

**TOWN OF LYONS, COLORADO
RESOLUTION 2020-118**

**A RESOLUTION OF THE TOWN OF LYONS APPROVING THE LYONS
INTEGRATED WEED MANAGEMENT PLAN**

WHEREAS, Colorado Noxious Weed Act (hereinafter "the Colorado Noxious Weed Act" or "the Act"), C.R.S. § 35-10-101 *et seq.*, requires local government agencies to create plans for the control of specific listed noxious weeds using integrated control methods; and

WHEREAS, Lyons Municipal Code ("LMC") Section 7-5-20(b) further requires the promulgation of a "Noxious Weeds Management Plan"; and

WHEREAS, the Town of Lyons (the "Town") staff, the Town of Lyons Board of Trustees (the "Board"), the Lyons Ecology Board, and several volunteer groups of concerned citizens worked collaboratively to develop the Town of Lyons Integrated Weed Management Plan (the "Plan") attached hereto as **Exhibit A**; and

WHEREAS, the Plan is intended to provide policy for Town Staff and Town contractor weed management activities within the Town; and

WHEREAS, a similar Plan approved in 2019 included some information applying only to that year, and the Town seeks a Plan to be revised, as per state law, regularly at three year intervals; and

WHEREAS, Lyons citizens have petitioned for a new town ordinance that would effectively remove all synthetic herbicides from use by the Town, and the Board wishes to address the concerns raised by a revised Plan that is more flexible than that proposed ordinance, but still restricts use of these chemicals and especially in Lavern Johnson, Sandstone, Bohn, and the Lyons Valley River parks; and

WHEREAS, the Board desires to approve this revised Plan.

NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF TRUSTEES OF THE TOWN OF LYONS, COLORADO THAT:


Section 1. The foregoing recitals are incorporated herein by reference.

Section 2. The Board of Trustees hereby approves a Lyons Integrated Weed Management Plan **Exhibit A** attached hereto.

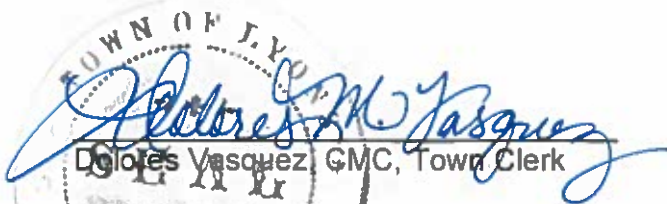
Section 3 This resolution shall take effect immediately upon its approval by the Board.

ADOPTED this 22nd of JULY, 2020.

TOWN OF LYONS


Nicholas Angelo, Mayor

ATTEST:


Dolores Vasquez, GMC, Town Clerk




EXHIBIT A

THE LYONS INTEGRATED WEED MANAGEMENT PLAN

[See attached]

Town of Lyons Integrated Weed Management Plan

Overview and Objectives

The Lyons Integrated Weed Management Plan (the "Plan") establishes management practices which reduce the occurrence of weeds and their associated negative impacts on native plant communities, public lands, and public corridors within the limits of the Town of Lyons (the "Town"). The Town utilizes staff, contractors and the assistance of state and local agencies to implement the practices outlined in this Plan. Control of noxious weeds is a component of establishing and maintaining a healthy and sustainable local natural environment.

This Plan satisfies the requirements of Lyons Municipal Code ("LMC") Section 7-5-20(b) requiring a "Noxious Weeds Management Plan", and the Colorado Noxious Weed Act of 2017.

