

**TOWN OF CARBONDALE
INTEGRATED
WEED MANAGEMENT PLAN
9/22/2019**

Resolution 13 Series 2019

Prepared by

The Weed Task Force
Town of Carbondale Public Works Department
The Town of Carbondale Parks and Rec Department
and
The E-Board

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SECTION I

INTRODUCTION

This plan is intended to be a standard for all public and private lands.

1.01 Purpose:

The purpose of the Integrated Weed Management Plan is to provide guidelines for effective land management to ensure healthy soils which are resistant to opportunistic non-native plants. This plan outlines and prioritizes protocols that further soil preservation, environmental health, and public health through a “*prevention, early detection, early treatment*” philosophy. This plan is a working document that identifies protocols and offers effective procedures for compliance with the Colorado Noxious Weed Act and the Garfield County Noxious Weed Management Plan on public lands within the Town of Carbondale pursuant to Chapter 7 Article 4 of the Carbondale Municipal Code. It shall reside as a “subdocument” which details integrated management protocols to the Public Works Master Plan [the Parent Document]. The appendix contains the Garfield County Noxious Weed Management Plan which is the guiding document for weed management protocol for the Town of Carbondale. The Plan shall be reviewed every (2) years for the first (4) years following adoption, then every (3) years.

The Plan references the following external documents (url’s listed in the Resource Directory, Section V and the Garfield County Noxious Weed List in the appendix.):

- State of Colorado Noxious Weed List
- Garfield County Noxious Weed List
- Garden Smart Colorado
- Other Natural Land Management resources

1.02 Mission Statement:

1. The health of our environment and community is a high priority to the residents and staff of the Town of Carbondale. This plan prioritizes environmental and community benefits from non-toxic solutions. It recognizes that multiple tools and strategies must be tailored to site specific needs to achieve the most effective weed management.
2. This plan recognizes that invasive plant species commonly dominate disturbed/poor soils and tend to persist on the landscape until the soil is improved and an optimal species is planted. The intent of the plan is to provide an integrated approach for building healthy soils that support healthy, desirable plant species.
3. This plan acknowledges the responsibility of local government to assure that

undesirable plants are effectively managed on public and private lands. Further, it is the responsibility of all landowners to use proactive and preventative methods for the healthy management of undesirable plants. The protocols utilized will prevent the spread and establishment of state, county and town declared undesirable or nuisance weed populations.

4. This plan is part of an effort by the town, having adopted the Healthy Eating Active Living (HEAL) Cities and Towns' resolution, to benefit the community through improving our environment and health.

1.03 Enactment Authority:

The Colorado Weed Management Act (C.R.S. 35-5.5-101, et. seq.) was signed into state law in 1990 and amended in 1996. Now known as the Colorado Noxious Weed Act (Act), it states that noxious weeds pose a threat to the natural resources of Colorado. The Act also directs that the governing body of each municipality shall adopt a Noxious Weed Management Plan for all land within the municipality. In addition to and independent of the powers elsewhere delegated by law, the governing body of the municipality may adopt and provide for the enforcement of such ordinances, resolutions, rules, and other regulations as may be necessary and proper to enforce said plan and otherwise provide for the management of noxious / undesirable weeds within the municipality, subject to the following limitations; No municipal ordinance, resolution, rule, other regulations, or exercise of power shall apply to unincorporated lands of facilities outside the corporate limits of the municipality, except such lands or facilities which are owned by or leased to the municipality.

The Mayor and Board of Trustees shall provide for the administration of the Integrated Weed Management Plan authorized by the Act through the use of agents, delegates, or employees and may hire additional staff or provide for the performance of all or part of the Integrated Weed Management Plan through outside contract. Any action initiated for the control of undesirable plants shall first consider soils amendment and seeding by appropriate plants. Any agent, delegate, employee, staff, or contractor applying or recommending the use of chemical management methods shall be certified by the Department of Agriculture for such application or recommendation.

1.04 Local Advisory Board

The Act directs the governing body of the municipality to appoint a local Weed Advisory Board. The local governing body may appoint itself, or a commission of landowners, to act as the local advisory board for that jurisdiction. In the Town of Carbondale, the Board of Trustees acts as the Weed Advisory Board, after weighing the council and advice of the E-Board. "The Environmental Board shall provide analysis and recommendation to the Town Board of Trustees..." regarding the "use of pesticides and herbicides". Resolution #7, 1998 (establishing the E-board)

The power and duties of the Weed Advisory Board (Board of Trustees) are as follows:

1. Develop a recommended Weed Management Plan for the integrated management of designated undesirable weeds and recommended management criteria for undesirable weeds within the Town of Carbondale. The Weed Management Plan must be reviewed at regular intervals but not less often than once every three years by the Weed Advisory Board.
2. Declare undesirable weeds for the Town and any state noxious weeds designated by rule to be subject to integrated management.
3. To provide notification to landowners requiring them to submit an integrated weed management plan to manage designated undesirable weeds on their properties.
4. Carry out sufficient measures, including project oversight and enforcement, as may be necessary to ensure the survival of healthy replacement plants and thus the effective eradication of list A species and populations of list B species designated for eradication or suppression by the commissioner.
5. Anytime chemicals are recommended for weed management to the Weed Advisory Board, the E-Board will have first reviewed the "Logs and Archive" of integral strategies pursued by staff, including the report from the Natural Land Management specialists to confirm that integral (chemical-free) management techniques have been exhausted. Town staff will consult with a Natural Land Management Specialist to determine the most beneficial and effective chemical management technique. Said specialists are listed in Reference Documents and will be updated yearly with the support and recommendation of Roaring Fork Food Alliance.

1.05 Duties of Affected Landowners or Occupants

Compliance: Private Lands:

A. Inspection.

1. The Town of Carbondale, through its delegates, agents, and employees, shall have the right to enter upon any premises, lands, or places, whether public or private, during reasonable business hours for the purpose of inspecting for the existence of undesirable weed infestations, when at least one of the following has occurred: (a) The landowner has requested an inspection; (b) A neighboring landowner or occupant has reported a suspected undesirable weed infestation and requested an inspection; or (c) An authorized agent of the local or state government has made a visual observation from a public right-of-way or area and has reason to believe that a undesirable weed infestation exists.
2. (a) No entry upon any premises, lands, or places shall be permitted until the landowner or occupant has been notified by certified mail that such inspection is pending. Where possible, inspections shall be scheduled and conducted with the concurrence of the landowner or occupant. (b) If, after receiving notice that an

inspection is pending the landowner or occupant denies access to the inspector of the local governing body, the inspector may seek an inspection warrant issued by a municipal, Town, or district court having jurisdiction over the land. The court shall issue an inspection warrant upon presentation by the local governing body, through its agent or employee, of an affidavit stating: i) the information which gives the inspector reasonable cause to believe that any provision of this article is being or has been violated; ii) that the occupant or landowner has denied access to the inspector; and iii) a general description of the location of the affected land. No landowner or occupant shall deny access to such land when presented with an inspection warrant.

