

# **SAC COUNTY ROADSIDE PROGRAM MANAGEMENT PLAN**

## **PREFACE**

### **a. Updated**

Spring 2015

### **b. Plan Contributors**

Dale Schnirring, Former Sac County Supervisor; Jerry Gosch, Former Sac County Supervisor; Russell Kroeger, Former Sac County Supervisor; Kirk Brown, Former Sac County Conservation Board Director; Bill Brenny, Former Sac County Conservation Board Member; Ken Hauser, Former Sac County Conservation Board Member; Keith White, Former Sac County Engineer; Dean Stock, Current Sac County Conservation Board Member and Sac County Supervisor; Rick Hecht, Current Sac County Supervisor; Ron Haden, Former Sac County Supervisor; Jack Bensley, Former Sac County Supervisor; Barb Bloom, Former Sac County Conservation Board Member; Ken Bentsen, Current Sac County Conservation Board Member; Sean O'Neill, Sac County Roadside Biologist/Weed Commissioner.

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## **EXECUTIVE PROGRAM ELEMENTS**

### **a. Goals**

Establish and maintain a self-sustaining and visually interesting plant community within the county right-of-way that provides for public safety, controls weeds, reduces erosion, improves infiltration, maintains drainage patterns, provides habitat, and provides a reduction in long term maintenance costs.

---Promote, establish, and manage native plant materials whenever possible

---Survey and maintain an updated inventory of the vegetative community and plant species found within the county right-of-way

---Determine and implement the best IRVM practices for maintaining the right-of-way for public safety and an economically and environmentally sustainable plant community

---Continually evaluate and monitor the effectiveness of implemented IRVM techniques

---Work with landowners, and community groups to implement IRVM principles and roadside beautification projects

---Adjust the plan as needed to accommodate new concepts

---Work with other Government Agencies to promote proper vegetation management activities

---Maintain proper seeding and herbicide application records

---Gear Right of Way spraying towards those species recognized as noxious

## **b. Program History**

In the winter of 1990, the Sac County Board of Supervisors met with the Sac County Conservation Board about hiring a new weed commissioner. There was much discussion about making the position one that would include an individual that would incorporate other roadside activities such as brush control, seeding, etc, with the management of noxious weeds. It was decided that the position would remain under the supervision of the Board of Supervisors but would be hired by, and be staffed with, the Sac County Conservation Board. In January of 1991, a Roadside Biologist/Weed Commissioner was hired and was placed at Hagge Park, the office for the Sac County Conservation Board. Since the beginning of the program, the duties of the Biologist/Weed Commissioner have varied from Roadside activities, Conservation activities, as well as some Secondary Road work. Because the program is an independent department, it became very beneficial to the program to be flexible if help was needed by the other departments. By making ourselves available to help those departments in need, we were able to access resources they volunteered to us. These items included funding, labor, and equipment. The biggest asset to the program was creating a good working relationship with the Department Heads of the various departments within the county system.

## **c. IRVM Decision Making Process**

Decisions within the Roadside Program are primarily with the Roadside Biologist/Weed Commissioner. This includes seeding and spraying schedules, as well as, working with landowners and other agencies when possible. Budget concerns are determined by the Biologist with final considerations to the Sac County Board of Supervisors.

## **d. Executive Summary**

The Sac County Roadside Program has been committed to IRVM practices since 1991. These practices include planting visually interesting, ecologically integrated, and useful native plant species for many purposes within the right of way, as well as private lands. Maintaining a safe roadway for travel, increasing wildlife habitat through the use of native grass plantings when possible, controlling noxious weeds in county right of ways, informing landowners of proper right of way management techniques, insuring that obstructions and encroachments within the right of way are dealt with accordingly, are a small part of the Sac County Roadside Programs mission.

## **e. County Map**

Appendix

## **f. Program Type**

The Sac County Roadside Program is located at the Sac County Conservation Board at Hagge Park but remains under the supervision of the Sac County Board of Supervisors. The Program operates independently from the Sac County Conservation Board and Sac County Secondary Roads.

