



Pocahontas County Conservation Board



***Management Plan for
Integrated Roadside Vegetation Management
In
Pocahontas County
Iowa***

*Original Plan: 1993
Updated: March 2018
Version #2*

Pocahontas County Conservation Roadside Vegetation Management Program General Plan

I. PREFACE

a. Update / Version:

Update #2 of the Pocahontas County Conservation IRVM Plan Approved by the Conservation Board on March 21, 2018

b. Plan Contributors:

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II. Executive Program Elements

a. Goals

- Establish and maintain a safe travel environment within the county right-of-way that provides for public safety, controls weeds, reduces erosion, preserves and/or increases biodiversity, improves infiltration, maintains drainage patterns, provides habitat, and provides a reduction in long term maintenance costs.
- Assure that County road construction projects are stabilized by seeding and providing adequate erosion control. Each site will be evaluated and cared for on an individual basis.
- Network with other county organizations to provide an effective and cost efficient program for the citizens of Pocahontas County.
- Implement and utilize a long-term and flexible management plan that promotes self-sustaining and visually interesting plant communities that are native to Pocahontas County through preservation of existing roadside vegetation and re-establishment of native vegetation whenever applicable.
- To work toward the continuing reduction of herbicides as a control method regarding undesirable plants and use of prescribed fire and mowing as an alternative treatment to chemicals.
- Maintain proper seeding and herbicide application records
- Through selective brush control and stump treatment, reduce the visibility hazards created by brush on county highways, road intersections, and other areas of decreased visibility and hazard.
- To recognize and stop the spread of newly introduced invasive plant species countywide. These species need to be controlled before they become a major problem.
- To stay up with latest technology that promotes efficiency of IRVM. Adjust the plan as needed to accommodate new concepts

b. Program History

In 1992 the Conservation Board Director and the County Engineer got together and discussed how to improve the Roadsides in the county. The program was established in 1992 and the first Roadside Biologist was hired in 1994. Since then the program has grown to a Full Time Roadside Biologist, 2 seasonal Brush Crew employees and a Designated Seasonal Spray Truck driver. New Spray Truck was built in 2009 with improved technology, better spray accuracy and improved record keeping.

c. IRVM Decision Making Process

Roadside Biologist administrates the Roadside Program. Roadside Biologist is in direct communication with the Conservation Director and Operations Supervisor, and Roads Foreman on special projects, day to day operations and work priorities.

d. Executive Summary

The Pocahontas County Conservation Board has been committed to IRVM practices since 1992. 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 Pocahontas County Conservation IRVM Program mission.

e. Area Map

See attached map in Appendix

f. Program Type

The Pocahontas County IRVM Program is housed and administered through the Pocahontas County Conservation Board.

III. Jurisdictional Recognition and Approval

a. Management

Roadside Biologist: 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 is in direct communication with the County Conservation Board Director and Maintenance Superintendent on special projects and day to day work priorities. Roadside Management Budget is administered by the Conservation Board Director.

b. Conservation Board

In cooperation with the Pocahontas County Conservation Board Director and Board Members, County Engineer and the Board of Supervisors oversee planning and implementation of the Roadside Program and Plan. This includes the Roadside Budget and major equipment purchases. Personnel evaluation and equipment needs are discussed as needed.

c. Iowa Code and Administrative Rules – State Laws and Regulations

Section 314.22 Integrated Roadside Vegetation Management

Section 314.17 Mowing Law

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 Procedures

d. Local Laws and Regulations

Local Laws, Regulations, and Policies pertaining to IRVM in Pocahontas County reflect that of the Iowa Code (see Iowa Code and Administrative Rules), as well as any other State and Federal Regulations that are specific to management activities that occur within the jurisdiction of the Pocahontas County Secondary Roads System. These include but are not limited to:

Iowa Code Chapter 314.22 – IRVM.

Iowa Code Chapter 317 – loosely governs county noxious weed spraying program and Weed Commission actions.

Iowa Code Chapter 468 Drainage Law

No Spray Requests – allows landowners to opt out of roadside spraying adjacent to their property in the form of a request (Request form in Appendix).

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 or organic farms they can call the Conservation Office 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.