B. Management.

1. If following inspection pursuant to section 5.01(A), land is found to contain designated undesirable plants, the landowner shall be given written notice, personally or by certified mail. The notice shall name the undesirable plants, identify the location of the plants, advise the landowner to control the undesirable plants, and specify the best available control methods of integrated management. The notice shall include an offer to consult with the landowner in the development of a management plan for the control of undesirable plants on the land. The notice also shall state that the landowner shall, within a reasonable time not to exceed 10 days, either (I) comply with the terms of the notification; (II) acknowledge the terms of the notification and submit an acceptable plan and schedule for the completion of the plan for compliance; or (III) request an arbitration panel to determine the final management plan.
2. If the landowner chooses action option I, the Town of Carbondale Public Works Department, or its representative, will re-inspect the land to confirm compliance.
3. If the landowner chooses action option II, the Town of Carbondale Public Works Department, or its representative will review the proposed weed management plan and determine its efficacy. If the plan is acceptable, no further action will be taken except to monitor compliance, including re-inspection.
4. If the landowner chooses action option III, an arbitration panel will be selected by the Board of Town Trustees, in accordance with CRS 35-5.5-109(4)(b). The state statute currently anticipates that the arbitration panel shall be comprised of a weed management specialist or weed scientist, a landowner of similar land in the same Town, and a third panel member chosen by agreement of the first two panel members. The landowner or occupant shall be entitled to challenge any one member of the panel, and the local governing body shall name a new panel member from the same category. The decision of the arbitration panel shall be final. A hearing shall be set for a time and date as soon as practical after the panel is complete. The Town of Carbondale Public Works Department, or its representative, shall give written notice, personally or by mail, of the hearing to

any complainant. The landowner is entitled to appear before the panel, individually and/or by representative, as is any complainant. The arbitration panel will be required to determine the final management plan not more than two calendar weeks after the hearing is completed. In the event of non-compliance with any management plan, in addition to remedies set forth in paragraph 5.01C. The arbitration panel shall have the ability to award cost of the arbitration to the prevailing party including arbitration panel fees and expenses. These fees and expenses may include, but are not limited to, salary, wages, travel, and per diem expenses.

C. Failure to Comply.

1. Public Nuisance.

If the landowner fails to comply with the notice to control the designated nuisance plants, fails to submit an acceptable management plan, fails to comply with an accepted management plan, or fails to comply with a management plan as determined by the arbitration panel, the Board of Town Trustees, at a public hearing at least 10 days after notice thereof to the property owner, may declare the infested property a public nuisance for which the remedies for abatement of a public nuisance shall be available as provided in C.R.S. 35-5.5-113. Once declared, such nuisances are subject to all laws and remedies relating to the prevention and abatement of nuisances.

2. Other remedies.

In addition to, or as an alternative to, the nuisance remedy Town of Carbondale may compel management of the weeds in the following manner: the Town of Carbondale Public Works Department, or its representative, shall give written notice of a hearing before the Board of Town Trustees to the landowner by personal delivery or by certified mail which will include the date and time of the hearing, 10 days prior to the hearing date. The notice will include (i) description of the land, (ii) name of the undesirable plants and their location(s) on the land, (iii) date the Town of Carbondale Public Works Department, or its representative, will perform weed control on the land, (iv) method of control to be applied, (v) a statement that the land will be assessed the entire cost of the weed control plus 20% surcharge for the cost of inspection and other incidental costs, which total will be a lien on the land (or the tract of which it is a part) until paid, and (vi) a statement should the landowner refuse admission to the land for application of the weed control, the Town will seek civil and/or criminal penalties and court-enforced abatement of a public nuisance. Such an assessment under this section shall have priority over all other liens except general taxes and prior special assessments may be certified by Town of Carbondale Public Works to the Town Clerk and collected and paid over in the same manner as provided for collection of taxes. Costs of providing for and compelling weed management shall not be assessed until the level of management called for in the notice or as

developed by the arbitration panel has been successfully achieved.

3. Other Occupants.

Whenever the land is known to the Town of Carbondale Public Works Department, or its representative, to be occupied by someone other than the record owner, written notices also shall be given to the occupant, and the occupant shall be informed that C.R.S. 35-5.5-109 and this regulation imposes on occupants the same responsibilities for undesirable plant control as it imposes on landowners.

4. Notice.

Whenever notice is given by mail, it shall be deemed given when deposited in a regular depository of the United States Postal Service, postage prepaid. Notice to landowners shall be mailed to the last known address as shown in the Town's Assessment Roll unless the landowner has provided the Town of Carbondale Public Works Department a different address for notice. Notice to occupants shall be mailed to the land's physical address unless the occupant has provided the Town of Carbondale Public Works Department with a different address for notice.

5. Condition Precedent.

No private land management shall be compelled without first applying the same or greater management measures to Town land or rights-of-way that are adjacent to the private property.

SECTION II

TOWN OF CARBONDALE'S UNDESIRABLE WEEDS

The Town's Weed Advisory Board encourages you to become more knowledgeable about specific weed species and effective and timely methods for their control.

Identification & Management Strategies

2.01 Integrated Weed Management - for Optimum Community Health:

The following recommendations are intended to be a reference for weed management in the Town of Carbondale. The management techniques prioritized in this plan include prevention, cultural, mechanical, biological strategies and as a last resort, chemicals. The information is not intended to be a complete guide to weed management. This plan includes consult with area Natural Land Management Specialists to exhaust all strategies named above before resorting to chemical control. Before using any chemical

on town managed land in Carbondale, it is necessary to get approval from the Board of Trustees, because Carbondale pursues an herbicide and pesticide free policy whenever possible. On an annual basis an assessment, well in advance of the growing season will take place, of the weed mitigation methods used per park and on other Town owned lands. The effectiveness assessment will utilize data compiled on the Parks Department & Public Works Department Weed Management Plan spreadsheets, which detail the methods, techniques, timing, and effectiveness of the methods of weed management presently being used. These documents also provide data on species of non-desirable plants not responding to the non-chemical treatment efforts. At this time a plan for the following growing season will be presented to the Environmental Board and to the Weed Advisory Board (Board of Trustees) for the use of an approved chemical treatment for the eradication of the weed in question, which will be identified by type, location, size of infestation, methods of chemical use, details of chemical used and the use regimen per location. In this manner Town staff, whom have been trained in the application of the herbicide, receive permission from the Board of Trustees acting as the Weed Advisory Board, to use an approved herbicide for the eradication of a noxious weed on Town lands. This plan uses the expertise of land managers for a long-term strategy that has the goal of long-term eradication and/or control of noxious weeds without uncontrolled proliferation. Any permission obtained to use herbicides from the board of Trustees must follow the label instructions. Any use of a herbicide inconsistent with the label's directions is illegal.

Prevention

As with the focus on preventative medicine for effective human health care, focus on soil health is the most effective strategy for the health of our land. Management of weeds is best achieved when the soil has abundant populations of microflora and fauna.

Microbes, fungi, mycelium, bacteria and zoospores are important inhabitants of soil. Upward of 500 different micro/macrosopic organisms inhabit a shovelful and form the backbone of healthy symbiotic plant systems. Chemical treatment may destroy these delicate organisms. Grasses cut too short make the organisms vulnerable to drying and overheating.

The use of heavy mulches such as wood chips can greatly assist in the prevention of undesirable species taking the opportunity to colonize bare soils.

To rapidly improve soil quality, apply a 1" plus layer of compost, or apply compost tea, as a more effective method than synthetic fertilizer. Soils densely seeded with desirable species, watered and allowed to fully cycle through its growth, flower, seed, dying back and then laying down under snow will repair the worst clays or sands.

Biological

Biological weed control involves the utilization of natural enemies for the control of specific species.

Cultural Techniques

When appropriate, a controlled burn on a field or hillside and seeding the area with desirable species shortly afterward, and watering or when rain is promised, can be an effective way to be rid of the weed and change the composition of plants in an area, in Spring or Fall. This method may be preferable to mechanically plowings, harrowing, composting, seeding and watering.

