

Chickasaw County Integrated Roadside Vegetation Management Plan

March 2023

Preface

A. Update/Version

Update No.4 of the Chickasaw County IRVM Plan

B. Contributors to the Plan

Caleb Ciavarelli – Natural Resources and Park Management/Roadside Manager

Joe Zubrod – Secondary Roads Drainage Foreman

Table of Contents

Executive Program Elements

a. Goals.....	2-3
b. Program History.....	3
c. IRVM Decision Making Process.....	3
d. Executive Summary.....	3-4
e. Area Map.....	14
f. Program Type.....	4

Jurisdictional Recognition and Approval

a. Management.....	4
b. Board of Supervisors.....	5
c. Iowa Code and Administrative Rules – State Laws and Regulations.....	5
d. Local Laws and Regulations.....	5
e. Permits.....	5

Program Organizational Structure

a. Staff Organizational Chart.....	5-6
b. Staffing Needs.....	6

Inventory and Analysis

a. Natural Resources.....	6
---------------------------	---

- b. Tools-----6
- c. Vegetation-----6
- d. Equipment-----6-7

Program Operations

- a. Operations.....7
- b. Work Area Types.....7
- c. Vegetation Types for Specific Uses.....7
- d. Special Projects.....7
- e. Annual Calendar of Activities-----7

Methods

- a. Vegetation Establishment-----8-9
- b. Ongoing Maintenance-----9

Material Procurement

- a. Sourcing-----9
- b. Handling and Storage-----9

Appendices

- a. Job description-----10 - 13
- b. Area map – Chickasaw County-----14

A. Goals

Implemented properly, IRVM provides structure and means to address both human health and safety needs as well as additional economic and environmental benefits. The goals of the county IRVM program are to:

- Preserve and provide safe, functional and environmentally sound travel corridors throughout the county.
- Utilize a long-term, integrated management program that promotes desirable, self-sustaining plant communities. Whenever practicable,

native plant communities are incorporated with roadside vegetation plantings.

- Minimize the need and use of herbicides and other chemical controls as methods for managing or eliminating undesirable plants. This includes incorporation of prescribed burning, spot-spraying and strategic use of herbicides and pesticides.
- Enhance the scenic qualities of roadsides and the value as habitat for wildlife.

B. Program History

Integrated Roadside Vegetation Management was established in Chickasaw County in 1995. The program has grown a little since it was established but is still rather small because of the small staff and it is incorporated in with the conservation system. Dave Sedivec was the first roadside manager and Denise Straw joined the program in 2001. Denise took over the position of roadside manager in 2010. After her retirement, Caleb Ciavarelli filled the position of Natural Resources and Park Management. Caleb became the roadside manager in 2021.

C. IRVM Decision Making Process

In Chickasaw County the roadside program is under the direction of the county conservation board, therefore not having large equipment we rely on the secondary roads department to do ditch clean outs. We are provided a map of the areas that they have excavated in the fall of the year. The roadside manager determines the mix and seeding rate for each area.

D. Executive Summary

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 way 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.
- Serves 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.
- Is based on a systematic assessment of conditions existing in roadsides, preservation of valuable vegetation and habitats in the area, and the adoption of a comprehensive plan and strategies for cost-effective maintenance and vegetation planting.
- Emphasizes the establishment of adaptable and long-lived vegetation, often native species, matched to the unique environment found in and adjacent to the roadside.
- Incorporates integrated management practices for the long-term control of damaging insect populations, weeds, and invader plant species.
- Builds upon a public education program allowing input from adjacent landowners and the general public.
- Accelerates efforts toward increasing and expanding the effectiveness of plantings to reduce wind-induced and water-induced soil erosion and to increase deposition of snow in desired locations.
- Incorporates integrated roadside vegetation management with other state agency planning and program activities including the recreation trails program, scenic highways, open space, and tourism development efforts. Agencies should annually report their progress in this area to the general assembly.

E. Area Map (Attached, appendix b)

F. Program Type

The Chickasaw County IRVM program is housed and administered through the Chickasaw County Conservation Board.

Jurisdictional Recognition and Approval

A. Management

The roadside manager works under the direction of the conservation director. The secondary roads department determines which ditches will be excavated. After they have completed the excavation they contact the roadside manager to hydroseed and complete the project. Mowing and burning are done as time and staff allow.

