

**Cerro Gordo County
IOWA**

Integrated Roadside Vegetation Management Plan

Cerro Gordo County Conservation Board

Prepared by:

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Contributors to the Plan

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I. DEFINITION:

Integrated Roadside Vegetation Management (IRVM)

Section 314.22 of the Iowa Code, Integrated Roadside Vegetation Management states: *It is declared to be in the general public welfare of Iowa and a highway purpose for the vegetation of Iowa's roadsides to be preserved, planted, and maintained to be safe, visually interesting, ecologically integrated, and useful for many purposes.*

Roadside vegetation performs many functions on the landscape. As a sustainable method of controlling erosion and sediment delivery, providing critical habitat and food sources for birds and pollinators, native vegetation in right of ways also ensures safe, visible, attractive roadways across Iowa. According to the Iowa legislature, Integrated Roadside Vegetation Management (IRVM) refers to a comprehensive program that:

- Maintains a safe travel environment.
- Systematically evaluates each area to be managed while adopting a comprehensive plan and strategies for cost-effective maintenance and vegetation planting.
- Determines which plant communities best fit the area.
- Develops procedures that will encourage, enhance or re-establish native plant communities.
- Provides self-sustaining, diversified, visually interesting vegetation.
- Keeps safety and an improved environment as priorities.
- Utilizes the most beneficial methods to prevent or correct undesirable situations caused by disturbance or less than optimum vegetative ground cover.

II. INTRODUCTION:

The prime purpose of road corridors is to transport people and goods safely and efficiently from one location to another. The prime purpose of roadside vegetation is to hold soil in place without creating hazards.

Cerro Gordo County's vegetation management goals must meet certain safety and functional requirements before aesthetic, recreational or economic considerations can be addressed. These are to maintain a clear zone recovery area, meet minimal sight distance requirements and provide for erosion control. We are also required by Iowa law to mow or otherwise control noxious weeds. Through the use of IRVM, we should be able to meet the prime purposes, provide for safe travel and address other desirable uses for roadside vegetation.

III. HISTORY OF IRVM IN CERRO GORDO COUNTY:

IRVM (Integrated Roadside Vegetation Management) was established in 1988 in Cerro Gordo County and the 5th county in Iowa to develop an IRVM program. The program started with the hiring of a Roadside Manager and one Roadside Technician. An additional full-time Roadside Technician was added to the staff in 1995. Cerro Gordo County ROW staff is responsible for over 900 miles of roadways which equates to over 4,000 acres of management area.

IV. JURISDICTIONAL RECOGNITION AND APPROVAL:

The Roadside Manager administers all duties within the IRVM plan; seeds all bare soil in a timely manner, decides what types of seed to use and when it should be planted, what types of soil prep work are needed, and all management of native vegetation after establishment (burning, spraying, etc.); administers roadside spraying program; determines what areas of the county are treated, what types of herbicides are used, and

what types of vegetation those herbicides are used on; administers brush spraying and removal program. The Roadside manager is in direct communication with the Conservation Board Director on special projects and day to day work priorities.

The Conservation Board oversees the planning and implementation of the IRVM plan. This includes approving the annual budget, equipment updates or additions, etc. The Roadside Manager gives the Conservation Board an annual report that points out herbicide use, brush removal and spraying, equipment evaluations, future personnel changes, etc.

The County Engineer and Secondary Roads Foremen work with the Roadside Manager with detailed location information on all maintenance work, which determines where seeding takes place. Any brush work needed, to include site preparation for maintenance and all down trees in the ROW, are relayed to the Roadside Manager and taken care of as time and staff allow.

The County Board of Supervisors approves the annual budget and acts as a liaison between the public and IRVM staff concerning any vegetation issues in the Right-of-Way. The Board of Supervisors also appoints the County Weed Commissioner and approves the annual weed report submitted by the County Weed Commissioner.

V: GOALS OF THE IRVM PLAN

The goals of the Integrated Roadside Vegetation Management Plan are to:

- Serve a variety of public purposes including erosion control, wildlife habitat, climate control, scenic qualities, weed control, utility easements, recreation uses, and sustenance of water quality.
- Emphasizes establishment of adaptable, long lived native vegetation, matched to the unique environment found in and adjacent to the roadside.
- Make more efficient and effective use of chemicals as a control method of undesirable plants.
- Enhance the scenic qualities of the roadsides and their value as roadside habitat.
- Builds upon a public education program allowing input from adjacent landowners and the general public.
- Maintain a working relationship with the County Engineer and the Secondary Roads Department.