Inserting plugs of a desirable native plant in an appropriate environment can be an effective biological technique. Introducing aggressive native plants or insects may help to overwhelm the undesirable plants.

The most suitable plants are locally adapted native species on healthy soil, and will usually out compete plants better suited to poor, dry, and disturbed earth.

Use of mulch, compost, compost teas will increase soil fertility and optimize moisture levels to improve soil quality and create less opportunity for weed colonization.

Use of a burn down non-selective organic herbicide is also a method of broad leaf weed control.

Mechanical

Pulling weeds before flowering is the most familiar of the mechanical controls which when done thoroughly and followed by compost and seeding can offer multi-year protection. Steam can also be used to kill or slow the growth of undesirable weeds.

The optimum method or methods for weed management will vary depending on a number of site-specific variables. Factors to be considered should include soil type and stability, grade, associated vegetation, existing and proposed land use, proximity to water, availability of irrigation water, weed type and stage of growth, and density of the undesirable plant. The management method selected should be the least environmentally damaging, yet practical and reasonable in achieving the desired results. When considering plant management on a property, work on the areas that may transport undesirable seeds. These areas include ditches, streams, roadsides, driveways, trails, livestock concentrated areas, and equipment storage sites.

Paradigm Adaptation

Carbondale designated the Dandelion the town flower. This action not only promotes tolerance and appreciation of the nutritious and healing properties of the plant, but also the desire of the town to manage its parks and public lands without chemicals. Many of the plants on the state list have beneficial and medicinal properties. Maintaining balanced land and soil can allow for beneficial uses of plants while keeping them from becoming a nuisance or greater problem.

2.02 Town of Carbondale Undesirable Plant Identification Guide & Control

Methods utilizing the State and County Noxious Weed lists

The State of Colorado list of plant species that are designated as undesirable weeds are designated by law and shall be managed under the provisions of the Colorado Noxious Weed Act and the provisions within this Management Plan. The State presently has designated 81 plants as State Noxious Weeds. The commissioner has classified undesirable weeds into three categories, including; "List A", contains 25 rare undesirable weed species that are subject to eradication wherever detected statewide in order to protect neighboring lands and the state as a whole ; "List B", contains 40 undesirable weed species with discrete statewide distribution that are subject to eradication, containment, or suppression in portions of the state designated by the commissioner in order to stop the continued spread of these species ; "List C", contains 16 weed species that are widespread and well-established undesirable weed species for which control is recommended but not required by the state, although local governing bodies may require management . There are 24 species on the watch list.

In addition to the list of weeds designated by the State of Colorado, the Town of Carbondale Weed Advisory Board (Board of Trustees) will use the Garfield County Noxious Weed list as a guiding document which more specifically identifies certain plants as undesirable weeds in our area and is continually being updated. This list and control mechanism are listed in the appendix. See Appendix for full guide and fact sheets for weed control mechanisms.

SECTION III

JURISDICTIONAL OVERVIEW OF AREAS OF INFESTATION IN TOWN OF CARBONDALE

3.01 Overview:

The Town has adopted a "*prevention, early detection, early treatment*" philosophy. Early detection is identifying and documenting recently introduced undesirable weed species into an area. Early treatment is the management of the land that could keep these plants from becoming a problem.

3.02 Town Land:

Town property is categorized as Roads, Right-Of-Ways, Parks, Trails, and Open Space. Currently we have 26 miles of roads and 160 acres of parks, athletic fields, bike trails

and open space.

These properties will be managed according to the guidelines set forth in the Carbondale Integrated Weed Management Plan.

3.03 Procedure for Tracking Weed Management Techniques for Town-owned Parcels:

Town staff will document weed mitigation techniques for various Town owned parcels using two tracking tools. One tool contains specific techniques used on parks that have historically required different techniques of weed management vs. our turf covered parks (templates in appendix with yearly actuals link in Resource Directory) The second spreadsheet is a Public Works & Parks Department Integrated Weed Management Log. This is to be filled out by staff to document integrated weed management efforts on a specific location and is customizable to that location (templates in appendix). Both documents include incorporating the recommendations of consultation with a Natural Land Management Specialist as part of the process and data collection.

SECTION IV

PLAN OF WORK

4.01 Objectives and Goals:

Goals and Objectives of the Town of Carbondale Integrated Weed Management Plan

1. Develop and implement a comprehensive integrated weed management program on all Town-owned property.
2. Educate the public and commercial entities concerning integrated weed management and soil health and health issues.
3. Foster a spirit of cooperation among federal, state and local government agencies and private landowners.
4. Work with other government agencies and departments to institute "Best Management Practices" and/or policies that emphasize soil health and prevention as integrated weed management tools.
5. Promote and use integrated management techniques that prioritize an herbicide-pesticide free environment.
6. Establish and maintain healthy plant communities with native or beneficial vegetation.
7. Restore and maintain desirable plant communities, healthy ecosystems, and productive agricultural lands in and around the Town of Carbondale.
8. Prevent the spread of undesirable weeds to healthy lands.
9. Contain, mow, burn, compost, reseed and water weed-infested areas.
10. Implement "Title 35 Article 5.5, The Colorado Weed Management Act."

Management Goals for Weed Species

Management goals will vary from species to species, by location, and over time. For some species, such as yellow star thistle, complete eradication of existing infestations and total suppression of newly identified infestations is feasible and appropriate. Containment of existing intentional plantings, exclusion of seed from new wild land or open space mixes, and elimination of targeted escaped infestations are three different management goals for certain ornamentals such as oxeye daisy. Russian knapweed, salt cedar, and Russian olive infestations are so widespread that they must be managed, in many cases, merely for containment and reduction in the rate of spread. Eradication of these stands may only be viewed as impossible in some instances, or as a long-range objective.

In all cases, revegetation, either from the existing seed bank or through supplemental

planting, must be included as a management goal. Without revegetation, disturbed or denuded soils invite adventitious weed infestation.

4.02 Prevention and Detection:

Prevention is the highest priority weed management technique on non-infested lands. It is the most economical and efficient land management practice.

The spread of undesirable weeds is most likely to occur where soil has been disturbed either by human activities (road and trail cuts, construction sites, the spread of gravel, road fill and topsoil contaminated with undesirable weed seed, or overgrazing) or by natural events (fire, avalanches, mudslides, flooding). Disturbed land provides opportunity for undesirable weeds.

Exotic plants and seeds such as oxeye daisy, purple loosestrife, chicory, toadflax, and Russian olive escape from our yards and gardens. Since they are attractive and establish themselves quickly, they are popular with landscapers and gardeners for ornamental planting and may be purchased through nurseries. They have the same ability to dominate and spread, however, as other better-known undesirable weeds.

Still other known methods of weed introduction include:

- Contaminated seed, feed grain, hay, straw, and mulch.
- Movement of contaminated equipment, cars, bikes, etc. across uncontaminated lands.
- Animal fur, fleece, human clothing.
- Dried flower arrangements.

Prevention is best accomplished by ensuring that new weed species seed or vegetative reproductive plant parts of weeds are not introduced into new areas, and by early detection of any new weed species before they become widespread.

STRATEGIES to prevent the introduction or establishment of undesirable weeds in areas not already infested include:

- Identification and mitigation or eradication of small, new infestations.
- Continuous monitoring and evaluation of soil health and irrigation to prevent recurrence.
- Identification of existing conditions, disturbances, and activities that represent a potential threat to native habitat.
- Identification of recently introduced weed species that represent a future threat.
- Timely revegetation and reclamation of disturbed sites using appropriate native plant species.
- The use of weed free seeds and mulch.

