



## **Management Plan for Pests and Invasive Plants**

**Approved by Red Wing City Council: September 23, 2024**

**Purpose of the Plan:** The City of Red Wing prioritizes protecting the health and well-being of its residents and visitors. Therefore, we wish to provide a safe environment from harmful invasive species and limit exposure to chemicals.

The purpose of this plan is to establish a sustainable approach to managing pests and invasive plants. We will do this through a combination of biological, chemical, mechanical, educational, and cultural methods to minimize the risks to people's health, environment, economy, and cultural history.

The City continues to make strides in reducing the use of pesticides and herbicides. That work includes prairie bluff restoration, emerald ash borer management plans, natural landscape integration, and other practices to eliminate invasive species. However, using chemicals will sometimes be required to battle the encroachment of invasive species such as oriental bittersweet, buckthorn, wild parsnip, giant hogweed, crown vetch, emerald ash borer, and others.

### **Definitions:**

- **Pests:** For the purpose of this plan, pests are defined as animals or microorganisms that, in a specific situation, may cause a health hazard to humans or to the facilities that humans use. It may also include things that cause hazards to pets, livestock, crops, forestry, and natural resources.
- **Invasive Plants:** For the purpose of this plan, invasive plants are defined as species that are not native to Minnesota *and* cause economic, social, or environmental impairment, or harm to human health.

### **Objectives of this Plan:**

- Limit or eliminate, when possible, the threats caused by pests and invasive plants.
- Limit the exposure of chemical pesticides to residents and visitors.

- Prevent the loss of natural habitat within the municipal boundaries of Red Wing.
- Limit pest populations so they remain below economically damaging levels.
- Consider the location of sacred Indigenous sites when planning and implementing herbicide and pesticide enforcement.

### **Plan Enforcement:**

The Public Works Director and/or designee will be responsible for implementing this plan and coordinating communications between the City of Red Wing and its residents. The Public Works Director and/or designee will make all decisions regarding the plan in coordination with other City departments, as well as with other local governmental agencies, including but not limited to the U.S. Fish and Wildlife Service, the Minnesota Department of Natural Resources, Goodhue County, the Minnesota Department of Agriculture, and the Land and Environment Department of Prairie Island Indian Community (PIIC).

**Control Methods:** The City's control methods are described below.

1. **Biological:** *Controlling pests and invasive plants by using other organisms.* Red Wing occasionally uses goat herds or other means to control the spread of buckthorn on our bluff prairies. The City may also consider using biocontrol insects when appropriate and feasible. In implementing this step, City staff would communicate closely with the Land and Environment Department of Prairie Island Indian Community.
2. **Chemical:** *Using pesticides to manage pests and invasive plants.* Pesticides that control weeds are called herbicides, and many herbicides are available. The City's protocol is to read product labels carefully and know how pesticides will affect plants, animals, and humans before applying them. City staff and their contractors are licensed in any chemical-use applications they use.
  - **Selective Herbicides:** These chemicals kill specific types of plants, such as grass plants or broadleaf plants.
  - **Non-Selective Herbicides:** These chemicals kill all types of plants. (A common example is glyphosate, the active ingredient in Roundup and other herbicides.)
  - **Contact Herbicides:** These chemicals kill the plant only where the chemical touches it. To be effective, the entire plant must be thoroughly covered with the product. Contact herbicides are quick-acting and useful in controlling annuals, biennials, and seedling perennials.

- **Systematic Herbicides:** These chemicals are absorbed through the leaves or roots and move freely throughout the plant. Application to part of the plant will kill the entire plant. Systematic herbicides are effective against most plants and are recommended for perennials. They take time to be effective and may be applied to the soil or foliage.
3. **Mechanical:** *Physically disrupting the spread of pests and invasive plants.* For invasive plants, this may be done by burning, mowing, brush hogging, hand pulling, weed whipping, etc. When necessary, the City will retain desirable plants while eliminating invasive plants, though time and cost do not always allow for this separation.
  4. **Educational:** *Educating the public on the proper ways to remove pests and invasive plants and how not to spread the seeds or larvae of pests or invasive plants.* The City does this in a variety of ways: informational signs at the site and communication to the public through traditional and social media. Education may also be a collaboration with a community partner.
  5. **Cultural:** *Considering sacred land and practices before creating a plan to remove pests and/or invasive plants.* Red Wing sits on the land of the Dakota people, and many sacred plant relatives are part of the ecosystem. The City of Red Wing will regularly communicate with the Land and Environment Department at Prairie Island Indian Community (PIIC), especially when discussions on pests and invasive plants relate to He Mni Caŋ-Barn Bluff, a sacred site to the Dakota.