## **JURISDICTION RECOGNITION AND APPROVAL**

### **a. Management**

Roadside Biologist/Weed Commissioner: Administers the Roadside Program; 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 is needed, additional erosion control measures, 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, what types of vegetation those herbicides are used on. Does Public Education work as opportunities develop. The Roadside Biologist/Weed Commissioner decides on budget requests. In direct communication with the County Conservation Board Director and Maintenance Superintendent on special projects and day to day work priorities.

### **b. Board of Supervisors**

In cooperation with the County Conservation Board, County Engineer, Roadside Biologist/Weed Commissioner, the Board of Supervisors oversee the planning and implementation of the County Roadside Plan. This includes the Roadside Budget and major purchases of equipment. The Roadside Biologist/Weed Commissioner updates the Sac County Board of Supervisors on the Noxious Weed Problems of the county, as well as, the effectiveness and usage amounts of herbicides. Personnel evaluation and equipment needs are discussed when pertinent.

**c. Iowa Code and Administrative Rules**

Section 314.22 Integrated Roadside Vegetation Management

Section 314.17 Mowing Law – No mowing before July 15th

Section 317.11 Weeds on Roads - Harvesting of Grass

Section 318.3 Obstructions in ROW / Destruction of plants placed in ROW / Crops in ROW

Chapter 317 Iowa Weed Law – Noxious Weeds and Enforcement Procedure

**d. Local Law and Regulations**

Iowa Code Chapter 317----Law administered by weed commissioner concerning noxious weeds within the county.

**e. Permits**

None within the Roadside Program....we do have gentleman's agreements concerning spraying within the rights of way. If an individual would like the county to refrain from spraying near their residence, they can call the Roadside Biologist/Weed Commissioner and request this. Agreement to do so is based upon the landowner agreeing to monitor and manage any noxious weeds that may occur within this area. Page 7, would be an example of our township map that our sprayers would follow.

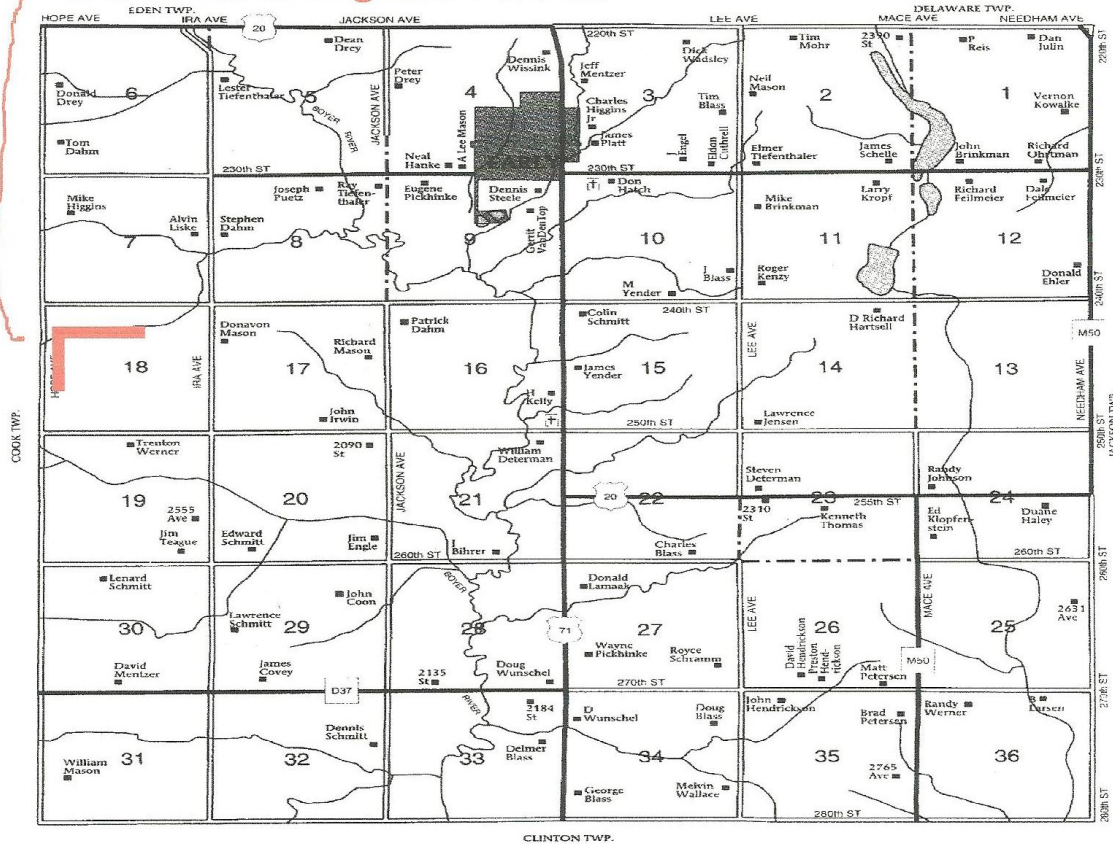
DRIVER \_\_\_\_\_ OPERATOR \_\_\_\_\_ CERT. NO. \_\_\_\_\_