- Town wide promotion of the Colorado Weed Free Hay and Forage program.
- Prioritization of weed management along areas of entry and dispersal.
- Discouraging the sale of weedy ornamental plants and seed packets that contain weeds.

SOIL HEALTH AND DESIRABLE PLANT DENSITY IS THE MOST EFFECTIVE NOXIOUS WEED CONTROL AVAILABLE.

4.03 Town of Carbondale Gravel Purchase Guidelines

Providing that there is a gravel pit between Glenwood Springs and Aspen that meets the criteria below, the Town shall require the following before agreeing to purchase any gravel for Town projects:

1. The gravel pit shall be inventoried and mapped by the pit operator for all plant species on Town of Carbondale’s undesirable weed list on an annual basis.
2. The gravel pit operator shall provide the Town with a weed management plan. Undesirable weeds shall be treated prior to seed formation.
3. The gravel pit operator must supply the Town with a detailed treatment record.

If no gravel pits between Glenwood Springs and Aspen meet these criteria, the Town will work with the gravel pits in this region to get them to follow the procedures outlined above.

4.04 Education, Awareness and Notification:

Education must play a major role in implementing this weed management plan. Groups targeted for public education include the following: farmers and ranchers, homeowners’ associations, private citizens, developers, gardeners, landscapers, nurseries, material suppliers, public and private land management agencies, recreational users, youth groups, schools, oil and gas companies, pipelines, and other utilities.

A partnership of the public and private sectors, along with awareness of what undesirable weeds are and the problems they cause, is essential to maintain or create plant communities that are free of undesirable weeds. Knowledge about how to identify weeds, how and where weeds are spread, and what it takes to manage weeds is needed. Continuation and expansion of current educational programs as well as the development of new programs is a priority of the Town of Carbondale Integrated Weed Management Plan. The Town of Carbondale Public Works Department and/or other governmental agencies will provide this instruction. Workshops will be held throughout the year to enhance public awareness. Opportunities for education include: Widespread distribution of informative printed material.

- Offering soil health tours and demonstrations of how to produce healthy soils.

- Offering weed tours and talks to the public.
- Offering medicinal and edible plant tours.
- Contacting area nurseries, landscapers, and landscape architects, to emphasize the problems created by escaped ornamentals.
- Cooperation with local media to disseminate weed information.
- Custom weed management recommendations for individual landowners along with supplying soil enhancement techniques and native plant lists.
- Private applicator certification, applicator safety, and laws/regulations.
- Proper calibration of spraying equipment.

Notification of Herbicide Use

1. Public Registry- town staff will establish a program for the registration of all pesticide sensitive (*interested*) residents so they may be informed, at minimum, within a 48 hour window before the application of an airborne herbicide.
2. On-site Posted Notification- Any town staff that uses any herbicides should comply with the following on-site notification procedure: Signs should be posted at all usual public and employee points of entry to the treated area and pursuant to State or Federal law, regulation and by product label instructions. Signs should be posted two (2) days in advance of application and remain in place for the re-entry interval as determined by the product label or regulation. Signs should contain the name and active ingredient of the herbicide product, the target plant, the actual date of application, the re-entry interval as determined by the product label or regulation, and the name and contact number for the town department responsible for the application. Signs should be of a standardized design that are easily recognizable to the public and workers.
3. Posted Notification on Town of Carbondale website of herbicide application on town property.

4.05 Land Stewardship:

The Colorado Noxious Weed Act requires that all property owners use integrated methods to manage undesirable weeds. Weed management must be ongoing, requiring an integrated approach in which proper land stewardship practices are utilized. Most weed species, if detected early, can be managed.

STRATEGIES:

- Identify your plants, and their growth variables.
- Judge the soils health and water availability.
- Understand the target weed. Does it reproduce by seed, roots, or both is it annual, biannual or perennial?
- Maintain inventory maps.

- Can it be isolated to plow, compost and reseed?
- Develop a Desirable/ Native Plant database.
- Review the towns Undesirable Weed Database.
- Develop site-specific plant management plans in cooperation with other individual landowners and public agencies.
- Develop a decision-making process that uses site-specific information to make decisions about treatment choices.
- Develop a long-term strategy for soil health including regular monitoring of treatment areas.
- Alleviate the situation, or practices, that allowed the soil to deteriorate and weeds to spread.
- Take the necessary action.

MAINTAINING ECOSYSTEMS THAT ARE DIVERSE, SUSTAINABLE, RESILIENT AND FREE OF WEEDS IS GOOD STEWARDSHIP. LANDOWNERS WHO DO NOT MANAGE THEIR SOILS TO PROMOTE DESIRABLE PLANTS INSTEAD OF WEEDS PLACE THEIR NEIGHBORS' LANDS AT RISK.

4.06 Revegetation and Rehabilitation:

A crucial part of any integrated weed management plan is the introduction of site appropriate vegetation.

Establishing a desirable plant community after undesirable weeds have been removed from a highly infested area requires timely cultivation and reseeded. Since the seeds from undesirable weeds may lay dormant for many years, removing all visible signs of the undesirable weeds does not ensure against their return.

Revegetation is the best remedy to prevent the germination of weed seeds. It is important to inspect the land regularly to identify and treat small, new infestations by improving the soil and planting desirable plants. For the highest chance of successful revegetation, managed irrigation of dry areas, fertilization, and reseeded are beneficial in establishing desirable plant communities.

Native plants are most appropriate when the goal is restoration (trying to restore native habitat). Weed-free seeds of native Colorado grasses, wildflowers or plant species appropriate to the site may be purchased, but the best source for seeds is from native species that grow in the immediate vicinity of the area to be planted. They will be best adapted to local conditions and will help maintain local integrity and genetic viability. Using native plants or seeds to reclaim disturbed land reduces degradation of native ecosystems, reduces the need for herbicides and conserves water resources. Native plants will provide a broad biological diversity and help

keep Colorado looking like Colorado with a unique regional landscape that sets us apart from other areas of the country.

When the goal is revegetation (reseeding for quick ground cover establishment or erosion control), it may be appropriate to use introduced, non-aggressive grasses and forbs. One should consider the benefits to the soil by utilizing native, appropriate vegetation.

Contact the Natural Resources Conservation Service or Colorado State University Cooperative Extension for seeding recommendations. The *Native Plant Revegetation Guide for Colorado*, <http://cpw.state.co.us/Documents/CNAP/RevegetationGuide.pdf> published by the Colorado State Parks Natural Areas Program, is an excellent guide for native plant reseeding. Contact the Town of Carbondale Public Works office for further information on this material.

STRATEGIES:

- Study all vegetation in the area and surrounding areas.
- Preserve plant species native to Colorado.
- Test the soil for pH balance and micro biome health by using the Haney and PLFA soil tests that are recommended by the Natural Resource Conservation Service (NRCS.).
- Retain, improve and utilize as much on-site topsoil as possible.
- Select a predominant species that is appropriate to the site. Then choose a few complimentary species to provide a balanced plant community.
- Choose plants that are healthy, vigorous and pest free.
- Use weed-free seeds. Use non-hybrid seeds. Avoid commercial seed packets containing exotic plant species.
- Choose plants that are horticulturally appropriate, i.e. plant species that are adaptable to climate, soil and topographical conditions of the designated area.
- Chose native plants to improve indigenous habitat, enhancing the area for human and animals.
- Consider the use of water, its availability and the vegetative requirements.
- To landscape for wildlife, choose native plants that provide cover, forage, browse, seeds for birds and rodents, and shade.
- Be site-specific; revegetation strategies may vary for small lots, farms, ranches or construction sites.
- Establish a vegetative cover that is diverse, effective and long lasting, capable of self-regeneration and appreciated by wildlife and people.
- Stabilize the surface with proper ground cover.

