

Date of Report: 31 December 1997 WORKPROGRAM UPDATE/AMENDMENT

LCMR Work Program 1995

I. Project Title and Project Number: ACCELERATED NATIVE GRASS AND FORBS ON ROAD RIGHTS-OF-WAY D2

Program Manager: Catherine M. Fouchi
Agency Affiliation: MN DNR Wildlife
Mail Address: Box 756, Hwy. 15 S., New Ulm, MN 56073-0756
Phone: (507) 359-6036 E-mail: dnr.internet:
"cathi.fouchi@dnr.state.mn.us"
Fax: (507) 359-6018

A. Legal Citation: ML 95, Chp.220, Art. ,Sec.19, Subd. 5o.

Total biennial LCMR appropriation: \$150,000

Balance: ~~\$59,100~~ \$0.00

Encumbered: ~~\$11,807~~ \$51,554

Appropriation Language: This appropriation is from the trust fund to the commissioner of natural resources in cooperation with the interagency roadside committee to accelerate native plant establishment and management in roadsides using integrated resource management techniques including educational materials about the benefits of low maintenance and biologically diverse roadsides statewide. This project must be completed and final products delivered by December 31, 1997, and the appropriation is available until that date.

B. Status of Match Requirement: N/A

II. Project Summary:

Road rights-of-way land use choices significantly impact soil and water quality, wildlife and rare plant habitats throughout our state. The goal of this project is to accelerate the acceptance and implementation of ecologically sound maintenance techniques which meet transportation needs while protecting and improving local biological diversity. This will be done primarily through demonstration areas and the use of appropriate educational materials at training sessions. Increased availability of specialized equipment needed to plant and manage native plantings will result in more acres (at least 130 acres) planted and managed than under existing programs during the biennium.

III. Six Month Work Program Update Summary:

Project applications were distributed to County and Township authorities statewide. Those returned were rated based on a variety of factors. Of the eleven (11) applications returned, ten were accepted for funding. Applications came from 6

counties and three townships. An estimated 150 acres will be planted for about \$34,000 of LCMR monies and \$6,000 of "cost-share" from counties, townships or state road authorities. A second round of applications will be accepted next spring to spend remaining funds. Requests for equipment purchases have been submitted through the state purchasing system. Costs will be a few thousand dollars more than indicated in original spending plan. Due to unexpected health issues (personnel unable to work), poster was not completed. Completion has been rescheduled for next fiscal year (see amendment request, A.l.e.). Part-time technician position was posted and filled.

1 July 1996. One formal burn school was held in SE Minnesota with County Highway Departments and Volunteer Fire Departments along Trunk Hwy. 56 (Wildflower Route). The Roadside Technician burned 183 acres of roadside prairie (remnants and planted) on 5 different sites. Roadside equipment lent out to road authorities resulted in an additional 75 acres being burned. Six of the 10 approved planting projects are underway. None are completed to date, due mostly to weather factors. Two truax drills are purchased and located in the Marshall and Detroit Lakes DOT offices. Some plantings with these drills are planned for this summer. Major problems and time delays were encountered when ordering the JD 6-wheeler, burn unit and trailer due in part to state purchasing system and vendor inadequacies. It will be available in July (if we are lucky).

1 January 1997. Planting projects in progress were monitored. Native Seed Harvester was purchased and the 3rd native seed drill is ordered. This drill will be placed in the Cambridge Area. A field tour was conducted of projects in SE Minnesota on September 30th. County Engnieers, contractors, DOT and LCMR staff joined the tour at various points. Media RARE filmed portions of the tour. Requests for the second round of project applications were mailed out. Replys are coming in. New projects will be chosen by 30 January 1997 to spend the balance of seed planting funds.

30 June 1997. Total number of acres planted is 76.5 on 5 sites. Additionally, 321 acres on 15 sites are encumbered to be planted. All the equipment has been purchased and placed as stated earlier. Very little roadside burning was accomplished due to Roadside Program personnel shortage (coordinator position was abolished by DNR section of wildlife) and flood related repair activities by road authorities. Seven (7) acres of Historical Society remnant prairie (along) a roadside was harvested with the Harvester. Seed will be used to establish prairie on remaining disturbed lands, including the roadside. Roadside kiosk draft design is completed and funds are encumbered for final design and construction.