The Town of Lyons Integrated Weed Management Plan provides management guidelines which:

- Adhere to the Municipal Code and acknowledge the large acreages of park and non-park properties that the Town is responsible for maintaining.
- Implement the mandates of the Colorado Noxious Weed Act (hereinafter "the Colorado Noxious Weed Act" or "the Act"), C.R.S. § 35-10-101 *et seq.*, by creating a plan for the control of noxious weeds using integrated control methods.
- Protect public and applicator safety, water quality, and non-target species.
- Reduce the spread of weeds from Town properties to adjacent properties.
- Foster cooperation with private property owners, state and local agencies, and other stakeholders to reduce the spread of weeds.
- Comply with State and Federal Law on the applications of herbicides and pesticides including, but not limited to, the Federal Insecticide, Fungicide, and Rodenticide Act ("FIFRA"), 7 U.S.C. § 136 *et seq.*, the Colorado Pesticide Act, C.R.S. § 35-9-101 *et seq.*, and the Colorado Pesticide Applicator Act C.R.S. § 35-10-101 *et seq.*
- Protect the public health and foster a healthy and natural local ecology.

Introduction

The Colorado Noxious Weed Act charges local government with the responsibility for noxious weed management. The Act requires that the Town implement weed management programs aimed at controlling various plants listed by the State of Colorado. Noxious weeds are non-native species that are "invasive"; once introduced, they may rapidly dominate plant communities to the extent that plant diversity and ecosystem integrity are threatened. Noxious weeds can also threaten valuable wildlife habitat and natural resources and be a nuisance for recreational activities.

Utilizing an integrated weed management approach, the Town of Lyons strives to prevent the introduction of new invasive plant species, and eradicate and contain weed species that are already locally established. In so doing, the Town of Lyons:

- Works with Boulder County, utilizing an integrated weed management approach for Town of Lyons-owned right of ways and public lands.
- Identifies the invasive weed species established in the Town and monitors the spread or decline of infestations over time.

Enhances the attractiveness and curb appeal of the Town by controlling weeds on or near streets, sidewalk, paths, and right of ways.

- Stays current with weed management research and innovative management techniques that increase effectiveness of weed control and/or decrease environmental impacts.

Town of Lyons parks and public works employees promote best management practices in the stewardship of Town lands to ensure the safe enjoyment of parks and public spaces in the community. Staff, contractors, and volunteers utilize an integrated management approach consisting of prevention (including public outreach and education), mechanical controls (for example, mowing), cultural methods (for example, hand pulling or grass seeding), biological controls (including introduction of control organisms), organic methods, and tightly regulated and restricted application of herbicides and pesticides where necessary. In order to provide maximum protection to all residents and desirable plant species, no synthetic herbicides are used in the public parks. Utilization and application of Organic, non-toxic substances will be used as a first response to weed eradication. If organic substances prove ineffective, the Town of Lyons and its contractors will submit an application for use of other substances.

Interpretation and amendment of this Policy

Local eradication of an invasive weed species is difficult to obtain through one weed control method alone. In order to achieve its goals, this Plan and the town's weed management policy requires flexibility. The Town evaluates needs on a site-specific basis. In addition, weed management is a constantly evolving; as new weed species of concern are introduced. However, new weed management strategies and tools are also being developed and can increase effectiveness of eradication of noxious weeds and decrease environmental and public health impacts.

In order to react to the constantly evolving nature of weed management in the Town, and comply with state law, this Plan will be amended every three years via resolution from the Town Board of Trustees. According to the Lyons municipal code, the designated advisory group for this work is the Lyons Ecology Advisory Board with input from the Parks and Recreation Commission. The Director of Parks and Public Works interprets the requirements of this Plan in order to ensure that actual weed management practices are in compliance. This Plan is a public document which can be referred to by Parks and Public Works staff, by advisory boards and the Board of Trustees, and by the general public and is posted on the town's web site for access by all.