V. INTEGRATED ROADSIDE VEGETATION MANAGEMENT CONTROL METHODS:

Vegetation Control for Public Safety and Infrastructure Protection

Brush (trees and shrubs) and herbaceous vegetation, if not properly managed, can cause the motorist problems as well as make road surfaces difficult to maintain. Brush can cause sight distance problems and obstruct signs. It can also impede proper winter time functions, whereas it can create snow drifts on the roadway and make it more difficult to push snow off of the roadway into the adjoining ditch. Brush also enhances frost formation on the road surface as it blocks sunlight that will typically cause the frost to melt and evaporate. By blocking sunlight, it also prevents the melting of snow and ice. Since gravel roads cannot be salted, these conditions can quickly create an unsafe situation. Roots from brush can also plug subsurface tile lines in the roadsides and impede drainage; thereby softening the base of the road causing soft spots, dips and even pavement failure. Brush is also less effective at preventing erosion compared to grassy vegetation and greater erosion of the ditches will occur where shade has stunted or killed the grass. Trees can also pose hazards for vehicles leaving the traveled surface and can block roads when damaged by storms. Herbaceous vegetation can cause drifting and visibility problems in certain areas as well as damage rock shoulders, guardrails and bridge abutments thereby reducing their effective life span. Hard-surface roads will be afforded highest priority for brush control efforts.

A. Brush control

I. Foliar

Treat trees and brush 10' and shorter (while avoiding ornamental species, crops and water) with a combination of various Triclopyr (e.g., Garlon®), Metsulfuron-methyl (e.g., Escort®) herbicides during brush spraying operations. Special care will be given to any brush within the vicinity of any creek, river, or drainage way.

Cerro Gordo County treats at least one-half of the county annually – a total of eight townships in the fall. Treatments will be made on a rotational basis as the north half of the county will be targeted on odd numbered years and the south half of the county on even numbered years. Foliar herbicide applications begin in June and continue through the middle of September. Vegetation targeted for chemical treatment includes seedling trees and shrubs (usually less than 8 feet in height) that are too small or too numerous to cut efficiently. Brush is treated with a combination of various Triclopyr (e.g., Garlon®), Metsulfuron-methyl (e.g., Escort®) herbicides during noxious weed spraying operations. Special care will be given to any brush within the vicinity of any creek, river, or drainage way. Herbicides are applied directly to the target with specialized equipment and certified applicators. This practice minimizes injury to desirable plant communities

II. Basal

Treat trees and brush up to 6" basal diameter in low to medium density stands with Triclopyr and JLB Oil (e.g. Pathfinder II) ® Also treat resistant species and highly sensitive areas. Treatments may be conducted any time during the year except when sap is rising. Desirable treatment window is November through March. Basal bark treatments are used primarily within native prairie plantings and any vegetation that cannot be safely cut with equipment (e.g. brush in fence lines).

III. Cut stump

Use in areas where complete removal of the tree is the desired objective due to potential hazard, sight distance, snow or ice deposition/retention, aesthetics, tree size, etc. Treatments may be conducted any time during the year, but best results will be achieved when sap is not rising. Ideal treatment window is October through early March. Use chemicals appropriate for site conditions and treat immediately after cutting.

B. Total vegetation control

I. Guardrails and bridge abutments

Treat vegetation and soil around guardrails and bridge abutments with appropriate products to eliminate vegetation while minimizing off-target damage and soil erosion problems. Chemicals used include Glyphosate(Roundup®) and Imazapyr, Aminocyclopyrachlor, Metsulfuron methyl(Viewpoint®). Treatments will be conducted between late April and late May but may vary depending upon weather.

Cerro Gordo County currently controls vegetation on a total of 269 bridges with guardrails and 61 bridges with abutments each year within the recommended time period for the product(s) used. Problematic areas will be weed-whipped in late summer to allow for better visibility.

C. Noxious and Invasive Weed Control

By statute, noxious weeds must be controlled in county roadsides. Noxious weeds typically pose an economic threat to pasture and cultivated crops and in some cases, can pose a human health hazard (i.e. poison hemlock) and have the potential to outcompete established roadside vegetation (e. g., Canada thistles in smooth brome). Other weed species, though not listed as 'noxious', can have similar and/or other undesirable effects (e. g., giant ragweed, wild parsnip).

The entire county is monitored for Canada Thistle on a yearly basis. Two boom buster spray rigs patrol every mile of ROW maintained by Cerro Gordo County, and spot spray sites of infestation. All other weed problems are addressed and targeted as necessary based on complaints submitted to the Conservation Board, or known sites of infestation.

Cerro Gordo County's routine, or annual service, consists primarily of spot herbicide applications for the control of noxious weeds such as Leafy Spurge, Poison Hemlock, Teasel, and Purple Loosestrife in all known locations within the ROW. Although not listed on the State of Iowa's noxious weed list, other weed species of concern such as Japanese Knotweed and Giant Ragweed may be targeted to eliminate safety hazards and encroachment into desirable plant communities. A database of locations for these species on public and private ground has been created which Cerro Gordo County will continue to treat and monitor annually.

Herbicides currently used for control of noxious weeds and the timing for effective control are as follows: Canada Thistle is controlled with *Telar*® and *Milestone*®,

with applications beginning in late May and ending in August. Leafy Spurge is controlled with *Perseptive*® and applied in late May or early June. Teasel is controlled with *Garlon 3A*® and applied in June/July. Purple Loosestrife is controlled with *Garlon 3A*® applied in July/August. Japanese Knotweed requires repeat applications of *Garlon 3A* throughout the summer. Ragweed problems are typically sprayed with 2, 4-D.

