1997 Project Abstract:
For the Period Ending June 30, 1999
This project was supported by the Environmental Trust Fund, MS 116 P

Title: Prairie - Grassland Landscapes, C14
Program Manager: Peter Buesseler
Organization: Prairie Biologist, MN DNR, Scientific and Natural Areas Program
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Legal Citation: ML 1997, Chp. 216, Sec. 15, Subd. 7d
Total Biennial Project Budget: $175,000 (LCMR: $125,000, NRCS/RC&D $25,000)

Statement of Objectives: Throughout the Glacial Lake Agassiz Interbeach Area are landowners working to balance their need to earn a living from the land - and their commitment to conserve it for future generations of their families. Concern about the decline of grass and forage based agriculture in the region, upcoming end of CRP contracts, and accelerating loss of biodiversity brought together a grassroots effort to improve grassland ecosystem stewardship in the region. Together, the four RC&D Councils, MN DNR, and others helped local groups & organizations initiate, sponsor, plan and implement projects that to rebuild a future for prairie-grassland landscapes.

Three major grassland landscapes occur on the Glacial Lake Agassiz Interbeach Area: The Lake Agassiz Beach Ridges, Aspen Parkland, and Sheyenne River Delta. Together these include the largest acreages of prairie grassland habitat left in the Northern Tallgrass Prairie ecoregion. However, except for CRP, the long-term trend for grassland continues to go down. Over 40% of the area's non-CRP grassland acres have been lost in just the past 10 years.

Overall Project Results: ~~The goal of this project was to~~ we engaged a wide diversity of groups in the region on projects relating to grassland stewardship. Over the biennium, we worked with over 100 different agencies and organizations on 34 different projects. In a number of cases, we helped support existing initiatives in ways that allowed them to better address grassland stewardship issues and needs. Completed projects included: landowner workshops and field tours (2); demonstration projects (15); improved information/technical assistance tools (8); community education activities (4); multi-agency/stakeholder training opportunities and coordination (3); CRP/Warm season grass acceleration project (2); an Internet information network

~~This project was organized and delivered through a unique partnership between~~ The area's 4 Resource Conservation and Development Councils (RC&Ds) and the MN DNR. RC&D coordinators solicited, promoted, and supported local project sponsors. Supported projects addressed the decline of grass and forage based agriculture in the region, upcoming end of CRP contracts, accelerating loss of biodiversity, or improving ecosystem stewardship in the region. All activities were locally driven, benefited, and had participation from the region as a whole. RC&D coordinators met with landowners, resource professionals, and others to explain the overall project and help them prepare specific project proposals. Once a project was developed, it was reviewed by all 4 RC&D coordinators, DNR Prairie Biologist, and approved the respective RC&D Council(s).

RC&Ds help people care for and protect their natural resources in a way that will improve the areas' economy, environment, and living standards, It provides a way for people to initiate, plan and implement projects that will make their area a better place to live. The Glacial Lake Agassiz Interbeach area is served by four RC&D Councils: WesMin and Pembina Trail in MN, Lake Agassiz and Red River in ND. For this project they have formed an informal partnership to focus on innovative projects serving the Glacial Lake Agassiz Interbeach Area.

Project Results Use and Dissemination: Like a small business incubator, this project brought together "grassland entrepreneurs and innovators". It gave them the support they needed to start turning ideas for improving grassland landscape stewardship into projects to benefit the entire region. Many of these have grown into continuing partnerships between the participants. The demonstration sites established during this period will continue to serve the region in years to come. Displays and other education materials developed will be used and disseminated by project sponsors. In addition, a number of local agencies and organizations have learned how to better integrate grassland stewardship interests and issues into their on-going programs. This will have a lasting effect on the area.

Date of Report: July 1, 1999
LCMR Final Work Program Update Report
Date of Workprogram Approval: June 30, 1997
Project Completion Date: June 30, 1999

LCMR Work Program 1997

I. **Project Title and Project Number**: Prairie - Grassland Landscapes, C14

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Web Page Address: http://www.eerc.und.nodak.edu/rrbin/projects/esp/grass/

Total Biennial Project Budget: $175,000 (LCMR: $125,000, NRCS/RC&D $25,000)

$ LCMR Budget	125,000	
$ LCMR Spent/Encumbered	125,000	
$ LCMR Balance		**0**
$ NRCS/RC&D Budget	50,000	
$ NRCS/RC&D Spent	50,000	
$ NRCS/RC&D Balance	**0**	**0**
$ Project Total Balance	**0**	**0**

A. **Legal Citation: ML 1997, Chp. 216, Sec. 15, Subd. 7d**

Appropriation Language: This appropriation is from the trust fund to the commissioner of natural resources for the second biennium to implement grassland ecosystem stewardship activities in the Glacial Lake Agassiz Interbeach Area in cooperation with the resource conservation and development councils.