4.07 Requirements:

At the discretion of the Board of Town Trustees, as part of the Planning and Zoning approval process, for land disturbances outside the building envelope in excess of 2 acres, the Town may require, a preliminary plan and prior to Final Plat, the following items:

A Soil Plan to include:

- Provisions for salvaging and storing on-site topsoil.
- A timetable for utilizing topsoil and/or aggregate piles.
- A plan that provides for soil cover if any disturbances or stockpiles will sit exposed for a period of 90 days or more.

Revegetation Plan to include: Plant material list (be specific, scientific and common names required).

- Planting schedule (to include timing, methods, and provisions for watering, if applicable).
- A map of the area impacted at preliminary plan (where the soil will be disturbed).
- A revegetation bond. (Agricultural practices are exempt from revegetation requirements unless they are in association with a subdivision or land use proposal).

A revegetation security deposit may be required if, in the determination of the Board of Town Trustees, the proposed project has:

- A potential to facilitate the spread of undesirable weeds.
- A potential to impact watershed areas.
- A potential for visual impacts from public viewing corridors
- Steep slopes (15% or greater) or unstable areas.
- Disturbs large areas (Half an acre or greater).

The revegetation security deposit will be in an amount to be determined by the Board of Town Trustees, their engineers and pertinent professionals that will be site-specific and based on the amount of disturbance. The Town of Carbondale shall hold the security deposit until vegetation has been successfully re-established according to the following Reclamation Standards. The Board of Town Trustees will designate the Public Works Director to evaluate the reclamation prior to the release of the security deposit.

4.08 Reclamation Standards

A. Site stability

1. The reclaimed area shall be stable and exhibit none of the following characteristics:
 - a) Large rills or gullies. (Though appropriately sized rills can be used to hold water and create a favorable microclimate to encourage plant growth on especially unfriendly surfaces. (See Coal Basin Revegetation Practices Sopris USFS)
 - b) Perceptible soil movement or head cutting in drainages.
 - c) Slope instability on or adjacent to the reclaimed area.
2. Slopes shall be stabilized using appropriate reshaping and earthwork measures, including proper placement of soils and other materials.

B. Soil Management

Topsoil management shall be salvaged from areas to be disturbed and managed for later use in reclamation.

C. Erosion Prevention

The surface area disturbed at any one time during the development of a project shall be kept to the minimum necessary and the disturbed areas reclaimed within ninety days to prevent unnecessary or undue degradation resulting from erosion.

1. The soil surface must be stable and have adequate surface roughness to reduce run-off, capture rainfall and snow melt, enhance seeding and allow for revegetation.
2. Application of certified undesirable weed free mulch or erosion netting may be necessary to reduce soil movement, retain soil moisture, and promote revegetation.
3. Soil conservation measures, including surface manipulation, reduction in slope angle, revegetation, and water management techniques, shall be used.
4. Sediment retention structures or devices shall be located as close to the source of the sediment generating activities as possible to increase their effectiveness and reduce environmental impacts.

D. Revegetation

When the final landform is achieved, the surface shall be stabilized by vegetation or other means to reduce further soil erosion from wind or water, provide forage and cover, and reduce visual impacts. Specific criteria for evaluating revegetation success must be site-specific and included as a part of the reclamation plan.

1. Vegetation production, species diversity, and cover, shall support the post-disturbance land use. Areas where the post-disturbance land use does not include lawns, gardens, and flower beds; shall approximate the surrounding undisturbed area or be revegetated to a desired plant community with a composition of species and plant cover typical to that site.
2. The vegetation shall stabilize the site and support the planned post-disturbance land use, provide natural plant community succession and development, and be capable of renewing itself. This shall be demonstrated by:
 - a) Using certified undesirable weed free seed.
 - b) Successful onsite establishment of the species included in the planting mixture and/or other desirable species.
 - c) Evidence of vegetation reproduction, either spreading by rhizomatous species or seed reproduction.
 - d) Evidence of overall site stability and sustainability.
3. The revegetation plan shall provide for the greatest probability of success in native or desirable plant establishment and vegetation development by considering environmental factors such as seasonal patterns of precipitation, temperature and wind; soil texture and fertility; slope stability; and direction of slope faces.
4. To insure the establishment of a diverse, preferably native and long-lasting vegetative cover, the permitted shall employ appropriate techniques of site preparation and protection, species diversity should be selected for long-term land uses and to provide for a reduction in visual contrast.
5. Where revegetation is to be used, a diversity of vegetation, preferably native species that shall be used to establish a resilient, self-perpetuating ecosystem capable of supporting the post-disturbance land use. Species planted shall include those that will provide for quick soil stabilization, provide litter and nutrients for soil building and are self-renewing.
6. Integrated Weed Management (IWM) methods shall be employed for all undesirable weed species on the Town of Carbondale List. IWM methods shall be used whenever undesirable weeds in the reclaimed area threaten nearby areas where revegetation is impractical or inconsistent with the surrounding undisturbed areas, other forms of surface stabilization shall be used.

Contact the Public Works Director for the Town of Carbondale public works department, at 970-510-1217 for information on integrated weed management and reclamation. Contact Natural Resources Conservation Service, at 970-945-5494, ext. 101, for reclamation and seeding recommendations.

4.09 Mapping and Inventory:

Mapping is a valuable tool in integrated weed management. As such, the public works director will establish and maintain visual maps of past and present infestations of undesirable weeds on Town land. This will provide a graphic representation of weed management progress and needs. The primary goal of mapping will be to record the desirable or undesirable plant species present, areas inhabited, density of habitation, and other site factors pertinent to successfully managing the land.

SECTION V

RESOURCE DIRECTORY AND SOURCES OF INFORMATION

5.01 Reference Documents

Pitkin County Revegetation Guidelines

<http://pitkincounty.com/515/Revegetation>

Palisade Insectary Biological Control insects

<https://www.colorado.gov/pacific/agconservation/biocontrol/>

Colorado Native Plant Revegetation Guide

<https://cpw.state.co.us/Documents/CNAP/RevegetationGuide.pdf/>

Garden Smart Colorado-Colorado Native Plant Society

https://conps.org/wp-content/uploads/2015/05/Garden_Smart_Colorado.pdf/

Colorado Native Plant Society

<https://conps.org/gardening-with-native-plants/>

Pitkin County Revegetation Guide

<http://pitkincounty.com/DocumentCenter/Home/View/2108/>

State Of Colorado Noxious Weed List

<https://www.colorado.gov/pacific/agconservation/noxious-weed-species/>

Garfield County Noxious Weed List

<http://www.garfield-county.com/vegetation-management/noxious-weed-list.aspx/>

Native Plant Conservation Initiative

<http://www.nature.nps.gov/npci/>

National Wildlife Federation, Garden to help wildlife

<http://www.nwf.org/>

How to Garden finely

<http://www.finegardening.com/how-to/managing-soil/>

Jerome Osentowski's Educational Videos on Natural Weed Control 4

<https://www.youtube.com/watch?v=HEIAe1ghhNQ>

- <https://www.youtube.com/watch?v=zpTZCf67YZE>

- <https://www.youtube.com/watch?v=f0o-U4JApRA>

- <https://www.youtube.com/watch?v=vPeLrMSr-pY>

info on the Haney Test from the USDA

http://www.usda.gov/oce/forum/past_speeches/2013_Speeches/Haney.pdf

5.02 Natural Land Management Specialists

Stephanie Syson

Dynamic Roots - High Altitude Herbals

www.dynamicroots.com/about.html/

Brook LeVan

Sustainable Setting Ranch

<http://sustainablesettings.org>

Ginger Jansen

Basalt Mountain Gardens

basaltmtngardens@gmail.com

Lisa Dinardo

(former Town of Basalt Arborist/Horticulturist)

sweetbirchxoxo@yahoo.com

John Buerger

ALPHA Natural, Inc.

