Financing

Project financing is determined on a case-by-case basis, and depends upon availability of grants and other sources of funding. After project costs are estimated, and other sources of funding determined, each sponsor's share of remaining cost is determined on the basis of project benefits received by each sponsor.

If a project sponsor will receive revenue from the sale of water, fishing or hunting privileges, cabin or camping sites use, or other such activity, then those revenues must be considered in calculating that sponsor's financial share of project cost. In such cases, that sponsor's share of project cost will be increased by the amount (in current dollars) of such revenues. The terms and conditions of such revenue producing benefits must be agreed to by all sponsors and defined in the project Interlocal Agreement.

If grants or other types of funds are obtained for the project from federal, state or local agencies, then those grants or other funds will be applied to reduce the sponsors' shares of project cost.

Public Access

Public access will be required as part of each district project, unless private funding is sufficient to offset the public investment. Conditional public access will be considered on a case-by-case basis.

Community Hazard Mitigation Planning

Hazard Mitigation Plans (HMP) are a requirement of the Disaster Mitigation Act of 2000, administered by FEMA, and once a community, county, or district is part of an approved plan they become eligible for up to a 75% cost-share for a wide variety of projects listed in the plan. Hazard Mitigation Plans are required to be updated on a five-year cycle.

A Hazard Mitigation Plan is a publicly-guided document that identifies vulnerability to natural and man-made hazards such as flood, drought, earthquake, wildfire, winter storm, tornado/high wind storm, dam failure, chemical transportation and fixed sites, agricultural diseases, etc. The plan sets goals, establishes mitigation alternatives, and prioritizes projects which may reduce or eliminate potential damages to property, and provides protection when future disasters occur.

Planning efforts are guided by a Planning Team consisting of representatives from the communities, Upper Big Blue NRD, Nebraska Department of Natural Resources (NDNR), and the Nebraska Emergency Management Agency (NEMA).

Public input will be gathered throughout the duration of the planning process through public meetings, surveys, and a project website. All communities, public school districts, and other taxing authorities within the county are eligible to participate.

The district can assist communities with hazard mitigation planning and implementation of the program.

Grants

The Federal Emergency Management Agency administers a grants program to assist with hazard mitigation planning and implementation of projects designed to reduce damage. In order for a project to be grant eligible, the project must be identified in the community's Hazard Mitigation Plan.

Land Treatment



Land Treatment Overview

This program provides technical assistance and financial incentives for soil and water conservation measures in the Upper Big Blue NRD. The district's technical guidelines and funding procedures generally coincide with USDA and Nebraska Department of Natural Resources (NDNR) programs.

Applications for funding are handled by the NRD and NRCS offices. Cost-sharing rates are based on state average costs determined by the NRCS's Environmental Quality Incentives Program.

The district prefers to use state funds first and district funds only after other sources are exhausted.

Applications for land treatment funds are affected by the following limitations and requirements, as a condition of application acceptance and payment:

1. Application for land treatment assistance must be made through a local NRCS or (in some cases) NRD office.
2. Practices installed with land treatment cost-share assistance must be properly maintained by the landowner.
3. If the project is removed, altered or modified so as to lessen its effectiveness within the design life of the project and after receipt of payment, the landowner(s) must refund all cost-share funds used for the project. This condition will be binding on heirs, assigns or other transferees.
4. Practices must be planned and installed in accordance with the technical specifications of the NRCS or specifications authorized by the appropriate cost-sharing agency.
5. An authorized technician must make prior determination that the practices are feasible on the site where they are to be installed, that they are properly planned and installed and the estimates of quantities are proper and reasonable.
6. Applications are screened for compliance with Upper Big Blue NRD rules and regulations prior to being accepted as eligible for the district's Land Treatment Program. After the application has been reviewed by the NRD staff, the landowner will be notified that the application is eligible, needs additional information, or does not meet policy criteria.

7. Within two weeks of the time the applicant wants to begin construction, the applicant must contact the district for authorization to begin construction. The district's land treatment coordinator will determine if funds are still available. If funds are available, the coordinator will issue an authorization number.
 8. Once authorization is given and funds are appropriated, the landowner has 90 days to complete the project. Windbreak Planting and Windbreak Renovation are allowed 18 months to complete the project (renovations only).
 9. On completion of construction or installation of the practice, the landowner is responsible for submitting all labor and materials bills to the NRCS for final payment determination.
 10. Cost-share payments to each landowner must not exceed the total cost-share limit per landowner for the district's fiscal year. Limits for specific cost-share practices are found under the descriptions of each practice in the following pages.
 11. State and district funds will be paid directly to the landowner, with the exception that some irrigation practices allow the tenant to be responsible for the practice and receive the cost-share; in this case the landowner must sign a waiver.
 12. The NRD will not provide cost-share assistance on any repair, replacement, conversion or maintenance of Land Treatment practices during the design life of the practice. Within its original design life, a practice may be converted from one practice to another, if the conversion is needed and practical and will be planned in accordance with NRCS technical specifications. However, no cost-share assistance will be made on such conversions.
 13. The State of Nebraska and the Upper Big Blue NRD's fiscal year runs from July 1 to June 30. Any reference to year under the Land Treatment section of this publication refers to fiscal year.
 14. Each landowner is limited to a maximum of \$7,500 in cost-share funds in a fiscal year. The only exception is that, using NSWCP funds, up to an additional \$2,500 maybe available when a landowner applies to build a water impoundment dam. To make use of NSWCP funds over \$7,500 for a water impoundment dam, the applicant should not apply for any other land treatment funds in that fiscal year. Water Impoundment Dams are required to have a water storage right granted by NeDNR. State (Nebraska Soil and Water Conservation Program—NSWCP) and NRD funds may not be combined for any practice.
 15. The landowner is required to provide power of attorney on forms approved by the district, as well as a W9 and Citizenship Form (available on our website).
-

Land Treatment



Terraces (NC-1)

This practice is designed to control erosion on cropland and to reduce pollution of water from non-point sources. A terrace intercepts surface runoff and conducts it to a stable outlet at a non-erosive velocity.

Cost-Share Rate

The cost-share rate will be either 75% of the state average cost (minus other cost-share funds) or 75% of the actual cost (minus other cost-share funds), whichever is less. The maximum cost-share is \$7,500 per landowner per year, including all NSWCP and NRD cost-share received for the fiscal year. NSWCP and NRD funds will not be combined for any practice. The minimum cost-share payment is \$100.

Mechanical Outlets (NC-2)

Mechanical outlets are designed to provide non-erosive discharge of runoff from diversions and terraces.

Cost-Share Rate

The cost-share rate will be either 75% of the state average cost (minus other cost-share funds) or 75% of the actual cost (minus other cost-share funds), whichever is less. The maximum cost-share is \$7,500 per landowner per year, including all NSWCP and NRD cost-share received for the fiscal year. NSWCP and NRD funds will not be combined for any practice. The minimum cost-share payment is \$100.

Water Impoundment Dams (NC-3)

This practice is designed to provide storage of surface water runoff. Dams are constructed across either normally dry or flowing water courses and provide stored water to replace or supplement the use of groundwater. In addition, these impoundments enhance groundwater recharge, prevent erosion and pollution and provide flood control and wildlife habitat.

The following rules govern dam design, construction and operation:

1. In accordance with Nebraska law, all water impoundment dams designed for storage must be constructed in a manner that allows inflow to be released on demand by senior downstream water right holders. This means that all spillway outlet works must be equipped with a draw down tube and control valve. The district requires two-thirds of the conservation storage to be above the control valve elevation.

2. The district requires that a permit for water storage must be received from the Nebraska Department of Natural Resources.
3. Nebraska law requires that all dams, no matter what size, for which a storage right is requested must have drawings and specifications submitted to the Nebraska Department of Natural Resources.

Grade Stabilization Structures (NC-4)

This practice is designed to stabilize the grade in an existing water course to prevent or heal gully erosion. This is a structural practice which includes erosion control dams, drop structures and other measures designed to control the flow of water and stop erosion.

Cost-Share Rate

The cost-share rate will be either 75% of the state average cost (minus other cost-share funds) or 75% of the actual cost (minus other cost-share funds), whichever is less. The maximum cost-share is \$7,500 per landowner per year, including all NSWCP and NRD cost-share received for the fiscal year. NSWCP and NRD funds will not be combined for any practice. The minimum cost-share payment is \$100.

Diversions (NC-6)

The purpose of this practice is to divert runoff away from active gullies and structures and conduct it to a non-erosive outlet.

Cost-Share Rate

The cost-share rate will be either 75% of the state average cost (minus other cost-share funds) or 75% of the actual cost (minus other cost-share funds), whichever is less. The maximum cost-share is \$7,500 per landowner per year, including all NSWCP and NRD cost-share received for the fiscal year. NSWCP and NRD funds will not be combined for any practice. The minimum cost-share payment is \$100.

Grassed Waterways (NC-7)

Grassed waterways are designed to provide non-erosive discharge of runoff from fields, diversions, terraces and other structures by carrying runoff from the owner's property to a natural water course.

Cost-Share Rate

The cost-share rate will be either 75% of the state average cost (minus other cost-share funds) or 75% of the actual cost (minus other cost-share funds), whichever is less. The maximum cost-share is \$7,500 per landowner per year, including all NSWCP and NRD cost-share received for the fiscal year. NSWCP and NRD funds will not be combined for any practice. The minimum cost-share payment is \$100.

Land Treatment

Sediment Control Basins (NC-8)

This practice is designed to intercept and detain surface water to reduce on-site erosion, to reduce sediment transported by water, to reduce peak flow rates to non-erosive velocity, and retard gully development.

Cost-Share Rate

The cost-share rate will be either 75% of the state average cost (minus other cost-share funds) or 75% of the actual cost (minus other cost-share funds), whichever is less. The maximum cost-share is \$7,500 per landowner per year, including all NSWCP and NRD cost-share received for the fiscal year. NSWCP and NRD funds will not be combined for any practice. The minimum cost-share payment is \$100.

Pasture Planting or Range Seeding-- Land Use Conversion (NC-10)

The purpose of this practice is to establish grass on land being converted from other uses or to renovate existing pasture or range. Cost-share is available for the seed, application and chemicals used for seedbed preparation when seeding in existing cover. This practice may be applied as part of a conservation management system to reduce soil erosion by wind or water, provide emergency forage and extend the length of the grazing season. It may be applied on crop land, hay land, pasture land and other agricultural lands where forage production is feasible and desired.

Plant species and their cultivars must be based upon the following general criteria:

1. Climate conditions: annual rainfall, seasonal rainfall patterns, growing season length, humidity levels and temperature extremes and USDA Plant Hardiness Zones.
2. Plant resistance to disease and insects common to the site or location.
3. Soil conditions and position attributes such as pH, available water holding capacity, flooding potential, inherent fertility, salinity and alkalinity.
4. Capability of forage species to meet desired level of nutrition for the kind and class of the livestock to be fed.

All seed and planting material must be labeled and meet State of Nebraska seed quality standards. Legume seed must be inoculated with proper, viable rhizobia before planting. Forage species selected for establishment must fulfill a recognized dietary deficiency within the yearlong forage management program.

Landowner's Responsibilities

The landowner must comply with NRCS reporting requirements for this program.

Cost-Share Rate

The cost-share rate will be either 75% of the state average cost (minus other cost-share funds) or 75% of the actual cost (minus other cost-share funds), whichever is less. The maximum cost-share is \$7,500 per landowner per year, including all NSWCP and NRD cost-share received for the fiscal year. NSWCP and NRD funds will not be combined for any practice. The minimum cost-share payment is \$100.

Windbreak Planting (NC-12)

This practice provides for planting new or replacement windbreaks. As part of the district's seedling sales program (see the Conservation and Parks Chapter), applicants may purchase seedlings from the district for spring planting under this practice. Cost-share payment is made once the planting is completed and an NRCS or NRD technician certifies that the planting meets NRCS specifications.

Cost-Share Rate

NRD Cost-Share: The cost-share rate will be either 75% of the estimated cost (minus other cost-share funds) or 75% of the actual cost (minus other cost-share funds), whichever is less. The maximum cost-share is \$7,500 per landowner per year, including all NSWCP and NRD cost-share received for the fiscal year. The minimum cost-share payment is \$100.

Planned Grazing Systems (NC-14)

The purpose of this practice is to promote proper management of grazing land resources and assist producers in implementing their grazing management plans. General benefits include:

- Maintenance of existing plant cover while properly using the forage of each grazing unit
 - Reduction of erosion and improvement of water quality
 - Increased efficiency by uniformly using all parts of each grazing unit
 - Improved plant vigor and quality and increased forage production
 - Wildlife habitat enhancement
 - Improved flexibility in the grazing program
 - Buffer against the adverse effects of drought
 - Energy conservation through reduced use of fossil fuel
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Land Treatment



Planned Grazing Systems (NC-14) (cont.)

A Planned Grazing System is a practice in which two or more grazing units are alternately rested and grazed in a planned sequence for a period of years. Rest periods can be throughout the year or might only occur during the growing season of key plants.

The NRCS tailors a specific plan to meet each operator’s objectives. Each plan is designed to fit the size and number of grazing units, climate, kind and condition of grazing land, kinds and classes of grazing animals and herd numbers. A grazing plan includes movement of livestock from one grazing unit to another.

Components of this practice that are not eligible for cost-share include:

- Boundary fencing
- Suspension cross fencing
- Rodent control

Landowner’s Responsibilities

The landowner must comply with NRCS reporting requirements for this program.

Cost-Share Rate

The cost-share rate will be either 75% of the state average cost (minus other cost-share funds) or 75% of the actual cost (minus other cost-share funds), whichever is less. The maximum cost-share is \$7,500 per landowner per year, including all NSWCP and NRD cost-share received for the fiscal year. NSWCP and NRD funds will not be combined for any practice. The minimum cost-share payment is \$100.

Windbreak Renovation (NC-16)

This practice provides site preparation and clearing for the renovation of farmstead and field windbreaks that have been rendered substantially ineffective due to the death of trees from weather, disease or other natural causes. This practice includes a commitment to replant the windbreak. Unlike other Land Treatment practices, the applicant for this practice has 18 months to complete the project from the time he or she is authorized. The 18-month completion time allows for removal of old trees and replanting new trees.

Windbreak Planning

Specifications are to be based on NRCS Technical Guides. The windbreak renovation plan is to be reviewed and approved by a forester of the Nebraska Forest Service. The forester

is to certify that the windbreak has lost its effectiveness, should be renovated, and approve the plan of renovation.

Practice Limits

1. In no instance will a cost share payment be based on a cost greater than the statewide average cost per acre adopted by the FSA-USDA for this practice.
2. Items of work to be cost-shared will be determined in accordance with NRCS Technical Guidelines for windbreak renovation.
3. This practice does not include replanting the windbreak. Those costs could be eligible for cost-share under Practice NC-12. Otherwise, windbreak replanting costs must be paid from other sources.
4. A landowner will not become eligible for cost-share on a windbreak renovation practice unless the landowner also agrees to replant the windbreak. No cost-share payment for a windbreak renovation practice will be made until the windbreak has been replanted.

Cost-Share Rate

NRD Cost-Share: The cost-share rate will be either 75% of the state average cost (minus other cost-share funds) or 75% of the actual cost (minus other cost-share funds), whichever is less. The maximum cost-share \$7,500 per landowner per year, including all NSWCP and NRD cost-share received for the fiscal year. The minimum cost-share payment is \$100.

Irrigation Water Management Practices (NC-17)

Landowner's Responsibilities that apply to all NC-1 practices:

- The purpose of these practices is to encourage the efficient use of groundwater for irrigation.
- The land covered by the application must have been irrigated for four of the previous five years. NOTE: No more than a 10% net increase in irrigated acres is allowed. The cost-share rate is 50%.
- Local NRCS staff will determine if the individual application meets the potential for required water savings.