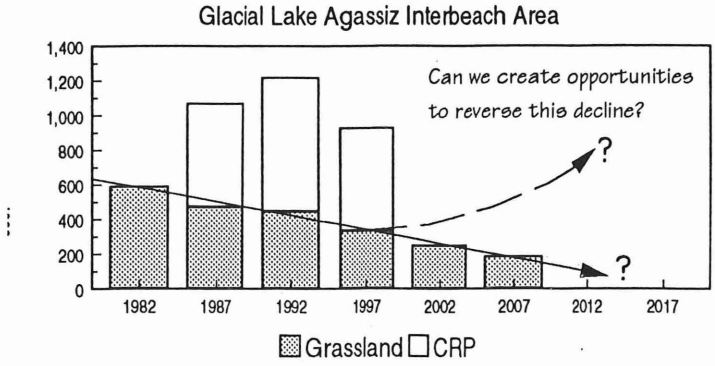
B. **Status of Match Requirement: N/A**

II. **Project Summary:** Throughout the Glacial Lake Agassiz Interbeach Area are landowners working to balance their need to earn a living from the land - and their commitment to conserve it for future generations of their families. Concern about the decline of grass and forage based agriculture in the region, upcoming end of CRP contracts, and accelerating loss of biodiversity has brought together a grassroots effort to improve grassland ecosystem stewardship in the region. Together, the four RC&D Councils, MN DNR, and others will help local groups & Organizations initiate, sponsor, plan and implement projects that will rebuild a future for prairie-grassland landscapes.

Three major grassland landscapes occur on the Glacial Lake Agassiz Interbeach Area: The Lake Agassiz Beach Ridges, Aspen Parkland, and Sheyenne River Delta. Together these include the largest acreages of prairie grassland habitat left in the Northern Tallgrass Prairie ecoregion. However, except for CRP, the long-term trend for grassland continues to go down. Over 40% of the area's non-CRP grassland acres have been lost in just the past 10 years.

Can this decline be stopped? That's exactly what this project seeks to accomplish. Like a small business incubator, this project brings together "grassland entrepreneurs and innovators". It gives them the support they need to turn ideas for improving grassland landscape stewardship into projects that will benefit the entire region.

Decline in Grassland Acres



III. Progress Summary:

The goal of this project was to engage a wide diversity of groups in the region on projects relating to grassland stewardship. Over the biennium, we worked with over 100 different agencies and organizations on 34 different projects. In a number of cases, we helped support existing initiatives in ways that allowed them to better address grassland stewardship issues and needs.

Completed projects included:

- landowner workshops and field tours (2)
- demonstration projects (15)
- improved information/technical assistance tools (8)
- community education activities (4)
- multi-agency/stakeholder training opportunities and coordination (3)
- CRP/Warm season grass acceleration project (2)
- Internet information network

IV. Outline of Project Results:

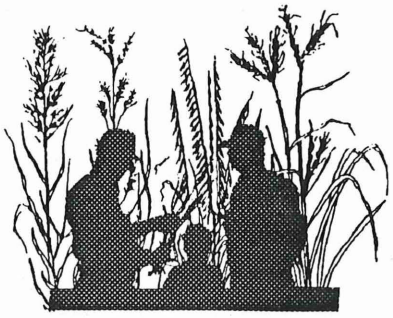
Results: Implemented 34 grassland landscape stewardship projects

LCMR Budget: $125,000 **LCMR Balance:** $0

Completion Dates	**7/97**	**4/98**	**10/98**	**4/99**	**6/99**
First round of projects completed (~ 10)	→	→			
Second round of projects completed (~ 24)	→	→	→	→	
Final Report	→	→	→	→	

This project was organized and delivered through a unique partnership between the area's 4 Resource Conservation and Development Councils (RC&Ds) and the MN DNR. RC&Ds help people care for and protect their natural resources in a way that will improve the areas' economy, environment, and living standards, It provides a way for people to initiate, plan and implement projects that will make their area a better place to live. The Glacial Lake Agassiz Interbeach area is served by four RC&D Councils: WesMin and Pembina Trail in MN, Lake Agassiz and Red River in ND. For this project they have formed an informal partnership to focus on innovative projects serving the Glacial Lake Agassiz Interbeach Area.

RC&D coordinators solicited, promoted, and supported local project sponsors. Supported projects addressed the decline of grass and forage based agriculture in the region, upcoming end of CRP contracts, accelerating loss of biodiversity, or improving ecosystem stewardship in the region. All activities were locally driven, benefited, and had participation from the region as a whole. RC&D coordinators met with landowners, resource professionals, and others to explain the overall project and help them prepare specific project proposals. Once a project was developed, it was reviewed by all 4 RC&D coordinators, DNR Prairie Biologist, and approved the respective RC&D Council(s).



Landowner workshops and field tours

- Holistic Resource Management Workshop Generating Wealth/Biological Monitoring: Dec 4-5, 1997. A three day workshop for farmers, ranchers, businesspersons, and agency personnel in the Lake Agassiz Area. The course provides a process of goal setting, decision-making and biological monitoring that assists people enhance the vitality of their communities and natural resources on which they depend.