IV. Program Organizational Structure

a. Staff Organizational Chart

Conservation Director

Roadside Biologist

Seasonal Roadside assistants

b. Staffing Needs

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 Driver's License

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

V. Inventory and Analysis

a. Natural Resources

Pocahontas County has 2,200 miles of road right of way throughout the County. That entails over 4,500 acres of Right of Way. These areas of vegetation create potential wildlife habitat benefits. The Roadsides provide habitat for plants, animals, and many invertebrates. The PCCB IRVM program selects chemicals, application methods, and different management practices to leave the smallest impact on the environment. Pocahontas County's computer controlled injection-type spray equipment further limits chemical usage, improves accuracy and chemical rate. PCCB also encourages planting diverse mixes of grass and forbs that can provide food and cover for a variety of wildlife. Other practices can enhance the attractiveness of roadsides to wildlife without compromising motorist safety.

b. Equipment

Large Equipment

Year	Item	Condition
2000	Seed Storage Room with Air Conditioning	Excellent
1995	Truax No Till Flex II 6' 88RD	Good
1999	Truax No Till Flex II 10'	Average
1995	Flail Vac FV-206	Good
1998	Finn Hydro Seeder T-60-TII 500 Gal	Average
2007	ATV Gator HPX w/ ROPS	Fair
2012	ATV Gator HP w/ ROPS	Good
2009	Ford F350 Spray Truck	Good
2009	Spray unit: 500 gal tank, w/ injection pumps	Good
1993	Tiller John Deere 4'	Fair
2013	Kubota Tractor M7040 MFWD	Excellent
2017	Ford F250 Pickup	Excellent
1997	Dump Truck International 4700	Average
2004	Vermeer Chipper BC1400	Good
2003	Trailer D&K T20-2	Fair
1990	Tiger 7710 w/ Side Rotary mower	Average
1990	Flail Mower	Average

Small Equipment

- Numerous Stihl Chainsaws (036, 026, 211)
- Stihl Brush cutter F460C and F410
- Drip Torch
- Nomex Pants, Shirts, and Helmets
- ATV slip in Burn units (2)
- Stihl Pole Pruner HT75
- 2 – 5' Drag Sections
- 2- Gator Slip in Units 100 gal 5.5hp Engine
- Pick up slip in unit 350 gal 5.5hp Engine
- Pick up slip in unit 500 gal 5.5hp Engine

VI. Program Operations

a. Annual Operations

January – March: Cut trees and brush, IRVM office and correspondence work as needed, training and CEU's, Equipment maintenance, inventory and order chemical and materials, other duties as assigned by Director

March – April: Prescribed burning, LRTF Grants begin spring seeding; begin bare ground spraying, other duties as assigned

April – October: Seeding, erosion control for projects, spraying (broadleaves), spraying (brush), bare ground spraying, mowing 1st and 2nd year plantings, equipment maintenance, Prescribed burning, other duties as assigned

October – December: Cut trees and brush, basal spraying, fall/dormant seeding, bare ground touch-up, equipment maintenance, reports, material inventory, other duties as assigned

b. Work Area Types

Majority of the Roadsides managed in Pocahontas County are Rural and adjacent to agriculture and/or acreages. There are some roadways that are in rural / urban interfaces.

c. Vegetation Types for Specific Uses

- Residential ROW– turf grass – Mowed areas in front of houses
- Non-Residential ROW – native tallgrass prairie – Areas where long term establishment and persistence of tallgrass prairie is deemed feasible by the Roadside Biologist
- Miscellaneous ROW / Borrow Area / Easement – cool season grasses – Areas where long term establishment and persistence of tallgrass prairie is deemed not feasible by the Roadside Biologist

VII. Methods

a. Vegetation Establishment / Ongoing Maintenance

1. Site Preparation

Seed Bed is leveled and cultivated to a depth that is best per the type of seed that is being planted.