It is the intention of the Cerro Gordo County Conservation Board to monitor and attempt to control noxious weeds within the ROW of the entire county on an annual basis. In an effort to maximize the effectiveness of herbicide applications, and minimize off-target drift, weather conditions are carefully monitored and all spraying activities cease when wind, temperature, or precipitation patterns are not favorable.

D. Safety

I. Non-target effects

Use drift control products and proper application techniques to reduce the risk of damaging crops, ornamentals, etc.

II. Chemical storage

Chemicals should be stored in a facility that fulfills requirements for ventilation, spill containment, security, protection from elements, and worker protection.

II. Applicator training

The Iowa Department of Agriculture and Land Stewardship requires licensing for most pesticide applicators. Cerro Gordo County provides for acquiring and maintaining a current Iowa Pesticide Applicators license (Category 6). Annual refresher training is provided by the Iowa State University Extension office. Additional training will be offered in the following areas: equipment (e.g., chainsaws, chippers), methods, chemicals, public relations, safety, labels & MSDS sheets, environmental hazards and other topics.

VI. Vegetation Establishment and Maintenance

Road construction and maintenance disturbs many acres of roadside each year. Left alone, these areas will undergo a process known as succession whereby the plant community moves through a series of stages until a best fit or 'climax' stage is established. Early successional stages are comprised of weedy species. Theoretically, the climax stage reflects the plant community present historically on the site – tallgrass prairie on 85% of Iowa. However, climax communities have the potential to be comprised of invasive and noxious species since numerous non-native species have been introduced to Iowa over the last 150 years. The objective of IRVM is to direct and accelerate the process of succession towards the historical climax community and away from non-native invasive species; then, maintain that community once in place.

A. Seeding projects

Sites may be prepared with a rake, drag or disk and cultipacked to firm the soil and break up clods. Seed will primarily be planted using a hydro-seeder due to ease of application and

benefit of erosion protection. A typical application involves a 'two-step' process where seed is directly applied with mulch at 120 lbs. /acre and then covered with only mulch at around 600 lbs./acre. However, rates may vary depending on site conditions and other factors. In addition, other methods can be used including: hand or machine broadcasting (i.e., Vicon spreader), drilling (conventional or no-till native seed drill). Seeds may be incorporated with a rake, harrow or cultipacker. Depending upon the characteristics of the site and seeding method used, seed and soil will be held in place using hydromulch material. Nurse crop seed (oats, winter wheat, annual rye, etc.) will be included in the seed mix to help control erosion and provide quick bare-ground cover.

I. Native

When and where possible, roadside construction projects will be seeded with mixes of native grass and wildflower species. When necessary, mixes will be tailored to the characteristics of a site (e. g., soil moisture, safety/maintenance considerations. Experience has shown that native seedings are best conducted during mid spring (mid-April through early June) and the dormant season (November to the end of February). However, construction projects are often completed at other times of the year and may require immediate seeding due to concerns about erosion, workloads and other factors. In summer months, the decision to seed will hinge on predicted rainfall. If droughty conditions are predicted, permanent seeding may be delayed and a cover crop used to provide temporary protection of the soil. In early fall, dormant seeding may occur earlier if soil temperatures are favorable.

Mowing will be the primary post-planting management tool used to control weeds in native plantings. At least one cutting will be made in the establishment year when weeds reach 12-15". Cutting height will be about 4". If a second cutting is made, cutting height will be increased to approximately 6". When mowing to reduce weed pressure, tailor cutting height to just exceed average height of the establishing native grasses and wildflowers. In the second growing season, a single cutting at about 10-12" may be made if weed pressure is heavy. Herbicides may also be used to control weed growth prior to seeding or after planting for maintenance purposes. For example, glyphosate may be used during pre-planting should an area become excessively weedy prior to seeding; while spot spraying of brush or invasive species may occur periodically as a maintenance activity once a planting establishes.

II. Cool Season

Time of planting and/or other factors (e. g., erosion potential, mowing) will occasionally necessitate the use of seed mixes that include non-native grasses and legume species. Additionally, cool season species can be more practical for reseeding an area with a disturbance regime too great for the establishment/persistence of native species such as mowed areas or areas with chronic soil deposition problems.

Because of location and population, many rural developments exist around the county. This results in disturbances of property owner's yards due to culvert re-builds and ditch clean-outs. A waterway mix of mostly brome is used to re-seed these areas. Mulch is then applied over the top of the new seeding with the hydro-seeder to stabilize the seedbed from erosion.

B. Renovation projects

Replanting projects to date have focused mainly on areas disturbed by construction and

maintenance activities. The renovation process will involve removal of existing plant cover using herbicide application. Sprayed areas will be planted with native grasses and wildflowers and managed post-planting (mowing, burning) to ensure success. Criteria for renovation may include the presence of a well-maintained fence (to reduce the potential for overspray and encroachment), history of mowing (to reduce the likelihood of unnecessary mowing), soil moisture (to match the species being planted), slope (to accommodate equipment), traffic count (to increase public awareness and enjoyment) and adjacent landowner (to improve prospects for long-term success of the seeding). In the event a landowner requests a 'renovation project' along any county road adjacent to property they own, the area will be inspected by IRVM staff to determine the feasibility of the project. If the area is deemed appropriate for renovation, IRVM will seed the area when seed is available.