- Warm Season Grass Field Day: On June 10, a "hands on" workshop was held for agency people (NRCS, SWCD, Extension, DNR, USFWS) and elevators operators involved in the planning, seed sales and planting of CRP. Items covered included CRP program guidelines, site preparation, seed selection, planting methods, herbicides, compaction, drill calibration and maintenance. Several different pieces of equipment were demonstrated. Future field days are planned to examine the results of the seedings. There will be many thousands of CRP acres planted to warm season grasses in the next 3 years. Very few acres of these grasses have been planted in NW Minnesota. The seed cost is high. It is imperative that the agency people and elevators (those who are giving farmers advice on seed, mixtures, site prep, planting methods, packing, etc) be familiar with the "do's and don'ts".

Demonstration projects

- Integrated Prairie Management in Glacial Lake Agassiz Beach Ridges: A cooperative project on public land to demonstrate an integrated livestock and wildlife production system. Dr. Dan Svedarsky and the University of Minnesota Northwest Experiment Station carried out this project. The two demonstration sites were Pankratz Prairie (TNC) and the Mentor Prairie (DNR). A total of $15,000 was spent on this project with $5000 from LCMR.

  Timed grazing was applied at both sites as a method to enhance the warm season native grasses. In 1998 this was definitely shown. Cattle were used to graze at a time that promoted the suppression of cool season introduced grasses and the enhancement of warm season grasses. This has major implications for producers in Northwest Minnesota. Simply by using grazing techniques they can establish the diversified grazing system needed for a productive intensive rotational grazing management system. This shows that using a lot of herbicides, chemicals, and ground cultivation are not the only way to improve grass systems. One of the objectives and benefits of this project was to enhance grass cover at critical times of year for native wildlife species. There were several areas that had brush and poplar that were invading the prairie. A burn in the spring of 1998 simulating natural fire was used to suppress the invading woody species just as fire and nature before settlement would have done. Dan Svedarsky is a wildlife biologist who teaches natural resource management at the University of Minnesota at Crookston. Successful projects such as these are used by Dan in his classroom instruction and are an excellent way for current students to learn resource management

principles as they actually happen. Several enclosures were established as checks to verify what the project accomplished.

Project funding spent on the Pankratz Prairie and Mentor Prairie sites was used for fencing materials to improve perimeter fences and for cross fences. Heavy gauge wire panels were purchased and installed for the enclosures. A watering pond with associated expenses was established to improve grazing distribution. A brush cutter was leased and there were some expense items related to clearing of brush. A John Deere Gator ATV was leased to aid in spraying troublesome spots. The Gator was also used in fire control during a burn. The Gator was jointly leased with the West Polk SWCD as a means of sharing expenses, jointly using equipment, and make available dollars go farther. A workshop was sponsored in Detroit Lakes on July 24, 1997 "Grazing as a Wildlife Management Tool". There was a RC&D Council tour in Oct. 1997 to demonstrate what was being done. One of the benefits of this project was to collaborate on an International Level with resource professionals demonstrating rotational grazing in Tolstoi, Manitoba, Canada.

- Dairy Grazing Demonstration: Fencing and water system improvements have been installed for an intensive grazing system on a dairy farm in Red Lake County: The owner has 110 dairy cows on 75 acres of pasture. 50 acres were renovated in 1998 with most of this expense provided by the farmer. LCMR funds were used to improve the perimeter fence, provide cross fencing, and develop a watering system. Cows are rotated approximately every three days. After completing the work early in 1998 and using this system, the owner feels his milk production has gone up while dramatically reducing labor and feed costs. The benefit to the land and grass resource is that it is in better condition and betters able to produce a healthier higher quality stand of grass. The site will be used for producer tours and presentations. Partly as a result of this project the landowner has requested an USDA EQIP contract to further develop his system.

- Beef Grazing Demonstration: This is a 60 cow-calf operation on 160 acres of existing grassland. The pasture was divided into four paddocks and livestock are rotated every week. Brush was encroaching on several areas of the existing grassland. In 1998 herbicides were applied for brush control. Intensive rotation grazing is now being used to enhance the existing grass species and further reduce the brush. There are existing water ponds but in the future two additional ponds will be installed to complement the system.

  This project has the potential to use multiple grazers to help control brush. Extension Educator Vince Crary and NRCS District Conservationist Shawn Balstad plan on continuing to work with the producer to develop an intensive grazing management plan. The USDA Natural Resource Conservation Service has also selected this site as a pilot for its NUTBAL fecal analysis program. This type of analysis can help farmers and ranchers better match grazing timing with grass stages for optimum use by animals. Overall, the Beef Grazing Demonstration project has been a good example of how the LCMR Prairie - Grassland Landscapes initiative has been catalyst for bringing a variety of people, projects, ideas, and groups together to improve grassland ecosystem stewardship.

- Norman County Grass Pasture Project: Norman SWCD owns 80 acres on which they want to demonstrate various techniques of establishing grass pastures. An emphasis is being placed on the establishment of native grasses in an intensive rotational grazing system. This is the beginning of a multi-year and multi-county project that will be used for tours, meetings, conferences, etc. to demonstrate preferred techniques for establishing and managing native species of grass. Brochures will be developed and materials for meetings are future activities for this project. Funding was provided for the purchase of fencing materials and establishing desired grass species in order to get this project started.