2. Seed Mixes and Rates

Native

Big bluestem 1.5 lbs/ac	Purple coneflower 1.6 oz./ ac
Sideoats gramma 2 lbs/ac	Rattlesnake master 2.4 oz./ ac
Canada wild rye 2.5 lbs/ac	Ox-eye sunflower 4 oz./ ac
Little bluestem 2 lbs/ac	Roundheaded bushclover 1 oz./ ac
Indiangrass 1.5 lbs/ac	Wild bergamot 0.6 oz./ ac
Partridge pea 8 oz./ ac	Foxglove penstamen 0.5 oz./ ac
Leadplant 0.5 oz./ ac	Large flowered penstemon 0.5 oz./ ac
Butterfly milkweed 0.8 oz./ ac	Prairie blazingstar 0.8 oz./ ac
Swamp milkweed 1 oz./ ac	Yellow coneflower 4 oz./ ac
New England aster 0.3 oz./ ac	Blackeyed susan 3 oz./ ac
Canada milkvetch 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 dropseed 16 oz./ ac

The species and amounts are both subject to change with the statewide TAP seed purchase annually.

Cool Season / Non-Native

Alsike Clover 1 lb/ac
Medium Red Clover 1.5 lb/ac
KY 31 Fescue 10 lb/ac
Gulf Annual Ryegrass 10 lb/ac
Climax Timothy 2.5 lb/ac

Spring Cover Crop

Cover Crop Oats 80 lbs/ac
Annual Ryegrass 10 lbs/ac
Timothy 1 lb/ac

Fall Cover Crop

Winter Wheat 100 lbs/ac
Timothy 1 lb/ac
Hairy Vetch 10 lbs/ac

Residential Mix

All Purpose Lawn Seed Mix (per rate on bag)

3. Seeding Techniques

Hydroseeder- Broadcast with mulch and seed mix
Truax Flex II Drill
Hand Broadcast seeding

4. Erosion and Sediment Control

Erosion Fence is used in areas if needed after re-construction and is installed by outside contractor. Hydro-seeding is done with Oats cover crop for faster first year cover growth.

5. Vegetation Establishment Maintenance

Maintenance is done by mowing and or spraying to control noxious weeds

6. Planting Evaluation and Documentation

Seeding area is evaluated to determine what sight preparation is needed. Harrowing, tiling, hydro-seeding, or drilling. Records are kept and reported to LRTF when grant seed is used

7. Mowing

Paved Road ROW shoulders and front slopes are mowed three times per year by the Secondary Roads department. Gravel ROW shoulders and front slopes are mowed one time yearly by Secondary Roads department. IRVM mows 1st year project areas in Summer for weed control and promotion of native growth. Second year mowing is dependent on weed growth and native vegetation success.

8. Chemical Control for Noxious Weeds, other Invasives and Bare Ground

Milestone and Telar are sprayed on noxious weeds and invasives at a rate of 4 ounces per acre of Milestone and 1 ounce per acre of Telar. Spot treatment of noxious weeds from the Spray truck is used to decrease the amount of unneeded chemical application.

9. Tree and Brush Control

Tree and Brush is controlled mainly by the Summer Brush Removal crew. This crew uses Chainsaws, Loppers, and mechanical Brush cutter is used to stump cut trees. Stumps are treated with Pathfinder II immediately following Cutting of the Brush and Trees. Fall and winter cutting is done by the Roadside Biologist and the Secondary Roads department.

10. Prescribed Burning

Prescribed Burning is used for native seeding areas and snow catch areas. Pocahontas County Conservation Assists with the Prescribed Burning.

11. Burning Plan and Records of Previous Burning

Burn plans are written in conjunction with the Pocahontas County Conservation and are kept on file in Roadside office along with the Burn Records.

VIII. Material Procurement

a. Sourcing

- Native seed demands are typically estimated a year in advance and requests are made to the State Roadside Office to participate in their statewide seed disbursement to Counties funded by Transportation Alternatives Program (TAP) dollars. Cool season and turf mixes are purchased locally on an as-needed basis typically from local vendors.
- Hydro Mulch and other erosion control materials necessary to perform IRVM functions are purchased as needed at fair market value through reliable vendors. Prices for hydro-mulch are reviewed annually by the roadside manager, vendors are contacted, and pricing made available. Materials are then purchased at the lowest price.
- Herbicides demands are estimated in the winter. Herbicides are mostly purchased from Van Diest Supply Company of Webster City, IA. Van Diest offers us with specialized product knowledge and personal experience with specialized chemicals. Prices are reviewed in the winter and competitive prices are checked with other specialized companies.
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b. Material Handling and Storage

Seed is stored in an Air Conditioned and Humidity controlled Seed storage facility located in a Conservation Storage building.

Herbicides are stored in a separate temperature controlled Chemical Storage Building located at the Conservation office complex.

