

## INTEGRATED PEST MANAGEMENT POLICY

EFFECTIVE DATE: Expected May 2022; must be brought forward to City Council

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## I. Introduction & Purpose

Integrated Pest Management (IPM) is not about the eradication of pesticides. Instead, it is a systematic approach of looking at a landscape and making sure alternatives to pesticide applications are considered before pesticides are utilized. The adoption of IPM practices will decrease pest outbreaks and reduce pesticide exposure where we live, work and play.

The four main principles of IPM are to:

- identify and monitor pests,
- set action thresholds,
- formulate an action plan for managing pests,
- and evaluate and modify the action plan.

Quoted from Bee City, USA:

Integrated Pest Management (IPM) is a long-term approach to maintaining healthy landscapes and facilities that minimizes risks to people and the environment by:

- Emphasizing prevention first and seeking to eliminate the underlying causes of plant diseases, weeds, and insect problems rather than only attacking the symptoms (the pests);
- Discouraging pests by altering habitat conditions, employing physical controls, and enhancing pests' natural enemies;
- Avoiding routine use of pesticides. Pesticides are acceptable if other methods fail to keep pests at acceptable levels. Any applications must minimize unintended consequences, such as harm to people and pollinators.

## II. Scope and Application

Policies laid out in this IPM shall apply to all City Departments and operations under the City's jurisdiction, and not to those of its residents. Any organized group with a Memorandum of Understanding with the City shall follow guidelines set in the IPM.

An important goal of the IPM is to encourage education and outreach to expand these IPM principles to all City residents and private properties.

The County Noxious Weed Control Act (MCA Title 7, Chapter 22) establishes a weed management district in every county of Montana. Carbon County, in which Red Lodge is the county seat for, has a very engaged weeds district. Each district's management plan is guided by MCA 7-22-2121, which states as follows:

- (2) The noxious weed management plan must:
  - (a) specify the goals and priorities of the program;
  - (b) review the distribution and abundance of each noxious weed species known to occur within the district and specify the locations of new infestations and areas particularly susceptible to new infestations;

- (c) specify pesticide management goals and procedures, including but not limited to water quality protection, public and worker safety, equipment selection and maintenance, and pesticide selection, application, mixing, loading, storage, and disposal; and
  - (d) estimate the personnel, operations, and equipment costs of the proposed program;
  - (e) develop a compliance plan or strategy; and
  - (f) incorporate cooperative agreements established pursuant to [7-22-2151](#).
- (3) The board shall provide for the management of noxious weeds on all land or rights-of-way owned or controlled by a county or municipality within the district. It shall take particular precautions while managing the noxious weeds to preserve beneficial vegetation and wildlife habitat. When possible, management must include cultural, chemical, and biological methods.
- (4) The board may establish special management zones within the district. The management criteria in those zones may be more or less stringent than the general management criteria for the district.

The purpose of the IPM is to provide the City of Red Lodge a means to support the health and safety of City residents, pollinators, and environment through reduction of pesticide use.

### III. Goals

In regards to noxious weeds, the IPM's goals and objectives primarily follow those of the Carbon County Weed District as laid out on page 32 of their management plan. These goals are:

- A. Continue control work on Category I weeds.
- B. Treat all Category II weeds with eradication as the goal.
- C. Eliminate any Category III weed that is found.
- D. Continue education and awareness programs.
- E. Attempt to continue weed infestation mapping and recording depending on funds.
- F. Keep an integrated weed management control program in place and be aggressive with it.

#### Additional City of Red Lodge goals:

- A. Implement the City of Red Lodge Integrated Pest Management Plan, which follows leadership from the County and State of Montana.
- B. Continue weed control efforts on City property and right of ways to prevent spread of weeds.
- C. Provide training opportunities for key personnel.
- D. Apply for and implement grant funding to expand weed control on City property and trails, as well as education opportunities for residents.
- E. Mitigate risk of invasive pests (ie. Emerald ash borer) through preventative measures, as guided by the Montana Forest Action Plan.

## IV. City IPM Coordinator

The City IPM Coordinator is the staff liaison for the Parks, Trees and Recreation Board.