SUBSURFACE DRIP IRRIGATION SYSTEMS—Gravity to SDI (NC-17)

Subsurface drip irrigation systems provide conduits to evenly distribute water, fertilizer, pesticides and herbicides to the root zone of a crop. Using this irrigation system, it is possible to minimize leaching of chemicals into the groundwater since only the required amount is applied to the root zone and not the areas in between. By controlling the area and the rate at which water, fertilizer or chemicals are applied, soil moisture can be optimized.

Land Treatment



Irrigation Water Management Practices (NC-17) (cont.)

Irrigation water must be analyzed in order to determine which filters should be used, which chemicals are compatible with the water, and how the water reacts with your soil. With water analysis, filter manufacturers, fertilizer and chemical dealers will be able to make recommendations on which of their products will perform best, given water composition.

Cost-share assistance on subsurface drip irrigation systems must be installed in accordance with NRCS standards and specifications. Eligible components include:

Filtration system(s)

- Necessary valves and controllers
- Pipe and fittings for mains, sub-mains and manifold lines
- Flush lines, drip tape, chemical injection port and other appurtenances necessary for meeting NRCS standards and specifications

Costs not included are:

- Pumping plant
- Fertilizer or chemical injection systems
- Electrical installations

Cost-Share Rate

The cost-share rate for any NC-17 practice, or combination of practices, will be either 50% of the state average cost (minus other cost-share funds), or 50% of actual cost (minus other cost-share funds), whichever is less. The maximum total NC-17 cost-share available to a landowner, on up to 160 contiguous acres, is \$7,500, per landowner per year, including all NSWCP and NRD cost-share received for the fiscal year. The minimum cost-share payment on any practice, or combination of practices is \$100.

Streambank Stabilization (NC-18)

This practice restores and protects stream banks and riparian areas adjacent to minor water courses where the banks are subject to damage from stream bank erosion and upstream conditions are stable. Earth fill, rock riprap, grass seeding, trees, fencing, underground outlets, pipes, sand, gravel and concrete may be used to stabilize the stream bank. A buffer strip of native vegetation, at least 30 feet wide, will be planted at the top of the bank.

Cost-Share Rate

The cost-share rate will be either 75% of the state average cost (minus other cost-share funds) or 75% of the actual cost (minus other cost-share funds), whichever is less. The maximum cost-share is \$7,500 per landowner per year, including all NSWCP and NRD cost-share received for the fiscal year. NSWCP and NRD funds will not be combined for any practice. The minimum cost-share payment is \$100.

Brush Management (NC-20)

This practice is for the purpose of removing or reducing woody vegetation to restore natural plant community balance, create the desired plant community, and reduce competition between desired and unwanted plants.

This practice is to be planned in accordance to NRCS technical guidelines, and in a manner that will not adversely affect threatened or endangered species (plant or animal) or their habitat.

Cost-Share Rate

The cost-share rate will be either 75% of the state average cost (minus other cost-share funds) or 75% of the actual cost (minus other cost-share funds), whichever is less. The maximum cost-share is \$7,500 per landowner per year, including all NSWCP and NRD cost-share received for the fiscal year. The minimum cost-share payment is \$100.

Dry Hydrant Program

This program provides cost-share to rural fire departments within the Upper Big Blue Natural Resources district for the construction of dry hydrants at ponds and streams for the purpose of providing access to supplemental water supply when fighting fires. The Upper Big Blue NRD's responsibility and obligation under this program is limited to providing minimum design standards and cost-share assistance. The district assumes no responsibility for the ownership, construction, operation, or maintenance of the dry hydrant, and does not provide any assurance that water will be available from the stream or pond where the hydrant is to be located.

Other Requirements

1. The dry hydrant design and installation must meet the district's minimum standards.
 2. For cost-share purposes, the service life for dry hydrants is 15 years. Cost-share applicants must agree to maintain the hydrant for this time period, otherwise repay the entire cost-share.
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Land Treatment

Dry Hydrant Program (cont.)

3. According to Nebraska Statute, 46-233 ¶ 9 NRS, water may be diverted from any stream, reservoir, or canal by any fire department or emergency response service for the purpose of extinguishing a fire in progress in an emergency without obtaining a permit from the Department of Natural Resources (DNR). The installation of a dry hydrant for this purpose is allowed without the prior permission of DNR, but DNR must be informed of the hydrant installation, its location, and the name of the party responsible for its installation and maintenance within 30 days after the installation.
4. Each rural fire department applying for cost-share under this program shall be responsible for all permits, land rights including easements and access rights, design, construction, operation, maintenance, and notification to DNR.
5. Applications for cost-share on dry hydrants will be approved by the district's Board of Directors, subject to funding available within the district's budget for this item. The applicant must complete the installation within 90 days from the date that funds are obligated, and must provide a copy of the DNR notification to the district.
6. The applicant is required to submit invoices for materials and labor to verify the actual costs incurred.

Cost-Share Rate

Rural fire departments are eligible for a maximum of two dry hydrant applications per year, and the cost-share rate per dry hydrant will be 50% of the actual cost of materials and labor. The maximum cost-share to be paid by the district is \$1,000 per dry hydrant installed.

Private Dams Program

The Private Dams Program provides planning, design and financial assistance for the construction or reconstruction of dams located on private property. These dams generally have a cost exceeding \$15,000 and have a drainage area of approximately 80 to 640 acres. Dams constructed under this program generally involve only one landowner. Public benefits include flood control, sediment and erosion control, water conservation, groundwater recharge, and fish and wildlife enhancement.

Application and Project Design

Applications for funding are handled by the NRCS or district offices. Planning, design and construction inspection will normally be provided by the NRCS or the district. If the NRCS or district is unable to provide these services, the landowner may hire a private engineering firm to provide all or part the needed services. The district will assist in preparation of the scope of services needed.

Permits and Land Acquisition

The landowner will be responsible for obtaining any required permits or easements for access or use of lands owned by another person. The NRCS and/or district will assist the landowner. All required permits must be obtained before construction can begin.

Maintenance

The landowner shall be responsible for the cost of all normal maintenance. "Normal" maintenance shall include, but not be limited to, preventing over grazing, removal of debris from or near the principle and emergency spillways, soil erosion on the dam, the control and removal of trees and brush on the structure and spillways. If repairs are needed, due to a major storm event, which are deemed, by the district, to be in excess of "normal" maintenance, the district will consider cost-share assistance for said repairs on a case-by case basis. Factors to be considered in determining the need for and merits of repair shall include, but not limited to, cost of the repairs and the age of the structure.

Repayment of Cost-share Funds

If the project is removed or the district determines that it has been altered so as to lessen its effectiveness within the design life of the project and after receipt of payment, the landowner(s) must refund all cost-share funds used for the project. This condition will be binding on heirs, assigns or other transferees.

Cost-Share Rate

The cost-share rate will be 75% of the engineer's estimate, or 75% of the actual cost, whichever is less. Eligible costs include construction and design services provided by a private engineering firm. The cost-share of private engineering will only be paid if the dam is constructed. The maximum cost-share is \$50,000. Final cost above the district approved cost shall be the landowner's responsibility.

Nebraska Buffer Strip Program

This program encourages landowners to establish vegetative buffer strips along shorelines of streams and lakes. Buffer strips reduce the levels of sediment and other pollutants reaching the surface water. Funding comes from a fee assessed on all pesticides registered for use in Nebraska.

Land eligible for enrollment in this program is cropland adjacent to perennial and intermittent streams and permanent bodies of water. Existing buffer strips established after January 1, 1996 are also eligible.

Land Treatment

Nebraska Buffer Strip Program (cont.)

Cost-share rates vary depending on whether the land is dryland or irrigated, CRP and soil rental rates, as determined by the Nebraska Agricultural Statistic Reporting District, in which the land is located and are set by the Nebraska Department of Agriculture. Payments received from other sources will be deducted from the buffer strip payment. The maximum payment (including funds from other sources) is \$150 per acre. Most payments will be less. Total minimum payment must be \$100. Contracts that do not meet the minimum payment level can be modified by adding acreage to achieve the minimum dollar amount.

General Terms

1. The contract length can be no less than five nor more than 10 years.
2. Limited haying and grazing is allowed provided it conforms to NRCS requirements.
3. Grass, forb, tree and shrub species must conform to NRCS requirements for filter strips or riparian forest buffers.
4. Minimum width is 20 feet for filter strips and 55 feet for riparian forest buffers (20 feet of riparian forest buffer must be grassed filter strip) unless NRCS requirements are greater. If the NRCS requirements are greater, the minimum width equals the NRCS requirements.
5. Maximum width is 100 feet unless the NRCS requirements are greater. If the NRCS requirements are greater, the maximum width equals the NRCS requirements.
6. Minimum size per application is one acre.
7. Failure to maintain the buffer strip according to contracted requirements may result in forfeiture of future and past payments.
8. Buffer strips will be subject to compliance checks by the NRD, NRCS and/or the Nebraska Department of Agriculture.

Sources of Funds for Land Treatment Practices

NRD land treatment funds are appropriated each year in the NRD budget and are supported by the district's local tax revenues. NSWCP funds are appropriated annually in the state's budget by the Legislature. Funds for the Buffer Strip Program come from a fee on pesticides.

Water Management



Water Management Groundwater Programs

Observation Well Program

This program is designed to gather district-wide information on changes in groundwater levels. Measurements, for which the owner has given his or her permission, are taken by district staff from privately owned irrigation wells. Measurements are taken in the spring when the groundwater level has rebounded from the previous irrigation season.

All of the pertinent data from the district's measurement program are sent to the Conservation and Survey Division of the University of Nebraska and USGS. The data is part of the basis for the yearly analysis of groundwater levels used by this and many other agencies involved in groundwater research and management. The data and results of the analysis are published annually by the University of Nebraska and USGS.

The district maintains well measurement data in the York office and publishes groundwater level information in its newsletter Blueprint and online.

Crop Water Use Information

This program encourages efficient irrigation water use by providing irrigators with daily water use data for crops throughout the growing season. The daily crop water use is determined by collecting data from an automated weather station (located at Recharge Lake near York), sponsored by the district and the University of Nebraska High Plains Climate Center. The collected information includes minimum-maximum daily temperature and corresponding relative humidity, solar radiation and wind run.

This data is entered into a computer program developed by the University of Nebraska which calculates the amount of water used by the crop under those existing weather conditions.

In order to use this information for irrigation scheduling, the irrigator should be familiar with certain field conditions. These conditions include:

- The water holding capacity of the soil (This information is available by contacting the NRD, NRCS, or UNL cooperative Extension.)
- The applied water for each irrigation
- Rainfall—This should be measured at or near the field
- Crop water-use information is available daily on KAWL radio in York, Nebraska. This information is also published in the York News-Times each day during irrigation season. Several county extension agents are also making this information available through their hotlines or weekly newspaper columns. For information, contact the Upper Big Blue NRD or your county extension office.

Nebraska Agricultural Water Management Network

Project WATER—TIP (Watermark ATmometer—Timed Irrigation Project) began in May 2005 by installing atmometers and Watermark® sensors at twenty cooperators' farms throughout the Upper Big Blue NRD. In 2006, we saw the numbers of cooperators jump to 67 members involved with WATER-TIP. As a result, the district offered a pilot program for cost-share in the form of an up-front price break of fifty-percent of the cost of ET gauges, Watermark© sensors and meters. This discount program is still offered in the district today.

The purpose of the project is to track soil moisture use by crops across the district through measuring evapo-transpiration (ET) with the atmometers and keeping track of soil moisture at each atmometer site with four Watermark® sensors placed at 1-, 2-, and 3-foot depths. (The actual equipment may vary depending on specific needs at each site).

During the summer of 2006, "Project WATER-TIP" spawned the beginnings of the Nebraska Agricultural Water Management Network to extend this program statewide along with UNL Extension.

Water Management



Irrigation Scheduling Equipment Discount

Irrigation scheduling is a critical part of good irrigation water management. Over-irrigation increases production cost, can reduce crop yields, and leaches nitrates out of the crop root zone which pollute the groundwater. Simple management tools are available, which can help the irrigator decide when it is appropriate to irrigate and when he or she can wait.

The district sells several of these tools at a fifty-percent (50%) discount to irrigators in the district. The equipment is also for sale to others at regular prices. The irrigation scheduling equipment available includes:

- Irrrometer - Moisture Sensors, Meters and Data loggers
- Etgage Company – Atmometers
- Clement and Oakfield Soil Probes

Irrigators choosing to purchase moisture sensors and atmometers are encouraged to participate in the Nebraska Agricultural Water Management Network. Participation is voluntary.

Domestic Well Testing Program

The purpose of this program is to gather information about the levels of nitrates in the drinking water. Samples are taken each fall from previously selected rural domestic wells throughout the district and tested at the district's laboratory. Approximately 250 domestic wells are tested annually. Although domestic well samples may not provide an accurate representation of the condition of the aquifer, they are an indication of the quality of the drinking water being used by the rural public.

Groundwater Management Area Monitoring Well Network

Nine cluster wells have been installed around the district and are used to collect water samples. They have been carefully constructed to prevent any outside sources of contamination to enter the water at those points. Each well site has two or more wells drilled into separate water sources (aquifers separated by clay layers). Samples from these wells give the district the most accurate representation of the groundwater at these sites. The sites were selected as representative of specific areas within the district. Each cluster well is sampled a minimum of twice a year.

In addition to the cluster wells, approximately 200 irrigation, domestic and other registered wells have been selected for sampling. These wells are sampled periodically to determine the groundwater nitrate levels in the Ground Water Management Area for Quality. These wells were selected by the USGS and the district based on criteria that ensure the district is getting the best available data on nitrate levels.

Wellhead Protection Area Assistance

This program supports and enhances the establishment and management of Wellhead Protection Areas (WHPAs) in the Upper Big Blue Natural Resources District and neighboring communities in Adams, Butler, Clay, Fillmore, Hall, Hamilton, Polk, Saline, Seward, and York Counties.

Objectives for Wellhead Protection Area Assistance

1. Facilitate WHPA delineation, contaminant source inventories and development of WHPA management plans for public water suppliers within the district and neighboring communities.
2. Provide advanced, focused assistance to a limited number of communities within the district and neighboring communities, concentrating on communities which have established WHPAs and a commitment to ongoing management within the WHPAs.
3. Provide technical assistance to communities by gathering, interpreting and delivering technical information required for WHPA activities.
4. Coordinate and enhance assistance for protecting community drinking water supplies under various programs such as Nebraska's Non-point Source Management Program, Source Water Assessment and Protection, the Mandates Management Initiative and related efforts.
5. Implementation of possible Phase II or Phase III Water Quality Management Areas within the district where source of contamination is due to non-point sources.
6. Assist in protection of water quality in and around WHPAs through the use of current district programs such as water well decommissioning, vadose zone and soil sampling, water sampling and analysis, GIS and GPS mapping capabilities, chemigation, free nitrate testing, etc.



Water Management

Walk-in Water Testing Program

The district offers free analysis for nitrates and bacteria in groundwater. Domestic wells should be tested at least once a year for both nitrates and bacteria. Ten parts per million is the safe drinking water standard set for nitrates in public water supplies. Infants are at highest risk from high nitrate poisoning. A condition called methemoglobinemia, also known as “blue baby syndrome,” limits the blood’s ability to carry oxygen. This can result in brain damage and even death if not treated promptly. High nitrates have been shown to cause health and reproduction problems in livestock. Certain health studies indicate that high nitrates may also be associated with some forms of cancer.

While most wells are free of harmful bacteria it can be introduced into a well during construction or repairs or may enter a well through a crack in the casing or surface seal. It is well documented that certain bacteria pose a serious health risk to humans and livestock.

- **Nitrates** - To have a water sample tested for nitrates, bring a small jar (four ounces) of water to the NRD during business hours. The jar should be washed and rinsed before the sample is collected. Let the water run for ten minutes before filling the jar.
- **Bacteria** - A sterile bottle with a special solution must be used for a proper bacteria test. The bottle and proper sampling instructions are available at the NRD office.

