



**City of  
Thornton**

**OPEN SPACE, TRAILS & LAKES  
MANAGEMENT AND MAINTENANCE  
GUIDELINES**



## **TABLE OF CONTENTS**

- 1. MOWING AND TRIMMING**
- 2. NOXIOUS WEED CONTROL**
- 3. TREE, PLANT AND VEGETATION MANAGEMENT**
- 4. WILDLIFE MANAGEMENT**
- 5. LAKE MANAGEMENT**
- 6. FISH MANAGEMENT**
- 7. ENCROACHMENT AND VEHICULAR CONTROL**
- 8. AREA SAFETY INSPECTION**
- 9. TRASH AND DEBRIS CONTROL**
- 10. GRAFFITI REMOVAL**
- 11. VANDALISM REPAIR**
- 12. TABLE AND BENCH REPAIR**
- 13. SNOW REMOVAL**
- 14. DOG WASTE DISPENSERS**
- 15. PARK SIGNAGE INSPECTION AND REPAIR**
- 16. FENCE INSPECTION AND REPAIR**
- 17. TRAIL MAINTENANCE**

## **1. MOWING AND TRIMMING**

- 1.1 Mowing shall be minimized in open space areas to encourage native grasses to grow. If mowing is deemed necessary due to safety and maintenance concerns such as fire mitigation, the parcel may be mowed.
- 1.2 A strip 6 to 15 feet wide shall be maintained behind private property lot lines depending on adequate equipment access and grades on slopes that are no more than 4 to 1, unless fire mitigation requires a wider maintenance zone. The 6-foot strip is preferred to conserve staff time and to encourage a more native character in open space areas.
- 1.3 A strip 6 feet wide shall be maintained along improved landscaped areas adjacent to open space unless fire mitigation requires a wider maintenance zone.
- 1.4 A strip 6 feet wide shall be maintained behind curb lines adjacent to open space.
- 1.5 Mowing is discouraged along trails unless necessary to allow for safe visibility or to address localized weed infestations. If deemed necessary, a strip 2 to 5 feet wide shall be created along trails depending upon terrain, availability of the proper size of equipment, and equipment access. The narrower 2-foot swath is encouraged to foster a more native character in the open space.
- 1.6 Mowed areas shall be cut at a height of 3 to 6 inches.
- 1.7 Weed mowing shall start in April and continue through October. Weeds shall be mowed on an as needed basis to prevent weeds from exceeding 12 inches in height or otherwise to prevent blooming and seed set. If weeds have set seed before mowing, the mown material shall be collected, removed from the site and destroyed.
- 1.8 To prevent transmission of noxious weeds, mowers shall be thoroughly washed before being moved to a new location.
- 1.9 Trimming shall be limited to curb lines, fence lines, benches, trash cans and light poles.
- 1.10 Spraying may be done to help reduce trimming activities.

## **2. NOXIOUS WEED CONTROL**

- 2.1 Colorado law defines noxious weeds as plant species that are not indigenous (non-native) to the state of Colorado and meet at least one of several criteria regarding their negative impacts upon crops, native plant communities, livestock and the management of natural or agricultural systems. This definition applies to species listed by both the state and local governing bodies.
- 2.2 Native plant species, those species that are indigenous (native) to the state of Colorado, may not be designated as noxious weeds by either state or local governments. Furthermore, the law does not permit distinctions to be made regarding the historical range or habitats of native species. Therefore, even a native species that expands its range within Colorado due to human influences and otherwise meets the descriptive criteria as a noxious weed may not be listed as such.
- 2.3 The following is a list of the common names of the noxious weeds that are found in Colorado:
  - Absinth wormwood
  - African rue
  - Black henbane
  - Bouncingbet
  - Bull thistle
  - Camelthorn
  - Canada thistle
  - Chinese clematis
  - Common crupina
  - Common tansy
  - Common teasel
  - Corn chamomile
  - Cutleaf teasel
  - Cypress spurge
  - Dalmatian toadflax
  - Dame's rocket
  - Diffuse knapweed