Hydro seed Mulch is stored in the Conservation Storage Building

IX. Budget

a. Annual Budget Process

Conservation Board reviews and approves the Budget presented by the Conservation Director in December. Conservation Director then presents the IRVM budget to the Board of Supervisors in January in preparation for their budget process and Public budget hearing.

b. Prior Year Summary

Fiscal Year 2017 IRVM Rural Services Budget is for the amount of \$147,199.

c. Current Year

Fiscal Year 2018 IRVM Rural Services Budget is proposed for \$151,826.

- X. **Appendices**
a. **Position Descriptions – Roadside Manager**

**INTEGRATED ROADSIDE VEGETATION MANAGER
JOB
DESCRIPTION**

A permanent full time position under the direct supervision of the Conservation Board Director shall implement a roadside vegetation management program for Pocahontas County. This individual will have a seasonal employee to supervise and help them implement the program.

The Roadside Manager shall perform the following duties and keep up the following requirements and certifications:

Graduation from an accredited four-year college or university with major course work in the natural science field or a related field; or
Associate degree in a conservation related course; or
Two years of progressive field experience.
Possess a valid Iowa driver's license or CDL.

Maintain certification as an Iowa Commercial Pesticide applicator – Category 2, 3OT and 6 or ability to complete training and become certified within one year.

Maintain certification in CPR and Basic First Aid or ability to complete training and become certified within one year.

Maintain a valid Iowa Commercial driver's license – Class B or ability to obtain license within one year.

Must be able to work weekends, holidays, and irregular or special event hours as necessary or assigned.

Performs chemical and hand control of weeds and brush on shoulders and in roadsides.

Keeps accurate records of chemical inventory and use.

Works with landowners and utility companies to encourage the proper management of roadsides.

Educate the public on proper alternative roadside management techniques.

Perform roadside seeding when projects allow the establishment of native grasses and forbes.

Develop a program for harvesting native grasses and forbes for a seed source.

Oversees prairie management with the Director and controlled burns as per policy.

Use skills in the operation of computers and software to complete and update the data base or requested for work along roadsides.

Supervise and coordinate activities of seasonal workers or other county employees assigned or requested for work along roadsides.

Provide media with regular information on the management of roadsides to gain support and enlist assistance from private individuals.

Assists in other areas of the Board's operations when needed and as assigned. Performs other duties as assigned by Director.

b. Position Description – Seasonal

**Pocahontas County Conservation Board
Position Description
Summer Conservation Worker**

Basic Function: Assure the continued operation and availability to the public; county conservation areas, buildings and facilities throughout Pocahontas County through a program of regular maintenance.

Work Hours: Generally Monday through Friday: 7:30 a.m. – 3:30p.m. Plus weekend and holiday work as assigned. Starting Salary: \$9.50 per hour depending on Qualifications

Minimum Qualifications: Knowledge of safe and proper operation of basic park maintenance equipment, and knowledge of custodial methods. Safe and proper operation of roadside management equipment. Possess a valid motor vehicle operator's license.

Responsibilities: Perform varied building and grounds maintenance responsibilities as assigned throughout the conservation system-using department provided tools, equipment and supplies; including:

- Assisting with prescribed prairie burns
- Maintaining buildings including repairing and/or staining.
- Mowing turf areas and road shoulders, string trimming.
- Tree care and Maintenance
- Controlling noxious weeds.
- Cleaning restrooms, comfort station and shelters.
- Brush and tree control in County road right of ways
- Repairing boundary fences as needed.
- Maintaining vehicles and equipment as assigned.
- Brush clearing for Roadside management and trails work, tree trimming.
- Litter pickup and garbage removal.
- Cleaning excess ash from grills.
- Operating IRVM spray truck
- Weekend park patrol, visitor services, and selling firewood
- Performing other duties as may be assigned.