All samples must be kept in a cool place (DO NOT FREEZE) and returned the NRD office within 24 hours of collection for nitrate and within 4 hours of collection for bacteria.

Abandoned Well Programs

Reporting Abandoned Wells

Any well that is abandoned within the management area must be reported to the Nebraska Department of Natural Resources. All abandoned wells must be properly and legally decommissioned according to state law by a licensed water well supervisor or contractor.

Abandoned Well Verification Program

State law and Upper Big Blue NRD Ground Water Management Area regulations require that any well that is abandoned must be properly decommissioned. Proper decommissioning means that a well that will no longer be used must be permanently sealed in a manner defined by state regulations. An unsealed, abandoned well is a potential source of contamination to groundwater. Contaminants from the surface such

as fertilizer, animal wastes, or agricultural chemicals can travel through the unsealed well to the aquifer. Notification of decommissioning must be made to the Nebraska Department of Natural Resources and the NRD. Improperly decommissioned wells pose a potential groundwater quality and public safety risk.

In 1989, the district began a program to determine the status of wells that have been reported as abandoned or that are not registered with the district. A public education program has been implemented to inform people of the hazards of incorrectly abandoning wells and the importance of notification. In addition, a field survey is being made to identify improperly abandoned wells and encouraging well owners to correct the situation.

AQWACAP: Aquifer Quality Well Abandonment Cost-Share Assistance Program

This program provides cost-share for proper decommissioning of abandoned wells. Wells must be decommissioned according Nebraska Department of Health and Human Services System regulations governing water well abandonment standards. All decommissioning activities must be conducted by a licensed water well contractor. The cost-share rate is 60% of the actual labor and materials.

The maximum cost-share rates for the proper plugging of wells of various casing diameters are as follows:

- All wells (including hand dug): \$750

All below ground pipe and any above ground pipe, tower or apparatus that may impede the plugging activity must be removed. Any cost incurred for this removal is not eligible for cost-share. The district may require that a district representative be present during the actual plugging process. (This will be done on a random basis.)

Application Process

The well owner must submit a completed Aquifer Quality Well Abandonment Cost-Share Assistance Program Application. State and Federal laws also require that two additional forms be completed and on file with the district. They are the “United States Citizenship Attestation Form” and “Form W-9 Request for Taxpayer Identification Number and Certification” (forms). The well owner or his/her power of attorney must sign the completed forms. For an application packet please contact the NRD office at (402) 362-6601 or access the forms on our website. The cost-share application must be approved by the Upper Big Blue NRD before work may begin. If an emergency replacement of a well is required, after the fact cost-share is available for the old well. Emergency replacement includes an irrigation well needed for a growing crop or a domestic, livestock or commercial well when no other water source is available. An application for after the fact cost-share must be received within 30 days after plugging the well.

Claim and Payment Process

A copy of the water well contractors itemized billing statement showing quantities of materials used in decommissioning the well must be provided to the Upper Big Blue NRD. All final payments must be approved by the Upper Big Blue NRD board of directors prior to payment.

Water Management

Chemigation Permits

State law requires anyone who applies agricultural chemicals or fertilizer through an irrigation system to first obtain a chemigation permit from his or her local NRD. Each chemigation site must have its own permit. Before issuing a permit, the district must conduct an inspection of the site to determine that the proper safety equipment is in place and operating.

The required safety equipment includes:

- A mainline check valve with zero leakage
- A low pressure drain that will discharge at least 20 feet from the well
- A chemical line check valve with zero leakage and a minimum of ten pounds per square inch opening pressure
- An interlock that prevents chemical injection when the irrigation well is not pumping water
- A vacuum relief valve between the well and the mainline check valve
- An inspection port with a four-inch minimum diameter

Each application for a permit to chemigate must list a certified applicator. A certified applicator is the only person who may apply fertilizer or agricultural chemicals through an irrigation system. To become a certified chemigation applicator, a person must attend a training session and pass a test. The Nebraska Department of Environment and Energy oversees this program. For information on becoming certified, contact your local extension office.

Application fees are \$60 for new permits and \$20 for renewals. Application forms are available online at www.upperbigblue.org/forms.

Flow Meter Maintenance and Repair Cost-Share

The district is in the mandatory reporting phase of the Groundwater Management Area Rules and Regulations. Proper maintenance is critical to insuring that flow meters accurately measure groundwater withdrawal. Without regular maintenance flow meters will begin to provide inaccurate data and eventually fail. Routine flow meter inspection and maintenance is required for all irrigation flow meters in the district. Mechanical flow meters will be inspected and serviced on a five (5) year rotation.

Maintenance and inspection will include an evaluation of the flow meter's current operating condition, compliance with minimum installation requirements, lubrication of bearings and mounting gaskets as needed. A protective cover often referred to as a "canopy boot" may be provided at the district's discretion. Electronic flow meters will be visited every four (4) years. The district will replace batteries. The cost of batteries will be billed to the owner of the flow meter.

Eligibility

All flow meters used on irrigation wells are required to be enrolled.

Cost-Share Rate

There is no charge for this service. One-hundred percent (100%) of the programs funding is provided by the district. Costs associated with repairs of a flow meter and/or its proper installation, determined by the maintenance inspection, are the responsibility of the well owner. Some flow meters may qualify for cost-share assistance for repairs under the "Water Meter Repair Practice."

The purpose of these practices is to encourage the efficient use of groundwater for irrigation. NRD funds will be used to provide cost-share for these practices. The flow meter assistance program consists of flow meter repair cost-share and flow meter maintenance.

Eligibility For Flow Meter Repair

Flow meters used in the district are eligible for flow meter repair cost-share. A flow meter is not eligible for repair more than once every four (4) years. Mandatory flow meters are not eligible until the meter has been installed four (4) years. Flow meters are not eligible while under warranty. Repair must include proper installation in accordance with the districts requirements. The district may waive the "proper installation" requirements for flow meters installed voluntarily prior to June 30, 2010, if the district can determine that the meter is recording accurately (plus or minus five percent).

Cost-Share Rate

The cost-share rate is fifty percent (50%) not to exceed \$300 per flow meter repair. The maximum cost-share per landowner for flow meter repair is \$1,000 per fiscal year. The minimum cost-share payment is \$100.

Water Management



Municipal Assistance Program

This program is intended to provide assistance to communities for improvements in their water system to mitigate the impacts of non-point source groundwater contamination for the protection and public health of the community's residents. The reasons for system improvements must be related to the impacts of contamination from pollution sources which are non-point in nature, not from point source contamination. General modification, improvement or expansion of a water well or distribution system are ineligible activities.

Eligible Communities

Incorporated cities and villages whose wellhead protection area lies, all or in part, in the district and who have a Nebraska Department of Environment and Energy approved wellhead protection area plan.

Requirements

A community must be facing present or imminent threat of the water supply from non-point pollution and making plans for infrastructural modifications to continue to provide their residents clean, potable water.

Practices

Assistance may be applied to any or all of the following purposes: engineering assistance to determine the best alternatives for water system improvements; assistance in well location identification; assistance in water source development if a new well or other water source is necessary because of non-point pollution; and water treatment if required due to non-point pollution.

Cost-Share

The district will provide financial assistance to the city or village in the amount not to exceed 25% of the local share of project cost. As guidance to the communities, the district uses the following formula to determine the district's participation.

Population plus the acres in the wellhead protection area = "Participation Score"

- Participation Score - less than 5,000 = \$50,000 maximum
- Participation Score - greater than 5,000 = \$100,000 maximum

The district will consider funding above the formula amount on a case by case basis. If part of the applicant's wellhead protection area also lies, in another natural

resources district, the district may adjust its contribution.

Financial assistance per community over a five-year period is limited to the maximum amount provided by the funding formula.

Total funding under this program will be limited to the amount budgeted for the program annually by the Board of Directors with consideration given to district budgetary obligations. The NRD reserves the right to evaluate and screen requests and prioritize requests based on urgency of needs or administrative orders issued to the community by the Nebraska Health and Human Services.

Application Process

Applications will be accepted throughout the year. Applications received by April 1st of each year will be reviewed and ranked. The applicants will be notified of approval, rejection or qualified approval in July. Final approval is subject to adoption of the district budget, which normally occurs at the August board of directors meeting. If Municipal Water System Assistance Program funds are unobligated following budget approval, a second review and ranking will be done on all applications received by October 1. Applicants considered during the second review will be notified of approval, rejection or qualified approval by January 1.

Cooperative Agreement

Approved applicants must enter into a cooperative agreement with the district stipulating the conditions for receipt of Municipal Water System Assistance Program funds. A complete application must address all nine items in the outline. Please be concise. The application should not exceed 6 pages. If additional information is necessary, the district will request it.

The following outline will assist you with your application:

1. Name of the community
 2. Contact information (Name, address, phone, fax, email) for the following:
 - Mayor, Board Chairman
 - Administrative Representative (City Manager, Secretary, Village Clerk)
 - Water System Operator
 - Engineer
 3. Is the community currently on Administrative Order from the Nebraska Department of Health and Human Services for exceeding the MCL for nitrates? If “YES”, include a copy of the order.
 4. Does the Community have a Wellhead Protection Plan approved by the Nebraska Department of Environment and Energy? Date plan was adopted. (DO NOT SEND COPY OF PLAN WITH THIS APPLICATION.)
 5. Community population based on most recent census? Does the water system serve any population outside the community? If so, how many additional people are served?
-

Water Management

Municipal Assistance Program (cont.)

6. List the following information for each active community well.
 - Registration number
 - The most recent water analysis
 - Include a narrative explaining the project objective and components. The narrative should not exceed one page.
 - Project cost and time line
 - A budget summary of the major project components
 - The estimated time for project completion
7. Other funding sources. List all other funding sources the community has or plans to request funds from for this project. Include the agency and contact information for each funding source.

Project GROW

In 2008, the City of York purchased 400 acres of farm ground east of the city. The property was developed into what is now the City of York Wellfield. In the summer of 2017, the Upper Big Blue Natural Resources District approached the City of York with an idea for improving soil health which would in turn protect the city's drinking water: Project GROW (Growing Rotational crops On Wellfield).



Project GROW focuses on 160 acres of the total 400-acre wellfield and includes demonstration fields, community garden plots, a berry orchard, and an extensive pollinator habitat. Using no-till, diverse cover crops, and proven crop rotations, the project seeks to improve soil health, decrease soil erosion, and improve water holding capacity, all while maintaining profitability. One of the main goals of the project is to improve the quality of the drinking water produced from the wellfield, as a healthy soil acts as a filtering system to the aquifer and decreases nitrogen leaching and contamination.

The community garden and berry orchard also helps supplement individual needs for locally-grown food.

The Project GROW plot is located just east of the ballfield complex in York, close to the

intersection of 12th Street and Road N.

Project Goals

The goals are to improve soil health, increase soil carbon, erosion control, non-leaching of nitrogen into the water table, and increasing water holding capacity in the soil, all culminating to protect York's water quality at the wellfield. York would become the model and leader for other cities to follow by establishing the York Wellfield Pilot Program known as "Project GROW," (Growing Rotational crops On Wellfields).

Measuring Success

There are three specific and measurable objectives for this project:

1. Awareness: To have an effect on the awareness of City of York Citizens; specifically, to increase their understanding of the importance of how cover/rotational crops planted atop the city wellfield can sustain both water quality and soil health that correlates to sustaining citizens' health (60% of citizens within 24 months).
2. Acceptance: To have an effect on the acceptance of cities to model the efforts of York as being an early adopter and lead influencer; specifically, to increase interest in other cities across the NRD to plant cover/rotational crops atop their city wellfields. (Two cities to adopt the program within 48 months inside the Upper Big Blue NRD). The NRD would possibly develop a cost-share program for these cities culminating from the success of the York Wellfield Pilot Program.
3. Action: To have an effect on the action of municipalities in viewing York as a knowledgeable leader in wellfield conservation and environmental educational efforts; specifically, to empower York as an authority to influence and change behavior for other cities to adopt similar wellfield programs across Nebraska (Two cities to adopt the program within 60 months outside the Upper Big Blue NRD).

Project Funding & Estimated Costs/Revenue

All cash crops will be non-GMO and non-treated seed. No insecticides or fungicides will be used. The City of York would provide the land and costs related to farming operations and retains the income for five years. Funding from this project comes from grants and collaborations with state and federal agencies.

Water Management



Water Quality Improvement Plan Incentive Program

The Upper Big Blue Natural Resources District offers an incentive program for producers in portions of the Recharge Lake Watershed, Beaver Creek Watershed, and qualifying municipal Wellhead Protection Areas. Incentivized practices included are cover crops, land treatment practices, and buffer/filter strips.

This program is funded directly by the Upper Big Blue Natural Resources District and is not affiliated with any federal conservation programs. However, the program does include collaboration with local NRCS soil specialists to ensure best results.

Practices: Cover Crops

The UBBNRD will administer the Cover Crop Cost-Share Program in conjunction with the Natural Resources Conservation Service (NRCS) to plant up to 2,000 acres of cover crops annually in the Recharge Lake Watershed and qualifying Municipal Wellhead Protection Areas. Approved applications are eligible for five years of funding through this program.

A total of \$100,000 is available. For approved applications, the maximum cost-share rate can be up to \$50/acre for the cost of seed and seeding or 100% of the actual cost, whichever is less up to \$7,500 per landowner per year. Applications are approved for a five-year term. NRCS and/or other federal, state, or local funds may not be combined with this program. All seed selection and seeding must abide by NRCS Code 340 Cover Crop Criteria and Scenarios. Cover crop termination is not eligible for funding under this program.

Recharge Lake Watershed

Tracts located in a 'Very High' and 'High Risk' categories are eligible for a maximum payment of \$50/acre for the first year of seeding and gradually decreases to \$30/acre over the five-year period.

Municipal Wellhead Protection Areas

Tracts located in a Municipal Wellhead Protection Area where the municipality has an approved Wellhead Protection Area Plan are eligible for a maximum payment of \$50/acre for the first year of seeding and gradually decreases to \$30/acre over the five-year period.

Eligibility

- Landowners and Operators are eligible for this program.
- If approval is given to a Tenant, the District will notify the Landowner by mail that the practice was approved for planting.
- Approved applicants will secure funding for five years of program support.
- Land must be located within the “Very High Risk” or “High Risk” categories within the Recharge Lake Watershed and/or within a qualifying Municipal Wellhead Protection Area.

Approval Process

Approved applications will be notified in writing. Once approved, the applicant must call the UBBNRD for an authorization number. Upon authorization, the applicant will have 90 days to complete the practice. After completion, final invoices must be turned in to the NRCS. The NRCS will review the practice and invoices and forward to the UBBNRD for final payment. Any purchases of seed or services made prior to authorization are not eligible for funding. Cover crop termination is not eligible for funding under this program.

Cost-Share Rate

The cost-share rate is 100% of actual cost of seed and seeding up to the maximum scheduled rate over the 5 years of the program.

- 1st year - \$50/acre
- 2nd year - \$50/acre
- 3rd year - \$40/acre
- 4th year - \$30/acre
- 5th year - \$30/acre

The landowner/operator will be reimbursed for 100% of the actual seed and seeding costs or at the program annual rate, whichever is less. The maximum cost-share is \$7,500.00 per landowner/operator per year. NRCS and/or other federal, state, or local funds may not be combined with this program. Seed selection and planting rates must abide by the NRCS Code 340 Cover Crop for planting rate, planting date, and termination (termination costs are not covered under this program). Seeding may be completed by drilling, aerial, or broadcast application.

If the landowner/operator discontinues the program prior to completing all five years, the landowner/operator must reimburse the UBBNRD 50% of all previous payments made to the landowner/operator through the program.

Participation in this cover crop cost-share program will not affect the landowner's/operator's ability to participate in the UBBNRD's Land Treatment Program.