**T-88-N**

# BOYER VALLEY DIRECTORY

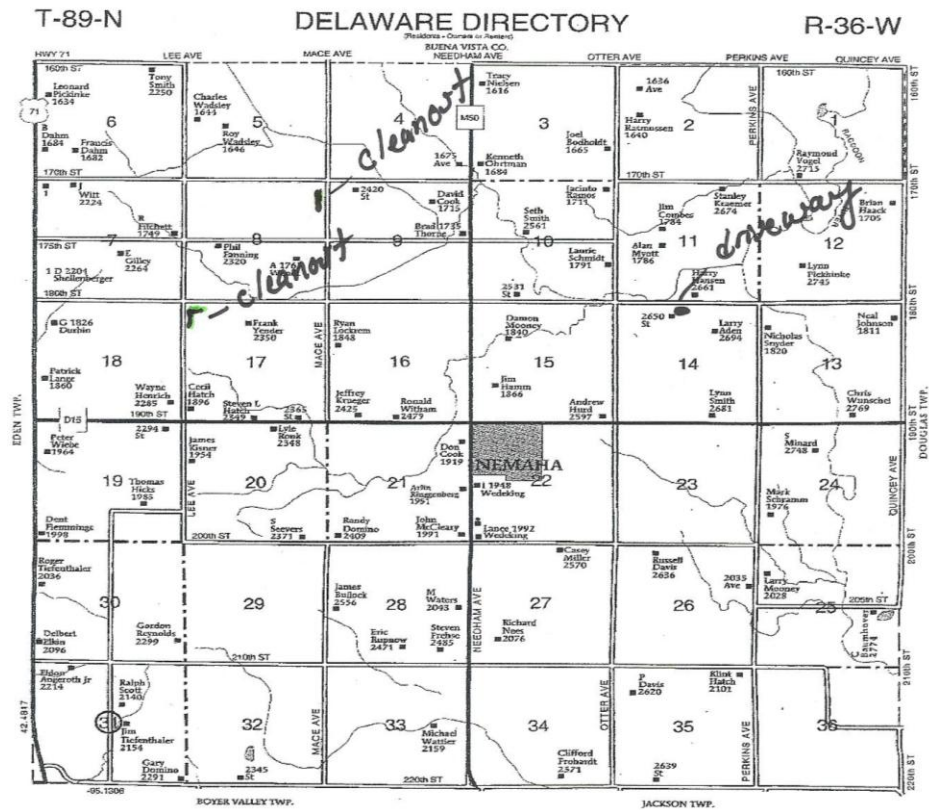
**R-37-W**

## David Nees-Organic Farmer



DATE 20	HERBICIDE /BRAND	RATE	HERBICIDE /BRAND	RATE	Additive	RATE	DAILY GAL.