C. Prescribed burning

Prescribed burns will be conducted in roadsides supporting remnant native vegetation and those reseeded to native grasses and wildflowers as soon as sufficient fuel is available to sustain combustion. Burns will also be conducted for native planting maintenance to suppress brush and non-native species; and may be used in areas to help limit snow deposition. Maps of candidate locations will be prepared to guide work. Priority will be based upon length of time since previous burn, benefit potential, (desirable/indicator species and undesirable species present) and other factors. Wind direction, adjacent land use and roadside features (fences, utility poles, junction boxes, etc.) will influence the choice of roadsides burned on a given day.

In the spring, burning will commence as soon as roadsides are dry enough to carry fire and may continue until green up prevents effective combustion or there is a potential to harm nesting birds (ca. May 10). Late spring burns will occasionally be conducted for specific management purposes (e. g., inhibit nonnative cool season species). Burns may also be conducted in fall and winter if environmental conditions and workloads allow. Whenever possible, timing of burns will be linked to management objectives for individual roadsides (e. g., fall burns for woody species control). Burning may be repeated on an area annually or less frequently as management objectives dictate. Fire suppression, traffic control, weather monitoring and safety equipment will be used. Burns will be conducted with a minimum of two crew members and daily records will be maintained.

D. Native Seed Mixes

I. Cerro Gordo County Native Grass Production Plots

Approximately 10 acres of land owned by the Cerro Gordo County Conservation Board was planted to plots of 5 species of native grass. The area serves a variety of purposes (wildlife habitat, environmental education, etc.) but primarily has been a source of seed for roadside and natural area plantings. The area will continue to be managed to maximize seed production and practices may include, but are not limited to, prescribed burning, prescribed mowing, and herbicide applications. Seed will continue to be harvested with a pull-behind seed stripper. Seed cleaning will continue to be done by roadside staff.

II. Harvest from prairie remnants.

Native grass and wildflower species that are not raised in production areas will continue to be harvested from remnant and planted sites. Species are picked to maximize diversity yet to allow proper regeneration of any single species on a particular site.

III. Outside Resources

Each year, Cerro Gordo County applies for grants through the Living Roadway Trust Fund (LRTF) for additional seed to be planted in the Right-of-Way. This is accomplished through the Iowa DOT's Transportation Alternatives Program and the Tallgrass Prairie Center at the University of Northern Iowa campus in Cedar Falls, IA.

VII. EDUCATION AND INFORMATION

As part of the county's IRVM plan, it will:

- Develop a public awareness campaign to gain support for integrated management through media, established organizations, seminars and brochures.
- Obtain educational and informational material on IRVM to be presented in seminars and distributed to adjacent landowners, the general public, consultants and contractors.
- Provide guidelines and directives for contractor and others who seed, plant and maintain roadsides.
- Prepare and distribute instructions on preservation of desirable areas and treatment of areas that need improvement.
- Educate citizens and public entities on new mowing legislation to help limit mowing in the Right-of-Way.
- Gather, develop and distribute information with other jurisdictions; seek and share information with other counties.
- Continue to support and be a part of groups like the Association for Integrated Roadside Management(AFIRM) and Iowa Weed Commissioner's Association(IWCA)
- Encourage research in all aspects of IRVM, i.e.; road design for improving IRVM, planting methods, management practices, seed sources, seeding rates, seed mixes, planting materials etc.
- Encourage use of native seeds and plant materials native to Iowa.

VIII. LONG TERM GOALS

- Keep informed on new/improved herbicides to improve efficiency and effectiveness of noxious weed control in Cerro Gordo County.
- Expand current and develop new prairie restoration sites, making it a priority to scatter sites throughout the county.
- Encourage all aspects of professional development with County staff.

- Continue to seek additional funding sources (Living Roadways Trust Fund) for seed and equipment purchases.
- Keep informed of new alien plant species that may enter Cerro Gordo County.
- Monitor illegal harvesting of native prairie seed in the ROW - IA Code 461A.41
- Increase public awareness of the Cerro Gordo County IRVM program through the media, educational displays, meetings, and public programs.
- Communicate with adjacent landowners regarding weed and brush problems, and prairie restoration efforts.
- Continue to communicate with Secondary Roads Dept. to promote information.

IX. CONCLUSION

This is a flexible plan that requires common sense interpretations with changes as necessary to fit the ever-changing complex circumstances realized in roadside vegetation management.