- Landscaping with Native Prairie Plants: Establish demonstration sites to educate Red River Valley urban and rural residents, businesses, and metro leadership on the applicability of native grasses and forbs for ground cover and landscaping purposes. Several demonstration projects were initiated:

  1. *Urban Xeriscaping with Native Plants*: A cooperative project with the City of Fargo, promoting the use of native plants and water conservation technologies in residential landscaping. Software to assist in creating a native landscape design was piloted, and several residential demonstration plantings established.

  2. *Metro Native Prairie Demonstration*: Established a 3-acre native plant demonstration site in the Fargo/Moorhead area. This public demonstration site is a cooperative project between the Fargo Forestry Department and the Lake Agassiz Resource Conservation & Development (RC&D) Council. Technical assistance will be provided by specialists of the USDA Natural Resources Conservation Service Plant Materials Center (PMC), USDA Natural Resources Conservation Service (NRCS), and Cass County Soil Conservation District (SCD).

  3. *Urban Native Plant and Wildlife Project*: Developed four native plant demonstration sites in urban and rural areas. The ND Extension Service coordinates the project including selection of sites, providing landowners educational and instructional materials, developing all sites (seeding, planting, seedbed preparation, and maintenance), conducting public tours, and providing reference materials to the public on how to use native plants and wildlife structures. A local agricultural service is donating Roundup to help prepare the seedbeds for planting. Three seed companies are donating seed and seedlings. Each of the four landowners commit to establishing and maintaining the sites (watering, mowing, weeding, etc) and reseeding if necessary. Local Boy Scout troops will be building birdhouses, feeders, birdbaths, butterfly houses, and bat houses to increase wildlife use in the landscaping project. The USFWS is providing funds to help purchase seed and materials for the wildlife structures. This is a cooperative project between the Wild Rice Soil Conservation District, Lake Agassiz Resource Conservation & Development (RC&D) Council, ND Extension Service, and US Fish and Wildlife Service.

- Improved Riparian Restoration And Management: Promote and demonstrate improved riparian restoration and management as part of the Red River Basin Riparian Demonstration Project. This included several demonstration sites:

  1. *Red River Flood Control/Riparian Management Demonstration*: This purpose of this project was to demonstrate both 1) rotational grazing systems in a riparian area, and 2) flood control using a small retention dam with drawdown tube. This structure will also provide livestock water through use of a solar pump. The reservoir area will be fenced and water pumped into two tanks. This project is part of a basin-wide riparian management initiative.

  2. *Sheyenne River Riparian Demonstration Site*: Demonstrates the use of native trees, shrubs, grasses and wildflowers for riparian restoration as part of the Red River Basin Riparian Demonstration Project. This project covered continued restoration work and monitoring at the Sheyenne River riparian demonstration site. Restoration of the site was initiated in 1993 with hand planting of 200 basswood and oak trees protected with tubex and fabric mulch. Willow cuttings were placed in the stream bank and about 200 more trees were machine planted with a scalper. A fence was moved 200 feet back from the bank to remove livestock from the area. Floods in the summer of 1994, and spring of 1996 and 1997 destroyed most of the tree plantings but greatly increased natural regeneration. This agreement is for implementing restoration practices which promote continued natural regeneration. The work will be done so that results can be evaluated and compared to the earlier restoration practices at a future date.

3. *Grazing Management Expertise* – Provided technical assistance to landowners in Pembina County participating in the Red River Basin Riparian Project. Particular attention was given to improving management of native and warm season grass pastures, and minimizing grazing impacts in woody draws, aspen woodlands and bottomland hardwoods. One-on-one visits provided an opportunity for landowners to learn from other landowners with experience in managed grazing systems.

4. *Warm Season Grass Pasture Demonstration*: Established two warm season native grass pasture demonstration plantings. Productivity in both cattle and bison grazing programs between these warm season grass and non-native grass pastures will be evaluated.

5. *Walsh Watershed Festival* – Assist in sponsoring the festival, as well as developing a native grass and native riparian forest demonstration on the park River, upstream of Homme Dam.

6. *Weinlander Riparian Site*: Established native grass and woody riparian buffer demonstration site on the Park River just east of the Alexander Henry Rest Area on I-29. This planting will be visible from the rest area. Signage will interpret the native tall grass prairie and the historic significance of oxcart trails in the vicinity

7. *Mekinock Reach demonstration.* This is a partnership project to restore a 10-mile stretch (the Mekinock reach) of the Turtle River. The restoration of the reach includes several activities:

- Removal and disposal of car bodies, asphalt, and concrete from the riverbank.
- Reshaping of riverbank to establish a stable slope for vegetation. This involves approximately 3500 cubic yards on the two properties
- Revegetate the bank with native trees and shrubs as well as native grass and wildflowers
- Either install a live crib wall or relocate the road to address road failure

- X-Disease Resistant Chokecherries: Produce germplasm from tissue culture and establish a field planting of X-disease resistant chokecherry. This is part of an 8-year field trial in which resistance will be confirmed, other traits evaluated, and a seed orchard established. The $4,000 will be used for operating costs to produce the plants and set up the field trial. For this portion of the project, total operating costs are estimated to be $14,000. The remainder ($10,000) will come from other project partners.