31 December 1997. A total of 16 projects (358 acres) were

planted to native grasses and forbs for \$80,300. Projects occurred in 12 different counties around Minnesota. The average cost per acre to LCMR was \$224. Non-state funds leveraged averaged about \$163 per acre. See attached table for details. Three native grass drills, 1 6-wheeler prescribed burn unit and one pull type native grass harvester were purchased for \$51,500. The drills were distributed one each to western, central and eastern Minnesota. The burn unit and harvester are located in South Central Minnesota. All are being used for the specified purposes by a variety of State and non-state agencies. Educational Kiosk was not completed due to personnel changes and lack of long-term commitment by local partner. Funds were used to cost-share additional planting projects.

IV. Statement of Objectives:

A. Design and Distribute Educational Materials

Informational/Educational kiosk and signage will be developed for Olmsted County planting on C.R. 22. Due to personnel changes and lack of local partner long-term commitment, we will not be able to complete this objective. We would like to shift these funds to cost-share on plantings since there is more interest than funds available.

B. Establish and Manage Native Plants in Roadsides

Establish at least 130 acres of native plants in county, township, and state roadsides through contract, cost-share on seed purchase and purchase of specialized equipment. Projects will be chosen through an application process. Governmental units chosen for projects will be provided the opportunity to participate in annual prescribed burning schools. Technical assistance will be provided to implement integrated vegetation management techniques. Equipment purchased will remain available through its useful life to road authorities and individuals after project is completed resulting in additional acres planted and managed. If equipment use changes, agency (DNR or DOT) holding equipment will pay back appropriate fund or account in the amount equal to either the cash sale price received from sale at the time or a residual value to be negotiated with the Director.

Timeline for Completion of Objectives:

| | 7/95 | 1/96 | 6/96 | 1/97 | 6/97 | 12/97 |
|----------------------------|------|------|--------|------|--------|----------------------|
| Obj. A Design & Distribute | | | | | | |
| Educ. Materials | | | | | | XXXXXXXXXXXXXXXXXXXX |
| Obj. B Establish & Manage | | | | | | |
| Native Plantings | | XX | XXXXXX | XX | XXXXXX | XX |

V. Objectives/Outcome:

~~A. Design and Distribute Educational Materials:~~
~~A.1 Activity: Design and Install Educational Roadside Kiosk~~
~~A.1.a. Context within project: Cooperation and input will be solicited from agencies and groups involved with roadsides to design and install an educational roadside kiosk on Olmsted C.R. 22, an area planned for environmental education use.~~
~~A.1.b. Methods: The Interagency Roadside Committee (IRC) will act as the sounding board. Methods used in previous roadside kiosks (similar to Hwy. 56) will be used.~~
~~A.1.c. Materials: Design and construction will be contracted out.~~
~~A.1.d. Budget~~
~~Total Biennial LCMR Budget: \$6,000 \$5,000~~
~~LCMR Balance: \$6,000 \$0~~
~~Encumbered: \$5,000~~
~~Match: \$ none \$1,250~~
~~A.1.e. Timeline:~~

| | 7/95 | 1/96 | 6/96 | 1/97 | 6/97 | 12/97 |
|-------------------------------------|------|------|------|--------------|------|-------|
| PRODUCT #1 | | | | | | |
| Kiosk Design | | | | xxxxxx | | |
| PRODUCT #2 | | | | xxxxxxxxxxxx | | |
| Kiosk Construction and installation | | | | | | |

A.1.f. Workprogram Update: MnDOT District Engineers have decided they will fund all of this project (not just production). Funds will instead be used to make up increased cost of equipment (\$3,000) and cost-share on plantings (\$3,000).
1 July 1996. Poster design and production will be delayed till Fall 1996.
1 January 1997. Due to a change in project manager's position within DNR, she will be unable to devote the time needed to design poster. After viewing the Hwy. 56 Kiosk on the Fall field tour, it was decided this would be a more permanent educational tool (if approved).
30 June 1997. Draft design for kiosk is complete. Funds have been encumbered for final design and construction. Olmsted County and the City of Rochester will be sharing in the cost.
31 December 1997. Due to personnel changes and lack of long-term commitment from local partner, we would like to drop this portion of the project and shift funds to cost-share on additional seeding projects.