Phillip E. Dougherty 6-9-15
 Chairperson: Cerro Gordo County Supervisor Date

Mary K Kelly 5-22-15
 County Engineer: Cerro Gordo County Date

James W. Reed 5-19-15
 Chairperson: Cerro Gordo County Conservation Board Date

HIGHWAY AND TRANSPORTATION MAP CERRO GORDO COUNTY IOWA

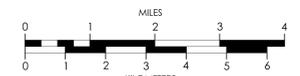


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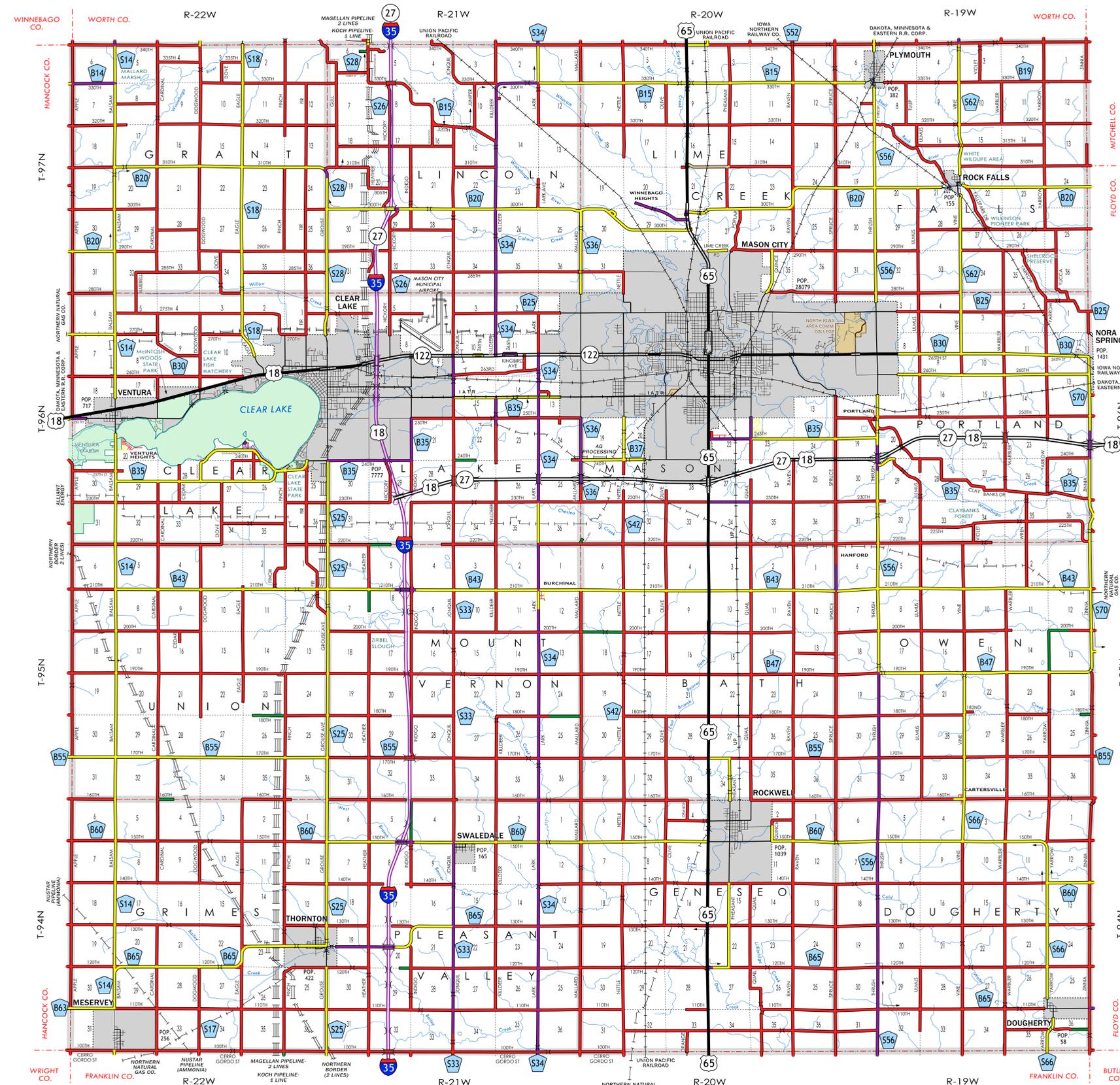
In Cooperation With
**United States
 Department of Transportation**

JANUARY 1, 2014



LEGEND

- INTERSTATE HIGHWAY
- PRIMARY HIGHWAY-DIVIDED
- PRIMARY HIGHWAY
- PORTLAND CEMENT CONCRETE ROAD
- ASPHALT ROAD
- BITUMINOUS ROAD
- GRAVEL ROAD
- EARTHEN ROAD
- INTERSTATE HIGHWAY
- UNITED STATES HIGHWAY
- STATE HIGHWAY
- COUNTY HIGHWAY
- RAILROAD
- PIPELINE
- AIRPORT
- HYDROLOGY
- BRIDGE
- STATE BOUNDARY
- COUNTY BOUNDARY
- CORPORATE BOUNDARY
- TOWNSHIP LINE
- SECTION LINE
- ROAD NAME
- UNINCORPORATED PLACE
- STATE PARKS
- STATE INSTITUTIONS
- FEDERAL LAND



Appendix B: Equipment List

Vehicles

- 1997 Ford F350 dually
- 2008 Ford F350 dually
- 2012 Ford F350 dually
- 2002 International dump truck dually