The UBBNRD reserves the right to re-allocate program acres/funds between the Recharge Lake Watershed and the Municipal Wellhead Protection Areas in order to best utilize available funding.

Water Management

Practices: Buffer/Filter Strips

The Nebraska Buffer Strip Program offers financial assistance for landowners that install filter strips (narrow strips of grass) or riparian forest buffer strips (strips containing trees and grass).

These strips are placed next to seasonal or permanent streams, wetlands and ponds. These practices provide protection between cropland and waterbodies by helping to stabilize the environment and filter agrochemicals such as fertilizers and pesticides.

Contracts run from 5 to 10 years. State program payments vary from \$20 to \$250 per acre, depending on soil type, whether the acres are irrigated or not and whether payments are received from other programs. In addition, there are incidental haying and grazing allowances through the program.

The Upper Big Blue Natural Resources District (UBBNRD) completed a Water Quality Management Plan (WQMP) and selected the Recharge Lake Watershed and the Beaver Creek Watershed as the initial target areas for implementing water quality measures.

Through the UBBNRD's WQMP Implementation Program, the UBBNRD is offering an additional incentive payment for filter and buffers strips within the Recharge Lake Watershed and the Beaver Creek Watershed.

Applications

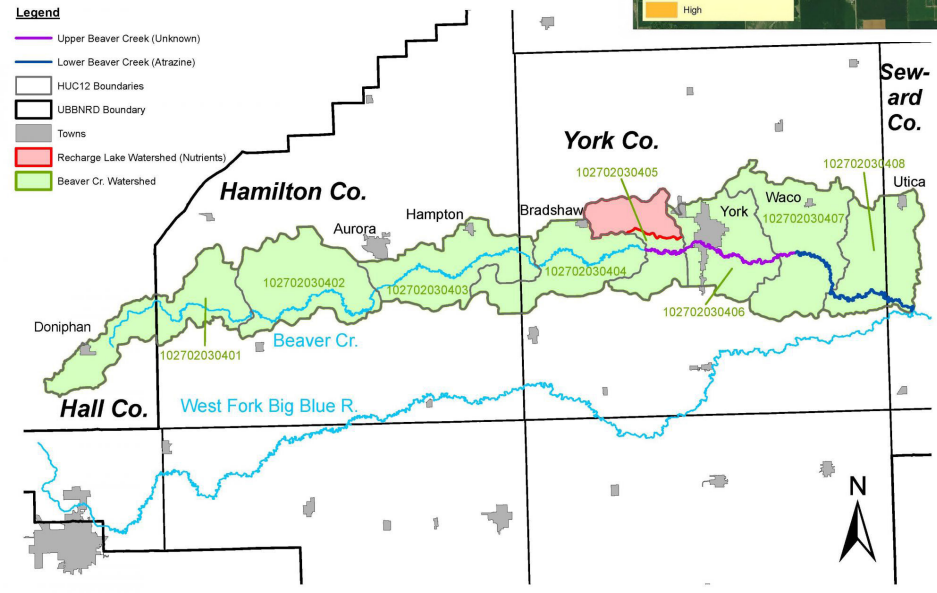
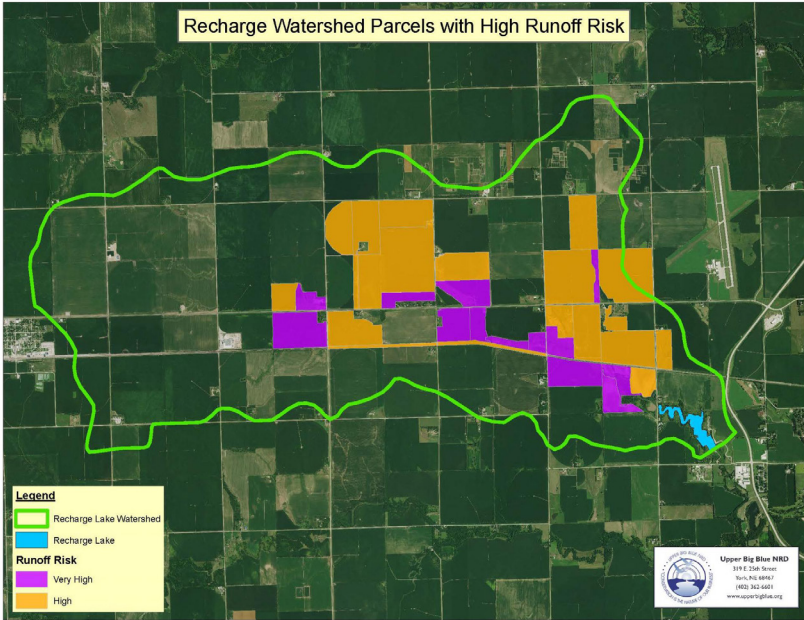
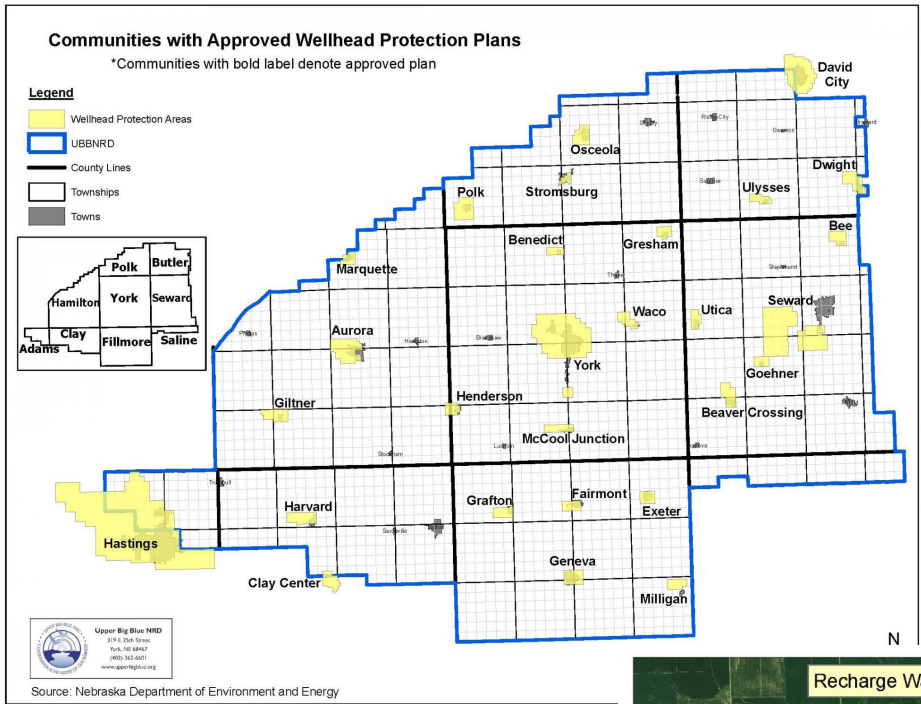
Applicants will apply through the Natural Resources Conservation Service (NRCS) under the Nebraska Buffer Strip Program.

Eligibility

- Only landowners are eligible for the Nebraska Buffer Strip Program.
- Lands located within the Recharge Lake watershed and/or the Beaver Creek watershed are eligible for the UBBNRD incentive program.
- Landowner must meet all requirements and be approved under the Nebraska Buffer Strip Program.
- Only new or renewed buffer strip projects are eligible for the incentive program.

Payment

In addition to the Nebraska Buffer Strip Program payment, landowner will receive an UBBNRD incentive payment set at 50% of the Nebraska Buffer Strip Program payment for the life of the contract (5 to 10 years). If the buffer strip is removed before the expiration of the contract, the landowner must return all previous incentive payments to the NRD.



Wildlife Habitat

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The district cooperates with the Nebraska Game and Parks Commission and Pheasants Forever on programs to create and enhance wildlife habitat. Federal agencies administer habitat development programs including the Conservation Reserve Program (CRP) for wildlife habitat improvement and soil erosion control, the Wetland Reserve Program (WRP), Partners for Wildlife for wildlife habitat enhancement and the USDA-WHIP for habitat development. Contact the FSA for information about CRP, the NRCS for information about the WRP and USDA-WHIP and the US Fish and Wildlife Service for information about Partners for Wildlife.

State sponsored conservation programs include the Nebraska Game and Parks Commission's Private Lands Wetland Initiative for wetland development. This program requires the landowner to sign a contract of varying duration.

In addition to joint programs with Natural Resources Districts, Pheasants Forever or Ducks Unlimited programs provide incentives for creating habitat. Kyle Yrkoski, district forester for the Upper Big Blue NRD, can provide current information on these programs. He can be reached by calling (402) 362-6601 or email. trees@upperbigblue.org.

The NRD co-sponsors a wildlife habitat enhancement program with the NGPC. The program, WILD Nebraska, has consolidated several former NGPC programs including the Wildlife Habitat Improvement Program (WHIP), the Wetland Initiative Program (WIP), the Conservation Reserve Program-Management Access Program (CRP-MAP), the Seasonal Habitat Improvement Program (SHIP), the Cooperative Roadside Seeding Program (RSP), the Upland Habitat Initiative (UHI), the Wildlife Shelterbelt Program (WSP), and the Living Snow Fence Program.

WILD Nebraska Overview

Due to declines in the wildlife populations in Nebraska, the Upper Big Blue NRD and the Nebraska Game and Parks Commission cooperate on a program, WILD Nebraska, to develop, manage and enhance wildlife habitat on private land through contracts with landowners. Cooperating landowners are offered financial assistance for establishing new wildlife habitat areas. The program is designed to give flexibility to interested landowners to implement land use practices that benefit wildlife, farmers, ranchers and the general public.

Procedure

1. Contact the Upper Big Blue NRD office to apply. Applications are taken year-round.
2. The NRD and the Game and Parks Commission will make an on-site review to determine eligibility and to establish priorities.

3. Final approval will be made by the NRD board of directors.
4. An annual review will be made to insure compliance.
5. Annual payments will be made on the anniversary dates of acceptance into the program.

Eligibility

WILD Nebraska is designed to create new wildlife habitat from crop ground or to improve existing wildlife habitat. Existing habitat lands will not be accepted into the program without improvements approved by the funding agencies. Allowing pedestrian public access, including access for hunting, is the option of the landowner on all acres funded through this program. If public access is allowed, an additional payment of \$3.00 per acre is made for each year of the contract.

Flexibility is a hallmark of this program. Landowners and agency staff have considerable leeway to develop a plan that meets the needs of all parties. Because of this, each contract will be created specifically for the individual site and goals.

Payments

A methodology to establish standardized costs has been adopted through WILD Nebraska using the USDA's published county average costs. These rates are familiar to landowners and are already managed to be current. Where county average costs are not available, WILD Nebraska will work with partners to develop reasonable rates. In cases where annual rental payments are used, the same problem of maintaining current rates exists. WILD Nebraska's solution is to use a percentage of the county average CRP rental rates. Total payments depend on the cost-share percentage and the annual maximum payment for each activity.

WILD Nebraska uses a payment system in which landowners receive financial incentives to help them "make a transition" from one level of economic land use to a different income base that provides greater wildlife benefits. Priorities are set on a statewide basis and include such things as habitat type, public access opportunities, project type (for example, row crop to high diversity grassland), contract length and regional resource needs.

In general, cost-share for management activities is designed to introduce a landowner to a specific wildlife habitat management technique and to encourage its use in the future. Therefore, re-enrollment of sites for additional cost-share benefits for the same activity will generally not be allowed unless special circumstances exist. Examples include public access or rare or unique habitats.

Transition payments will be limited to a maximum of five years. Following that period, lands will continue to be eligible for development or management activity incentives, but would not be eligible to receive additional transition payments.

A payment of \$3.00/acre will be made for public access, including hunting, for each year of the contract.

Wildlife Habitat



WILD Nebraska Overview (cont.)

The district has a minimum payment policy. In order to be cost-effective, the district will not issue a check for payment in an amount less than \$100. If the estimated cost on an application turns out to be higher than the actual amount and the actual amount to be paid is less than \$100.00, the application will be denied and no check will be issued. If an application results in a payment that would be less than \$100 consider adding more acres on the application to increase the payment amount.

Development

Development projects are eligible for reimbursement for materials and construction costs. Cooperators will be reimbursed, up to the specified limit, after submitting bills and invoices to the Upper Big Blue Natural Resources District.

Management

Management payments will be based on a prescribed management plan. This plan may be modified by mutual consent as conditions warrant. Payments, will be made to the cooperator after the prescribed management action has been completed. Payments will be based on actual costs that are adjusted to account for equipment needs and maintenance, labor and risk factors. If a management activity is not listed in the table, the payment will be established in the contract and mutually agreed to by the Upper Big Blue NRD, the NGPC and the cooperator. Cooperators will be reimbursed for the amount listed in the table if they do the management themselves, or if they pay someone else to do the management.

Transition

These are short-term payments designed to help the landowner transition to an alternate use of the land designed to be more wildlife friendly. These payments are needed when the alternative use of the land results in uncertainty and a loss of income generating potential, at least in the short term. WILD Nebraska alone will not be able to compete economically with conventional agriculture. Therefore, payments will be targeted to obtain the greatest benefit for wildlife. When possible, payments will complement the existing land payment programs of our partners, especially the USDA. Transition payments will be based on a percentage of the county average land rental rates. Agreements will be either in the form of a contract or an easement. The decision on whether to use a contract or easement will be based on a number of factors including: cooperator preference, resource value, cost of the activity and length of the agreement.

Wildlife Habitat Improvement Practices

Grazing Management

- Disking
- Grassland haying and/or shredding
- Grazing management for grassland wildlife
- Herbicide treatment of grasslands
- Inter-seeding established grasslands with legumes and other forbs
- Prescribed burning
- Wildlife shrub planting
- Woody vegetation removal
- Food and cover plot establishment

Grassland Establishment Practices

- Grassland or prairie establishment
- Wildlife shrub planting
- Food and cover plot establishment
- Wetland Practices
- Disking
- Drain closure
- Grassland haying and/or shredding
- Prescribed burning (approved by partnership)
- Quick-cycle tail water recovery system installation
- Stream weir installation
- Water control structure installation
- Wetland silt and fill removal
- Wetland vegetation management
- Woody vegetation removal
- Food and cover plot establishment

Wetland Creation Practices

- Drain closure
 - Excavation
 - Stream weir installation
 - Water control structure installation
 - Wetland creation
 - Food and cover plot establishment
 - Woodland Practice
 - Riparian forest buffers
 - Wildlife shelterbelts
 - Wildlife shrub planting
 - Woody vegetation removal
 - Food and cover plot establishment
-

Wildlife Habitat



WILD Nebraska Management Activities

Disking

Purposes

- Increase plant diversity and productivity in existing grasslands and wetlands to fulfill life requirements of wildlife and set back plant succession
- Site preparation for inter-seeding

General Concept

Disking can increase diversity by setting back plant succession and improving the structure of grassland and wetland plant communities. It will allow growth of important broadleaf “wildlife friendly” plants by reducing competition from plants with few wildlife benefits. Disking can be used to prepare sites for inter-seeding.

Examples

- Disking existing low diversity grass stands (primarily CRP and other planted grasslands) incorporates dead plant material into the soil, promotes new tiller growth into bare areas, splits the crowns of bunch grasses to stimulate growth and reduces competition within sod bound grasses.
- Disking low diversity grass stands provides seed beds for legume or forb inter-seeding.

Cost-Share Rate

- Maximum Annual Payment: \$1,000/landowner/year, payment made upon project completion.
- Minimum Payment: \$100
- Management Payment: Up to 75% of county average cost, payment made upon project completion. Only one payment per site is allowed unless required in the agreement.
- Public Access Payment: \$3/acre/year for duration of contract
- Minimum Size: 5 acres
- Contract Term: 5 years

Requirements and Technical Specifications

Must be part of an approved management plan. As a general rule, no disking should occur in grasslands between May 1 and August 15 to reduce impacts to wildlife production and improve desired plant growth. Typically, disking in grasslands should be shallow (2-3 inches) and only disturb approximately one-half of the soil

surface. The intensity will vary according to wind and water related soil erosion potential and type of grassland. Tracts in heavy soils with invasive species (like smooth brome) will often require two or more diskings to be effective. A minimum of 10% of the grassland should be treated at one time with several treatments being rotated over subsequent years. Disking in wetland communities should be deep (6-10 inches) and accomplished during dry periods.

