



City of Le Sueur Integrated Pest Management (IPM) Plan

Integrated Pest Management (IPM) is a pest management plan that focuses on long-term prevention or suppression of “pest” issues with minimum impact on human health, the environment and non-target organisms. In most cases, an IPM is directed at controlling pests that have an economic impact on city streets, facilities, parks, athletic fields and our customers.

For the purpose of our plan pests are identified as: *weeds, rodents, insects and fungus.*

Management Strategies

Management strategies and pest management techniques include:

1. Promoting natural occurring biological control.
2. Cultural practices that include cultivating, pruning, fertilizing and general maintenance.
3. Changing the habitat within the area to make it incompatible with pest development.

Three principles of IPM used in designing a specific program are:

1. Know your pests.
2. Have a BMP in place for streets, facilities, parks, athletic fields. (Best Management Practices)
3. Continual surveying and observation of streets, facilities, parks, athletic fields.

Setting Thresholds.

Before any pest control action is taken, the IPM approach considers if the pest has exceeded a predetermined threshold. Determinations of action thresholds are made on a case-by-case basis within the area of the city’s streets, facilities, parks and athletic fields. The point at which the pest population or environmental condition indicate that pest control action should be taken. Meaning, finding a single pest or even very low numbers of pests does not always result in taking action. Conversely, some pests may be below the threshold while others are above it. Keep in mind that some pests are seasonally specific, as well as weather-related.

Streets

Surfaces and Gutter Lines

Goal: To develop and implement environmentally sound, IPM for the city streets to look aesthetically pleasing throughout the city.

Thresholds and action levels are determined by a licensed applicator or supervisor for the specific pest problem in question weeds in general parks or green spaces.

- 1) When it has been determined that a threshold has been reached. The appropriate post emergent or pre-emergent herbicide may be applied.
- 2) Selection of the appropriate herbicide of choice will be determined by trained staff after evaluating the site, the hazard rating of the product and the specific location.



Turf

General Parks

Goal: To develop and implement environmentally sound, IPM for the use of green space in our parks system. We plan to minimize cost with providing a safe environment.

Thresholds and action levels are determined by a licensed applicator or supervisor for the specific pest problem in question weeds in general parks or green spaces.

- 1) When it has been determined that a threshold has been reached. The appropriate post emergent or pre-emergent herbicide may be applied.
- 2) Selection of the appropriate herbicide of choice will be determined by trained staff after evaluating the site, the hazard rating of the product and the specific location.
- 3) Posting of the park site to be treated will occur prior to application and if this park includes a recreation center or building facility, posting of a sign must occur at the entrance.

Competitive Athletic Fields

Goal: To develop and implement environmentally sound, IPM for the use of competitive athletic fields within our parks system. We plan to minimize cost with providing a safe environment.

Thresholds and action levels are determined by a licensed applicator or supervisor for the specific pest problem in question weeds in general parks or green spaces.

- 1) When it has been determined that a threshold has been reached. The appropriate post emergent or pre-emergent herbicide may be applied.
- 2) Selection of the appropriate herbicide of choice will be determined by trained staff after evaluating the site, the hazard rating of the product and the specific location.
- 3) Posting of the park site to be treated will occur prior to application and if this park includes a recreation center or building facility, posting of a sign must occur at the entrance.

Staff recognizes the need to develop and use strategies that effectively manage turf pests on athletic fields and to manage those pests in an environmentally sound manner. We also plan to maintain the athletic fields so that park users have a safe and stable site for a high level of athletic activities.

Difficulty of maintaining multi-use fields and the intensity of their use is impacted by turf recovery time and a lack of down time will affect the quality of turf. Currently, due to compaction from overuse, many of our athletic fields have a high population of clover, dandelions, spurge and annual grassy weeds. The approach to reducing these populations of pests will take multiple years and persistency. Staff will develop a multi-year plan for reduction.

Facilities like Jo Eagle Anderson and Bruce Frank Field a threshold and action levels are determined by a licensed applicator or supervisor for the specific pest problem in question. Once this threshold has been reached, appropriate management practices are implemented. Heavy use on competitive fields requires fertilizing more frequently in these areas. This will assist in the turfs ability to rebound from the stress of repetitive foot traffic.



Invasive Terrestrial Plants

Native Landscapes, Wetlands and Parks

Terrestrial plants are non-native plants that grow in non-aquatic habitats, including agricultural fields, rangelands, forests, urban landscapes, wildlands, and along waterways. Terrestrial invasive plants include trees, shrubs, vines, grasses and herbaceous plants.

Goal: To develop and implement environmentally sound, IPM for terrestrial plants within our native landscape, wetlands and park areas. We plan to minimize cost with providing a safe environment.

Thresholds and action levels are determined by a licensed applicator or supervisor for the specific pest problem in question weeds in native landscape and park areas.