www.alphanaturalconsulting.com

5.03 Government & Other Organizations

CSU Extension Agent, Abi Saeed

Agriculture/Horticulture abi.saeed@coloradostate.edu
970-625-3969 x 2

Garfield County Vegetation Management Department
Garfield County Vegetation Manager
Steve Anthony 945-1377 x 4305
santhony@garfield-county.com

Garfield County Program Coordinator
Sarah LaRose 970-945-1377 x 4315
slarose@garfield-county.com

Bureau of Land Management
Colorado River Valley Field Office
2300 River Frontage Road Silt, Colorado 81652
970-876-9000 v. 970-876-9090 f
<http://www.blm.gov/co/st/en/fo/crvfo.html/>

Colorado Department of Agriculture
State Weed Coordinator
305 Interlocken Parkway
Broomfield CO 80021
303-869-80021
<https://www.colorado.gov/agmain/>

Colorado Department of Ag. Insectaries
P.O. Box 400, 750 37.8 Rd.
Palisade, CO 81526
(970) 464-
7916 <https://www.colorado.gov/pacific/agconservation/node/58531#BiocontrolContact>

Colorado Parks and Wildlife
50633 US Hwy 6 & 24
Glenwood Springs, CO 81601
(970) 947-2920

Colorado Department of Transportation
Sarah Tunget

226 S. 6th St., Room 317
Grand Junction, CO 81501
(970) 683-6250
<https://www.codot.gov/programs/environmental/landscape-architecture/>

Colorado State University
Extension Weed Science Specialist
116 Weed Lab
Ft. Collins CO 80523-1177
(970) 491-7568
<http://bspm.agsci.colostate.edu/outreach-button/weed-science-information/>

Colorado State University Master Gardening Program
Cooperative Extension
PO Box 1112
Rifle, CO 81650
(970) 625-3969
www.extension.colostate.edu/garfieldcounty/

Colorado Weed Management Association
PO Box 419
Hotchkiss, CO 81419 Phone: 970-361-8262
<http://www.cwma.org/HealthyLandscapes.html>

Eagle Town Weed Dept
PO Box 250
Eagle, CO 81631
(970) 328-3546
http://www.eaglecounty.us/Weeds/Weed_Control/

Town of Rifle Public Works
PO Box 1112
Rifle, Co 81650
(970) 625-3969

Natural Resources Conservation Service
Bookcliff Soil Conservation District
Mount Sopris Soil Conservation District
Southside Soil Conservation District
<http://www.mountsopriscd.org/>
PO Box 1302
Glenwood Springs, CO 81601(970) 945-5494

Pitkin Land Management

<http://www.pitkincounty.com/423/Land-Management/>

76 Service Center Road

Aspen, CO 81611

(970) 920-5214

Roaring Fork Transportation Authority

<http://www.rfta.com/>

PO Box 1270

Carbondale, CO 81623

(970) 704-9282

White River National Forest

<http://www.fs.usda.gov/land/whiteriver/landmanagement/>

900 Grand Ave.

Glenwood Springs, CO 81601

(970) 945-2521

5.04 Tracking Logs for Integrated Weed Management on Town Lands

Individual Parks Weed Management Plans Template

[https://www.carbondalegov.org/departments/parks & recreation/parks.php](https://www.carbondalegov.org/departments/parks_recreation/parks.php)

Public Works Manual with template for weed management for Public works maintained Town properties

<https://www.dropbox.com/sh/53plcc6fd7x86jq/AAACEc19M0UvzNcUeWiLihUja?dl=0>

5.05 Herbicide Information

Colorado Weed Management Association

<http://www.fortnet.org/CWMA>

<http://www.cwma.org/>

Bureau of Land Management

<http://www.blm.gov/education.html>

Pesticide Information

http://164.159.187.239/NWRSFiles/Internet_resources/Pesticide.html/

Noxious Weeds, Exotic and Invasive Plant Management Resources

<http://164.159.187.239/NWRSFiles/InternetResources/Weeds.html/>

Weed Science Society of America
<http://piked2.agn.uic.edu/wssa/>

Colorado Natural Heritage Program
<http://colostate.edu/Orgs/CNHP/>

Colorado Natural Areas Program
<http://elbert.state.co.us/cnap/>

Chemical Label Information
<http://greenbook.net/>

Search engine for labels
www.cdms.net/

5.06 Books

Weeds of the West
http://www.barnesandnoble.com/p/weeds-of-the-west-tom-d-whitson/1100001733/2682100677337?st=PLA&sid=BNB_DRS_Marketplace+Shopping+T_extbooks_00000000&2sid=Google_&sourceId=PLGoP20436&k_clickid=3x20436/
University of Wyoming Bulletin Room
(307) 766-2115

Colorado Flora, Western Slope
William Weber and Ronald Wittman
<http://www.upcolorado.com/university-press-of-colorado/item/1939-colorado-flora/>

Native Plant Revegetation Guide for Colorado see book here
<http://cpw.state.co.us/Documents/CNAP/RevegetationGuide.pdf/>

Colorado Natural Areas Program
<http://cpw.state.co.us/aboutus/Pages/CNAP.asp/>
(303) 866-3437

Trees and Shrubs of Colorado
<http://www.amazon.com/Trees-Shrubs-Colorado-Jack-Carter/dp/0961994509/>
By: Jack Carter
Available in most bookstores
Troublesome Weeds of the Rocky Mountain West

Colorado Weed Management Assoc.

Available through Town of Carbondale (970) 625-3969

Biology and Management of Noxious Rangeland Weeds

<http://www.amazon.com/Biology-Management-Noxious-Rangeland-Weeds/dp/0870714619/>

University of Arizona Press

1230 N. Park Ave. Suite 102

Tucson, AZ 86719

1-800-426-3797

SECTION VI

6.01 DEFINITIONS

1. Act – The Colorado Noxious Weed Act, Title 35 C.R.S., Article 5.5 as amended.
2. Adjacent – Having a common boundary that meets or touches at some point.
3. Aggressive – Fast growing, tending to spread quickly.
4. Agriculture – Uses involving the cultivation of land, production of crops, and/or the keeping of livestock and the preparation of these products for man’s use and disposal.
5. Alien Plant – A plant species that is not indigenous to the State of Colorado.
6. Annual – A plant that lasts one growing season, completing its life cycle from seed to seed in one year.
7. Biennial – A plant that lives in two calendar years. The first year is usually a vegetative form, such as a rosette of leaves. The second year the plant grows a flowering shoot, sets seeds and dies.
8. Biological Management – The use of organisms to disrupt the growth of noxious weeds.
9. Bolt – To flower or produce seeds prematurely or develop a flowering stem from a rosette.
10. Bract – A reduced or modified leaf often surrounding the base of a flower.
11. Browse - Tender shoots, twigs, and leaves of trees and shrubs fit for food for wildlife.
12. Chemical Management – The use of agents or plant growth regulators to disrupt or inhibit the growth of undesirable weeds. Anything that doesn’t fit into Cultural, Biological, Mechanical or Preventative strategy got weed control.
13. Commissioner – The commissioner of the State Department of Agriculture or his or her designee.
14. Cultural Management – Methods or management practices which favor the growth of desirable plants over undesirable weeds, including maintaining optimum fertility and plant moisture status in an area, planting at optimum density and spatial arrangement in an area, and planting species most suited to a particular area.
15. Designated Noxious Weed – A non-native, invasive plant or plant parts that is identified as a threat to native plant communities and included on the Town of Carbondale Noxious Weed list.
16. Desirable Plants – Plants considered to be advantageous and beneficial to the Town.
17. Escaped Ornamental -A plant originally intended for horticultural or landscape situations that has escaped its intended boundaries.
18. Exotic Plant – A plant that is not a regular member of the native or natural community in which it is found.
19. Forb - A broad-leafed, non-woody plant other than grass that dies back to the