B. Title of Objective/Outcome: Establish and Manage Native Plants in Roadsides.
B.1 Activity: Establish Native Grass/forbs in Roadsides

B.1.a. Context within the project:

B.1.b. Methods: Planting will be achieved by contracting out (generally on county and township roads) the work and reimbursing the road authority. For projects that are postponed until Spring 1998 (due to flood related activities, mostly), we would like to reimburse counties for seed even though it won't get planted till spring or have DNR Roadsides purchase the seed to plant in spring 1998. Approximately \$60,000 will be spent in this manner. Matching funds will be solicited to purchase an additional \$30,000 worth of native grass/forb seed.

Due to the amount of special expertise and knowledge required to coordinate and supervise native grass/forb plantings in roadsides, I am requesting that the existing part-time Roadside Wildlife Technician (a 45% classified position) be temporarily assigned to 55% time with approval for paid overtime. This would only be for the two year period of the LCMR project. Most of the personnel salary and expenses will be spent coordinating and supervising establishment and management of native grass plantings.

B.1.c. Materials: MnDOT new seeding specifications will be used for seed origins, rates, mixes and application methods. Three interseeder type native grass drills will be purchased at a cost of \$30,000. Drills will be housed and maintained by Wilmar and Detroit Lakes DOT Offices and DNR Area Wildlife Office (Cambridge,MN). A light, pull type native grass seed harvester costing \$5000 will be purchased to allow harvest from fragile remnant prairies. This harvester will be housed and maintained by the DNR Roadside Program in New Ulm. This will allow additional acres to be seeded in the second year of project (unable to estimate exact acres at this time) for a very low cost. Personnel costs will be approximately \$17,390.

B.1.d. Budget
Total Biennial LCMR Budget: \$ 117,100
LCMR Balance: \$ 0.00
Encumbered: \$ 51,554
MATCH: \$ 4,056

B.1.e. Timeline:

| | 7/95 | 1/96 | 6/96 | 1/97 | 6/97 | 12/97 |
|-------------------|------|------|-------|------|-------|-------|
| PRODUCT #1 | xxx | | xxxxx | xxx | xxxxx | xxx |
| Establish Natives | | | | | | |

B.1.f. Workprogram Update: Projects totaling 150 acres for spring and fall 1996 have been chosen through application process in Fillmore, Steele, Olmstead, Goodhue, Redwood, Stearns and Wright

Counties. Technician has been hired. Two 6 foot Truax native grass drills are in the process of being purchased.

1 July 1996. Six of ten projects are underway. None are complete to date (due to weather and project schedule changes). Two Truax drills have been purchased and placed with DOT offices in Detroit Lakes and Marshall. Planting projects are planned for this summer with these drills. We have been requested to help form an Integrated Roadside Resource Committee in Redwood County. Brown and Lincoln County Officials have requested some training for road maintenance personnel on an integrated approach to vegetation management and plant identification. Surrounding counties will be invited to attend.

1 January 1997. Three of nine projects are completed. One project dropped out due to lack of seed from appropriate seed sources. A third truax drill is ordered. The native seed harvester has been purchased. Applications for the second round of projects have been mailed out and replys are coming in. New projects will be chosen by the end of January 1997 to spend balance of funds for planting.

30 June 1997. Five sites (76.5 acres) have been completed. Match funds from counties totaled \$18,960. Fifteen sites (321 acres) are in the process of being planted or planned for fall planting. The third Truax drill was delivered and is housed at the DNR Cambridge Office. In the last two years, requests from county, township and city road authorities for technical assistance about native establishment in roadsides have sky-rocketed. Requests from individuals have also increased significantly.

31 December 1997. Sixteen sites (total project) were completed for a total of 358 acres planted in twelve counties of Minnesota (see attached summary sheet). Average cost-share per acre was \$224. LCMR funds leveraged \$58,326 dollars from other sources to pay for planting native grasses in Minnesota Roadsides.