Hierarchy of Weed Management

Town weed management methods are employed consistent with an Integrated Pest Management approach that provide a hierarchy, starting with prevention, and ending with chemical treatments as a last resort. This approach is as follows:

Prevention - Prevention is the most cost-effective solution for weed control. Examples include choices in landscaping, campground and picnic area design; use of weed-free soil, condensed perennial plantings, heavy mulch, regulating introduction of exotic organisms, care in transport of fill and excavated soil, building of healthy soils, and protecting biodiversity. For most projects, the Town stipulates use of weed-free soils, non-synthetic fertilizers, and composts. Proper landscape planning and collaboration with contractors is important in new construction or modifications to existing landscapes in order to reduce future weed issues. For example, the gravel-on-fabric hardscaped areas adjacent to some town arteries invites aerial seeding of weeds. In contrast, if turf, native grass, or other ground cover can be established, weed growth is reduced. The Town is exploring partnerships with citizen groups, local homeowners associations, and local business and residence property owners for pilot programs aimed at progressively reducing the need for town weed maintenance and improving property appearance.

Education is a critical component of prevention control strategies, as is careful planning of any new developments such that they do not result in chronic weed control problems. The Town hosts weed identification and management workshops and uses volunteers (including its local "Weed Posse", Lyons Volunteers and other groups) in weed education and management. Boulder County and Town of Lyons also offer noxious weed programs, services, booklets and other information for the purposes of weed education. Town Staff collaborate with the Lyons Ecology Board to provide educational information to the community and to solicit advice concerning new prevention methods. They also ensure that contractors comply with prevention aspects of this Plan.

Cultural - The establishment of desirable and competitive vegetation is a primary method of Town weed control in the maintenance of parks, open space, and other Town-owned properties. Along rights-of-way, perennial grasses serve this purpose. In natural areas, establishment of a diversity of native vegetation keeps out invasive plants such as cheat grass. Plant ecologists can be used to help select appropriate plants and select methods for success on restoration projects. In turf areas of the parks, over-seeding with high quality seed and organic pre-emergent/fertilizing substances is effective at maintaining healthy grass and reducing broad-leaf weed growth.

Mechanical - Mowing is the primary mechanical method of managing vegetation in public right-of-ways and park/open space land. Mowing is used for weed suppression on large open areas by utilizing mowers as well as hand-held weed whackers. Mowing in these areas encourages perennial grasses over broadleaf vegetation (typically weed species), may assist with better land uses, and maintains Town sight distance requirements. In general, mowing to relatively long vegetation heights (3-6 inches) is encouraged because such promotes desired vegetation cover species while discouraging undesirable weed species. Mowing heights should be customized according to which weed species needs to be controlled and the timing of weed flowering.

Hand pulling is another mechanical method and may be utilized for control of annual and biennial species. Manual methods on deep-rooted perennials can be difficult, but is utilized in sensitive areas, including the parks. In the park flower beds, appropriately dense planting and thick mulch effectively suppress many weeds and the remaining plants can be easily pulled. For some invasive weed species, hand pulling is effective but must include a continued regimen of at least twice a year for a minimum of three to five years before local eradication can be achieved. In some circumstances, it is important to support desired vegetation which can be harmed by herbicide sprays, so that the surface is less disturbed. Two problem plants (thistle species and cheat grass) commonly invade immediately after broad spectrum herbicide applications: so that it can be more cost-effective to encourage ground cover that competes with both.

Biological Control- Biological control methods of weed management include introduction or re- introduction of natural enemy organisms of existing noxious weeds. It can include grass seeding and cultivation. Biological weed control through insect/plant and other interactions (insect biocontrol) is becoming increasingly well-established in the region and can become an important component of the Town's weed management program. The use of insects and other bio-control agents may be employed in cases where eradication is impractical due to the size of the infestation. Insect agents have been utilized in Boulder County over the past 10 years for the control of musk thistle, diffuse knapweed, leafy spurge, field bindweed, and dalmatian toadflax. It is common for field releases to take 3-5 years to establish an insect population large enough to have an impact on a weed infestation. Noxious weed eradication is difficult; more attainable is reduction of weed infestation to a level where the insect agents are limiting distribution and abundance of the target weed species and the weed density is not detrimental to the desired plant community. Biological organisms are only used with the approval of the Boulder County Weed Control Supervisor.