Drain Closure

Purpose

To restore hydrology to wetlands that have been fully or partially drained

General Concept

Many wetlands have been fully or partly drained by ditches, culverts, head-cutting gullies and tiling. Closure of these drains will result in an increase of wetland acres and also restore, or partially restore, the natural hydrology to the wetland. The water control activity will often be used in association with this activity.

The Seasonal Habitat Improvement Program (SHIP) of the Rainwater Basin Joint Venture is included as part of this activity. An existing cooperative agreement between the NGPC, USFWS and the National Fish and Wildlife Foundation is in place to implement this activity in the Rainwater Basin. The main difference between SHIP and other drain closure projects is that SHIP closes the drainage only during the non-cropping season to provide water bird migration habitat.

During the cropping season, the landowner is allowed to remove the water and crop the site. In some cases, this activity may be offered outside of the Rainwater Basin.

This activity works well when coupled with our partners' programs. An example is WRP and some CRP activities where those programs cover a portion of the landowner's restoration costs and this activity under WILD Nebraska could pay the remaining cost-share.

Cost-Share Rate

- Maximum Annual Payment: \$5,000/landowner/year, may exceed with administrative approval, payment made upon project completion
- Minimum Payment: \$100
- Public Access Payment: \$3/acre/year for duration of contract
- Contract Term: 10 or more years

Requirements and Technical Specifications

Commission approved seeding of construction areas will be used as prescribed to provide wildlife habitat and to prevent erosion.

Wildlife Habitat

Excavation

Any excavation as part of the Wetland Creation Practice must be approved by cooperating agencies.

Cost-Share Rate

- Maximum Annual Payment: \$5,000/landowner/year, payment made upon project completion
- Minimum Payment: \$100
- Public Access Payment: \$3/acre/year for duration of contract
- Contract Term: 10 years

Food and Cover Plot Establishment

Purposes

- To provide a readily available winter food source for wildlife
- To provide a lure for wildlife that will attract them into high quality cover
- To provide a relatively safe feeding environment for wildlife
- To provide wildlife cover

General Concept

Food is a strong wildlife attractant and strategic placement of food plots can help to manage wildlife. However, the term “food plot” is not the best descriptor of this activity. The term “food and cover” plot better expresses the actual benefits provided. Although food is rarely a limiting factor for wildlife, it is much safer for wildlife to forage in a food and cover plot than searching for waste grain in a disked field. An important use of food and cover plots is the ability to attract resident wildlife species, such as pheasants, into areas with secure winter cover prior to winter. This complementary activity improves survival and tends to bring wildlife through winter in better physical condition.

Examples

Establishment of a multi-species sorghum planting to provide food and cover for wintering pheasants

Cost-Share Rate

- Maximum Annual Payment: Materials only
- Minimum Payment: \$100
- Public Access Payment: \$3/acre/year for duration of contract
- Minimum Size: 3-10 acres
- Contract Term: 1-2 years

Grassland Haying and/or Shredding

Purposes

- Fulfill life requirements for grassland wildlife by enhancing vegetative structure and composition
- Site preparation for inter-seeding additional forbs and grasses in existing grasslands

General Concept

Haying (removal of vegetative material) and shredding or mowing can be used on grasslands and wetlands to alter the composition of existing plant communities.

Altering the timing and extent of haying or shredding can protect ground nesting birds, encourage rare plant species and modify plant diversity, structure and residual cover.

Examples

- Alteration of time and extent of haying on sites with known populations of plant species of concern (threatened and endangered species) may enhance survivability.
- Shredding undesirable vegetation may allow more effective herbicide treatment.
- Shredding may curtail encroachment of woody invaders in grassland situations.

Cost-Share Rate

- Maximum Annual Payment: \$500/landowner/year, payment made upon project completion, CRP tracts not eligible
- Minimum Payment: \$100
- Management Payment: Up to 50% of county average cost if shredded or mowed according to an approved management plan (no harvest allowed), payment of \$10/acre if timing of haying operation substantially altered according to an approved management plan.
- Public Access Payment: \$3/acre/year for duration of contract
- Minimum Size: 5 acres
- Contract Term: 5 years

Requirements and Technical Specifications

Must be part of an approved management plan. No more than 30% of grassland tract can be hayed annually except when used as a timing alteration specified in the approved management plan. This activity must occur between July 15 and April 1 to minimize impacts to ground nesting birds. Shredding on CRP is not eligible for payment.

Wildlife Habitat



Grassland or Prairie Establishment

Purposes

- Fulfill life requirements for grassland wildlife
- Establish boarder plantings in ag systems
- Restore native grassland communities to the greatest extent possible

General Concept--Native Plantings

These are intended to restore native grassland communities and should include a diverse mixture of grasses, sedges and forb species. Seed mixtures for native grass and forb plantings should be representative of local native prairies. For example, tall grass prairie species should be planted in the tall grass prairie region of eastern Nebraska and mixed grass species should be planted in the mixed-grass prairie region of central and western Nebraska. Such seed mixtures will provide the best habitat for native wildlife species. Where available and practical, local ecotypes (varieties native to the local area) should be used in plantings.

Introduced or Native Grasses with Legumes

Without nesting cover, other management practices for ground nesting bird species with high population turnovers are not very effective. Cool season grasses with a strong legume component, also known as Dense Nesting Cover (DNC), can be very important habitat for pheasants and other ground nesting birds. Combinations of various different types of herbaceous vegetation provide excellent diversity and structure and are used by many species of grassland wildlife throughout the year.

Legumes Only

Legumes can provide excellent nesting cover and brood rearing cover for grassland birds, especially pheasants. Legumes are also excellent insect producers (protein source), which enhances brood survival.

All of the above are applicable in block plantings.

Introduced and native grasses with legumes and legume seedlings are applicable in strip-plantings such as field borders.

Examples

- Prairie restoration projects
- Conversion of cropland to grasslands

Cost-Share Rate

- Maximum Annual Payment: \$2,500/landowner/year, payment made upon project completion
- Minimum Payment: \$100
- Development Payment: Up to \$80/acre for seed costs, \$15/acre for ground preparation and seedling
- Management Payment: Up to 100% of cost of selected herbicide costs if implemented according to an approved management plan, payment of \$10/acre for application if implemented according to an approved management plan, may be eligible for payment after fifth year of contract.
- Transition Payment: Up to 80% of county average annual rental rate for up to 5 years, payments not applicable if grazing or haying implemented
- Public Access Payment: \$3/acre/year for duration of contract
- Minimum Size: 5 acres
- Contract Term: 5 years—introduced native grasses with legumes and legumes only; 10 years—native plantings

Requirements and Technical Specifications. Native Plantings

Restore native grassland communities to the greatest extent possible according to an approved plan. Enrollments of lands with high diversity plantings that are intended to restore or provide buffer for native prairies are the primary targets. A minimum guideline is to include five or more native grasses and two or more native forbs with the forb component to represent at least 30% of the seed mixture. Prairie restoration projects are to include eight or more native forbs. Where existing grass cover occurs (for example, smooth brome), seed bed preparation will require elimination of existing vegetation by disking, plowing or chemical treatment. In addition, cover-cropping and repeated tillage operations may be necessary to eliminate existing persistent vegetation. On crop fields, seed bed preparation may not be necessary and seeds may be planted directly into residue. Mowing, grazing, burning and/or other activities may be used to manage the grassland after establishment. If noxious weed control is needed, it must be accomplished by spot mechanical treatment or spot chemical spraying.

Introduced or Native Grasses with legumes

The seed mixture must include two or more grasses and one or more legumes. Either introduced or native, warm or cool season grasses are acceptable. Smooth brome, reed canary grass, crested wheat grass, or Garrison creeping foxtail are not acceptable. Switchgrass cannot comprise more than 20% of the grass component. Seed mixture must include a minimum of 30% legumes. If plant materials are known to be invasive in the project area, alternate plant materials should be used.

Wildlife Habitat



Grassland or Prairie Establishment (cont.)

Legumes Only

The seed mixture may contain a single species of legume or combination of two or more species. If plant materials are known to be invasive in the project area, alternate plant materials should be used.

Grazing, haying and/or burning may be an applicable management activity after the first three years of the contract. If noxious weed control is needed, it must be accomplished by spot mechanical treatment or by spot chemical spraying.

Lands enrolled into this activity will be accepted on a case-by-case basis following an inspection and planting plan.

Grazing Management for Grassland Wildlife

Purposes

- Manage grassland and/or wetland ecosystems to fulfill life requirements for wildlife
- Demonstrate quality grassland stewardship emphasizing mutual benefits to wildlife and livestock production
- Enhance native grassland by increasing plant species composition and structure

General Concept

The objective of this activity is to create a more desirable landscape with a mosaic of grassland habitats. Planned grazing can be a viable management tool that can maintain productive grasslands and enhance habitat conditions for wildlife. Other associated plant community management activities, such as haying, prescribed burning and herbicide use, may be integral to a stewardship plan. Through partnerships in the planning process, ranchers and conservation agencies can reach consensus on a stewardship plan to adequately meet each of their objectives. Under a good stewardship plan, improvements in plant species composition and improved structure can be expected, resulting in improved wildlife habitat conditions. Long-term whole ranch planning is a preferred strategy for this activity because of greater benefits realized on a large scale, but smaller units may be considered under some circumstances. Cost-share is available for fencing and/or other selected activities.

Encroachment of native grassland by exotic invasive species such as smooth brome and Kentucky bluegrass can reduce habitat quality for grassland dependent wildlife.

Reduction of these invasive exotics, resting overgrazed grasslands and other grassland management practices can fulfill necessary wildlife production and winter cover requirements. In the case of introduced grass and legume tracts, management strategies will encourage plant diversity with particular emphasis on increase or retention of legume component. Cost-share is available for fencing and other grassland management practices.

Examples

- Cross fencing large pastures to improve grazing systems and provide rested pastures and residual cover for wildlife
- Fencing out important wildlife features to better manage grazing on those sites
- Replacing invasive species with native plant mixtures
- Managing timing and intensity of grazing in introduced grass/legume situations to encourage a minimum of two grasses and 25% legume component

Cost-Share Rate

- Maximum Annual Payment: \$2,500/landowner/year (some exceptions possible), payment made upon project completion
- Minimum Payment: \$100
- Development Payment: Based on county average cost for materials (fencing, water sources, etc.) depending on other available funding and wildlife habitat benefits received. Payment made upon project completion.
- Management Payment: May be eligible for management payment for other grassland activities benefiting wildlife
- Public Access Payment: \$3/acre/year for duration of contract
- Minimum Size: 5 acres
- Contract Term: 10 years

Requirements and Technical Specifications

Develop a stewardship plan in cooperation with the landowner and other partners that will benefit wildlife and address shared objectives. The plan should include vegetative inventories, wildlife and livestock objectives, management strategies (for example, fencing, water needs). funding sources and development of a cooperative agreement. If noxious weed control is needed, the landowner must use mechanical means or spot applications of herbicides.

Wildlife Habitat



Herbicide Treatment of Grasslands

Purposes

- Minimize adverse effects of broad-scale herbicide treatments on sites with known state or federally listed threatened and endangered plant species
- Retain or increase diversity of existing plant communities necessary to fulfill life requirements of wildlife
- Site preparation for seeding or inter-seeding

General Concept

Use of herbicides can be a significant factor affecting plant diversity in plant communities. Nebraska statutes require control of listed noxious weeds. Herbicides can be the control activity of choice in many situations. Broad-scale applications of herbicides can result in almost complete loss of many forb species, including threatened and endangered species such as the western prairie fringed orchid. Careful applications of proper herbicides on plant communities can minimize adverse effects on non-target plants. Proper use of selected herbicides can be a valuable tool in controlling invasive plants and for setting back succession of existing undesirable vegetation.

Examples

- Spot spraying with a narrow-range herbicide on leafy spurge in a wet meadow site with population of western prairie fringed orchids.
- Use of Roundup® on field of smooth brome to allow early successional plants to re-establish.

Cost-Share Rate

- Maximum Annual Payment: \$500/landowner/year, payment made upon project completion
- Minimum Payment: \$100
- Management Payment: Up to 100% of cost of selected herbicide costs if implemented
- According to an approved management plan, payment of \$10/acre for application if implemented according to an approved management plan
- Public Access Payment: \$3/acre/year for duration of contract
- Minimum Size: 5 acres
- Contract Term: 5 years

Requirements and Technical Specifications

Herbicide applications must be a part of an approved grassland management plan. This management plan must include specific name, rate, timing and method of chemical application, target species and affected important plant community and/or rare species. Blanket or whole field applications will not be acceptable unless part of a grassland renovation project.

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Wildlife Habitat



Interseeding Established Grasslands with Legumes and Other Forbs

Purposes

- Fulfill life requirements for upland game and other grassland wildlife
- Enhance native grasslands by increasing plant species composition and diversity

General Concept

Existing grasslands in many instances may be dominated by a single species or only a few species of grass with relatively few forbs. Such areas do not provide the habitat requirements necessary to sustain many wildlife populations. Forbs support an additional array of insect species and provide a forage and seed source for wildlife. Forbs (including legumes) and other grasses can be introduced into grassland by various methods. Only native species should be inter-seeded into native prairies. Alfalfa and sweet clover are the most commonly used legumes and can be used statewide on non-native grasslands.

Methods of seeding forbs and grasses include: (1) light disking, drilling or broadcasting and harrowing; (2) drilling directly into sparse grass stands; or (3) drilling into recently burned or chemically treated tracts. Broadcasting followed by short-term, high intensity grazing may also be acceptable. Methods are site specific and will vary according to location, soils and type of existing grass stands.

Examples

- Inter-seed introduced, cool season grass or switch grass stands with alfalfa, sweet clover and/or red clover
- Inter-seed native grass stands with native forbs

Cost-Share Rate

- Maximum Annual Payment: \$2,500/landowner/year (some exceptions possible), payment made upon project completion
- Minimum Payment: \$100
- Development Payment: Up to 100% of seed costs and up to 100% of county average costs for site preparation - maximum of \$10/acre
- Public Access Payment: \$3/acre/year for duration of contract
- Minimum Size: 5 acres
- Contract Term: 5 years

Requirements and Technical Specifications

A site development plan must be prepared for each project. In most instances, mechanical disturbance or chemical applications must occur prior to seeding. In smooth brome stands, a minimum of 90% reduction in grass cover is required prior to interseeding. Seed mixtures to be inter-seeded into nonnative grasslands must include at least two or more legumes consisting of alfalfa, red clover, sweet clover and/or hairy vetch. Alfalfa should be a dryland, rhizomatous variety and sweet clover should be used in conjunction with a perennial legume. Red clover may be used in the eastern half of the state and in wetter sites. Hairy vetch is suitable in sandy soils. A minimum of two pounds of introduced legumes, in any combination, should be seeded per acre. Native, unbroken grasslands must be inter-seeded only with native forbs or grasses. Inter-seeded legumes or native forbs must comprise a minimum of 30% of full seeding rate. CRP-MAP tracts are not eligible for payment under this activity.

Prescribed Burning

Purposes

- Improve plant composition and structure of existing plant communities to fulfill life requirements of wildlife
- Control of woody plant invaders
- Site preparation for inter-seeding

General Concept

Fire has played an integral part in the development and maintenance of grasslands and other plant communities in the Great Plains. Through technical assistance, landowners can be provided the necessary information to conduct safe and effective burns and will be better informed of the benefits of prescribed burning.

Many private landowners lack the necessary equipment and information to conduct prescribed burns. WILD Nebraska may provide cooperators with drip torches and other tools on loan at no cost along with necessary information to conduct safe and effective burns.