- ground after each growing season.
20. Forage - Food for animals, especially when taken by browsing or grazing.
 21. Town of Carbondale Weed Advisory Board – A group of individuals appointed by the Board of Trustees of Town of Carbondale to advise on matters of management of undesirable weeds, or the Mayor and Board of Trustees acting as the advisory board.
 22. Herbaceous - Applies to plants of soft texture whose stems die back to the ground after each growing season; green and leaf like, not woody.
 23. Infestation – Growth of an undesirable plant, which has become harmful or bothersome. Referred to in this document as (densely inhabited)
 - ◆ Heavy Infestation – Dense, 25-100 percent canopy cover.
 - ◆ Moderate Infestation – Widely scattered plants, 5-25 percent canopy cover.
 - ◆ Light Infestation – Occasional plant per acre, less than 5 percent canopy cover.
 24. Integrated Management – The planning and implementation of a coordinated program utilizing a variety of methods for managing undesirable weeds, the purpose of which is to achieve desirable plant communities. Such methods may include but are not limited to education, preventive measures, good stewardship, biological, cultural, mechanical management, and chemical/herbicide management.
 - (a) Biological Management means the use of an organism to disrupt the growth of undesirable weeds.
 - (b) Cultural Management means methodologies or management practices that favor the growth of desirable plants over undesirable weeds, including maintaining an optimum fertility and plant moisture status in an area, planting at optimum density and spatial arrangement in an area, and planting species most suited to an area.
 - (c) Mechanical Management - means methodologies or management practices that physically disrupt plant growth, including tilling mowing, burning, flooding, mulching, hand-pulling, hoeing, and grazing. Always to be followed by soil enhancement and planting of desirable species.
 - d) Chemical Management means the use of herbicides or plant regulators to disrupt the growth of undesirable weeds.
 25. Invasive – Aggressive, capable of invading a plant community and creating a monoculture...
 26. Invasive Ornamental -A plant originally intended for horticultural or landscape situations that has escaped its intended boundaries and is capable of invading a plant community and creating a monoculture
 27. Landowner – Any owner of record of state, municipal or private property including an owner of any easement, right-of-way, or estate within the Town.
 28. Lobe - A division or segment of a leaf or other plant part, especially a rounded one.
 29. Local Undesirable Weed – Any plant of local importance, which has been declared an invasive or undesirable plant by the Town of Carbondale Weed

Advisory Board.

30. Management – Any activity that prevents a plant from establishing, reproducing, or dispersing itself.
31. Management Plan – A plan developed by the local Weed Advisory Board and implemented by the Board of Trustees in order to control the spread of undesirable weeds.
32. Mechanical Management – Methods or management practices that physically disrupt plant growth including tilling, mowing, burning, flooding, mulching, and hand-pulling, shoveling, hoeing and chopping.
33. Monoculture – A single homogeneous crop without diversity.
34. Native Plant – A plant species that is indigenous to a particular locale.
35. Neighboring – Any property located within a one-half mile radius of the boundary of a subject property.
36. Noxious Weed referred to in this document as Undesirable – An alien plant or parts of an alien plant that has been designated as being invasive and undesirable and has been declared a undesirable weed by the Town Weed Advisory Board and meets one or more of the following criteria:
 - a) aggressively invades or is physically destructive to economic crops or native plant communities;
 - b) is detrimental directly or indirectly to the environmentally sound management of natural or agricultural ecosystems;
 - c) is poisonous to livestock;
 - d) is a carrier of detrimental insects, diseases or parasites.
37. Natural Land Management Specialist--A published specialist/ expert in the natural, non-chemical management of plants, noxious, undesirable or otherwise who has at least 3 years experience.
38. Ornamental - A decorative, aggressive, non-native plant often sold through nurseries or spread through seed collection; a threat to native plant species because it has no natural predators and thus competes against the plants of the natural ecosystem.
39. Perennial - A plant that grows for three years or more. Usually flowering and producing fruit each year. The above ground part of the plant may die, but new growth comes from the roots or the crown each spring.
40. Petiole - A slender stem that supports the blade of a foliage leaf.
41. Rhizome - An elongated subterranean plant stem that produces shoots above and roots below, and is distinguished from a true root by possessing buds, nodes and scale like leaves.
42. Rosette - A cluster of closely crowded leaves in a compact circle, usually at ground level.
43. Undesirable Weed - A plant on the state's noxious weed list.
44. Undesirable Weed Management – The planning and implementation of an integrated program to manage undesirable or problematic plant species.

45. State Noxious Weed – Any weed identified by the commissioner of the State of Colorado Department of Agriculture after surveying the Local Weed Advisory Boards and prioritizing the top ten problematic plants. Said survey is to be conducted every three years.
46. Subject Lands - All public and private lands within unincorporated Town of Carbondale with the exception of:
 - a) any municipal property owned or leased to an incorporated municipality;
 - b) any land managed or administered by a federal agency.
47. Surfactant - A compound that improves the emulsifying, dispersing, spreading, wetting, or other surface modifying properties of liquids.
48. Weed Inspector – The agent or employee appointed to conduct the duties and functions as defined under this plan.
49. Weed Office – The office of the Weed Inspector, or Public Works Director, out of which all undesirable weed administration and enforcement activities are conducted.
50. Wildflower – The flower of a wild or uncultivated plant or the plant bearing it.
50. Xeriscape – Landscaping with water conservation as a major objective.

Colorado Noxious Weed List

The State of Colorado list of plant species that are designated as noxious weeds shall be designated by rule and shall be managed under the provisions of the Colorado Noxious Weed Act (C.R.S. 35-5.5-101). The designated noxious weed list in the State of Colorado is broken down into three categories:

List A species. List A species are rare noxious weeds that are subject to eradication wherever detected statewide in order to protect neighboring lands and the State as a whole. List A species as of this report include:

African rue (<i>Peganum harmala</i>)	Camelthorn (<i>Alhagi pseudalhagi</i>)	Common crupina (<i>Crupina vulgaris</i>)
Cypress spurge (<i>Euphorbia cyparissias</i>)	Dyer's woad (<i>Isatis tinctoria</i>)	Giant salvinia (<i>Salvinia molesta</i>)
Hydrilla (<i>Hydrilla verticillata</i>)	Meadow knapweed (<i>Centaurea</i>)	Mediterranean sage (<i>Salvia aethiopsis</i>)
Medusahead (<i>Taeniatherum</i>)	Myrtle spurge (<i>Euphorbia</i>)	Orange hawkweed (<i>Hieracium</i>)
Purple loosestrife (<i>Lythrum salicaria</i>)	Rush skeletonweed (<i>Chondrilla</i>)	Sericea lespedeza (<i>Lespedeza cuneata</i>)
Squarrose knapweed (<i>Centaurea virgata</i>)	Tansy ragwort (<i>Senecio</i>)	Yellow starthistle (<i>Centaurea</i>)