- 2.4 Noxious weeds shall be controlled as defined and mandated by State of Colorado regulations. Staff shall inventory all open space areas twice a year for new infestations of noxious weeds and monitor results of weed control measures.
- 2.5 The general goal of noxious weed control is to manage noxious weed infestations in such a way as to prevent large outbreaks in the open space areas. Open space areas adjacent to private property shall receive priority treatment where feasible to prevent the spread of noxious weeds from City-owned land to private property.
- 2.6 Noxious weed control efforts shall be prioritized by species and infestation size. Noxious weed management goals shall be to (1) eradicate small localized populations; (2) manage and enhance areas of more diffuse populations; and (3) control the perimeter to limit the expansion of large, extensive populations if control and revegetation are not practical.
- 2.7 Weed management for a particular species and location shall include an integration of chemical, mechanical and/or biological control methods based on the size and severity of the infestation. Multiple treatment methods shall be encouraged. Applications of herbicides shall be conducted at the appropriate time of the year for the most effective control of the particular weed species. When appropriate for the weed species at issue, selective rather than non-selective (broad-spectrum) herbicides shall be used to minimize adverse impacts to native or other desirable species.
- 2.8 When feasible, herbicides shall be applied when animals are not nesting or rearing young in the affected areas, both to reduce chemical exposure and to minimize disturbance. Plant species not listed as noxious, but the presence of which would impede the success of revegetation or restoration efforts, shall be controlled as required using integrated methods.

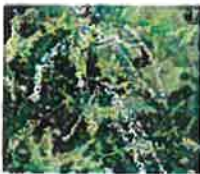
**The following pages show some of the most common noxious weeds that are found in and around the City of Thornton. They explain how to identify them and how to control them.**

- Dyer's woad
- Eurasian watermilfoil
- Giant salvinia
- Hoary cress
- Houndstongue
- Hydrilla
- Leafy spurge
- Mayweed chamomile
- Meadow knapweed
- Mediterranean sage
- Medusahead
- Moth mullein
- Myrtle spurge
- Musk thistle
- Orange hawkweed
- Oxeye daisy
- Perennian pepperweed
- Plumeless thistle
- Purple loosestrife
- Quackgrass
- Redstem filaree
- Rush skeletonweed
- Russian knapweed
- Russian-olive
- Salt cedar
- Scentless chamomile
- Scotch thistle
- Sericea lespedeza
- Spurred anoda
- Squarrose knapweed
- Seufur cinquefoil
- Tansy ragwort
- Venice mallow
- Wild caraway
- Yellow nutsedge
- Yellow starthistle
- Yellow toadflax



# Saltcedar

Adams County  
Weed Department  
9755 Henderson Rd  
Brighton, CO  
80601  
303-637-8115



## Key ID Points

1. Saltcedar is a tall shrub or small tree that has large sprays of small, whitish or pinkish flowers that are borne in finger-like clusters.
2. Leaves are small and scaly.

## Saltcedar Identification and Management



### Identification and Impacts

Saltcedar, aka tamarisk (*Tamarix ramosissima*), is a non-native deciduous or evergreen shrub or small tree that grows from 5 to 20 feet tall. The bark on saplings and stems is reddish-brown. The leaves are small and scale-like and the flowers are pink to white and 5-petaled. Saltcedar reproduces by seeds as well as vegetatively. A mature plant can produce up to 600,000 seeds per year. Seeds are viable for up to 45 days under ideal conditions. Saltcedar buds break dormancy in February or March. Flowering occurs anytime between April and August. Ideal conditions for saltcedar seedling survival are saturated soil during the first few weeks of life, a high water table, and open sunny ground with little competition from other plants.

Saltcedar was introduced from central Asia, northern Africa, and southern Europe for ornamental purposes and for stream bank stabilization. It is now widespread in the United States. Saltcedar crowds out native stands of riparian and wetland vegetation. Saltcedar increases salinity of surface soil, rendering the soil inhospitable to native plant species. Saltcedar can be found along floodplains, riverbanks, streambanks, marshes, and irrigation ditches. It's heavy use of water has intensified the drought.

The most effective method of control for saltcedar is to prevent its establishment through proper land management. Monitor susceptible areas for new infestations.

Saltcedar is designated as a list "B" species on the Colorado Noxious Weed Act. It is required to be either eradicated, contained, or suppressed depending on the local infestations. For more information visit [www.ag.state.co.us](http://www.ag.state.co.us).