Examples

- Spring or fall burning to control or suppress cool season grasses in native grasslands and facilitate release of warm season grasses and forbs
 - Burning to prepare site for inter-seeding grasses and forbs into existing grasslands
 - Burning, in conjunction with hydrologic manipulation, to suppress undesirable vegetation in wetland ecosystems
 - Burning to retard encroachment of woody plants into grasslands, wetlands and savannas and remove litter accumulation and undesired invasive species in forest understory
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Wildlife Habitat

Prescribed Burning (cont.)

Cost-Share Rate

- Maximum Annual Payment: \$1,000/landowner/year, payment made upon project completion
- Minimum Payment: \$100
- Management Payment:
 - Burns of 5-20 acres - up to \$100
 - Burns of 21 to 80 acres - \$250
 - Burns of 81-160 acres - \$50
 - Burns of 161-320 acres - \$750
 - Burns over 321 acres - \$1,000
 - [Payment will be made upon project completion. Only one payment per site is allowed unless required in the agreement.]
- Transition Payment: may be eligible for a payment if grazing deferment is necessary to provide adequate fuel load
- Public Access Payment: \$3/acre/year for duration of contract
- Minimum Size: 5 acres, no limit for equipment loan or technical assistance
- Contract Term: 5 years, site eligible for payments normally only once in a five-year contract

Requirements and Technical Specifications

A management plan detailing prescribed burns must be prepared by a resource professional for each site.

Quick-Cycle, Tail-Water Recovery System Installation

Purpose

To the fullest extent possible, restore and/or maintain the natural hydrology of wetlands by encouraging the use of quick-cycle, tail-water recovery systems.

General Concept

In Nebraska's Rainwater Basin and elsewhere, pits have been dug in and near wetlands to make these areas more suitable for cropping. Because most pits capture water during the entire year, the natural hydrology of the wetland is usually interrupted. By providing financial incentives to install quick-cycle, tail-water recovery systems, cooperators may be able to fill existing pits.

The quick-cycle works like a sump pump. Excess water from irrigation is directed into a small earthen pit or tank. A pump, switched on by a float returns the excess water to the irrigation system resulting in increased efficiency. In the absence of a larger volume pit, runoff from precipitation reaches the wetland at a higher rate. Quick-cycle systems can also benefit wetlands by directing irrigation tail-water away from a wetland to facilitate natural draw-down processes. Pit closure or pit filling or some other type of hydrologic modification must accompany this activity.

Examples

Several quick-cycle pumps have been installed in the Rainwater Basin. In each case either an existing pit was filled or a new pit was not constructed resulting insignificant benefits to the wetland resource.

Cost-Share Rate

- Maximum Annual Payment: \$5,000/landowner/year, may exceed with administrative approval, payment made upon project completion
- Minimum Payment: \$100
- Development Payment: Up to 50% of the cost of supplies and materials, may exceed with administrative approval, payment made upon project completion.
- Public Access Payment: \$3/acre/year for duration of contract
- Contract Term: 10 or more years

Requirements and Technical Specifications

System should be designed to capture irrigation tail-water and allow most precipitation runoff to enter the wetland. Cost of return lines is not eligible.

Riparian Forest Buffers

Purpose

To restore or establish native woody species including trees, shrubs, vines, etc., along seasonal and permanent drainages to enhance wildlife habitat diversity within the landscape.

General Concept

This activity will be combined exclusively with USDA programs, primarily continuous CRP, or possibly the Nebraska Department of Agriculture/Natural Resources Districts' Nebraska Buffer Strip Program which includes riparian forest buffer restoration and establishment. The intent of this activity is to encourage cooperators to increase the width of enrolled buffers and to select native woody species that provide the greatest benefit to wildlife.

A mixture of short- and long-lived tree and shrub species that produce mast or browse is preferred. The potential to restore or establish riparian forest buffers exists along many drainages across Nebraska, especially in the eastern and southern parts of the state.

Wildlife Habitat

Riparian Forest Buffers (cont.)

Riparian areas serve as key wildlife habitats in the life requisites of a majority of wildlife species found in Nebraska. These wooded corridors, though often narrow, are vitally important for nesting, loafing and escape cover and also provide a variety of foods for wildlife. In many cases, these woodlands may have been removed intentionally to expand cropland areas or have been degraded due to overgrazing, flooding, erosion, etc.

Opportunities may exist to promote riparian forest buffers and riparian filter strips within priority watersheds in Nebraska. A partnership between NGPC and Pheasants Forever, called the Nebraska Buffers Partnership, has been formed to facilitate identification and enrollment of lands into the continuous sign up of the Conservation Reserve Program. This process uses one-on-one contacts with landowners and provides landowners with enrollment assistance.

Cost-Share Rate

- Maximum Annual Payment: \$2,500/landowner/year
- Minimum Payment: \$100
- Development Payment: Up to 100% of the cost of materials and installation, payment made upon completion of project. Cost-share will be provided at a rate not to exceed 25% of the county average costs (or actual costs if less) for all components eligible for cost-share under the Riparian Forest Buffer practice of the continuous provision of the CRP offered by USDA. For sites that do not qualify for CRP, such as “three-dot drains”, but do not qualify for the Nebraska Buffer Strip Program, cost-share may be provided at a rate of up to 75% the county average costs (or actual cost if less).
 - Seedling planting site preparation: Up to 100% of county average cost or actual costs, if less
 - Weed control: No cost-share on mechanical weed control (shredding) between rows except the removal of competitive grass cover may be cost-shared on a case by case basis.
 - Weed barrier fabric and installation: 50% of county average cost (or actual, if less)
 - Replants: 100% of seedling cost only if survival is less than 75%, provided twice during first five years, cooperators install seedlings
- Transition Payment: Only for conversion from cropland to riparian buffer, will not apply to sites enrolled in CRP or other programs providing an annual land use payment.

- Public Access Payment: \$3/acre/year for duration of contract.
 - o Minimum Size: 1-5 acres
 - o Contract Term: 10-15 years concurrent with USDA contract and as specified in the cooperative agreement

Requirements and Technical Specifications

To qualify for cost-share, the buffer must be a minimum of 66-feet wide. Composition of the species planted can include no more than 10% conifers (for example, red cedar) and no less than 30% native shrubs.

Stream Weir Installation

Purposes

To stop or reverse streambed degradation that negatively impacts wetlands.

General Concept

Many streambeds in Nebraska have become severely degraded. Degradation occurs when a stream cuts at an unnaturally accelerated rate, forming an incised channel with steep banks. A highly degraded stream affects wetlands by isolating them from over bank flood flows, by potentially lowering ground water levels across the floodplain and by allowing the development of erosive gullies that drain adjacent wetlands. Stopping degradation ensures that the wetlands on the floodplain will not become further isolated from ground water or over-bank water sources. Reversing degradation helps to restore wetlands by reconnecting them with ground water and over bank water sources. This activity will often be paired with the Drain Closure (see tab above) activity where floodplain head cuts (erosive gullies draining wetlands) are plugged.

Cost-Share Rate

- Maximum Annual Payment: \$5,000/landowner/year, may exceed with administrative approval, payment made upon project completion
- Minimum Payment: \$100
- Development Payment: Up to 50% of the cost of supplies and materials, may exceed with administrative approval, payment made upon project completion
- Public Access Payment: \$3/acre/year for duration of contract
- Contract Term: 20 or more years

Requirements and Technical Specifications

Approval of final plans by a registered professional engineer is needed for these projects. Natural Heritage Program and Fisheries Division staff at the NGPC will review these projects to ensure that the movement of aquatic life is not impaired.

Wildlife Habitat



Water Control Structure Installation

Purposes

- To facilitate wetland restoration
- To maintain the productivity of the wetland by effectively managing water levels

General Concept

Wetland plant and animal communities are well adapted to the wet and dry cycles that wetlands undergo. However, the hydrology of many wetlands has been altered to the point that the natural wet and dry cycles no longer occur. When this is the case, it is often necessary to provide for water control to restore the wetland or to maintain the productivity of the wetland. This activity will usually be paired with the Drain Closure (see page 52) activity.

Cost-Share Rate

- Maximum Annual Payment: \$5,000/landowner/year, may exceed with administrative approval, payment made upon project completion
- Minimum Payment: \$100
- Development Payment: Up to 50% of the cost of supplies and materials, may exceed with administrative approval, payment made upon project completion
- Public Access Payment: \$3/acre/year for duration of contract
- Contract Term: 10 or more years

Requirements and Technical Specifications

This activity is only applicable for development of shallow water wetlands (average depth of less than 2.5 feet). This activity will not be used to cost-share on deep-water projects (for example, lakes and fishponds).

Wetland Creation

Purposes

To create wetlands for the benefit of wildlife

General Concept

Although wetland creation is not a priority of this program, there are instances in which creations can replace wetlands that have been drained or to complement the functions of existing wetlands. Creation, most often, is accomplished through excavation or by construction of a dam. This activity will generally be paired with one of the other wetland activities.

Cost-Share Rate

- Maximum Annual Payment: \$5,000/landowner/year, may exceed with administrative approval, payment made upon project completion
- Minimum Payment: \$100
- Development Payment: Up to 50% of the cost of supplies and materials, may exceed with administrative approval, payment made upon project completion
- Public Access Payment: \$3/acre/year for duration of contract
- Contract Term: 10 or more years

Requirements and Technical Specifications

A wetland will not be created in an area where it will degrade existing wetlands or other unique natural communities. This activity is intended to emphasize shallow water habitat for wildlife. It is not intended for development of fisheries habitats. Creation of fish ponds will not be allowed under this activity.

Wetland Silt and Fill Removal

Purposes

- To restore wetlands in areas that were filled and leveled
- To remove silt and sediment washed into wetlands in order to restore original basin profile, depths and hydrology
- To remove invasive plant species and expose native plant seed banks
- To create varying water depths within the wetland and provide habitat diversity

General Concept

Many wetlands throughout the state have been filled (with soil, etc.) and leveled. Other wetlands have been severely impacted by removal of perennial vegetation from the watershed leading to the deposition of silt into the wetland. The highly accelerated rate of silt deposition leads to an alteration of wetland hydrology and can result in the establishment of invasive plants such as hybrid cattail, reed canary grass and river bulrush, all of which out compete more desirable plants. Also, silt buries the seed bank of desirable plant species preventing germination. It also acts as a sponge, absorbing water and making it unavailable to wildlife, and has a leveling effect, creating a wetland with a nearly flat bottom that eliminates the micro topography that provides habitat diversity. This activity must be accompanied by a prescribed vegetative buffer and/or silt trap.

Cost-Share Rate

- Maximum Annual Payment: \$5,000/landowner/year, may exceed with administrative approval, payment made upon project completion
 - Minimum Payment: \$100
 - Development Payment: Up to 50% of the cost of supplies and materials, may exceed with administrative approval, payment made upon project completion
 - Public Access Payment: \$3/acre/year for duration of contract
 - Contract Term: 10 or more years
-

Wildlife Habitat



Wetland Silt and Fill Removal (cont.)

Requirements and Technical Specifications

Wetlands that have been filled and leveled, as well as wetlands from which silt is to be removed, will need to have a depth of fill/silt and a topographic survey conducted to determine how much material should be excavated. Care must be taken when excavating in “perched” wetlands (such as Rainwater Basins and other playa wetlands) so that the clay seal underlying the area is not breached, allowing water to seep away. A vegetated buffer and/or silt trap will almost always accompany this activity.

Wetland Vegetation Management

Purpose

To manage, enhance and restore native wetland plant communities to benefit wildlife

General Concept

Because wetlands occupy a continuum between wet and dry conditions, they undergo a variety of unique changes both seasonally and from year-to-year. Wetlands under natural conditions go dry and then flood, are burned by prairie fires and are subjected to other disturbances such as grazing. These are natural processes that do not harm the wetland. In fact, it is the interaction of all of these dynamic processes that make wetlands so productive. If some of these processes are altered, for example, by maintaining a constant water level or the exclusion of a vegetative disturbance, such as fire, the wetland habitat will actually begin to deteriorate.

Many wetlands have been impacted, either due to the removal of natural disturbances or because proper management has not been prescribed. Examples of prescribed management techniques that may be applied under this activity include burning, grazing, haying, disking, shredding, spraying, water level changes, seeding and tree removal. Specific examples are not provided because each wetland and situation is unique. Management will be prescribed based upon site conditions and biological justification. These activities apply to the wetland only, however, they may be paired with other grassland or woodland management activities as appropriate.

Cost-Share Rate

- Maximum Annual Payment: \$5,000/landowner/year, may exceed with administrative approval, payment made upon project completion
- Minimum Payment: \$100
- Development Payment: Up to 50% of the cost of supplies and materials, may exceed with administrative approval, payment made upon project completion
- Public Access Payment: \$3/acre/year for duration of contract
- Contract Term: 5 or more years

Requirements and Technical Specifications

The cooperator will follow a NGPC approved management plan for the term of the contract.

Wildlife Shelterbelts

General Concept

Wildlife shelterbelts provide a multitude of benefits for many game and non-game species of wildlife. Shelterbelts primarily provide winter and escape cover, but also provide nesting cover, brood rearing cover, food and loafing sites.

Over the past several decades, shelterbelt numbers have been on a steady decline due largely to agricultural development. This activity is designed to replace some of that loss. The activity will develop new shelterbelts and restore existing ones. This activity will not be used to establish farmstead or feedlot windbreaks. Other programs exist that provide cooperators adequate financial assistance for their establishment.

Various combinations of red cedar, rocky mountain juniper and a variety of locally adapted native shrubs will be used. The use of exotic species is prohibited. Shrub species that provide winter and escape cover as well as food will be emphasized. The planting of red cedar in central and eastern parts of the state should be scrutinized due to the potential for “pioneering” into areas where they are not wanted.

Cost-Share Rate

- Maximum Annual Payment: \$2,500/land owner/year
 - Minimum Payment: \$100
 - Development Payment: Up to 100% of the cost of materials and installation, payment made upon project completion.
 - o Seedling planting site preparation: Up to 80% of county average cost or actual costs, if less
 - o Weed control: No cost-share on mechanical weed control (shredding) between rows except the removal of competitive grass cover may be cost-shared on a case by case basis
-

Wildlife Habitat



Wildlife Shelterbelts (cont.)

- o Weed barrier fabric and installation: 50% of county average cost (or actual, if less). Replants. 100% of seedling cost, provided twice during first five years, cooperators install seedlings
- Transition Payment: Only for conversion from cropland to wildlife habitat, will not apply to sites enrolled in CRP or other programs providing an annual land use payment
- Public Access Payment: \$3/acre/year for duration of contract
- Minimum Size: 2 acres (includes belt plus herbaceous and shrub cover)
- Contract Term: 10 or more years.

Requirements and Technical Specifications

The site must contain an area of herbaceous cover (undisturbed, quality nesting-loafing-roosting-cover) equal in size to the wildlife shelterbelt planting and not less than 66 feet wide located on the leeward side of the shelterbelt. This cover may be hayed (or shredded) after July 15th up to twice every five years to maintain habitat quality.

The site must also contain two shrub thickets a minimum of 100 feet long and 20 feet wide per two acre “plot” (belt plus herbaceous cover) located on the leeward side of the shelterbelt.

The wildlife shelterbelt must contain a minimum of three rows (recommended 20 foot spacing between rows) using any combination of red cedar, rocky mountain juniper and native shrub species.

The site must be protected from livestock and tillage encroachment. Fencing will be required for sites exposed to livestock. A single shrub row will be used to delineate herbaceous cover boundary on sites located adjacent to tilled cropland.

All vegetation between the rows will remain undisturbed (except to control noxious weeds). The planting of food/cover plot seed between the rows will be encouraged during the first five years following wildlife shelterbelt establishment on sites converted from cropland.