Responsibilities of the IPM Coordinator include, but are not limited to:

- Coordination with city departments on weed and pest management issues and integrating
- Establishing threshold levels;
- IPM principles with other environmental policies and plans;
- Coordination of the development and update of an IPM operations manual;
- Research and recommendations for IPM strategies;
- Assistance to city departments with staff training needs; and
- Assistance to Parks Board with outreach to residents regarding IPM, pollution prevention and pesticide reduction strategies, pollinator protection and natural lawn and gardening practices.

## V. IPM Procedure

### A. Guiding Documents

The following resources will be used as guiding documents in the decision-making process.

- Montana Weed Control Act
- Carbon County Weed Management Plan
- Montana Noxious Weed Management Plan
- Montana Forest Action Plan

### B. Establishing Threshold Levels

To determine if treatment is warranted, an acceptable threshold level of treatment for each target pest and site should be established based on the ecology of the pest and either its density that creates environmental, aesthetic or economic damage or based on a measurement of the damage resulting from the pest. In some cases, a threshold, such as eradication, suppression, or containment may be required by federal or state law.

1. Aesthetic Threshold
2. Environmental Threshold
3. Economic Threshold

### C. Management Selection Criteria

Upon determining that management for an undesirable species is necessary, the following criteria should be used to help select the appropriate IPM treatment strategy:

1. Least disruptive of naturally occurring controls;
2. Least hazardous to human health;
3. Least toxic to non-target organisms;

4. Least damaging to the general environment, surface and ground water, and overall ecosystem function and stability;
5. Most likely to produce a permanent reduction in the environment's ability to support target pests;
6. Economic *and* environmental cost-effectiveness in the short- and long-term.

#### D. Management Strategies and the IPM Hierarchy

Prevention, cultural control, mechanical control, biological control and chemical control are the techniques used in the hierarchy of integrated pest management. In general, a combination of compatible treatments is more effective than a single approach. The following treatments are listed in the order in which they should be executed:

1. Prevention- This is the most effective and important pest management strategy and is the foundation of IPM. By reducing the capacity of the ecosystem to support target pest populations through design and appropriate management, the opportunities for pest establishment can be reduced to tolerable thresholds or eliminated.
2. Cultural- Cultural control is the use of management activities that can prevent pests from developing or keep them below tolerable levels by enhancement of desired conditions.
  - a) Selection and placement of materials that provide life support mechanisms for pest enemies and competitors;
  - b) Modification of pest habitat by reducing pest harborage, food supply and other life support requirements;
  - c) Vegetation management including optimized irrigation practices, mulching, fertilization, aeration, mowing height, seeding, pruning and thinning;
  - d) Waste management and proper food storage;
  - e) Barriers and traps;
  - f) Heat, cold, humidity, desiccation or light applied to affected regions; and
  - g) Prescribed burning or grazing.Properly managing plant material once planted helps minimize stress and unfavorable conditions for that plant. Healthier plants have less stress and less stress means less pests.
3. Mechanical- Pest numbers can be kept lower by mowing, weed-eating, hand-pulling, prescribed burning, raking, etc.
4. Biological- Relying on beneficial insects or animals to reduce or eliminate the presence of unwanted or harmful pests. Biological methods include:
  - a) Conservation and augmentation of the pest's natural enemies; and

b) Introduction of host-specific enemy organisms

5. Chemical- Chemical applications are sometimes necessary when other control measures have proven ineffective. All pesticides shall be assumed to be potentially hazardous to human and/or environmental health. Regulated chemicals will only be applied by licensed personnel on an as needed basis.
6. Education/Outreach- Education on best pest management practices is crucial to a holistic approach.

## **VI. Contractor Requirements**

When the City signs a new contract or extends the term of an existing contract with a contractor that conducts IPM-related work, including the application of pesticides, the department must ensure that the work is in compliance with existing IPM guidelines or consult with the city IPM coordinator to develop procedures that comply with the IPM policy.

## **VII. Exceptions/Change**

Any exception to this policy may be granted only by the Community Development Department or Mayor, under advisory from the Parks, Trees and Recreation Board. This policy may be reviewed and changed at any time.