B.2 Activity: Manage Native plantings with Prescribed Burns

B.2.a. Context within the project: Prairie plants require periodic burning to maintain vigor and keep woody vegetation from encroaching. Prescribed burning is one technique used in the integrated approach to roadside management which is very different than standard practices. Providing training sessions for road authorities and additional specialized equipment for this activity will accelerate its acceptance and use in roadside management.

B.2.b. Methods: One or two formal prescribed burn sessions will be provided each spring for state and county road authorities. Informal training sessions will occur as roadsides are burned in spring and fall of each year (weather permitting).

B.2.c. Materials: An AMT 6-wheeler unit out-fitted with drip torches, pressurized water tank, backpack sprayers plus trailer will be purchased for \$10,000. It will be housed and maintained at the St. Cloud DOT Office. Similar materials already owned by the state will also be used to expand the area covered.

Personnel costs will be approximately \$8710. Equipment is being purchased rather than leased because of the relatively short window when burning takes place during the year, the high demand which can occur depending on weather conditions may result in shortages, equipment is somewhat specialized and can receive some rugged treatment so leasing can cost almost as much as purchasing out right.

B.2.d. Budget

Total Biennial LCMR Budget: \$18,710

LCMR Balance: \$0.00

Encumbered: \$ 0.00

MATCH: \$

MATCH BALANCE: \$

B.2.e. Timeline:

| | 7/95 | 1/96 | 6/96 | 1/97 | 6/97 | 12/97 |
|---------------|------|------|------|------|------|-------|
| PRODUCT #1 | xxx | | xxx | xxx | xxx | xxx |
| Conduct Burns | | | | | | |

B.2.f. Workprogram Update: Six wheeler burn equipment is in the process of being purchased. No burns were conducted this fall due to program coordinators health situation (temporary).

1 July 1996. One formal burn school was conducted in SE Minnesota with road authorities and volunteer fire departments along Trunk Hwy. 56 (wildflower route). The Roadside Technician burned 183 acres of roadside prairie (remnant and planted) on 5 different sites. The JD 6-wheeler, burn unit and trailer should be available in July (major purchasing and vendor problems were encountered).

1 January 1997. The 6-wheeler was finally delivered. However quite a bit of time and dollars were spent to bring it up to what we thought we had ordered. No fall burning took place.

30 June 1997. Due to program personnel shortages, no burn schools were conducted. A total of 95 acres and 11 sites were burned along Hwy. 56 in Southeast Minnesota.

31 Decemer 1997. No additional progress made.

VI. Evaluation: The following accomplishments will indicate the project is a success:

- at least 130 acres of native grass/forb plantings on a variety of sites (state, county, township)
- Increasing the acreage of sites managed through prescribed burning by 10% from previous years
- ~~- Roadside Kiosk in place along Olmsted C.R. 22.~~
- Requests from county and state highway offices for additional training and field manuals

- More County Highway Departments begin using IRRM techniques on a regular basis without financial assistance.

VII. Context within field: The concepts promoted in the project through demonstration plantings, management activities and written materials are the cutting edge for ecologically sound roadside resource management. Numerous states and other countries (Canada and Australia) are working towards implementing these activities and modes of approaching management. Minnesota is considered a model state for its roadside programs.

VIII. Budget context:

Two-year Period Ending June 30, 1995

| Agency | Fund Source | \$ Amount |
|--------|------------------|-----------|
| DNR | Pheasant Stamp | 198,706 |
| DOT | Ecological Serv. | 130,000 |
| Total | | 328,706 |

Two-year Period Beginning July 1, 1995

| Agency | Fund Source | \$ Amount |
|--------|---------------------|-----------|
| DNR | Pheasant Stamp | 198,706 |
| DOT | Eco. Serv. & Maint. | 100,000 |
| Total | | 298,706 |

A grant from the EPA for \$10,000 has been requested to hire an intern to work closely with selected counties and for production of additional educational materials. Applicants will be chosen in Spring 1995. (EPA grant application was not chosen). Additional grants will be applied for when appropriate for Roadside Programs.

Donations from local conservation and civic groups will be requested once projects have been chosen. Amount unknown at this time. These will be documented in semi-annual reports.