On the backside of this sheet are saltcedar management recommendations. If you have any questions or would like more information, please contact the Adams County Weed Department at 303-637-8115. Please visit our website [www.adamscountyextension.org](http://www.adamscountyextension.org).



*Tamarix ramosissima*





**CULTURAL**  
After a saltcedar infestation is managed, revegetation is necessary in order to protect the soil resource and reduce the threat of reinvasion. Seeded grasses, willow stakes, and cottonwood cuttings can reduce the chances of saltcedar reinvading managed sites.



**BIOLOGICAL**  
The saltcedar leaf beetle (*Diorhabda elongata*) larvae and adults feed on foliage. This causes stem dieback and potential death of the plant if defoliation is consistent. The leaf beetle should be available for distribution by 2007. For more information, contact the Colorado Department of Agriculture, 970-464-7916.



**MECHANICAL**  
A bulldozer or prescribed fire can be used to open up large stands of saltcedar. These methods must be followed up with a herbicide treatment of the resprouts when they are 1 to 2 meters tall. Chainsaws, or topplers for smaller plants, are effective for cut-stump treatments to smaller infestations or in environmentally-sensitive management areas.

**Integrated Weed Management:**

*Select the appropriate control method based on the size of the area and other environmental or cultural considerations.*

*Re-seed controlled areas with desirable species to protect the soil resource and to prevent or slow saltcedar reinvasion.*

*Follow up control efforts the same growing season and for several years afterwards.*

# Saltcedar

**HERBICIDES**

The following are recommendations for herbicides that can be applied to range and pasturelands. Always read, understand, and follow the label directions. The herbicide label is the LAW!  
Rates are approximate and based on equipment with an output of 30 gallons per acre. Please read label for exact rates.

HERBICIDE	RATE	APPLICATION TIMING
Garlon 4	foliar - 2-4qts./acre	Foliar treatments - late spring to early fall
	cut-stump - undiluted 100%	Cut-stump - anytime except when snow or water prevent spraying of the ground line
	basal bark treatment - 1:3 herbicide:natural oil	Basal bark - anytime except when snow is present
Rodeo - aquatic label *nonselective, will kill all vegetation it contacts*	cut-stump - undiluted 100%	Treat anytime except when snow is present. Treat the cambium immediately after being cut. Thoroughly wet the surface, but not to the point of runoff.
Arsenal or Habitat *Habitat is approved for use in aquatic sites*	cut-stump - 8-12oz/gal water Foliar - 0.5-6.5oz/gal water + nonionic surfactant or methylated seed oil	Cut-stump - anytime except spring during heavy sap flows  Foliar - late spring to late summer. Spray entire crown and 70% of plant. Avoid spray solution runoff.



# Purple loosestrife

Adams County  
Weed Department  
9755 Henderson Rd  
Brighton, CO  
80601  
303-637-8115



## Key ID Points

1. Showy rose-purple flowers bloom in long vertical racemes.
2. Lance-shaped leaves have smooth edges.

## Purple loosestrife Identification and Management



### Identification and Impacts

Purple loosestrife (*Lythrum salicaria*) is a non-native, tap-rooted, perennial forb. It is native to Europe and was introduced to North America as an ornamental plant for gardens and has escaped into natural areas such as streambanks and shallow ponds. Purple loosestrife reproduces primarily by seed. A single, mature plant can produce up to 3 million seeds per year. The seeds can remain viable in the soil for 5 to 20 years. Pieces of roots or stems also can produce new plants. Purple loosestrife produces multiple 4-sided stems that can grow 2 to 8 feet tall. Leaves are 2 to 5 inches long, lance-shaped and whorled on the stems. Flowers are tightly grouped in long, vertical heads; they bloom from the bottom up on heads. They are reddish-purple in color, about 1 inch long, and have 5 to 7 petals. Flowers appear from late June through September.

Purple loosestrife can be found along riverbanks, ditches, and wet meadows throughout the state. Infestations rapidly replace native vegetation, can impede water flow in canals and ditches, and have little wildlife habitat value. Infested wetlands eventually becomes a monoculture of loosestrife.