# SAC COUNTY SEED REPORT



DATE SEEDD \_\_\_\_\_

APPROXIMATE ACRES \_\_\_\_\_

SEED BED TYPE \_\_\_\_\_

SEEDING METHOD \_\_\_\_\_

SEED BED PREP (YES/NO)..IF YES,  
EXPLAIN \_\_\_\_\_

IF HYDROSEEDD, MULCH TYPE \_\_\_\_\_

COMMENTS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



## **PROGRAM ORGANIZATIONAL STRUCTURE**

### **a. Staff Organizational Chart**

County Roadside Biologist/Weed Commissioner

Seasonal Staff

The Sac County Roadside Biologist/Weed Commissioner is considered a Department Head situated directly under the Sac County Board of Supervisors. The Program works directly with the County Conservation Board staff, as well as, the Sac County Engineer and Secondary Road staff. Seasonal Staff consists of 2 or 3 seasonal sprayer operators and 2 or 3 spray truck drivers. They work approximately 3 months out of the year with hours averaging ~35 hrs a week. These individuals work directly under the Roadside Biologist/Weed Commissioner.

### **b. Staffing Needs/Training**

All sprayer operators are certified in Category 6 of the Commercial Pesticide Applicators Law.

All drivers are 18 or older and maintain a valid Iowa Drivers License

All employees are expected to follow all the safety rules and guidelines provided to them.

### **c. Partners**

Sac County Conservation Board

Sac County Engineers Office

Sac County Extension

Sac County SWCD

Sac County Sportsmen's Club

Sac County Pheasants Forever

#### **d. Stakeholders**

Integrated Roadside Vegetation Management is implemented on behalf of the citizens of Sac County.

#### **e. Education and Outreach**

Promoting the benefits of native plants and prairie ecosystems is done through meeting with individuals privately, through the local media, as well as hosting programs for interested clubs or agencies. Public awareness concerning these issues is heightened through these contacts.

#### **f. Communication**

Local Newspapers---includes various articles concerning roadside activities or the printing of legal notices

Brochures---includes the distribution of any available brochures covering roadside management practices that would be helpful to county residents.

Internet---allows interested individuals to make contact with the Roadside Department through the various sites that list our county contact information

Special Programs---includes informative meetings regarding topics such as wildflower walks, trustee meetings, 4-H group meetings, other field day sponsored activities.

Landowner Meetings---includes meeting 1 on 1 with landowners regarding roadside activities or assisting landowners in seeding, spraying, etc on private property.

### **INVENTORY AND ANALYSIS**

#### **a. Tools**

Mapping for Seeding and Spraying

Paper records----maintenance logs for equipment

#### **b. Natural Resources**

All the vegetation, warm season and cool season species, soil, and water are resources that are managed on a daily basis within the Roadside Program. Management practices used to manage these are discussed with landowner as well as any applicable agencies.

### **c. Equipment**

#### **Large Equipment**

- 2010 Chevy Silverado 1/2 ton truck
- 2000 Chevy ton cab and chassis (500 gallon sprayer bumper mounted)
- 1996 Chevy ton cab and chassis (500 gallon sprayer bumper mounted)
- 2000 Bowie 1500 gallon Imperial Hydro seeder
- 40 x 80 pole building with seed storage room
- 2011 Can-Am 500 Outlander ATV
- 1992 Truax Flex 88 Seed Drill
- 1995 Truax WF32 Pull behind Seeder

#### **Small Equipment**

- 2 drip torches
- burn flappers
- 2 Indian Backpack Firefighting Pumps
- Truax Seed Slinger
- ATV mounted Bucket Seeder
- ATV mounted 10 gallon Sprayer
- ATV mounted 30 gallon sprayer
- Trimble Geo XT handheld GPS unit
- laptop computer
- miscellaneous tools and office equipment

## **PROGRAM OPERATIONS**

**January – March:** Update seeding areas, Meet with Landowners considering seeding projects, Weed Commissioner/Annual Conference, Snow removal, IRVM AND LRTF Grants, Training.

**March – April:** Prescribed burning, LRTF Grants, inventory, spraying and seeding needs, update files, other office needs as needed.

**April – October:** Seeding, Weed Commissioner duties, spraying road ditches, spraying brush, mowing 1<sup>st</sup> and 2<sup>nd</sup> year seeded areas, manage seasonal employees, seed harvesting, winterizing equipment, equipment storage, building winterization.

**October – December:** Fall seeding, equipment maintenance, Snow Removal, reports, material inventory, roadside budget, other duties assigned.