B. Board of Supervisors

The board of supervisors do not have an active roll with the IRVM program. According to the law they are only allowed to set the total budget for the year and not manage how the dollars are spent.

C. Iowa Code and Administrative Rules-State Laws and Regulations

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 Procedures

D. Local Laws and Regulations

Local Laws, Regulations, and Policies pertaining to IRVM in Chickasaw 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 Chickasaw 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.

No Spray Requests – allows landowners to opt out of roadside spraying adjacent to their property in the form of a request (not a permit or agreement).

E. Permits

Secondary roads does not require permits, they spray as they see fit and upon request.

Program Organizational Structure

A. Staff Organization Chart

County Engineer

Secondary Roads Department

Roadside Manager and Park Ranger

The secondary roads department is under the direction of the County Engineer. The Roadside Manager is under the direction of the county conservation board director and manages the seeding. Paper mulch is used when hydro seeding and if more extensive erosion control is needed that is handled through secondary roads.

B. Staffing Needs

Ideally it would be in the counties best interest to have a full time roadside manager with at least two full time employees. The requirements of this job are but not limited to holding Iowa Pesticide certification Category 6 – Right of Way, S 130 – S 190 - S290 burn certifications, CPR and basic first aid, hunter education instructor, weather spotter, grant writing and record keeping. Updates are an annual requirement. Currently the roadside manager and weed commissioner are not the same person. The position of the weed commissioner is held by the conservation director. Complete job description is attached.

Inventory and Analysis

A. Natural Resources

1. Tools

Paper records – Ditch clean out from secondary roads

2. Vegetation inventory

I am not aware of any that has been done in Chickasaw County

B. Equipment

Hydroseeder (2006)

Frontier seeder – model SS1079P pendular spreader (2007)

HP Pavilion Laptop & case (2009)

John Deere Gator XUV (2012)

Skidtanx Rancher 65 NH water tank (2013)

Drip torches (4) and holders (4) (2014)

Flashing lights for hydroseeder (2014)

Nomex jacket and pants (2022)

Program Operations

A. Annual Operations

March – Attend AFIRM winter meeting & write grant

May – Pick up TAP seed

July – Attend LRTF application review

October – November – Fall seeding

November – Final seed report

B. Work Area Types

Rural

Rural adjacent agriculture – Native seed mixes

Rural adjacent non-agricultural – Native seed mixes

Rural adjacent homestead – Cool season grasses

Urban

No urban areas

C. Vegetation Types for Specific Uses

Non-Residential ROW – native tallgrass prairie – Areas where long term establishment and persistence of tallgrass prairie is deemed feasible by the Roadside Manager

D. Special Projects

Typically do not do special projects; they are done by the secondary road department. Secondary roads installs erosion control mats where needed and handles brush control.

E. Annual Calendar of Activities

Seed in late October to mid November.

Methods

A. Vegetation Establishment

Site preparation:

Site prep is done with an excavator by secondary roads.

Seed mixes and rates:

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.

Seeding Techniques:

We seed according to the guidelines in the IRVM tech manual using:

Hydroseeder with seed and mulch

Truax drill

Frontier seeder

Erosion and sediment control:

Hydro mulch

Vegetation Establishment Maintenance:

Secondary roads and the Conservation department work together on this.

First and second year mowing of annual weeds on new projects

Permanent seed (native)

Prescribed burning
Selective spot spraying

Planting Evaluation and Documentation:

Documentation is completed at the end of each year in the form of a map showing the areas that were seeded. This also includes the seed used and the date that it was seeded.

B. Ongoing Maintenance

Burning as time allows through the Conservation board.

Brush cutting and spraying are managed by the secondary roads department.

Material Procurement

A. Sourcing

Each year we receive TAP seed and secondary roads purchases the mulch and chemicals for spraying.

B. Material Handling and Storage


The seed is stored in a small shed, owned by the conservation board, usually from May until it is used in October or November.



County Conservation Board Director



Date



Roadside Manager/Park Ranger



Date

CHICKASAW COUNTY CONSERVATION**JOB DESCRIPTION****Department:** Conservation**Title:** Natural Resources & Park Management**FLSA:** Non-exempt**Date:** March 13, 2023**Reports to:** Director**PURPOSE OF POSITION**

Under general direction, performs scheduled maintenance/repair of equipment, premises, buildings, parks and public access areas; operates and maintains equipment, machinery and tools used in maintenance, operational and repair functions; participates in various forestry, wildlife habitat, development, and educational program functions.