The key to effective control of purple loosestrife is early detection when infestations are small. It is fairly easy to control small numbers of loosestrife plants when the seed bank in the soil is small. Eradicating large populations is much more difficult. Biological control should primarily be considered when populations of loosestrife have become large or are inaccessible. Small loosestrife infestations should be eradicated by hand-pulling or herbicide application.

Purple loosestrife is designated as an "A" list species on the Colorado Noxious Weed Act. It is required to be eradicated wherever found in the State. For more information visit [www.ag.state.co.us](http://www.ag.state.co.us).

What if purple loosestrife is growing in your garden? There are many planting alternatives that are better suited to Colorado and beneficial to wildlife. Alternatives include spotted gayfeather, Rocky Mountain Penstemon, beebalm, purple coneflower, and Colorado Columbine.

On the backside of this sheet are purple loosestrife management recommendations. If you have any questions or would like more information, please contact the Adams County Weed Department at 303-637-8115. Please visit our website [www.adamscountyextension.org](http://www.adamscountyextension.org).



*Lythrum salicaria*





**CULTURAL**  
Prevent the establishment of new infestations by minimizing disturbance and seed dispersal.



**BIOLOGICAL**  
Two species of beetles (*Chalcidocella calmar-lenses* and *Chalcidocella pueblita*) are proving to be effective on large infestations only. Releases of at least 500 beetles per infested site are required.

Biocontrols are not included in the prescribed management plans by the state for eradication of purple loosestrife. Exceptions are granted for very large infestations.  
For more information, contact the Colorado Department of Agriculture, 970-464-7316.



**MECHANICAL**  
Hand removal of isolated individuals can be effective on small infestations. Hand-pulling should be performed prior to seed set. It is important to remove the entire rootstalk of the plant to avoid regrowth from root fragments.  
During the flowering stage, flowerheads must be cut and disposed of properly before a herbicide is applied. This will prevent or reduce seed production.

*Integrated Weed Management:*

*Prevent new seeds from being added to the seed bank by managing purple loosestrife before it flowers or by clipping and disposing of the flowerheads prior to seed set.*

*Follow up control efforts the same growing season and for several years afterwards.*

*Maintain a healthy cover of perennial plants.*

**HERBICIDES**

The following are recommendations for herbicides that can be applied to range and pasturelands. Always read, understand, and follow the label directions. The herbicide label is the LAW!

Rates are approximate and based on equipment with an output of 30 gallons per acre. Please read label for exact rates.

HERBICIDE	RATE	APPLICATION TIMING
Garlon 3A	1-2 qts./acre or 1.3-2.5 oz/gal water	Apply in summer. If plants are flowering, cut and properly dispose of flowerheads before applying Garlon 3A. Add non-ionic surfactant @ 0.32oz/gal water or 1 qt/100 gal water.
Rodeo *nonselective, will kill all vegetation it contacts*	1-2 qts./acre or 1.3-2.5 oz/gal water	Apply in summer during the flowering stage. Cut and properly dispose of flowerheads before applying Rodeo. Add non-ionic surfactant @ 0.32oz/gal water or 1qt/100 gal water.
Aquatic 2,4-D Amine	1-2 qts./acre or 1.3-2.5 oz/gal water	Early spring - prevents seed formation only. Re-treatment will be necessary. DO NOT apply when outside temperatures will exceed 85 degrees. Add non-ionic surfactant @ 0.32oz/gal water or 1qt/100 gal water.

Purple Loosestrife

### 3. TREE, PLANT AND VEGETATION MANAGEMENT

- 3.1 Natural open space areas shall not be irrigated except as deemed necessary for successful restoration.
- 3.2 All natural vegetation shall be left in its natural state unless associated with a hazardous condition (hazardous trees or limbs that need to be removed), is diseased, dead or a nuisance species.
- 3.3 Nuisance species as listed below shall be eradicated as warranted and feasible:
  - \* Tamarisk / Saltcedar (*Tamarix ramosissima*)
  - \* Russian Olive (*Elaeagnus angustifolia*)



*TAMARISK*

Tamarisk usually grows as a woody shrub or small tree in areas where water is at or near the surface. Tamarisk is distinguished by its feathery needle-like leaves and numerous small, pink flowers at

the ends of the branches. Up to 500,000 small windblown seeds can be produced per plant.