Large Equipment

- 1999- 800gal Bowie Hydro-seeder
- Beaver M18R Morbark wood chipper
- 1994 Flex Series II Truax grass drill
- 2007 Vicon Broadcast seeder
- 3 pt Sprayer with 50' hose(Rx fire use)
- 3- 300gal slide-in sprayers
- 2002 John Deere 7.5' 390 flail mower
- 1993 Prairie Habitat seed stripper
- 8' x 10' Chemical storage shed
- 1998 Trail King 20' tandem axle equipment trailer
- 1996 Speedy Esquire hammer mill and fanning mill(seed cleaning)

Small Equipment

- Stihl FS450 brush saw
- 2 Stihl FS130 weed whips
- 2 Stihl FS110 pole pruners
- 1 Hand Held Seed Stripper
- 2 Boom Buster sprayers with 4 nozzle tips
- 2 Drip torches
- 4 Fire brooms
- 2 Spray guns with shower nozzle
- 3 Decontamination kits
- 2 Truax Seed Slingers
- 3 Kenwood radios
- 2 Smith Indian backpack fire pumps
- 3 FMC Spray guns(brush spraying)
- 1- 2 gallon hand sprayer
- 10 Stihl chainsaws
 - 3- MS009
 - 2- MS211
 - 2- MS260
 - 2- MS360

Appendix C: LRTF Grants Awarded to Cerro Gordo County

**Living Roadway Trust Fund (LRTF) Projects Awarded
Cerro Gordo County**

• Native Seed for Roadside Enhancement (1997-2013)	
290 Acres of native grass and wildflowers established	\$115,000
• Native Seeding Projects	
1991 trail seeding	\$3,392
1992 ROW seeding	\$3,996
1993 ROW seeding	\$7,749
1995 ROW seeding	\$7,040
1995 ROW seeding	\$11,498
1996 ROW seeding	\$8,047
• Equipment Purchases	
Brush Chipper	\$10,000
3-pt Utility Sprayer	\$3,128
Herbicide Storage Shed	\$8,494
Watchdog Mobile Weather Stations	\$4,234
Native Prairie ID Guide	\$2,138
Native Seed Cleaner	\$3,055
Vicon Broadcast Seeder	\$3,610
Digital Camera	\$295
Equipment Storage Shed	\$10,000
Hand-held Seed Stripper	\$1,716
• TOTAL	\$203,392

Appendix D: Roadside Manager Job Description

CERRO GORDO COUNTY, IOWA POSITION DESCRIPTION

Position Title: Vegetation Manager

Department: Conservation

Immediate Supervisor: Conservation Director

Shift: Normally 7:30 a.m. to 4:00 p.m., Monday - Friday

Location: Cerro Gordo County - Lime Creek Nature Center

FLSA: Exempt/Non-Bargaining

Approved by: Conservation Board

Summary:

Responsible for the general implementation of duties associated with all aspects of vegetation management within county secondary road right-of-way (ROW) corridors. Primary work activities are focused on the continued maintenance and development of safe travel corridors for vehicles and biological management of desired vegetation types along those corridors. In addition the Manager works directly with Conservation Education, Outdoor Recreation, and Wildlife Area Managers to assist them with routine educational efforts, public land and facility management goals and objectives

Essential Duties and Responsibilities:

Direct the assigned professional staff with the design and implementation of established ecological goals for ROW vegetation management in the county.

Coordinate and assist with control and removal of woody vegetation in ROW and other county managed areas.

Direct and assist with spraying of herbicides in ROW and other county managed areas for control of recognized noxious weeds, according to Iowa Department of Agriculture Standards and also spraying of unwanted woody vegetation.

Coordinate and implement seeding projects on cleaned, re-graded and newly created ROW areas, primarily utilizing native warm season plant species, where applicable.

Oversee and maintain accurate, up-to-date records of the following activities: herbicide application, seeding and reseeded, prescribed burning, tree and brush removal and timely handling of complaints from county residents and other government agencies.

Oversee and maintain efficient and effective maintenance records for assigned equipment and facilities.

Assist with and perform scheduled and non-scheduled routine equipment and facility maintenance and arrange with supervisor for non-routine work to be completed by private vendors/contractors.

Compile monthly individual and supervised staff work activity reports for all tasks completed.

Function as appointed County Weed Commissioner and maintain records and enforce Iowa Code.

Responsible for immediate notification to supervisor, of potential problems concerning ROW safety, equipment problems/safety and other potential risk exposure situations.

Perform any and all assigned work according to the goals and objectives of the ROW program and conservation department, in accordance with departmental and county safety regulations.

Direct and assist with development and presentation of on-going educational materials related to ROW management and conservation department.

Direct and assist with production, harvest and processing of warm season native prairie plant seeds for use in ROW and other county property seeding projects.

Direct and assist with continued inventory and data collection of prairie remnants, noxious weed sites and woody vegetation encroachment sites.

Follow established county purchase policies (i.e. bid procurement, repair estimates, etc.) in daily operation of ROW program.

Assist Director with annual budget preparation and expense tracking for ROW management operations.

Assist other full time staff on agency projects as specified by director.

