

City Of Knoxville
Integrated Roadside Vegetation Management Plan
for Cities Under 10,000 Population
APRIL 17, 2023

IOWA CODE

Section 314.21 1. c. of the Iowa Code states: *“a city or county shall not be eligible to receive moneys from the living roadway trust fund unless the city or county has an Integrated Roadside Vegetation Management plan in place consistent with the objectives in section 314.22.”*

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.”

DEFINITION

Integrated Roadside Vegetation Management (IRVM) a long-term approach to vegetation management that:

1. Systematically evaluates each area to be managed.
2. Determines which plant communities best fit the area.
3. Develops procedures that will encourage, enhance or re-establish native plant communities.
4. Provides self-sustaining, diversified, visually interesting vegetation.
5. Establishes safety and an improved environment as priorities.
6. Utilizes the most beneficial methods to prevent or correct undesirable situations caused by disturbance or less than optimum vegetative ground cover.
7. Enforces Chapter 317, Code of Iowa Noxious Weed Law.

INTRODUCTION

Transportation corridors move people and goods safely and efficiently from one location to another in vehicles, on bicycles and walking. The purposes of roadside vegetation are to hold soil in place without creating hazards, improve scenic beauty for users, and provide habitat for pollinators and other wildlife.

The city’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. Also required by Iowa law is the control of noxious weeds.

The goals of this Integrated Roadside Vegetation Management Program are to:

1. Preserve and provide safe, functional, and environmentally improved corridors of travel throughout the city.
2. Promote desirable, self-sustaining plant communities in roadsides, drainage areas, and other public lands in the city over the long term.
3. Utilize those plant communities that are native to Iowa through preservation and re-establishment whenever practical.
4. Implement a brush control program within the roadside rights-of-way.
5. Make more efficient and effective use of pesticides as a control method of undesirable species.
6. Enhance the scenic qualities of the roadsides and entranceways and their value as roadside habitat.

PROCEDURES FOR INTEGRATED ROADSIDE VEGETATION MANAGEMENT

1. Inventory sites to be managed, listing areas of desirable vegetation and those needing improvement.
2. Determine the appropriate management methods needed.
3. Determine the best time to implement management procedures and see that they are accomplished at that time. Temporary procedures may be needed to preserve an area before permanent methods can be utilized.

INTEGRATED ROADSIDE VEGETATION MANAGEMENT METHODS

Integrated vegetation management includes the use of cultural, mechanical, biological and chemical practices. Each location must be evaluated to determine the best method to be used. One or more of the following will be used:

1. Cultural Methods

Cultural controls can be achieved through the introduction and management of desirable plants to control noxious weeds and other undesirable plants. The city will use diverse native grass and forb seed mixes or plant plugs as well as trees in their plantings. These diverse native plantings will be maintained and protected.

Prescribed fire is recognized as a valuable tool in brush and invasive plant control and can be used to enhance and maintain native plant communities. The city recognizes the potential hazards relating to prescribed fire. Therefore, roadsides will be burned only under the safest atmospheric conditions by burn crew personnel trained and certified in the use of prescribed fire.

2. Mechanical Methods.

This involves anything from tractor mowers for managing shoulders, weed control and planting maintenance to pruning shears, chainsaws, and boom mowers for controlling brush and maintaining guardrails and the clear zone.

3. Biological Methods

This involves the use of animals, insects, bacteria or viruses to control plant growth. Natural enemies of noxious weeds could be used in the ROW if necessary. Further research will be needed on other possible biological controls before the city will recommend them.

4. Pesticide Methods

Selection of pesticides to be used shall be based on their label constraints and residual effects on the environment. They will be monitored to document their effectiveness and impacts upon target and non-target species.

Pesticides can be valuable tools for controlling undesirable vegetation. Applicators will be certified by the State of Iowa as public applicators in the appropriate categories.

EDUCATION AND INFORMATION

In accordance with this IRVM plan, the city will:

1. Develop a public awareness campaign to gain support for integrated roadside management through media, established organizations, seminars and brochures.
2. Obtain educational and informational material on IRVM to be presented in seminars and distributed to adjacent landowners, the public, consultants, and contractors.
3. Provide guidelines and directives for staff, contractors and others who seed, plant and maintain roadsides.
4. Encourage the use of seed, plants and trees native to Iowa.

This is a flexible plan that requires common sense interpretations with changes made as necessary to fit the ever-changing complex circumstances realized in integrated roadside vegetation management. This plan will require an update within five years of certification.

City Certification:



Mayor

4/17/2023
Date



City Administrator

4/17/2023
Date