Herbicide and Pesticide Application - In order to protect the public and foster a healthy and natural local ecology, no synthetic herbicides or pesticides are used in Lavern Johnson, Sandstone, Bohn, and Lyons Valley River parks. However, for park land being restored with the assistance of 2013 flood recovery funding, synthetic herbicides and pesticides may be used during the restoration work and during any warranty period. The process described below for other town properties is followed prior to use in these sensitive areas during this period. Also, special circumstances may arise where synthetic herbicides can be used in the parks as a last resort in order to avoid severe noxious weed spread throughout town property and into adjacent properties. In any such case, the process to utilize herbicides for other town properties must be followed, and the exception to town policy for the parks fully justified, including why alternative methods cannot be used.

For necessary weed control on all other town-managed property, including outlots zoned POS, MUN, and other properties, synthetic chemical control is the last resort. This means that other weed control methods are fully considered, and tried first. Before synthetic herbicides (examples are: 2,4-D and indaziflam) are used, the herbicide products and the weeds considered for control are both assessed for human and environmental impacts. Synthetic chemicals are not applied for cosmetic purposes or for nuisance weeds, but instead must be focused on specific non-native noxious weeds

listed by the State of Colorado for control. Any proposed action is submitted for approval to a designated and qualified member of the town's staff, with notification also to the town's Ecology Advisory Board (the town's Weed Advisory Board). The form used for each submission includes: a) identification of the target weeds, b) justification of the need, c) description of why only chemical control will be effective, d) determination of where and when the pesticide will be used, e) the application method and a location map, and f) how unintended effects to people, non-target organisms, surface and ground water, and the environmental will be minimized. In some cases, the contractor provides this information and prepares the application form.

The Town takes action to avoid town properties becoming a source for spreading of noxious weeds into adjacent property such as Boulder County Open Space land. In some cases, a chemical control method may be most cost-effective, but must be carefully justified and the risks fully considered. Also, when local business or residents make requests for adjacent property weed control, the Town does not spray toxic synthetic chemicals for only cosmetic purposes, but instead restricts such to noxious weeds identified by the State of Colorado.

Town approval or denial of any herbicide application plan occurs after review of regulatory data from the EPA and other regulatory agencies, including other respected international agencies. This information includes: standard toxicity testing used to develop exposure standards (including for occupational exposure), non-target species exposure, and environmental effects. The hazards posed by possible endocrine system disruption and other hormonal effects, including reproductive problems, birth defects, cancer, and developmental issues are included. For environmental effects, risks posed by how the herbicide acts in the soil, water, air and how it breaks down and interacts with other factors are considered. Known persistence in the soil and water and volatility (possible issues with drift) are all evaluated, as is risk to soil microbiota and to animals who may use the affected plants as a food source.

Records are kept of the use of any synthetic herbicides on public lands. Each record includes: a) location text description and sketch map, b) date, c) chemicals used, including commercial product name and active ingredients, and d) method of application and estimated area. If a contractor makes the application, then its records are also provided as part of the contractor's invoice to the Town. The herbicide use records are available to the public in a file maintained by the town staff in its offices and also online as scanned versions via a Town web site.

This application, approval and record-keeping process applies to the town's non-park lands, including hardscapes and out-lots. It provides encouragement for all other weed control measures to be tried first, by providing for careful justification of any chemical use. By keeping records, this application process also identifies areas of town-owned land presenting chronic weed control problems. It thus identifies areas where long term mitigation without herbicides is needed. The Town desires to reduce the amount of land being treated by chemicals each year, and record keeping allows it to demonstrate any progress towards this goal.