### **Community Areas of Concern:**

1. **Park Maintenance:** Chemicals will only be used as needed after thoroughly exploring non-chemical options. Due to the extensive and diverse environments within Red Wing's parks and recreation areas, the City uses a variety of control practices.
  - *Neighborhood Parks:* The City does very minimal to no spraying for noxious weeds in neighborhood parks. If spraying is done, it is applied in small areas and only if weeds become unmanageable.
  - *Community Parks:* These larger parks are expected to be kept at a higher standard, and as such, bi-annual herbicides may be used at some parks through contracted services. Spaces used for athletic purposes, such as the Athletic Field, may have a higher standard of care, with more frequent herbicide use and mowing. Some community parks are also located along the river and have riprap shorelines. To control volunteer trees and prevent

them from overtaking and compromising these areas, various methods will be used to minimize the potential for damage.

- *Natural Trails*: Walking or multi-use trails located in natural areas are mowed on an as-needed basis. No chemical treatments are applied unless the weeds or invasive plants become uncontrollable.
- *Bluff Prairies*: The City contracts to perform prescribed burns on bluff prairies to encourage prairie growth and limit the intrusion of invasive plants.
- *He Mni Caŋ-Barn Bluff*: This bluff is sacred to the Dakota people, and as such, the bluff and the land immediately surrounding it are of the utmost importance to the Dakota people and the City of Red Wing. Invasive plants will be managed via mechanical means (hand pulling, burning, mowing) and/or systematic herbicides (i.e. killing targeted plants while minimizing damage to surrounding plants). When a systematic herbicide is being considered, it will be only to remove an invasive species, and its use will be specific and focused. This will usually involve a cut-stump treatment. In very rare cases where hand-pulling is impossible, and a cut-stump treatment is improbable due to available space or safety, then a limited amount of broadcast spraying of systematic herbicide may be done. City staff will work closely with the PIIC Land and Environment Department and/or a designee of the department during the planning process of plant removal. The City will also work in partnership with PIIC to provide education to the public on the importance of native plants on this bluff.
- *All Parks and Recreation Areas*: All parks and recreation areas with traditional turf are mowed with large rotary mowers regularly and with small push mowers weekly. As a practice, the City also looks periodically at areas within our parks and recreational sites that may have the potential for natural landscaping, which requires less mowing and spraying. The City does not spray for mosquitos, black flies, or ticks in any park or recreational area.

2. **City Easements**: Easements are important for City employees to access essential utilities such as water pipes and sanitary sewers. Easements must remain free and clear of all obstructions.

- Easements are cleared at least once a year and may be done more often as needed.
- Easements are usually cleared using mechanical means, and chemical herbicides may be applied when invasives such as wild parsnip become unmanageable or dangerous to employees. Future planning may incorporate

more natural landscaping into easement areas, when feasible. Shifting to an appropriate native/natural cover would reduce time and funds expended on chemical and mechanical management over the long term, promote native biodiversity, foster ecological services, and benefit pollinators.

3. **Roadside Vegetation:** Roadsides are considered road right-of-way, which means they are reserved for public use; that includes boulevards and road ditches. These areas provide essential space for pedestrian traffic, the flow of stormwater, and traffic sight lines. These areas must remain free and clear of all obstructions. Future planning may involve planting native/natural cover for the reasons outlined in “Easements” above.
4. **Exclusions:** The Mississippi National Golf Course is excluded from this plan as golf courses have their own requirements per Minnesota Statute 18B.345.
5. **Chemical Application:** The City’s goal is to limit the use of all chemical pesticides on City properties. The City strives to use pesticides that target specific problems rather than broad-spectrum pesticides that can impact non-targeted species. Whenever possible, the City will use the least toxic concentration that is highly effective with a short re-entry or a rapid dissipation. This reduces the chemical release into the environment and helps prevent accidental exposures.
  - The City will strictly limit the use of glyphosate, but it reserves the right to apply this chemical if necessary. The only exception is He Mni Caŋ-Barn Bluff, where the chemical will not be used at all unless the Land and Environment Department of Prairie Island provides written permission to use it and is onsite for advisement during implementation.
  - The City will consult with local experts on the best chemical to use when considering the use of pesticides. When the area is on, near, or around He Mni Caŋ-Barn Bluff, these experts include PIIC’s Land and Environment Department.
  - Prior approval must be given by the Public Works Director or their designee before any pesticide or fertilizer is applied with the broadcast method on City property.
  - Any chemical application done on City property, whether by a staff member or by a contractor, shall be applied only by a person who has obtained a Pesticide Applicator's License. All manufacture and label directions will be followed.

- Any chemical application on City property by an outside organization must be done by a person who has obtained a Pesticide Applicator's License. Applications on City property by outside organizations for the benefit of the organization or the community at large must be given permission by the Public Works Director or their designee on an annual basis.
- In very rare situations, it may be warranted to use a practice not recommended in this plan. In those emergency cases, the City of Red Wing reserves the right to apply the necessary pesticides. This will only be done as a last resort and after considering all other options and practices cited in this plan. For He Mni Caŋ-Barn Bluff, the Department of Land and Environment of PIIC will always be consulted before any non-recommended pest removal because of the sacredness of that site.