  Development of this germplasm will allow much greater use of chokecherry for resource conservation purposes. Its development will provide a reliable native shrub for use in situations such as riparian buffer strips, stream bank stabilization, wildlife habitat plantings, prairie restorations, and field and farmstead windbreaks. There is potential for increased utilization of chokecherry as a high value specialty crop as well.

Improved information & technical assistance tools

- "Selected North Dakota and Minnesota Range Plants" book: This guidebook was produced, in part, with funding from the 1996-97 LCMR Sustainable Grasslands project. The book is now available. Copies are being distributed to conservation and other offices throughout the region. Reception has been very favorable. Work was completed to make the publication available on the Internet.

- Native Grass Displays: Two native grass display boards have been developed. They include mounted grass and forb identification cards and an area for displaying grass specimens. One display will be stationed in the Clay Co NRCS office, and other at the WesMin RC&D office. The displays will be used at county fairs, Ag Days, 'Big Iron', 'Dome Show', Conservation Education Days & Tours, Rosholt Farm Field Days, and other area events and programs.

- Tallgrass Prairie Slide Presentations: Two slide programs are being developed for making presentations to cattle producers, schools, conservation boards, and other groups in the Glacial Lake Agassiz Interbeach Area. One will be on general native prairie grasses and forbs, the other on historical, medical, and food uses of native prairie plants by Native Americans and pioneers. Two sets of each program would be produced and made available to conservation agency staff and others for presentations to groups throughout the region. This project should be completed this summer.

- Prairie Stewardship Educational Materials: Prairie plant guides, soil test kits, restoration manuals, and other technical/educational resources were distributed to county conservation offices to help them assist landowners in planning prairie/grassland stewardship activities.

- Rancher's Pocket Guide: An easy-to-use grazing management guide is being developed for ranchers. It includes information on grazing systems, stocking rates, plant identification, animal health, grazing "rules-of-thumb", water and fence development, etc. A group of ranchers is assisting in designing the guide. ND Extension Service, NRCS, and other regional experts are providing technical support. Additional funding is coming from EQIP (ND NRCS). When completed (fall, '99), it will be distributed to producers at grazing workshops and upon request.

- Stewardship Information Project: Worked with local groups in NW MN to help them develop informational materials and programs that promote a better understanding and appreciation for the Glacial Lake Agassiz Interbeach Area. This project included support for the following activities:

    1. Printing of the 1998 symposium "The Great Prairie Chicken – A National Look" held April 25, 1998, UofM Crookston
    2. Development of the Marshal County Trail brochure, highlighting the natural and cultural history of the area
    3. Development of a display promoting the use of GIS in the region, and in particular, soil survey GIS applications
    4. Establishment of a Forage and Grassland Council in the area

- Biomass/Energy Feasibility Study: This project is investigating the feasibility of producing ethanol from native over-mature aspen, short rotation wood crops (SRWC), switchgrass and other native grasses in the Red River Valley. Partners include the EERC; Red River, Lake Agassiz, Pembina Trail, and WesMin Resource Conservation and Development Councils (RC&Ds); Red River Regional Council; City of Walhalla, ND; North Dakota Office of Intergovernmental Affairs, Western Regional Biomass Energy Program, and other commercial partners. This project is will be carried out in 2 parts, Phase 1 & 2. The scope of work for the first phase is outlined below. Work on the second phase will not begin until sufficient matching funds are secured.

    Task 1 Establish the anticipated yields and viability of native grass and short rotation woody crop (SRWC) plantations. The evaluation of native aspen stands will be carried out in Phase 2 of this study.

    Task 2 Determine the production, harvesting, and transportation costs of native grasses and SRWC. The Oak Ridge National Laboratory as its contribution through the State Partnership program will perform the majority of this work. The costs associated with native aspen will be evaluated in Phase 2.

    Task 3 Assessment of Technology options: The viability and cost-effectiveness of new ethanol production methods will be evaluated, and a preliminary plant design and cost estimate will be prepared based on technology for a grassroots plant.

Task 4 Marketing: During Phase 1, the marketing assessment will be limited to determining a reasonable market price and subsidy allowance to use in financially based calculations. During Phase 2, a more detailed marketing and sales assessment will be made.

Task 5 Coordination with State and Regional Interests: coordination with regional groups, Western Regional Biomass Energy Program, and Oak Ridge National Laboratory will be a part of both phases.

Final Report on Phase I results will be available later this summer.

- GIS support for Pembina River Basin: This project was to coordinate and assist the Pembina River Technical Committee and Energy and Environmental Research Center (EERC) in developing GIS support and analysis for the development of a comprehensive watershed plan for the Pembina River Basin. The goal was to assemble and provide all available, relevant information in geographic information system (GIS) mapable, or text format to the Pembina River Basin Advisory Board. This watershed contains several areas of significant biological diversity.