Supervisory Responsibilities:

The manager will routinely oversee the work of two full-time biologists, seasonal interns, temporary or part-time employees and be responsible for the implementation and daily work activities of the integrated ROW vegetation management program for this agency/county. The manager is responsible for employee safety training specific to the above positions and ensuring that the work of those he/she oversees is conducted safely.

Qualification Requirements:

To perform this job successfully, an individual must be able to satisfactorily perform each essential duty. The requirements listed as follows are representative of the knowledge, skill, and ability required.

Ability to routinely work at remote/satellite work stations.

Ability to organize assigned work and develop efficient strategies to accomplish said work.

Ability to establish and maintain effective working relationships with other staff, the general public, special interest/civic groups and individuals from other government agencies.

Ability to work a non-standard workweek, including nights and weekends to accomplish the objectives of the position.

Ability to maintain accurate safety, work and equipment and facility maintenance records.

Ability to safely operate any equipment owned by the Conservation Board and ability to operate non-agency owned, job specific equipment, to achieve work goals.

Ability to safely make minor repairs on equipment and facilities not requiring a trained professional repair person.

Ability to operate personal computers and demonstrate or become proficient with Windows, Microsoft Word, Excel, Publisher and Internet applications.

Ability to continue professional training to remain knowledgeable of current issues, trends and management techniques.

The requirements and duties listed above are intended only as illustrations of the various types of work that may be performed. The omission of specific statements of duties does not exclude them from the position if the work is similar, related or a logical assignment to the position.

Education and Experience:

Graduation from an accredited college or university with a Bachelor's Degree in natural resource biology, wildlife management, or a closely related subject and a minimum of four (4) years (no exceptions) practical work experience in the above or a closely related natural resource field environment is required.

Shall possess a working knowledge of Iowa/Midwest habitat management including, but not limited to native and restored prairies, cool season vegetation, riparian corridors/floodplains, hardwood forests, and wetland ecosystems.

Shall be knowledgeable of the tools and equipment required to perform the job.

Language Skills:

The ability to communicate effectively with co-workers and the general public.

Ability to deal with the general public in a tactful and courteous manner.

Ability to properly and effectively communicate verbally and in writing.

Ability to read, analyze, and interpret general business periodicals, professional journals, technical procedures, and government regulations.

Ability to utilize a wide variety of reference and descriptive data, information, and computer hardware and software documentation.

Mathematical Skills:

Ability to apply concepts such as fractions, percentages, ratios, and proportions to practical solutions.

Ability to apply basic geometrical, statistical, and algebraic principles.

Reasoning Ability:

Ability to apply common sense understanding to carry out instructions in written, oral, or diagram form.

Ability to apply common sense to solve problems or achieve work objectives.

Ability to recognize work situations that require special attention.

Ability to deal with problems involving several variables in standardized situations.

Ability to establish goals and objectives and assess progress toward their achievement.

Certificates, Licenses, Registrations:

Valid Iowa Commercial Drivers License (Within 90 days of hire date).

Valid Iowa Pesticide Applicator License (Within 90 days of hire date).

National Wildfire Coordinating Group (NWCG) certification for S-130 & S-190 (within first year of service).

Physical Demands:

The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job.

While performing the duties of this job, the employee is routinely required to stand, walk, sit, operate hand tools, kneel, stoop, balance and climb ladders and equipment. These activities may be required for 2 or more hours at a time during an 8-10 hour work/day.

The employee must routinely lift 75 pound objects 40 inches high and carry 15 yards.

The specific vision abilities required for this job include; close vision, distant vision, color vision, peripheral vision, depth perception and the ability to adjust focus.

Work Environment:

The work environment characteristics described here are representative of those an employee encounters while performing the essential functions of this job.

While performing the duties of this job the employee may work around moving parts/equipment. The employee may work outdoors in extreme hot, cold, rainy, snowy and windy weather conditions and be exposed to dust, fumes and loud noises.

Comments:

Must be insurable for driving under county insurance company policies.

Applicant will be subject to post offer, pre-employment drug and physical testing.

Cerro Gordo County is an Equal Opportunity Employer. In compliance with the Americans with Disabilities Act, the County will provide reasonable accommodations to qualified individuals with disabilities and encourages prospective employees and incumbents to discuss potential accommodations with the employer.

Appendix D: Natural Resource Biologist Job Description

POSITION ANNOUNCEMENT CERRO GORDO COUNTY CONSERVATION BOARD MASON CITY, IOWA

Position Title: Natural Resource Biologist – ROW Vegetation

Department: Conservation

Immediate Supervisor: Natural Resource Manager-ROW Vegetation/Conservation Director

Shift: Normally 7:30 a.m. to 4:00 p.m., Monday - Friday

Location: Cerro Gordo County - Lime Creek Nature Center, Mason City, Iowa

FLSA: Exempt/Non-Bargaining

Approved by: Conservation Board

Summary:

The general implementation of activities associated with all aspects of vegetation management within county secondary road right-of-ways (ROW)/agency managed property. Work activities focus on the continued maintenance and development of safe travel corridors for vehicles and biological management of desired vegetation types along those corridors.

Essential Duties and Responsibilities:

Operate any equipment owned by the conservation board.