Specific herbicide/pesticide usage, timing, and target species are always considered

based on site- specific factors and the season prior to usage. The Town only uses herbicide/pesticides recommended by certified contractors, consultants, Boulder County, Colorado State University Extension, and other professionals for the specific use. The lowest recommended application rates for effective weed control are always used, and chemicals which have the lowest toxicity and volatility; spot spraying is used wherever feasible. All herbicides used are selective for control of broadleaf weed species. Products are chosen carefully to not impact grasses or native species. As new products become available that may be less toxic and effective at lower use rates, the Town evaluates those products for adoption.

Licensing, Registration, and Notification

Any Town employee who works with controlled synthetic herbicides, fungicides, or pesticides must be certified with the Colorado Department of Agriculture through its pesticide application regulatory process. Otherwise, any applications of herbicides or pesticides are scheduled and completed by State of Colorado licensed contractors. Herbicide labels provide precautionary information relating to proximity to water, sensitive vegetation, re-entry intervals, etc., and must be adhered to. Product labels will be on-site and the applicable Colorado law concerning public notification and warning is followed by town staff and by any contractors. In addition, the Town and its employees and contractors comply with all Federal, State and Local regulations pertaining to purchase, storage, and application of pesticides and herbicides.

Notification of herbicide/pesticide applications in areas with public access is posted by the Town two days prior to and remains in place two days following the treatment. In addition, the Town notifies the public through electronic posting on the Town website at least two days prior to service and including a map of the area to be treated. Licensed contractors will flag areas as required by the Colorado Department of Agriculture on the day of service and flags will remain in place for at least two days following the service date. Also, the Town requires one week advance notification by its contractors to any residents on the state's Pesticide Sensitive Registry if synthetic herbicides are to be applied at locations abutting their residences.

Weed Management Principles

The following principles are incorporated into Lyons weed management decisions:

Prevention of the establishment of new weed infestations with early detection and rapid response. This principle underlines the importance of public outreach efforts in promoting noxious weed awareness including the impacts of noxious weeds and their identification.

The optimal timing for management is when weeds are in the early invasion stage. Small, isolated weed infestations are eradicated whenever possible to prevent a small problem from becoming a larger problem. Town employees need to make decisions without significant delays as one year of seed production could result in several years of needed control.

Weed management along roads and trails is a high priority. Public corridors serve as sites for introduction of weed species from other areas. It is important to keep these areas as free from particular invasive weed species as possible in order to prevent establishment in the local area, and to prevent movement of weed seed along these corridors onto adjacent sites.

Cultural control, the establishment of desired vegetation, prevents or slows down invasion by weedy species and is a key element of weed management. Weeds are typically opportunistic and readily invade disturbed sites. Establishment and promotion of perennial grasses and non-invasive species in public areas and along rights-of-ways improves roadside vegetation management.

Ongoing treatments facilitate cultural control. Throughout the growing season, contractors and staff help control of broadleaf and grassy weeds in mowed areas of Town parks and other Town- owned properties. Healthy turf and native grasses are a defense against unwanted weeds. The Town may apply non-synthetic fertilizers to promote healthy grass, in addition to aeration, top dressing, over seeding, and ensuring proper irrigation practices. Notification of upcoming turf fertilization in the town's public spaces is provided on the Town's web site and via email notifications.

Application for Use of Synthetic Herbicides in Town of Lyons

This form is used by personnel from Town departments or by Town contractors prior to any use of non-organic herbicides. A public record of approved and denied applications will be retained in order to help inform future practices and provide for a record of use.

Send Application to:

1. Director of Public Works and Parks, or designated representative
2. Chair, Ecology Advisory

Board Date:

Town Department or Contractor applying the chemicals (include contact information):

Chemicals to be applied (brand names and active ingredients):

Location Description (see attached map):

Dates and approximate times (include backup dates and times):

Method of Application:

Weed species to be controlled, and seed status:

Reasons other control measures including organic chemicals will not be adequate:

How unintended effects to people, and non-target plants, insects, and animals will be minimized:

I approve this application of the listed chemicals.

(Director of Parks and Public Works or designated staff; signature and date)