Equipment likely to be assigned and responsible for safe operation:

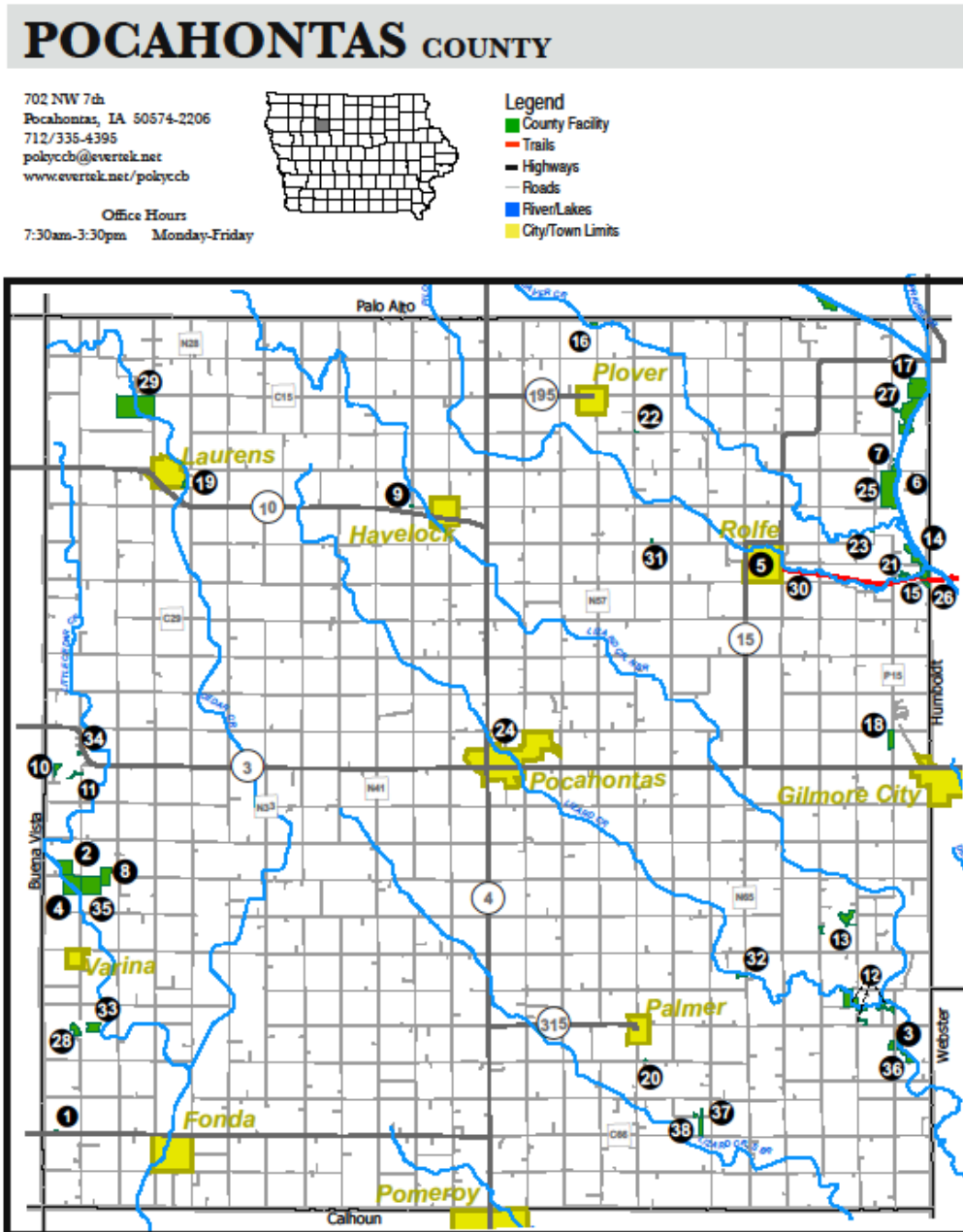
- 4 x 4 pickups (various years)
- Single and tandem axle equipment trailers
- Front cut turf mowers (72" cut)
- Full size diesel tractor with full range of implements
- 4 wheel ATV and John Deere Gator
- Chainsaws and pole pruner
- String trimmers and brush cutters
- Wood chipper, stump grinder, and tree spade
- Shop and mechanics tools to maintain equipment
- Electric or manual carpenter tools

Additional Information:

- Employees must provide and wear steel-toed work boots and leather gloves.
- Agency T shirts & a cap are provided. Safety glasses & Hearing Protection are provided.

Lunch Breaks can take place at outlying areas, and access to restaurants is usually not available. Employees should pack their lunch and drinking fluids for the day. Extra water is available.