List B species. List B species are those with discrete statewide distributions that are subject to eradication, containment, or suppression in portions of the State designated by the commissioner in order to stop the continued spread of these species. List B species as of this report include:

Absinth wormwood (<i>Artemisia absinthium</i>)	Black henbane (<i>Hyoscyamus niger</i>)
Bull thistle (<i>Cirsium vulgare</i>)	Canada thistle (<i>Cirsium arvense</i>)
Chinese clematis (<i>Clematis orientalis</i>)	Common tansy (<i>Tanacetum vulgare</i>)
Common teasel (<i>Dipsacus fullonum</i>)	Corn chamomile (<i>Anthemis arvensis</i>)
Cutleaf teasel (<i>Dipsacus laciniatus</i>)	Dalmatian toadflax, broad-leaved (<i>Linaria dalmatica</i>)
Dalmatian toadflax, (<i>Linaria genistifolia</i>)	Dame's rocket (<i>Hesperis matronalis</i>)
Diffuse knapweed (<i>Centaurea diffusa</i>)	Eurasian watermilfoil (<i>Myriophyllum spicatum</i>)
Hoary cress (<i>Cardaria draba</i>)	Houndstongue (<i>Cynoglossum officinale</i>)
Leafy spurge (<i>Euphorbia esula</i>)	Mayweed chamomile (<i>Anthemis cotula</i>)
Moth mullein (<i>Verbascum blattaria</i>)	Musk thistle (<i>Carduus nutans</i>)
Oxeye daisy (<i>Chrysanthemum leucanthemum</i>)	Perennial pepperweed (<i>Lepidium latifolium</i>)
Plumeless thistle (<i>Carduus acanthoides</i>)	Quackgrass (<i>Elytrigia repens</i>)
Redstem filaree (<i>Erodium cicutarium</i>)	Russian knapweed (<i>Acroptilon repens</i>)
Russian-olive (<i>Elaeagnus angustifolia</i>)	Salt cedar (<i>Tamarix chinensis</i> , <i>T. parviflora</i> , and <i>T. ramosissima</i>)
Scentless chamomile (<i>Matricaria perforata</i>)	Scotch thistle (<i>Onopordum acanthium</i>)
Spotted knapweed (<i>Centaurea maculosa</i>)	Spurred anoda (<i>Anoda cristata</i>)
Sulfur cinquefoil (<i>Potentilla recta</i>)	Venice mallow (<i>Hibiscus trionum</i>)
Wild caraway (<i>Carum carvi</i>)	Yellow toadflax (<i>Linaria vulgaris</i>)

List C species. List C species are those that are widespread and well established for which control is recommended but not required by the State, although local governing bodies may require management. List C species as of this report include:

Chicory (*Cichorium intybus*)

Common burdock (*Arctium minus*)

Common mullein (*Verbascum thapsus*)

Common St. Johnswort (*Hypericum perforatum*)

Downy brome (*Bromus tectorum*)

Field bindweed (*Convolvulus arvensis*)

Halogeton (*Halogeton glomeratus*)

Johnsongrass (*Sorghum halepense*)

Jointed goatgrass (*Aegilops cylindrica*)

Perennial sowthistle (*Sonchus arvensis*)

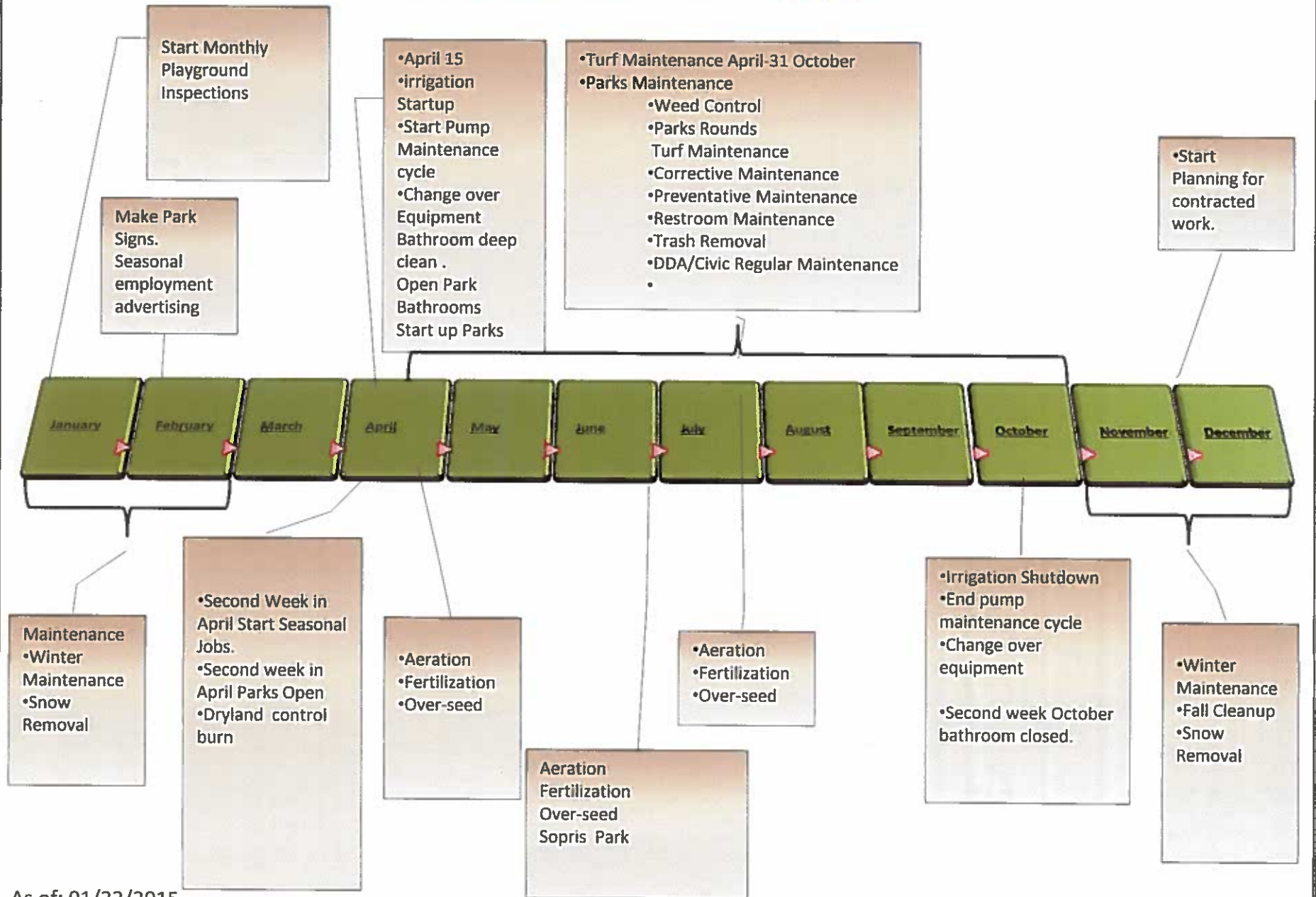
Poison hemlock (*Conium maculatum*)

Puncturevine (*Tribulus terrestris*)

Velvetleaf (*Abitilon theophrasti*)

Wild proso millet (*Panicum miliaceum*)

Parks Department Yearly Timeline



As of: 01/22/2015