- 1) When it has been determined that a threshold has been reached. The appropriate post emergent or pre-emergent herbicide may be applied.
- 2) Selection of the appropriate herbicide of choice will be determined by trained staff after evaluating the site, the hazard rating of the product and the specific location.
- 3) Posting of the site to be treated will occur prior to application.

Noxious Weeds

Controlling noxious weeds is always a moving target. There are weeds added and removed from the state of Minnesota's Prohibited Noxious Weeds lists every year. There are two lists; Eradicate and Control. The list is made public on the Minnesota Department of Agriculture's website. As a city, we are responsible for monitoring the list.

Goal: To develop and implement environmentally sound, IPM for noxious weeds through the confines of the city. We plan to minimize cost with providing a safe environment.

Thresholds and action levels are determined by a licensed applicator or supervisor for the specific noxious weed.

- 1) When it has been determined that a threshold has been reached. The appropriate post emergent or pre-emergent herbicide may be applied.
- 2) Selection of the appropriate herbicide of choice will be determined by trained staff after evaluating the site, the hazard rating of the product and the specific location.
- 3) Posting of the site to be treated will occur prior to application.

Rodents

By eliminating rodents, facilities and parks will remain healthy for our citizens. Rats, mice, gophers and voles are some of the more common rodents in our community. Trapping with mechanical traps is the most practical means of eradicating rodents but do cause a variety of other public issues. The action point for rodents is visual observation or traces within our facilities and parks.

- 1) When it has been determined that rodents are present staff will implement the appropriate eradication processes.



- 2) Selection of the appropriate mechanical traps will be placed and flagged for public notice. If this method is unsuccessful staff will proceed to Step #3.
- 3) Selection of the appropriate rodenticides pellet and or liquid form will be determined by trained staff after evaluating the site, the hazard rating of the product and the specific location.
- 4) Posting of the park site to be treated will occur prior to application and if this park includes a recreation center or building, posting of a sign will occur at the entrance.

Mosquitoes

Goal: To develop and implement environmentally sound, IPM for control of mosquitos within the corporate boundaries of the City of Le Sueur. We plan to minimize cost with providing a safe environment.

Staff aims to provide and maintain a safe and hospitable environment for the community and recognizes the need to develop and use strategies that effectively manage mosquito populations in an environmentally sound manner.

To this effect, the threshold for implementing the BMP strategies will be implemented based on City Council authorization and policy. A guiding principle is Minnesota Statutes 2019 18G14 Mosquito Abatement, Minnesota Department of Agriculture Category L Mosquito Pesticide Applicator Training Manual and National Pesticide Applicator Certification core manual.

- 1) Determination of breeding sites for mosquitoes within corporate limits
- 2) Determination of types of mosquitoes
- 3) Surveillance of mosquito populations
- 4) Control of mosquito populations based on the thresholds
 - a. Citizen complaints using the following pest management options
 - i. Cultural
 - ii. Economical
 - iii. Physical/Environmental modification
 - iv. Chemical
 1. Larvicides (primary control)
 2. Adulticides (secondary control)

Selection of the appropriate chemical will be determined by trained staff using the appropriate IPM strategy. Notice of the use of chemicals will be completed to impacted areas in a timely manner using the appropriate media.

- 5) Monitor mosquito population

Insects

Urban Forest

Goal: To develop and implement environmentally sound, IPM for control of insects within the corporate boundaries of the City of Le Sueur. We plan to minimize cost with providing a safe environment.

Staff plans to maintain a safe and hospitable environment for the citizens of the community and recognize the need to develop and use strategies that effectively manage tree diseases in an



environmentally sound manner.

To this effect, strategies will be implemented based on ANSI A300 Integrated Pest Management Standard (Part 10) and the Best Management Practices booklet Integrated Pest Management, 2nd Edition.

Tree Injection

Within the City, tree injection is a disease/pest management option that can be utilized with other IPM management tools and considerations.

The threshold would be visual observation and/or notifications from a state agency.

An example of how tree injection is being utilized within the City as part of an IPM strategy, is for controlling Emerald Ash Borer (EAB). Please refer to the EAB management plan and EAB methodology document, The Management of Ash Trees Utilizing Geographical Information Systems (GIS) to Mitigate Emerald Ash Borer (EAB) within the corporate limits of the City of Le Sueur.

For all tree injections, the selection of the appropriate chemical will be determined by trained staff using the appropriate IPM strategy. Notice of the use of chemicals to impacted areas will be completed in a timely manner using the appropriate media.

Tree Stump Removal

Tree stump removal using mechanical, physical or environmental modification is not always feasible or practical within the community. The current policy is to physically remove the stump by grinding, this is not always the case and at times based on an IPM, the application of a chemical to the stump is appropriate. The selection of the appropriate chemical will be determined by trained staff using the IPM strategy. Notice of the use of chemicals to impacted areas will be completed in a timely manner using the appropriate media.

Reviewed by Le Sueur RPAC

February 1, 2022

Adopted by Le Sueur RPAC

February 1, 2022

Approved by Le Sueur City Council

February 14, 2022