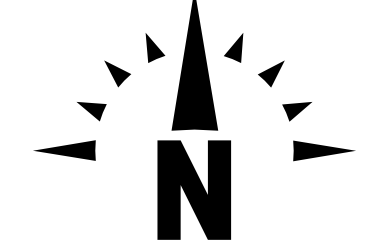
c. Map County



HIGHWAY AND TRANSPORTATION MAP POCAHONTAS COUNTY IOWA

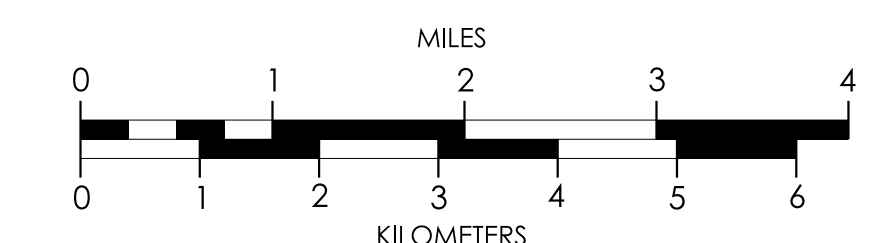


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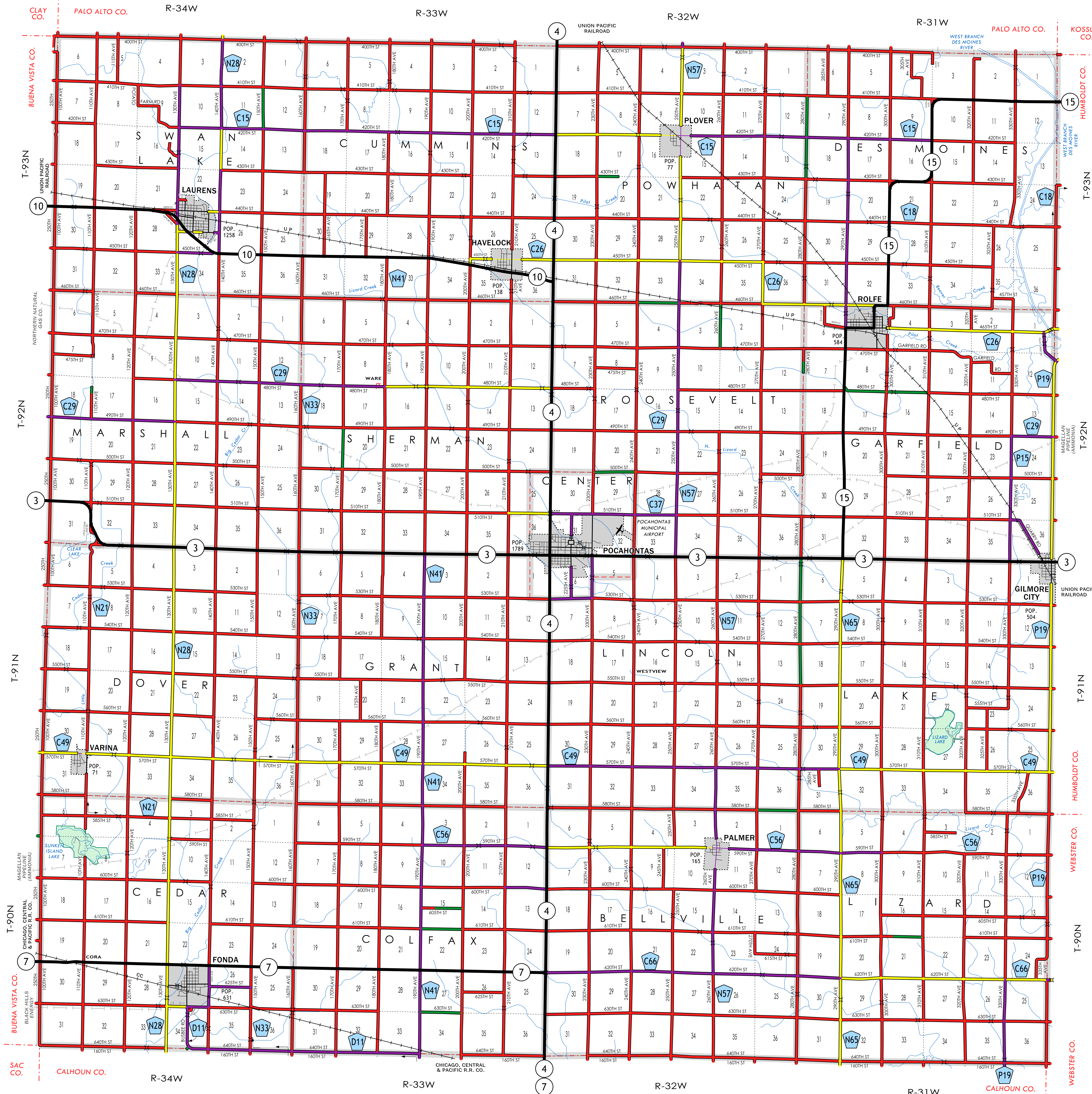
In Cooperation With
United States
Department of Transportation