Sites with obvious noxious weed problems will not be enrolled. Should noxious weeds become a problem, the producer will be responsible for their control. Weed control will be limited to spot treatment by mechanical or chemical means.

Wildlife Shrub Planting

Purpose

To establish woody cover where needed to supply food and cover for game and non-game species of wildlife

General Concept

Shrubs are important habitat components for many wildlife species. These plants provide food and cover during the entire year. Some wildlife are dependent on woody plants for a considerable portion of their daily diet. Others depend on woody plants for cover from avian predation, shelter during winter storms, loafing and brood rearing.

This activity is intended to establish plantings that will be varied in size and location. They may be on pivot corners, bordering irregularly shaped fields, within grassy draws, or along riparian areas that lack essential woody cover. These are not intended to be shelterbelt plantings. Each proposed site will be evaluated for its potential to provide good, woody cover where it is lacking.

The “thicket” concept will be encouraged but design flexibility will allow for customizing the site.

Cost-Share Rate

- Maximum Annual Payment: \$2,500/landowner/year
 - Minimum Payment: \$100
 - Development Payment: Up to 100% of the cost of materials and installation
 - Seedling planting site preparation: Up to 100% of county average cost or actual costs, if less
 - Weed control: No cost-share on mechanical weed control (shredding) between rows except the removal of competitive grass cover may be cost-shared on a case by case basis
 - Weed barrier fabric and installation: 50% of county average cost (or actual, if less)
 - Replants: 100% of seedling cost only if survival is less than 75%, provided twice during first five years, cooperators install seedlings
 - Transition Payment: Only for conversion from cropland to wildlife habitat, will not apply to sites enrolled in CRP or other programs providing an annual land use payment.
 - Public Access Payment: \$3/acre/year for duration of contract
 - Minimum Size: 100 seedlings
 - Contract Term: 10 or more years (includes shrubs and associated herbaceous cover)
-

Wildlife Habitat



Wildlife Shrub Planting (cont.)

Requirements and Technical Specifications

The site must contain an area of herbaceous cover (undisturbed, quality nesting-loafing-roosting cover) equal in size to the wildlife shrub planting and not less than 20 feet wide. This cover may be hayed (or shredded) after July 15 up to twice every five years to maintain habitat quality.

A minimum of three native shrub species that are locally adapted must be used within any wildlife shrub planting.

The site (shrubs plus herbaceous cover) must be protected from livestock and tillage encroachment. Fencing will be required for sites exposed to livestock. Exceptions can be made for sporadic plantings into existing grasslands; however, livestock use must not directly reduce shrub survival.

Sites with obvious noxious weed problems will not be enrolled. Should noxious weeds become a problem, the producer will be responsible for their control. Weed control will be limited to spot treatment by mechanical or chemical means.

The wildlife shrub planting should be designed as a dense thicket when possible to maximize wildlife benefits and the long-term survival of the planting. The row spacing should be four to six feet and between row spacing should be five to eight feet.

The minimum width of the thicket should be no less than 20 to 25 feet. If planting into existing grass, killing (tillage or herbicide) the grass stand within the entire thicket area is recommended prior to planting in order to reduce competition and promote suckering of the shrubs.

Woody Vegetation Removal

Purpose

To remove all invasive trees, shrubs and other woody vegetation from grasslands and prairie wetlands that are negatively impacted by their presence.

General Concept

In the absence of natural or artificial disturbances such as fire, grazing, or haying, undesirable woody plants often invade grasslands and prairie wetlands. This transition to woodland habitat often contributes to the decline of important grassland and prairie wetland habitats and their associated wildlife species. In addition, woody plant invasion can result in a loss of ecosystem function through secondary affects, such as stream channel degradation in braided channel riparian systems and wetland water loss on clay lined playa wetlands. Removing woody vegetation and incorporating management activities to reduce the threat of re-invasion can restore valuable wildlife habitat at a specific seral stage while maintaining ecosystem function.

This activity is intended to enhance wildlife habitat for target species. It is not intended to specifically enhance livestock grazing, although it may occur as an associated benefit.

Examples

- Tree removal on and along the central Platte River has restored important roosting and feeding habitat for waterfowl, Sandhill Cranes, shorebirds and the endangered Whooping Crane. By removing woody vegetation, sandbars and islands can be destabilized allowing stream flows to naturally scour vegetation.
- Tree removal from Rainwater Basin wetlands can reclaim these wetlands for water birds and will restore the hydrologic balance by reducing losses through evapo-transpiration and root channel drainage.
- Removal of red cedar, Siberian elm and other woody species from existing tall and mixed grass prairie can assist in maintaining the integrity of these habitats.

Cost-Share Rate

- Maximum Annual Payment: \$2,500/landowner/year
 - Minimum Payment: \$100
 - Development Payment: Up to 100% of the cost of materials and installation, payment made upon completion of project. The cost of tree removal can vary widely due to amount of woody vegetation present and other conditions such as soil type, slope, etc. Sites will be evaluated in accordance with cost estimates to determine an acceptable cost-benefit ratio. The actual dollar per acre amount paid is site specific and will be determined on a case-by-case basis
 - Management Payment: Made upon completion of project or can be made in portions based on progress of the project
 - Transition Payment: Only if approved by NGPC
 - Public Access Payment: \$3/acre/year for duration of contract
 - Minimum Size: 1 acre (wetlands), 5 acres grassland
 - Contract Term: 10 years
-

Wildlife Habitat



Woody Vegetation Removal (cont.)

Requirements and Technical Specifications

On sites such as the central Platte River and most Rainwater Basin wetlands, removal via heavy equipment is the most efficient method. Shallow-rooted trees can be pushed over, piled up and burned. The US Army Corps of Engineers should be contacted prior to beginning project.

On grassland sites, trees such as red cedar, can be cleared using a custom tree sheers. Harvested trees can be piled up and burned or placed in brush piles along an established edge. Stumps of trees that have the potential to re-sprout, such as Siberian Elm, should be treated with herbicide to prevent re-sprouting.

Must be used in conjunction with a management activity to control future encroachment by woody species.

Backyard Habitat Establishment (additional practice)

Purposes

To provide information to assist in the establishment of backyard wildlife habitat
To facilitate and enhance the experience of enjoying wildlife

General Concept

This practice is currently supported through technical assistance only. There are many resources available to assist homeowners and hobby farmers in developing habitats that attract and benefit various wildlife. In time, this practice may include some development and management funds.

Examples

Identification of aesthetically pleasing, native plants to be used as wildlife attractants for home viewing.

Cost-Share Rate

Maximum Annual Payment: No payment

Requirements and Technical Specifications

Technical assistance only

Corners for Wildlife

Nebraska's Natural Resources Districts and Pheasants Forever cooperate on a cost-share program to develop center pivot corners from cropland to wildlife habitat. The goal of the program is to establish permanent wildlife habitat in an area that was not previously habitat. Corners planted with at least 400 trees and shrubs have greatest priority. As such, the use of Eastern Red Cedar will be removed as an option in this program unless the landowner has a specific need for it to be included in the project design. Instead, the emphasis will now be placed on the creation of thickets using native shrubs such as American Plum and Chokecherry.

Landowners are responsible for planting trees and shrubs when fewer than 400 trees and shrubs are planted. If 400 or more trees and shrubs are planted, the NRD will plant the trees and shrubs at no cost to the landowner.

A no-till seed drill may be rented from the local Pheasants Forever chapter for \$8/acre for Pheasant Forever members or \$20/acre for non-members—with a \$30 dollar minimum. A \$100 deposit is required but will be released if the drill is returned in the same condition as when received.

Contracts funded by grants from The Nebraska Environmental Trust Fund run for five years.

Procedure

1. Contact the district to determine eligibility and develop a plan.
2. File the application with the NRD. The district's board of directors and Pheasants Forever will accept or deny the application. Applications are accepted on a first come, first served basis.

Eligibility

1. Pivot corners on a four-way road intersection are not eligible.
2. The pivot corner must currently be cropped. Corners already covered in warm-season grass and/or trees are not eligible.
3. For pivot corners planted with trees or shrubs, mechanical or chemical weed removal is required three times each year for the life of the contract.
4. This District will not process a payment of less than \$100. Applicants must include enough acreage to insure that the minimum payment will be at least \$100.
5. Two project signs must be posted on each project.



Wildlife Habitat

Corners for Wildlife (cont.)

Funds Available to Cooperators

- Cover Practice I - Grasses
 - Annual Rate: \$60 per acre
 - Minimum Size: 2.5 acres
 - Contract Term: 5 years
 - Last date for planting: May 15 (1st year of the contract)
 - Cover: Numerous grass seed mixtures, contact the NRD for more information
 - Cost-Share Rate: 75%
- Cover Practice II- Trees or Shrubs Added to Cover Practice I
 - Annual Rate: \$100 per acre, total—Planting a selected nesting cover mixture with two shrub plantings that are each 1,500 square feet in size (a total of 534 shrubs) or planting a selected cover mixture with at least 400 shrubs and trees in a traditional row planting up to \$75 per acre
 - Minimum Size: 1.5 acres
 - Contract Term: 5 years
 - Last date for planting: May 15 (first year of the contract)
 - Cover: 400 or more trees or shrubs
 - Cost-Share Rate: 75% on grass and trees; 100% on planting trees; 50% on fabric weed barrier

Sources of Funds for Cover Practices I & II

Funding comes from grants obtained by Pheasants Forever from The Nebraska Environmental Trust Fund and the Nebraska Game and Parks Commission's "Conservation Reserve Enhancement Program." In addition, services are provided by the NRD and Pheasants Forever. The lease should state if any non-public uses (for example, grazing or farming) will occur within the limits of the lease. NRD approval of the application is not contingent upon state or federal financial assistance. However, the applicant is encouraged to make use of state and/or federal funds whenever possible.

Conservation Plantings



Seedling Sales and Planting

Under the district's seedling sales program, stock is provided to district patrons at the lowest possible cost. In order to assure quality stock, the seedlings are kept in a refrigerated state prior to delivery to the customer. To increase the survival rate, customers are instructed to prepare the site before planting. Following the planting, sufficient watering and proper weed control is imperative.

Seedlings Planted By the District

1. The NRD will provide a complete tree planting service. This includes all necessary equipment, materials and labor.
2. All trees and shrubs planted by the NRD will be ordered by the NRD. The sites are to be designed and planned by the NRCS or NRD, assisted by the customer, and submitted to the NRD.
3. The order form to be used is the NRCS NB-Wood-1. Tree and shrub seedlings must be ordered in multiples of 25.
4. Orders will be accepted between November 1 and April 1.
5. Survival of the seedlings is not guaranteed.
6. The customer will be charged for planting all trees ordered. Payment must be made by the time of planting.
7. If 1,000 seedlings or more are ordered, 10% down will be required at the time of order. The balance must be paid before planting. Under no circumstances will any planting be done until the seedlings have been paid for in full.
8. If the NRD is to do the planting, a minimum of 150 trees or shrubs must be ordered.
9. The NRD will make a maximum of 120 plantings or plant 35,000 seedlings per season, whichever figure is reached first. The trees will do best if the ground is plowed or deep chiseled. If the ground is in sod form, plow or chisel in the fall and disc again in the spring. All customers will be notified prior to planting. If the plots are found unprepared to plant, the seedlings will be left with the customer. Any farmstead within the Upper Big Blue NRD boundaries is eligible.

Replacement Policy

Before replacement will be considered, the following criteria must be met by the customer:

1. Proper ground preparation - plowed, chiseled and disked
2. Seedlings watered during hot periods
3. Weed control

NOTE: The district will replace seedlings if the stock is found to be in poor condition prior to planting. Planting errors will also be a consideration.

Conservation Plantings

Seedling Sales and Planting (cont.)

Replacement will not be made under the following conditions:

1. Seedlings damaged by floods or hail.
2. Seedlings damaged by mowing or destroyed by farm equipment.
3. Seedlings planted in sod.
4. Poor ground preparation.
5. Lack of care following planting.

Funds Available to Customers

- NRD Cost-Share: Landowners may be eligible for assistance under the district's Land Treatment Program
- State Cost-Share: Landowners may be eligible for assistance under the district's Land Treatment Program
- Federal Cost-Share: Contact your local NRCS office for information.

Sources of Funds

Program costs are paid for by tree and planting sales as well as local tax revenue collected by the NRD.

Seedlings Planted By Purchasers or the District

1. Seedlings must be ordered in multiple of 25.
2. Orders will be accepted from November 1 to April 1.
3. Survival of the seedlings is not guaranteed. The district will only replace seedlings if they are found to have been in poor condition prior to delivery to the customer.
4. Payment must accompany the order.
5. If 1,000 seedlings or more are ordered, 10% down will be required at the time of order. The balance must be paid before receipt of the seedlings, or planting of the seedlings by the district.
6. Under no circumstances will any planting be done until the seedlings have been paid for in full.

Community Tree Resources Program

This program offers financial assistance to communities for the development or improvement of city or village tree resources. Two levels of participation are offered. The first level (CTR-I) encourages cities and villages to develop a new tree improvement program which qualifies them for the Tree City USA designation. A higher level of District

assistance is available to communities which make such a commitment. A second level of assistance (CTR-II) is available to cities, villages and other public entities which have developed a specific plan for tree replacement or new plantings. A five-year plan and an annual budget for tree resources improvement are required.

Because this program is designed to encourage plantings which provide public benefits, funding will be approved for planting on public lands. Nursery stock recommended for use may be balled, burlapped, or potted. Bare root stock may be used if it is at least six feet tall. Permanent plantings are required.

Seedlings for nursery plantings are available for purchase through the District's seedling sales program.

Applications for either level of assistance must include a copy of the community's tree plan and a cover letter stating the amount and purpose of the financial assistance requested. In addition, a commitment is required that the applicant will maintain all plantings funded by the District for a minimum of five years.

Community Tree Resources Program (CTR-I)

This program is designed to encourage planned, long-term plantings where trees and shrubs are not presently growing.

Eligibility

1. The city or village must establish a legally constituted tree board that has the responsibility of public tree resource management.
2. The city or village must have a current tree ordinance.
3. The city or village must develop a community tree plan that includes:
 - A current inventory and assessment of publicly owned trees
 - A summary of accomplishments of the last five years and detailing of goals of the current tree plan
 - A five-year master plan and a one-year detailed plan for tree planting, removal and maintenance, including pruning
 - A proposed annual budget of estimated costs and detailed description of how the community plans to meet the commitments of the tree plan
4. The city or village must have the community tree plan approved by the University of Nebraska District Extension Forester.
5. Eligible plantings of trees and shrubs include plantings:
 - Along city streets and right-of-ways
 - On city-owned property
 - In new or expanded city parks or other publicly-owned areas

Funds Available

The district will provide a 50% matching grant on a per capita basis. The maximum assistance will be \$1 per capita up to \$5,000 with a minimum assistance of \$200. Funding is based on the type and quality of the project and the number of times that the community has received CTR funds. The amount of district funds available is dependent on the annual budget.

Conservation Plantings



Community Tree Resources Program (cont.)

Community Tree Resources Program (CTR-II)

This program is designed to encourage replacement plantings of trees and shrubs.

Eligibility

1. The city, village or public entity must submit a work plan for tree planting. Guidance from the University of Nebraska District Extension Forester is recommended. The plan must include:
 - A list of the trees and shrubs and number to be planted
 - A map showing where trees will be placed
 - A timetable for completion of the project
 - An estimate of the total project cost
2. The city, village or public entity must sign an agreement stating that it will maintain the plantings for a minimum of five years.
3. The city, village or public entity must agree to match funds provided by the district.

Funds Available

The district will provide a 50% matching grant with a maximum of \$1,000 and a minimum of \$200. Funding is based on the type and quality of the project. The amount of district funding available is dependent on the annual budget.



Community Native Grass Resources Program

This program offers financial assistance to communities to develop or improve city or village properties where the establishment of native grass would be beneficial. Such areas may include, but are not limited to lands surrounding wastewater treatment lagoons, lands within a Wellhead Protection Area, and areas suitable for wildlife habitat improvement.