IX. Dissemination: Currently established modes of information dissemination will be used. These will include Mn DOT Minnesota Roadsides Newsletter, Minnesota Township Newspaper, Symposiums and workshops, training sessions, DNR and conservation organization newsletters.

All published materials will contain required credit language.

Copies will be provided to LCMR upon completion.

X. Time: Changing the way we have traditionally approached roadside management is a relatively young effort and will take another 10 to 20 years in our estimation. As special projects or different approaches come about, future funding may be requested from LCMR.

XI. Cooperation: The IRC committee will act as an advisory board for the project and includes representatives from MnDOT Maintenance and Ecological Services, MDA, and DNR. We hope to have a representative from the County Engineers Professional Organization by 7/1/95.

Major cooperators include:
Lisa Mueller - MDA, Endangered Species Program
Bob Jacobson - Mn DOT, Ecological Services

Additional cooperators (County and Township road authorities) will be added as projects are chosen.

XII. Reporting Requirements: Semi-annual six-month workprogram update reports will be submitted not later than January 1, 1996, July 1, 1996, January 1, 1997 and a final six-month workprogram update and final report by December 31, 1997.

XIII. REQUIRED ATTACHMENT:
1. **Qualifications:** See attached
2. **Project Staffing Summary:** See attached
3. **Detailed Budget and Timeline:** See attached

LCMR PROJECT SUMMARY SHEET

| Site No. | County/ Road | Contact Number | Acres | LCMR \$\$ | Partner \$\$ | Total \$\$ |
|----------|---------------------------------|--------------------------------|-------|-----------|--------------|------------|
| 1. | BrownCounty C.R. #24 | Co. Engineer, 507-354-2313 | 25 | 5,000 | 2,862 | 9,112 |
| 2. | Brown County C.R. #8 | same | 4 | 1,000 | 420 | 1,420 |
| 3. | Blue Earth Co. T.H. #60 | Al Forsberg, 507-625-3281 | 5 | 1,250 | 565 | 1,815 |
| 4. | Dodge County T.H. #14 | Ed Pitzenberger, 507- 374-6305 | 2.5 | 625 | | 10,000+ |
| 5. | Fillmore Co. C.R. #44 | Gene Ulring, 507-765-3854 | 52 | 10,400 | 24,522 | 34,922 |
| 6. | Freeborn Co. CSAH 5 | W.A. Groskurth, 507- 377-5188 | 19.8 | 4,950 | 2,068 | 7,018 |
| 7. | Kanabec Co. CSAH 16 | David Blum, 612-679-2982 | 40 | 8,000 | | |
| 8. | Kandiyohi Co. Prairie Woods ELC | Gary Sletten, 320-235-3266 | 18 | 4,500 | 2,477 | 6,977 |
| 9. | Kandiyohi Co. C.R. #1 | Gary Sletten 320-235-3266 | 9.5 | 2,362 | 1,307 | 3,669 |
| 10. | Kittson Co. CSAH #9 | Kelly Bengston 218-843-2686 | 50 | 10,000 | 3,500 | 16,000 |
| 11. | Olmsted Co. C.R. 22 | Mike Sheehan, 507-285-8231 | 4 | 1,750 | 461 | 2,211 |
| 12. | Redwood Co. CSAH 101 | Ernest Fiala, 507-637-2934 | 8 | 1,587 | 349 | 1,936 |
| 13. | Redwood Co. CSAH 3 | Same | 17 | 3,213 | 717 | 3,930 |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

| Site No. | County/ Road | Contact Number | Acres | LCMR \$\$ | Partner \$\$ | Total \$\$ |
|----------|---|-------------------------------|-------|-----------|--------------|------------|
| 14. | Rice County CSAH 29 & 30 | Mitch Rasmussen, 507-332-6110 | 69 | 17,250 | 17,748 | 34,998 |
| 15. | Rice County Sakatah Lake St. Park, Leroy Ave. | Jeff Karels 507-362-4438 | 12 | 2,915 | 323 | 3,238 |
| 16. | Wright Co. CSAH 20 | Wayne Fingalson, 612-682-7388 | 22 | 5,485 | 1,007 | 6,492 |
| | | | | | | |
| | TOTALS | | 358 | 80,300 | 58,326 | 138,626 |