### **a. Work Area Types**

#### **--Rural**

The majority of the Roadside Programs daily activities are conducted in a rural setting. Working within a county park may require us to help out with maintenance issues at the park.

#### **--Urban**

Very little work is done in an urban setting---some may occur in an unincorporated town such as Carnavon as the county bike trail runs through the town.

#### **--Residential**

**a. Residential ROW** – Mowed areas in front of houses-Type of grass is usually determined by resident and purchased by Sac County.

**b. Non-Residential ROW** – Seed mixture from Tall Grass Prairie Center along with cover crop seed.

## **METHODS**

### **a. Vegetation Establishment**

Ditch Clean out/ Re-grade  
Site Prep (disking, harrowing, etc.)  
Hydro seed, Broadcast seed, Drilling, Hand seeding

### **Natives**

Canada wild rye 2.5 lbs. /ac	Ox-eye sunflower 4 oz. / ac
Little bluestem 2 lbs. /ac	Round headed bush clover 1 oz. / ac
Indian grass 1.5 lbs. /ac	Wild bergamot 0.6 oz. / ac
Partridge pea 8 oz. / ac	Foxglove pen stamen 0.5 oz. / ac
Leadplant 0.5 oz. / ac	large flowered penstemon 0.5 oz. / ac
Butterfly milkweed 0.8 oz. / ac	Prairie blazing star 0.8 oz. / ac
Swamp milkweed 1 oz. / ac	Yellow coneflower 4 oz. / ac
New England aster 0.3 oz. / ac	Black-eyed Susan 3 oz. / ac
Canada milk vetch 0.8 oz. / ac	Compass plant 0.5 oz. / ac
White wild indigo 0.5 oz. / ac	Stiff goldenrod 0.3 oz. / ac
Purple prairie clover 4 oz. / ac	Ohio spiderwort 0.8 oz. / ac
Showy tick trefoil 0.5 oz. / ac	Hoary vervain 0.5 oz. / ac
Goldenrod 0.8 oz. / ac	Rough drop seed 16 oz. / ac

The general type and seeding rates are subject to change

### **Cool Season/ Non Native**

Medium Red Clover 1 lbs./ac  
Smooth Brome 10lbs/ac  
Perennial Rye Grass 5 lbs/ac  
Timothy 5 lbs./ac  
Tall Fescue 2 lbs./ac

### **Lawns mixture is the following:**

--Perennial Ryegrass  
--Kentucky Bluegrass  
--Creeping Red Fescue

This is a standard mix that we use. Seeding is done with various broadcast seeders at an approximate rate of 20 lbs./acre.

## **Cover Crops**

Seed Oats---1.5 bushels/ac

## **Seeding Techniques**

**Hydro seeding**--mix mulch, water, and seed all together. Spray on bare soil areas until satisfactory coverage

**Truax Flex 88 Seed Drill**

**-Broadcast Seeder** --where other equipment not applicable

## **Erosion and Sediment Control**

Hydro mulch on ditch cleanouts and other projects that can be accessed.

## **Vegetation Establishment and Maintenance**

Mowing or Spraying of potential noxious weeds.

Planting and Evaluation and Documentation

Records including seeding dates, mix used, acreage, cover crops used, all contribute to the evaluation on determining what steps will be taken to promote desired vegetation.

## **Mowing**

Shoulder mowing occurs 3-4 times per year on the hard surfaced roads by an individual that is strictly hired to do this job through Secondary Roads. Gravel roads are mowed with a mower that circulates amongst the grader districts in the fall.

## **Chemical Control for Noxious Weeds, Invasive Species (Spot Spraying)**

The Roadside Biologist/Weed Commissioner makes all decisions on spraying for noxious weeds. Chemical control for the noxious weeds occurs approximately mid May and will continue until the end of July or early August. This is accomplished with the use of 2 500 gallon spray trucks that spot spray each of the 16 townships within the county. Usually working from the southeast corner of the county and

working our way to the western portion of the county. Each township will be covered twice before early August.

## **Invasive Species**

Invasive Species is accomplished with herbicides and is considered on a case by case basis.