  Planning workshops introducing and using the GIS layers were conducted this past winter (January and February). The system will be applied to selected Pembina Basin watershed projects to further develop and improve its usefulness. This project is seen as a pilot for better integrating biodiversity information available for the Glacial Lake Agassiz region into watershed planning and management activities. It is understood that through this project, the EERC will be positioned to offer similar GIS services to other watersheds and groups in the region.

Community education activities

- Children's Environmental Festival: Hands-on presentations and topics such as water conservation, wetlands, wildlife, ecosystems, and prairies. The event involved approximately 1000 4th graders from the Grand Forks, East Grand Forks area.

- 'Watch 'm Grow' Native Grass Seed Kits: Designed and produced a "Watch 'm Grow" seed kit for use in K-12 classrooms and other conservation education programs. The kit features native prairie grasses and soils, and includes a teaching guide/lesson plan. The kit will be available for distribution and use in the Glacial Lake Agassiz/Red River Valley region. This is a partnership project with several agencies and organizations. Assistance will be provided by specialists of the USDA Natural Resources Conservation Service Plant Materials Center (PMC), USDA Natural Resources Conservation Service (NRCS), and Lake Agassiz Resource Conservation & Development (RC&D) Council.

- Ladies Ag Night: As a group, women are very active in farm decisions and operations, but often are not involved in traditional agency and program information meetings. This project seeks to promote and encourage improved natural resource conservation and stewardship by providing information and an opportunity to strengthen networking among the participants. 1998's event highlighted Native American culture and included a presentation of their uses of native plants. An estimated 200+ participants from Wilkin, Richland, and surrounding Counties participated. The 1999 Ladies Ag Night featured "Backyard Conservation", a program being implemented in cooperation with NRCS, the National Association of Conservation Districts, and others. Carroll Henderson, DNR Nongame Program Supervisor and author presented a slide show on creative landscaping techniques to be used in both urban and rural backyards. An estimated 345 women attended.

- Sheyenne River Valley Scenic Byway/Backways Project: Design, develop, and install interpretive signage at key historical and natural heritage sites in the Sheyenne River Valley. The goal is to promote tourism and aid in telling the story of the Sheyenne River Valley. The project will include approximately 20 interpretive panels, two route map panels at the ends of the 47 mile route, and map panels at nearby I-94 rest areas. One of the interpretive stops will feature the tallgrass prairie. This is a partnership project being coordinated by the Scenic Byway Committee and includes the Byway/Backset, Bridges, and Medicine Wheel Park projects. Total project costs are approximately $180,000. Funding from the LCMR project is for initial creative and engineering design services, materials, and other costs associated with this effort.

Multi-agency/stakeholder training opportunities and coordination

- Red River Basin Riparian Workshop, Watershed Impacts On The Riparian Zone: Sept. 8-9, 1997, Grand Forks ND. This workshop focussed on the impacts of watershed processes on the riparian zone. The river channel and riparian corridors associated with them connect all aspects of the watershed—the native woodlands and prairies, agricultural land, communities, and cities. Workshop speakers presented information on the geology and native plant communities of the area, modifications that have occurred, and strategies to achieve a long-term solution. The second day included a field trip to view healthy and impacted sites, to assess stream and riparian function, and to understand the watershed processes acting on the site. A field exercise was conducted exposing participants to the "Index of Aquatic Integrity".

- Nature As Common Ground: Bringing Collaborative Solutions to Confrontational Situations: A pre-conference workshop of the joint ND/MN Wildlife Society Meeting; Feb 11-13, 1998. This workshop featured speaker and Pulitzer Prize nominated author Dan Dagget. Dagget spoke on the successes of environmental activists and agriculturists who have looked past their differences to the interests they share in healthy ecosystems and stable sustainable communities — and found enough in common to work together to make significant headway against problems that have been bones of contention between the groups for more than a century. The workshop involved a large number of wildlife professionals attending The Wildlife Society conference, as well as producers, and other ag professionals from the region (~175, standing room only).

- Specialty Livestock/Ethnic Minorities Network: The Red River Basin has a growing population of ethnic minorities. This project addressed how to provide for their dietary and cultural preferences for goat and sheep — which is not commonly available in the region or not slaughtered/processed according to their cultural and religious beliefs. Livestock producers in the region are looking for new market opportunities, and natural resource managers are interested in goats and sheep for grassland management. This is not, however, a typical 'value-added' market development project. Many of the Bosnians, Somalians and other minorities in the region face significant economic, social, and language barriers. They may not be able to afford a 'premium price' product. Producers are generally unaware of – and insensitive to – their cultural and religious practices (primarily Muslim) relating to the raising, slaughter, and use of goat and sheep. Labeling meat cuts appropriately raises issues of language, literacy, and cultural norms (some groups want to see the horns to insure they are getting goat vs. sheep). Through this project, the Lake Agassiz RC&D in collaboration with the other three RC&Ds serving the region, as well as social service agencies, will:

  1. Meet with and determine the needs/preferences/practices of various ethnic groups within the project area relating to goat and sheep meat.
  2. Meet with livestock producers in the area to inform them of the needs of the ethnic populations and identify opportunities to address them.