The Tamarisk is highly adapted to arid climates. It survives in very saline and nutrient-poor soil. During the spring it can grow as much as one foot per month. It spreads readily by seed and by root, trunk and branch sprouts. Tamarisk can usually out-compete native plants for water. A single large Tamarisk can transpire up to 300 gallons of water per day. In many areas where watercourses are small or intermittent and Tamarisk has taken hold, it can severely limit the available water or even dry up a water source. Tamarisk can grow in salty soil because it can eliminate excess salt from the tips of its leaves. When the leaves are shed, this salt increases the salinity of the soil, further reducing the ability of native plants to compete. Because of its ability to spread, its hardiness, its high water consumption and its tendency to increase the salinity of the soil around it, the Tamarisk has often completely displaced native plants in wetland areas.

From a wildlife point of view, the Tamarisk has little value and is usually considered detrimental to native animals. The leaves, twigs and seeds are extremely low in nutrients and as a result, very few insects or wildlife will use them. Because of the Tamarisk's ability to eliminate competition and form single-species thickets, wildlife populations have dropped dramatically in some areas that were studied along the Colorado River.

Russian Olive is a hardy tree growing to 25 feet tall. Spreading branches near the ground form an open rounded crown and the twigs have 1 to 2 inch thorns on them. It has distinctive satiny leaves, pale silvery-green or gray-green, and fruit of the same silvery appearance.

Russian Olive was originally planted for windbreaks to prevent soil erosion and as an ornamental which could stand the rigors of the plains climate. The Russian Olive is not a relative of the common edible olive of the Mediterranean. The dry olive-shaped fruit is eaten by squirrels, grouse and song birds. It is harmless to humans but so tasteless and mealy as to be unpalatable.

We know that Russian Olives degrade wildlife habitat and compete with native tree species in riparian areas. While wildlife will eat the fruits, they are low in food value compared to those of other native species. Furthermore, the dense wood does not form hollow

cavities limiting habitat for cavity-nesting birds like Flickers, Tree Swallows, Wood Ducks and Owls.

- 3.4 All disturbed vegetation shall be re-established to its natural state.
- 3.5 The natural state of a disturbed site will be determined in terms of plant community type. Site exposure, slope, local hydrology and historic land uses will all be considered in this determination.
- 3.6 A restoration plan will be created for each disturbed site and will specify seeding and/or planting of only locally indigenous plant species, except in special circumstances in which one or more regional or other species are desirable for a specific purpose. Seed mixes will comprise a diversity of species in proportions found in a desired natural community. Indigenous or native species are those that occur naturally (i.e., not as a result of intentional or unintentional introduction by humans) in the Front Range region of Colorado. Regional natives are species that occur naturally in other portions of Colorado or ecologically similar portions of adjacent states. Plantings will be installed in natural appearing groups and spacing. Weed control will be included in all restoration plans.
- 3.7 Supplemental irrigation may be considered for enhanced success of restoration seeding and plantings.
- 3.8 Non-indigenous species may be introduced into open space areas where appropriate to meet specific management objectives (e.g., wildlife habitat, species diversity, vegetative barriers) and where compatible with existing and desired native plant or wildlife populations.
- 3.9 Vegetation shall be managed within trail corridors to promote wildlife habitat and enhance visual and ecological diversity while providing for public safety.
- 3.10 Dryland prairie grass provides vegetation for a more wildlife friendly environment on open space that was previously in agriculture use or is no longer in a natural state. Typically, prairie grasses take three to five years to get established. The process requires patience and persistence, especially since growing prairie grass depends on rainfall and temperature factors that are not possible to control. Despite best efforts to reduce weed seed prior to planting, once the grass seedlings appear, weeds will poke up also. Common bindweed and other deep rooted perennial plants will often persist for many years. Depending on weather conditions, within five years after the grassland is seeded, the



native grasses will likely out-compete the weeds and dominate the site. However, since weeds are persistent, the need for at least some weed control will continue. Until the germinated grass seeds have established a competitive stand of grass – usually in the first and second years after planting – the grass should be mowed periodically to reduce the weeds. The weeds serve as cover to the emerging native grasses but need to be cut while the grasses are in the establishment phase. This lets sunlight get to the grasses and insures that the grasses get adequate moisture to survive. Mowing limits the competition between the grasses and the weeds since broadleaf herbicides cannot be applied during the first year as they would kill the grass seedlings.