ESSENTIAL DUTIES AND RESPONSIBILITIES

The following duties are normal for this position. These are not to be construed as exclusive or all-inclusive. Other duties may be required and assigned.

* This person provides supervision and coordination to maintenance employees and community service workers in maintenance, construction and development activities of the Department according to seasonal needs, weather conditions and availability of staff/equipment.

* Observes designated land areas and facilities to ensure that facilities and property are used consistent with Board policies, rules and regulations, and State statutes; provides general information to the public concerning their use.

* Operates and maintains machinery, tools and equipment used in the maintenance/repair of facilities and premises including exhibits, grounds, signs, tree planting and trimming, building of picnic tables, fences and related devices; garbage removal and related functions.

* Assist County Secondary Road Department with County Integrated Roadside Vegetation Management (IRVM) program including record keeping and grant writing.

* Ability and willingness to assist with environmental education program.

MINIMUM TRAINING AND EXPERIENCE REQUIRED TO PERFORM ESSENTIAL FUNCTIONS.

Graduation from an accredited four (4) year college or university with major coursework in the natural sciences, outdoor recreation or a job-related field and one (1) year of experience in a natural resource related field; or graduation from a two (2) year college or university with four (4) years of experience.

Iowa Pesticide Applicator certification in Category 6 – Right-of – Way, or the ability to obtain certification.

USEFUL TRAINING AND EXPERIENCE

Possession of, or ability to obtain certification in CPR and Basic First Aid, Weather Spotter, Hunter Education Instructor, Furharvester Education, Bowhunter Education, Fish IOWA!, and Master Woodland Manager, or other training as deemed necessary by the Director.

MINIMUM PHYSICAL AND MENTAL ABILITIES REQUIRED TO PERFORM ESSENTIAL FUNCTIONS

Physical Requirements

Considerable field work involving the use and maintenance of vehicles, tractors, mowers, augers, tree planters, trailers, tree trimmers, chain saws, motors, sprayers, various power saws, and power painting equipment. Lifting and carrying heavy objects weighing up to 50 pounds is required. Pushes and pulls objects weighing in excess of 110 pounds. Climbing, balancing, stooping, kneeling, crouching and crawling are regular requirements of the job. Regularly uses a variety of hand and power tools in various trade functions required to maintain facilities. Position requires regular movement of fingers and hands in grasping objects, use of feet/legs in various operations, and movement of arms/torso in driving and operating various types of equipment.

Cognitive Demands

The ability to use written information such as policy manuals, service manuals, and related data is required. Dexterity requirements include basic use of fingers, hands, feet, legs and body torso in such functions as grasping light to heavy objects, walking, and driving a variety of motorized equipment. Entails visual perception and discrimination, odor perception and discrimination, and color perception and discrimination. Ability to do report and grant writing.

Language Ability and Interpersonal Communication

Knowledge of the principles and practices of effective program supervision is mandatory. Able to apply knowledge of relevant statutes and Board policies to situations encountered at work. Have the ability to interact effectively with the general public, volunteers, other employees, government officials, landowners and farmers.

Environmental Adaptability

Regular exposure to temperature extremes according to the season of the year will be necessary. Regular exposure to occupational hazards involved in operating a variety of mechanical equipment, hand and power tools in various maintenance/repair functions. Exposed to toxic agents, dust, odors, noise, vibrations, etc.

The Park Ranger position shall be under the direction and supervision of the Director.

I, Colt Carroll, certify that I have read and understand these policies.

Employee Signature

4-3-2023

Date

Chris Wynn

Department Head

4-4-2023

Date

Chickasaw County is an Equal Employment Opportunity Employer. In compliance with the Americans with Disabilities Act, the County will provide reasonable accommodations to qualified individuals with disabilities and encourage prospective employees and position incumbents to discuss accommodations with the Employer.

Mission Statement: The Mission of Chickasaw County Conservation is to enhance, promote, protect, preserve and reclaim Chickasaw County natural resources for the benefit, enjoyment and education of all Chickasaw County residents and visitors.