JANUARY 1, 2017

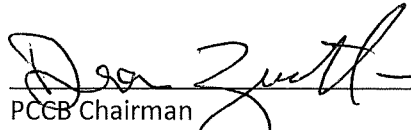


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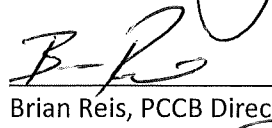
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- PRIMARY HIGHWAY-DIVIDED
- PRIMARY HIGHWAY
- PORTLAND CEMENT CONCRETE ROAD
- ASPHALT ROAD
- BITUMINOUS ROAD
- GRAVEL ROAD
- EARTHEN ROAD
- INTERSTATE HIGHWAY
- UNITED STATES HIGHWAY
- STATE HIGHWAY
- COUNTY HIGHWAY
- RAILROAD
- PIPELINE
- AIRPORT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



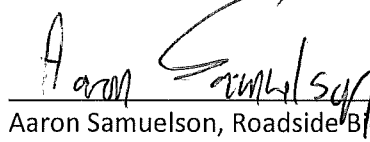
The Pocahontas County Conservation Board at their March 21, 2018 Board Meeting approved the Pocahontas County Conservation IRVM Plan.


PCCB Chairman

3/21/2018
Date


Brian Reis, PCCB Director

3-21-2018
Date


Aaron Samuelson, Roadside Biologist

3/21/2018
Date

Pocahontas County LRTF Funding History through FY 2018

DOT Project Number	Applicant	Award	FiscalYear Description	Type
90-00-LRTF-122	Pocahontas DOT Garage	\$ 4,369.85	1991 Seed	State
90-00-LRTF-303	Pocahontas DOT Garage	\$ 4,503.00	1993 Seed	State
90-76-LRTF-501	Pocahontas County	\$ 4,500.00	1995 Inventory	County
90-76-LRTF-503	Pocahontas County	\$ 1,494.45	1995 Equipment - Burn	County
90-76-LRTF-504	Pocahontas County	\$ 10,000.00	1995 Equipment - Rear-wheel Truax drill	County
90-76-LRTF-505	Pocahontas County	\$ 730.20	1995 Equipment - Burn	County
90-76-LRTF-506	Pocahontas County	\$ 8,500.00	1995 Equipment - Harvest	County
90-00-LRTF-509	Pocahontas Co. Conservation Board	\$ 783.30	1995 Plantings - Highways 15 & 3	State
90-76-LRTF-601	Pocahontas County	\$ 4,500.00	1996 Inventory	County
90-76-LRTF-802	Pocahontas County	\$ 14,345.00	1998 Equipment - Hydro seeder	County
90-76-LRTF-901	Pocahontas County	\$ 926.00	1999 Equipment - Water refill	County
90-76-LRTF-001	Pocahontas County	\$ 1,500.00	2000 Seed storage	County
90-76-LRTF-201	Pocahontas County	\$ 12,780.00	2002 Equipment - GPS/GIS spray components	County
90-76-LRTF-202	Pocahontas County	\$ 500.00	2002 Equipment - Saw	County
90-76-LRTF-701	Pocahontas County Conservation Board	\$ 5,000.00	2007 Equipment - Gator HPX 4x4 with roll bar	County
90-76-LRTF-301	Pocahontas County Conservation	\$ 8,000.00	2013 Equipment - Gator	County

Total LRTF Funding Awarded FY1990 - FY2018	\$ 82,431.80
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