Perform scheduled and non-scheduled routine equipment maintenance.

Make minor repairs on equipment and facilities.

Maintain efficient and effective maintenance, spraying & tree/brush removal records.

Assist the Natural Resource Manager with accomplishing established ecologically oriented mgmt. goals for vegetation on county ROWs/agency managed property.

Assist with control and removal of woody vegetation on ROW/agency managed property.

Assist with conducting controlled burns on ROW/agency managed property.

Assist with spraying of herbicides on ROW/agency managed property.

Assist with seeding projects on cleaned, regraded and newly created ROW areas.

Compile monthly and annual work activity reports for tasks completed.

Perform any and all related work according to goals and objectives of ROW/agency programs, following departmental safety regulations.

Assist with development and presentation of educational materials related to ROW/agency programs.

Assist with production, harvest and processing of warm season native prairie plant seeds.

Assist with continued inventory and data collection for prairie remnants, noxious weed areas and woody vegetation encroachment sites.

Assist other full-time staff as specified by director.

Supervisory Responsibilities:

The biologist may routinely work with temporary or part-time employees and occasionally may supervise a specific work project being performed.

Qualification Requirements: (see official job description)

Education and Experience:

Graduation from an accredited college or university with a Bachelor's Degree in biological sciences, wildlife management, or a closely related subject and a minimum of 1 year practical work experience in the above or a related field.

Knowledge of the tools and equipment required to perform the job.

Language Skills: (see complete job description)

Reasoning Ability: (see complete job description)

Certificates, Licenses, Registrations:

Valid Iowa Commercial Drivers License (Within 90 days of hire date).

Valid Iowa Pesticide Applicator License (Within 90 days of hire date).

******National Wildlife Fire Coordinating Group (NWCG) S-130 & S-190 certification (Within first year).**

Physical Demands:

While performing the duties of this job, the employee is routinely required to stand, walk, sit, operate hand tools, kneel, stoop, balance and climb ladders and equipment. These activities may be required for 2 or more hours at a time during an 8-10 hour work/day.

The employee must routinely lift 75 pound objects 40 inches high and carry 15 yards. The specific vision abilities required for this job include; close vision, distant vision, color vision, peripheral vision, depth perception and the ability to adjust focus.

Work Environment:

The employee may work outdoors in extreme hot, cold, rainy, snowy and windy weather conditions and be exposed to dust, fumes, loud noises and be around moving parts & equipment.

Comments:

Must be insurable for driving under county insurance company policies.

Applicant will be subject to post offer, pre-employment drug and physical testing.

Cerro Gordo County LRTF Funding History through FY 2016

DOTProjectNumber	Applicant	Award	FiscalYear Description	Type
90-17-LRTF-101	Cerro Gordo County	\$ 3,392.00	1991 Trail seeding	County
90-00-LRTF-120	Cerro Gordo	\$ 4,425.39	1991 Roadside trail plantings	State
90-00-LRTF-121	Cerro Gordo Co. Conservation Board	\$ 4,517.98	1991 Planting - Rest area	State
90-17-LRTF-201	Cerro Gordo County	\$ 3,996.00	1992 Seed	County
90-17-LRTF-301	Cerro Gordo County	\$ 7,749.00	1993 Seed	County
90-00-LRTF-303	Cerro Gordo Co. Conservation Board	\$ 7,678.34	1993 Seed - Highway 107	State
90-17-LRTF-501	Cerro Gordo County	\$ 7,040.70	1995 Seed	County
90-17-LRTF-502	Cerro Gordo County	\$ 11,498.00	1995 Seed	County
90-17-LRTF-601	Cerro Gordo County	\$ 8,047.50	1996 Seed	County
90-17-LRTF-501	Cerro Gordo County Conservation	\$ 8,494.00	2005 Equipment - Storage shed	County
90-17-LRTF-601	Cerro Gordo County	\$ 3,055.00	2006 Equipment - Seed cleaning	County
90-17-LRTF-701	Cerro Gordo County Conservation	\$ 3,610.00	2007 Equipment - Vicon PS403 seed spreader	County
90-17-LRTF-801	Cerro Gordo County Conservation Board	\$ 295.18	2008 Equipment - Canon digital camera	County
90-17-LRTF-901	Cerro Gordo County Conservation Board	\$ 10,000.00	2009 IRVM equipment storage building	County
90-17-LRTF-101	Cerro Gordo County Conservation Board	\$ 1,716.00	2011 Equipment - Prairie Habitats seed stripper	County
90-17-LRTF-202	Cerro Gordo County Conservation Board	\$ 3,386.80	2012 Equipment - Sprayer stations and consoles	County
90-17-LRTF-201	Cerro Gordo County Conservation Board	\$ 1,488.00	2012 Native plant ID guide	County
90-17-LRTF-301	Cerro Gordo County Conservation Board	\$ 3,128.00	2013 Equipment - 3 pt. utility sprayer	County
90-17-LR14-(304)	Cerro Gordo County Conservation Board	\$ 10,000.00	2014 Equipment - Brush chipper	County

Total LRTF Funding Awarded FY1990 - FY2016	\$ 103,517.89
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