Eligibility

1. The city, village or public entity must submit a work plan for native grass planting. Guidance from district staff is recommended. The plan must include:
 - The number of acres to be planted
 - The native grass seeding mixture to be used
 - A map showing where planting is to be located
 - A timetable for completion of the project
 - An estimate of the total project cost
2. The city, village or public entity must sign an agreement stating that it will maintain the planting for a minimum of five years.
3. The city, village or public entity must agree to match funds provided by the district.

Funds Available

The district will matching 50% of the local share of the project cost with a maximum of \$1,000 and a minimum of \$200. Funding is based on the type and quality of the project. The amount of district funding available is dependent on the annual budget.

Parks Program

The parks program offers financial assistance to communities for the development or improvement of natural resources in nature areas, campgrounds and park facilities. This program is available for any city, town, county or school located in the district. The district is not considered the lead agency in park development, but will assist in the funding.

The district will consider—on a case by case basis—providing cities and villages with planning and financial assistance for multiuse parks and recreation improvement / development that encourages tree planting, creation of wildlife habitat, open spaces and other enhancements of natural resources.

Public use areas that conserve soil and water are to have priority. Sports facilities are to be planned and funded by others.

To help reduce damages from flooding, the district promotes publicly-owned linear parks, greenbelts and other open spaces by offering planning and financial assistance to counties, cities and villages.

Conservation Plantings



Parks Program (cont.)

It is district policy to cooperate with county, state and federal agencies in developing public use areas where such activities are consistent with district priorities and goals.

Terms

1. The applicant must be a village, town, city, county or school located within the district. Volunteer groups, service clubs, etc., are not eligible to receive NRD park funds, although their efforts are to be encouraged. Their participation should be coordinated through the local unit of government making the application.
2. The applicant is to sign an agreement with the District which includes the following conditions:
 - The applicant will administer the project.
 - The applicant will handle contracts and vendors as necessary.
 - The project will be designed and built to meet appropriate park, safety and building code requirements for public facilities.
 - The applicant has or will acquire title to or long-term lease or easement for the property on which the facility is or will be located.
 - The applicant will operate and maintain the facility. NRD funds are not available for operation or maintenance.
 - The facility will be for the use and enjoyment of the general public.
 - The NRD funds will be paid to the applicant upon completion of each approved phase of the project and upon satisfactory final inspection and acceptance by the NRD of each phase.
 - The applicant is to proceed in a timely fashion with the project and will submit claims for payment for work completed by July 1 of the current fiscal year. Failure to do so may result in nonpayment.
 - The applicant will complete the project within five years of the date that the application is approved by the NRD. Failure to do so may result in nonpayment and cancellation of the NRD's participation.
3. The following minimum points must be incorporated in the lease or easement:
 - The time period remaining on the lease must be at least equal to the life of the facility. An option for renewal would be desirable.
 - The lease cannot be revoked at will by the lessor.
 - There must be a provision in the lease for continued operation and maintenance responsibilities by the sponsor.
 - A legal description and map of the area to be leased must be provided.
 - Both parties to the lease should agree that the land being leased must be retained and used for public outdoor recreation for the duration of the lease

- or the life of the facility.
 - The lease should state if any non-public uses (for example, grazing or farming) will occur within the limits of the lease.
4. NRD approval of the application is not contingent upon state or federal financial assistance. However, the applicant is encouraged to make use of state and/or federal funds whenever possible.

Funds Available to Communities

NRD Cost-Share. The District will fund up to 25% of the local share, of the estimated or the actual costs, whichever is less. A maximum limit of \$10,000 in NRD funds can be approved per applicant per year. The amount of district funds available is dependent upon the annual budget.

State Cost-Share. Funds may be available. Check with the Nebraska Game and Parks Commission.

Federal Cost-Share. 50% grants may be available. Apply through the Nebraska Game and Parks Commission.

Sources of Funds

The district's funds are from local NRD tax revenues. Other funds come to the park sponsor direct from the Nebraska Game and Parks Commission or the U.S. Department of the Interior.

Storm Damage Tree Replacement Program

This program is designed to encourage replacement plantings of trees and shrubs damaged or destroyed due to tornados, strong winds, hail and ice storms. This program is not for replacement of trees that have been damaged or have died due to winter kill, disease or insects.

Cost-share through this program is not available for the removal of damaged or dead trees, stump removal or maintenance. Cost-share funding will be considered for 4' – 8' nursery stock replacement trees under the following conditions:

Public Owned Property – The district will match 50% of the local share of the project cost of storm damaged trees on public right-of-way and public property with a maximum cost-share of \$10,000. The city or village amount of district funding available is dependent on the annual budget.

Private Property – The district will match 50% of the private entity, or rural or urban homeowner's share of the project cost of storm damaged trees on private property, with a maximum cost-share of \$300 per homeowner. The amount of district funding available is dependent on the annual budget.

Conservation Plantings



Storm Damage Tree Replacement Program (cont.)

Eligibility

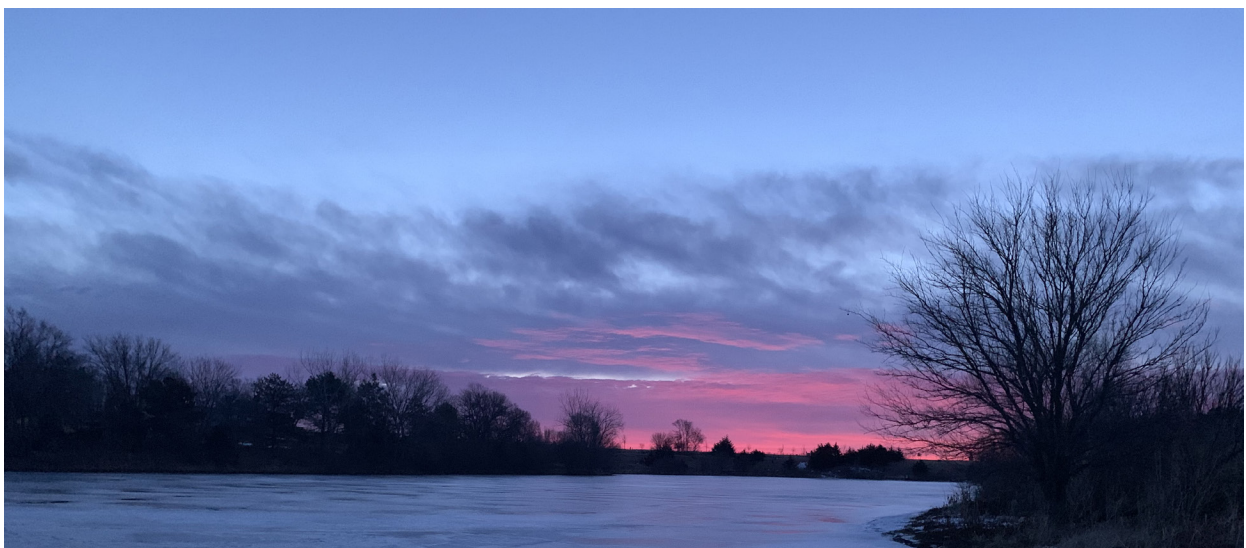
Rural and urban homeowners are eligible, along with cities and villages. Public and private entities, including businesses, are also eligible:

1. The city, village, public or private entity, rural or urban homeowner, must submit an application and a work plan for the replacement tree planting.

In the case of storm damage to a city or village, a work plan that includes a plan for all the public and private properties involved is preferred over individual work plans for each property. However, a signed application by each private property owner involved is required in addition to the master application submitted by the City or Village.

The plan or plans must include:

- a) A list of the trees and shrubs, and number to be planted.
 - b) A map showing where trees will be placed.
 - c) A timetable for completion of the project.
 - d) An estimate of the total project cost.
- 2) The city, village, public or private entity or homeowner, must agree to maintain the plantings for a minimum of five years.
 - 3) The city, village, public or private entity, or homeowner (or combination thereof) must agree to match funds provided by the District and to be responsible for all



labor and any other necessary materials.

- 4) Only those trees that have suffered at least 30% damage, as determined by the NRD, will be considered for replacement funding.
- 5) A site visit to assess the damage to trees by the NRD Forester, or District Forester, is necessary before an application will be accepted. The Forester will offer recommendations for a work plan for replacement plantings to the applicants.
- 6) Nursery stock that is 4' – 8' tall is recommended. Such nursery stock may be balled, burlapped, or potted. Bare root stock may also be used if it is at least six feet tall. Permanent plantings are required. Bare root stock must be planted in early spring before bud break.
- 7) Tree replacement applications will be considered on a case by case basis.
- 8) The city, village, public or private entity, rural or urban homeowner, is eligible for funding for one project per storm event. The application for Storm Damage Tree Replacement must be made within one year after the storm occurs. The application must include a map and plan showing the location, and species of trees to be planted. The application shall also include an estimated project cost and a timetable for completing the Storm Damage Tree Replacement Project. The project is required to be completed within one year of the date of approval of the application.

Living Memorial Tree Planting at District Recreation Areas

Families or friends may provide a living memorial by purchasing a special tree to be planted at a district operated recreation facility. The tree is planted and cared for by the NRD and a small sign is erected— with the name of the person memorialized or honored—identifying the kind of tree. The trees are part of a planting plan developed by the district for each recreation area. The NRD is responsible for the tree during its normal life span. Species availability varies depending on the progress of the planting plans and previous purchases. Contact the NRD for more information at (402) 362-6601 or trees@upperbigblue.org.

Educational Assistance



Water Festivals, Contests, and Camps

The Upper Big Blue NRD sponsors / co-sponsors such annual educational and informational events as Range and Land Judging, FFA Contests, Water Jamboree, Earth Jamboree, Groundwater Festival, NARD ACE Camp, and Envirothon.

Each year, the NRD reaches out to provide quality programming through public events, field days, and seminars, as well as one-on-one communication in the role as guest speakers at schools, service clubs and corporate gatherings.

Issues concerning reduced tillage, limited nitrogen application, irrigation scheduling, soil sampling, and groundwater contamination are just a few of the in-depth topics that the NRD staff discusses with district citizens.

FFA Project Fund

The Upper Big Blue NRD is committed to assisting FFA organizations throughout the district and bordering NRDs. In recent years, these FFA chapters included Osceola, Superior, Hampton, Fillmore Central (McCool Junction), High Plains (Polk), Centennial (Utica), Geneva, Milford and Schickley. Assistance consisted of addressing the FFA organizations through public speaking tours and development of class projects.

Financial assistance is also given on an annual basis through the Upper Big Blue NRD FFA Project and Natural Resources Practicum Scholarship Funds. These funds are awarded to FFA chapters in need of support for special projects and scholarships for state and national FFA events.

FFA projects may also qualify for grants through the NRD's Educational Capital Projects Fund (see next page).

Burke Scholars

The family of Raymond A. Burke established this scholarship in his memory for the benefit of young men and women interested in pursuing careers in natural resources related fields. Mr. Burke was a land improvement contractor and farmer with very strong interests in the management of conservation and educating young people. He served for 40 years on the elected boards of the Polk County Soil & Water Conservation District and the Upper Big Blue Natural Resources District. From time to time, donations memorializing other

individuals have been added to the Raymond A. Burke Scholarship Fund. The Upper Big Blue NRD administers two scholarships awarded annually in the amount of \$2,000 each.

You can complete the application online or download and complete the application then send it to the office. Applications are available at www.upperbigblue.org/education and are due each year in March. The board makes scholarship selection decisions in June.

Educational Capital Projects Fund (ECAP)

The purpose of ECAP is to create, develop, or enhance natural resources related educational capital projects that create experiential learning environments and opportunities for District citizens.

Grant applications are due May 1 of each year. Recipients will be notified in June. You can apply online or print and return this downloadable application.

Qualifications

To qualify for the Educational Capital Fund Program (ECAP) educational/conservation projects must be physically located, constructed, and maintained within the Upper Big Blue NRD boundary. These educational capital projects are generally constructed on school property, however can be located elsewhere in the NRD boundary if there is a more suitable ecosystem which again is determined on a case-by-case basis for funding determination by the board of directors.

This fund is for capital items only, deemed to have educational/conservation value, and determined worthy of funding on a case-by-case basis by Upper Big Blue NRD. (This is not a scholarship fund for individual/group of students).

Examples

Examples of such projects include, but are not limited to greenhouses; commercial and botanical gardens/vegetative learning plots; beekeeping/honey production equipment; rain/flood/dam/erosion/wind simulators; interactive and hands-on exhibits; educational learning displays/pods; digital/electronic equipment/devices; and research/demonstration equipment, etc.

Funding Parametric

If the total project cost is \$1,000 or less, then the cost-share may be 100% of the actual cost. If the total project cost is greater than \$1,000, then the cost-share may be \$1,000 + 5% of the total cost not to exceed \$10,000 (refer to funding scale on page 5 of the application).

Funds Available to Cooperators

Maximum Payment from NRD Funds: \$10,000.00 (labor costs excluded)

Minimum Payment from NRD Funds: \$100.00 (labor costs excluded)

State/Federal Cost-Share: None

Educational Assistance



Nebraska Water Leaders Academy

The Upper Big Blue Natural Resources District will sponsor one individual per year to attend the Nebraska Water Leaders Academy. The purpose of this sponsorship is to provide training to those who may eventually serve on the NRD board of directors or in another water leadership capacity.

- The sponsorship will be provided to any district resident (non NRD employee) with interest in attending. It is not restricted to those working in natural resources or land management.
 - If there is funding from another source (such as an employer) for a participant, it is recommended that those options be utilized first.
 - Each applicant must have a board member recommendation in order to be considered for the sponsorship.
 - The application for the Nebraska Water Leaders Academy will also be the application used for the NRD sponsorship (includes a one-page description of why you want to attend the program, a resume, and a letter of recommendation).
 - Applications to the Nebraska Water Leaders Academy are due by December 1 (but may be submitted at any time earlier). Early application is preferred as the cohort may fill up. Applications for the NRD sponsorship should be submitted by September 1 so that the candidates may be discussed and voted upon at the September or October executive committee and board meetings. When an applicant has been approved for the sponsorship from the NRD, it is their responsibility to submit their application to the Nebraska Water Leaders Academy.
- Approval from the NRD for the sponsorship does not guarantee acceptance into the Water Leaders Academy.**
- For consideration for the NRD sponsorship, please submit your application materials to chouston@upperbigblue.org.

Cost and Responsibilities

- The total cost of attendance of the Leaders Academy is \$2,000, which includes lodging and meals. The application cost is \$500 (this amount goes toward the \$2,000 fee). Additional costs include travel related expenses.
- The NRD will fund 75 percent of the cost of attending the Water Leaders Academy (\$1,500) but will not pay for travel.
- The program includes six 1.5-day sessions in a variety of locations across the state. To receive the NRD sponsorship funds, the selected applicant must attend at least five of the sessions.
- The NRD sponsorship funds will be available as a reimbursement at the completion of the program.

Programs Book 2022

- The selected applicant is expected to give a brief presentation to the board upon completing the Water Leaders Academy.
 - If the Nebraska Water Leaders Academy class is full, the applicant may be asked to delay entry until the following year. The NRD sponsorship would remain available to the candidate for a later entry.
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UPPER BIG BLUE

Natural Resources District

Protecting Lives • Protecting Property • Protecting the Future

319 E 25th St, York, NE 68467

www.upperbigblue.org

(402) 362-6601

This Programs Book was revised for format and updated for current year's numbers in September 2022.

Our Mission

The Upper Big Blue Natural Resources District shall be a leader in conserving, protecting, developing, and managing the natural resources of this district for the health and welfare of the people of the district. The core of the Upper Big Blue Natural Resources District focuses on these things:

- Water
- Soil
- Urban Conservation
- Flood Control
- Trees and Wildlife Habitat
- Recreation
- Grazing Lands
- Education