## **Tree and Brush Control**

Tree and brush control is mainly conducted by the Secondary Road Department. Some is done on a township by township basis throughout the summer by seasonal employees. We have provided some foliar treatments during the month of August if our help is needed and the herbicide provided to us. Brush and Tree cutting occurs throughout the winter months as the weather allows. The area where this occurs is usually along the Raccoon River corridor where this problem is the most prevalent.

## **Prescribed Burning**

Prescribed Burning occurs on native grass plantings as well as prairie remnants when conditions are right and manpower is not an issue.

## **Material Procurement**

### **a. Material Storage**

Seed-----Seed is stored in a seed storage room located within a cold storage building

Herbicides are stored in a designated area within a cold storage building

Mulch----is stored within a cold storage building located at the Secondary Roads Shed located in Sac City.

## **Appendices**

### **a. Position Description and Qualifications**

#### **--Biologist/Weed Commissioner Job Description:**

A Roadside Biologist/Weed Commissioner will be hired by the Sac County Conservation Board. The Biologist/Weed Commissioner and the technical staff within the program will address Chapter 314 of the Code of Iowa, the Integrated Roadside Management Law. The Biologist will also develop a program of vegetative habitat management on Sac County rights-of-way and public drainage districts.

--Minimum Requirements:

--Four year degree in natural history or conservation related major.

--Valid Iowa Commercial Drivers License

--Valid Commercial pesticide applicator license in Category 6, Right of Way Pest Control (or is able to obtain within 21 days of employment.)

--Basic Computer literacy.

--Ability to communicate effectively both orally and in writing.

--Knowledge of, and ability to identify both native and introduced plants, including weeds.

--Knowledge of principles of vegetation management

--Ability to operate and maintain power equipment

#### **--Seasonal Spray Truck Operator**

Sprayer Operator will address noxious weed control within county right of ways for approximately 2.5 months of the summer. This position is a temporary one and interested individuals must be certified or be able to become certified in Category 6 (Right of Way) of the Iowa Commercial Pesticide Applicators Department. Sprayer Operators will be supervised by the Sac County Weed Commissioner and will execute a spot spraying program within the required county right of ways. Basic knowledge of vegetation management is required.

----Valid Iowa Driver License

----Certified in Category 6 (Right of Way) or be able to obtain this license

----Knowledge of and ability to identify both native vegetation and introduced plants including weeds

----Knowledge of basic vegetation management principles

----Ability to operate and maintain power equipment.

----General Maintenance of Spray Truck

----Ability to follow written and oral instructions



----Record Keeping for Sprayed Roads

**--Seasonal Spray Truck Driver**

Spray Truck Driver will assist in noxious weed control within county right of ways for approximately 2.5 months of the summer. This position is a temporary one and interested individuals must have a valid Iowa Drivers License. Drivers will be supervised by the Sac County Weed Commissioner and will assist in the spot spray program within the required county right of ways. Basic knowledge of vegetation management is required.

**b. County Map**

**c. Statement of Support**

In 1991, the Sac County Board of Supervisors, the Sac County Conservation Board, and the Sac County Engineers Office (Secondary Roads) came together with the idea of implementing the Integrated Roadside Vegetation Management way of managing our county right of ways. The concept of managing county roadsides in this manner benefits the county economically, as well as environmentally. By working cooperatively, we believe our roadsides will remain safe, free of noxious weeds, and visually attractive.

Sac County Board of Supervisors

BY Rick Hecht DATE 5-1-15  
Rick Hecht, Chairman

Sac County Engineer

BY Zach Anderson DATE 5-4-15  
Zach Anderson, Sac County Engineer

Sac County Conservation Board

BY Chris Bass DATE 4/30/15  
Chris Bass, Sac County Conservation Board Director

Sac County Roadside Program

BY Sean O'Neill DATE 4/30/15  
Sean O'Neill, Sac County Roadside Biologist/Weed Commissioner