3. Meet with meet with processing plants to identify issues and custom processing services for serving the ethnic populations.

The project resulted in both an assessment of the needs and opportunities, but also extensive networking, trust building, and grassroots organizing among the various parties involved. Funding to continue and expand the project is being sought from several sources.

CRP/Warm season grass acceleration project

The recent CRP sign-up, and continuous CRP sign-up has presented a significant opportunity to accelerate native grass planting in the Glacial Lakes Interbeach Area. Each of the RC&Ds met with SWCD, NRCS, DNR, FWS, Extension, Watershed District, and other offices to determine how to best capitalize on this opportunity— and position the area for continued native grass planting in the future. This opportunity would not be captured unless a special accelerated effort is undertaken for many reasons:

1. landowners do not either know about the sign-up or the economic gain it offered their farm situation,
2. individual project partners did not have the time or person power alone to accelerate this effort with existing staff because of conflicting staff commitments,
3. the resources needed to accomplish this project were either not available, not dedicated to this need, or scattered amongst the proposed partners,
4. native grasses are not normally the mixture of choice by farmers and won't be without special incentives, They are more difficult to see, require specialized equipment, and cost substantially more that cool season mixtures or less diverse warm season mixtures.

Projects to accelerate CRP/warm season grass use were:

- 2000 by 2000 Pilot Project: The goals of this project were to 1) plan, develop, and implement a realistic effort to capture the window of opportunity being offered by the Continuous CRP sign-up, 2) organize and combine available technical and financial resources to work towards this common goal, 3) plant 2,000 new acres of native grass by the year 2,000 in Clay & Wilkin Counties, 4) strengthen the working relations of all project partners in the process, and 5) offer the opportunity to expand the project in the future with additional components and/or acres. The project included development of an information and landowner contact campaign, technical assistance, securing of native grass drills and transportation equipment, securing high quality seed and making the warm season grass option as cost competitive, convenient, and simple as other planting options. The total partnership project was budgeted for $465,000, with the Prairie - Grassland Landscapes project contributing $26,606.

  The Clay and Wilkin Co. SWCDs received local, state, and national recognition for this project — in particular for the interagency partnerships and leveraging that was involved. The project added to and enhanced the ongoing NRCS Bufferstrip Initiatives by providing added assistance to landowners for upgrading their CRP planting to warm season grass mixtures.

- Native Grass Drill Demonstration Projects: Availability of grass drills and lack of understanding regarding seeding methods are significant limiting factors throughout the region. Four separate projects were undertaken to make available and demonstrate the use of native grass seed drills with no-till modifications (Truax and others), as well as grain drills specially modified for warm season grass seed. The drills were available for regional use. Local conservation districts coordinated and scheduled drill use to improve efficiency. Some also provided calibration and other on-site services. The districts also coordinated field tours, news article features, and other information and education activities relating to the project.

Internet information network.

- A website was created during the 96-97 LCMR Sustainable Grasslands project: the 'Red River Basin Information Network' <www.eerc.und.nodak.edu/rrbin/>. This site was intended for basin-wide collaboration and was to be eventually administered by The International Coalition (TIC). It included a section on the Sustainable Grasslands Project www.eerc.und.nodak.edu/rrbin/projects/esp/grass/ While the pilot site was well received, TIC was not able to carry through and take it over. During the biennium, the UND Energy and Environmental Resource Center in Grand Forks, ND agreed to host the site. However no further development has taken place. Future plans are to change the site to focus specifically on the Glacial Lake Agassiz Interbeach Area initiatives.

V. Context

A. Significance: The Glacial Lake Agassiz Interbeach Area is an area where proactive, integrated action now could prevent future "environmental train wrecks". However, integrated action is hampered by two state, an international, and several federal agency boundaries — not to mention the large number of county, and local jurisdictions. Organizations and agencies participating in the Great Plains Partnership (GPP) have identified the Glacial Lake Agassiz Interbeach Area as one of the ten most important areas in the Plains for strengthening coordinated, ecosystem-based management. *(GPP is a voluntary alliance, led by the Western Governors' Association, for conserving biodiversity while enhancing the economic health of the Great Plains. GPP spans thirteen states, Canada, Mexico, and includes federal, state, tribal and local governments, and private organizations).* As a direct result of GPP, the NRCS has proposed the area be designated as a "New Initiative Laboratory" under the President's Interagency Ecosystem Management Initiative. In addition, the USFWS has included this part of the Tallgrass Prairie as one of its top priorities in its Upper Mississippi/Tallgrass Prairie Ecosystem Management Plan

On a state level, the Glacial Lake Agassiz Beach Ridges has been targeted as one of DNR's Ecosystem-based Management pilot projects. As part of MDA's *CRP Investment Initiative* a number of joint landowner/agency workgroups are developing alternatives for CRP lands in the region. In addition, The Nature Conservancy has identified the area as one of its top three priority areas for landscape conservation.

This project is an outgrowth of the 1996-97 LCMR *Sustainable Grasslands Conservation and Utilization* project. In particular, it is a continuation of Objective B "Integrated grassland projects", which was coordinated by the 4 RC&Ds. Anticipated 1998-99 projects will build on those carried out in the 1996-97 LCMR project, as well as the results of the forums and other work completed by the MDA CRP Investment Initiative. Several are extensions of activities begun in the 1995-97 biennium. Others are the result of a renewed interest and collaboration on grassland stewardship generated by these previous activities.

B. Time: N/A

C. Budget Context:

	July 1995 - June 1997	July 1997 - June 1999	July 1999 - June 2001
	Prior expenditures on this project	Proposed expenditures on this project	Anticipated future expenditures on this project
1. LCMR	$ 125,000	$ 125,000	—
2. Other State	—	—	—
3. Non State cash	$ 125,000	$ 125,000	—
Total	$ 250,000	$ 250,000	—

As a matter of course, RC&Ds secure in-kind or matching funds for each project whenever possible. In addition, the Minnesota and North Dakota state offices of the USDA Natural Resources Conservation Service (NRCS) received $75,000 (FY '95), and $50,000 in FY '96 through the President's *New Initiative Laboratory* program to supplement this project.

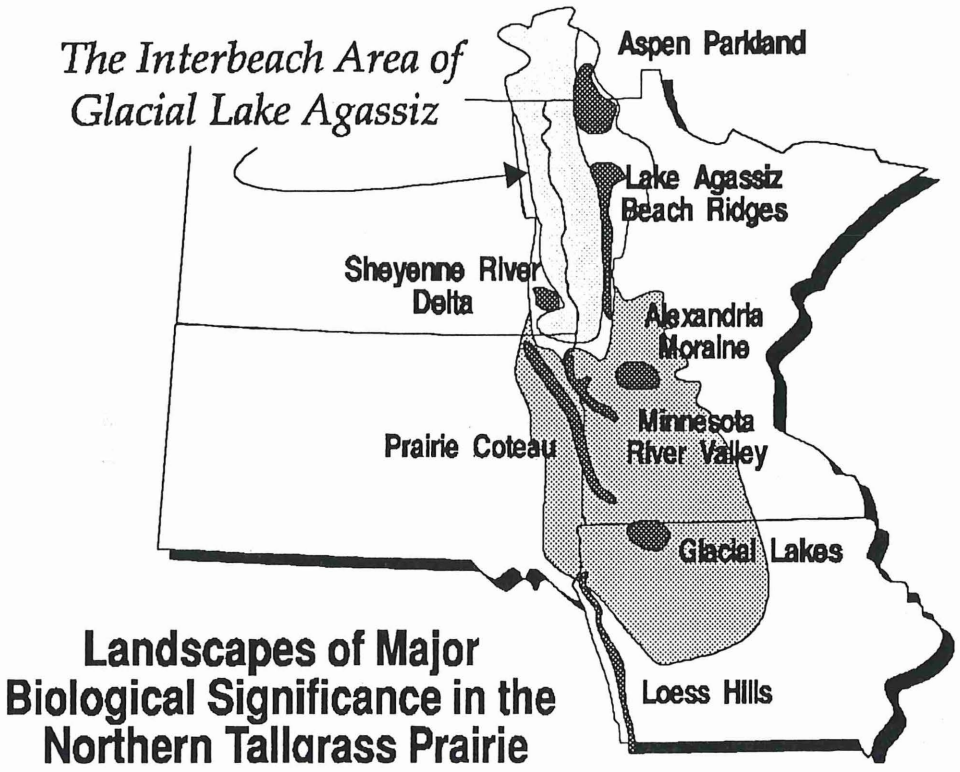
VI. Dissemination: Dissemination of project progress and results will be coordinated regionally through the participating agencies, organizations, and workgroups. Data and results will be also be distributed through the Great Plains International Data Network — established by GPP.

Status Reports: October 30, 1997 - Report on results of summer projects; April 30, 1998 - Report on results of winter projects; October 30, 1998 - Report on results of summer projects; June 31 - Final Report on project.

VII. Cooperation: Direct cooperators include:

Cooperator	Role	% Time
Peter Buesseler DNR Prairie Biologist	Overall project manager	50%
Greg Larson Coordinator, WesMin RC&D	Solicit, promote, and support local project sponsors	10%
Al Gustafson Coordinator, Pembina Trail RC&D	Solicit, promote, and support local project sponsors	10%
Paul Wellman Coordinator, Red River RC&D	Solicit, promote, and support local project sponsors	10%
Jay Mar Coordinator, Lake Agassiz RC&D	Solicit, promote, and support local project sponsors	10%

VIII. Location:



IX. Reporting Requirements: Periodic workprogram reports will be submitted October 30, 1997, April 30, 1998, and October 30, 1998. A final workprogram report and associated products will be submitted by June 30, 1999, or by the completion date as set in the appropriation.

X. Research Projects: N/A