## Sac County LRTF Funding History through FY 2015

DOTProjectNumber	Applicant	Award	FiscalYear Description	Type
90-81-LRTF-201	Sac County	\$ 3,855.00	1992 Equipment - Truax Flex-88 seed drill	County
90-81-LRTF-202	Sac County	\$ 650.00	1992 Equipment - Burn	County
90-81-LRTF-301	Sac County	\$ 978.00	1993 Equipment - Truax Wildflower seeder	County
90-81-LRTF-303	Sac County	\$ 581.00	1993 Equipment - Drill, trailer; seed	County
90-81-LRTF-401	Sac County	\$ 606.00	1994 Educational material	County
90-81-LRTF-402	Sac County	\$ 245.00	1994 Equipment - Electric Seeder	County
90-81-LRTF-501	Sac County	\$ 4,500.00	1995 Equipment - ArcView Software	County
90-81-LRTF-502	Sac County	\$ 3,000.00	1995 Resource planting	County
90-81-LRTF-503	Sac County	\$ 765.00	1995 Equipment - Hydraulic axle, cultipacker	County
90-81-LRTF-504	Sac County	\$ 1,500.00	1995 Seed storage	County
90-81-LRTF-505	Sac County	\$ 5,000.00	1995 Seed	County
90-81-LRTF-601	Sac County	\$ 7,000.00	1996 Seed	County
90-81-LRTF-901	Sac County	\$ 8,500.00	1999 Equipment - Flail Vac Harvester	County
90-81-LRTF-902	Sac County	\$ 4,645.00	1999 Equipment - Sprayer	County
90-81-LRTF-903	Sac County	\$ 1,086.00	1999 Equipment - Seed cleaning	County
90-81-LRTF-001	Sac County	\$ 1,500.00	2000 Seed storage	County
90-81-LRTF-102	Sac County	\$ 7,500.00	2001 Seed	County
90-81-LRTF-103	Sac County	\$ 1,000.00	2001 Plants	County
90-81-LRTF-201	Sac County	\$ 15,000.00	2002 Equipment - Hydro seeder	County
90-81-LRTF-401	Sac County	\$ 7,270.00	2004 Equipment - Geo XT GPS unit	County
90-81-LRTF-402	Sac County	\$ 899.00	2004 Equipment - Hypro transfer pump	County
90-81-LRTF-701	Sac County Roadside Program	\$ 6,160.00	2007 Recycled newspaper mulch	County
90-81-LRTF-701	Sac County Roadside Program	\$ 3,000.00	2007 Canada thistle herbicide trial plots	County
90-81-LRTF-801	Sac County Roadside Program	\$ 240.00	2008 Equipment - Kodak digital camera	County
90-81-LRTF-802	Sac County Roadside Program	\$ 10,000.00	2008 Educational prairie display	County
90-81-LRTF-901	Sac County Roadside Program	\$ 2,240.00	2009 Equipment - Mower	County

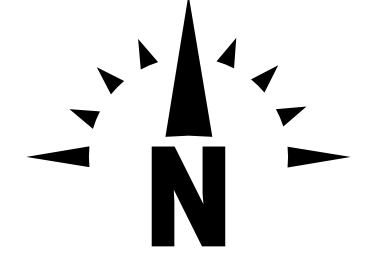
Total LRTF Funding Awarded FY1990 - FY2015	\$ 97,720.00
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# SAC COUNTY IOWA

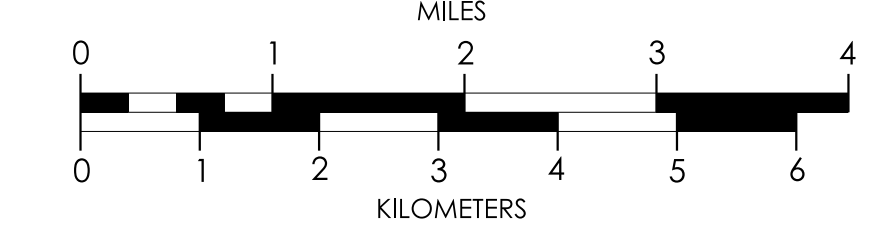


Office of Systems Planning  
Phone: (515) 239-1289  
WWW.IOWADOT.GOV/MAPS



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 NAMES
- UNINCORPORATED PLACE
- STATE PARKS
- STATE INSTITUTIONS
- FEDERAL LAND