**The following pages show some of the more common native grasses that may be used in the open space areas.**

#### **4. WILDLIFE MANAGEMENT**

- 4.1 All federally listed or proposed threatened or endangered animal species shall be protected and preserved in accordance with the Endangered Species Act.
- 4.2 State-listed threatened or endangered animal species shall be protected to the extent required by the Bald and Golden Eagle Protection Act, Federal Migratory Bird Treaty Act and other federal or state laws. Prairie dogs shall be treated in accordance with the City of Thornton policies for Prairie Dog Conservation and Management. There are currently two prairie dog habitat sites in the City of Thornton. One site is the Riverdale Open Space and the other is the Grandview Ponds Open Space.
- 4.3 Other wildlife shall be preserved in their natural state unless they pose a public health risk as determined by the Colorado Division of Wildlife or the City of Thornton.
- 4.4 No wildlife shall be removed from or introduced into Thornton Open Space areas except under the direction of the Colorado Division of Wildlife or the City of Thornton.
- 4.5 Control or remove non-indigenous wildlife species where their presence creates a nuisance, health or safety hazard or threat to native species in consultation and coordination with the Colorado Division of Wildlife.
- 4.6 Nuisance wildlife on private property (e.g. skunks and raccoons) may be removed by the owner. Removal shall be accomplished by a professional and in compliance with applicable State laws.
- 4.7 All native birds are protected by the Federal Migratory Bird Treaty Act which prohibits killing, injuring or harassing birds or destroying their active nests.
- 4.8 Consider methods to enhance natural populations of desirable species such as raptors while providing natural control of prairie dog populations by erecting raptor perch sites and carnivore blinds in the vicinity of prairie dog colonies.
- 4.9 Prohibit feeding of wildlife by the public. Utilize a variety of methods including signage to educate the public about the detrimental effects and consequences of feeding wildlife.

## **5. LAKE MANAGEMENT**

5.1 The water quality at the Gravel Lakes fishing facility and the Sprat Platte fishing facility are monitored and treated by the City of Thornton Water Quality Department. The water in these lakes are part of the Thornton drinking water storage supplies, so therefore all treatments of this water are under the full control of the Water Department.

5.2 The water quality at the Eastlake Nature Area, Hunters Glen, Lambertson Lakes, Notts Pond, Civic Center Lake and at the Grandview Ponds is managed by an outside contractor that has been hired by the City of Thornton.

The lakes and ponds will be managed in a clean, odor-free manner and maintained in accordance with sound ecological management practices.

The contractor shall insure that the lake is inspected on a weekly basis in order to monitor lake and pond water quality conditions and to anticipate potential problems.

The contractor shall provide, to the City, a monthly status report of all work performed at the lakes and ponds. This report shall include:

- Weekly overall lake and pond quality conditions.
- Water quality conditions to include, but not limited to: pH, temperature, dissolved oxygen, specific conductance, ammonia, algae count and predominant species and chlorophyll.
- All pesticide and other biological applications.
- All other work performed.

The contractor shall also provide, to the City, an annual report of overall water quality conditions at the lakes and ponds to include, but not limited to:

- Monthly breakdown of overall water quality conditions.
- Bar graph illustrating annual water quality conditions.
- List of all pesticide and other applications.

The contractor shall submit a list of pesticides and other materials to be used for the purpose of lake and pond maintenance to the City as well as accompanying Material Safety Data Sheets.

5.3 General quality requirements:

- Aquatic plants – Submerged aquatic plants that are allowed to reach the surface will be considered unacceptable by the City. In addition, the contractor shall maintain an average 30 percent of submerged aquatic plants that will provide acceptable habitat conditions for the fish populations in the lake. The contractor shall also insure that in the event herbicide applications are necessary to control submerged aquatic plants, that no more than one third of the water volume is treated per application.
- Algae – The contractor shall insure that algae (filamentous and planktonic) are controlled. Historically, filamentous algae have been an on-going problem that can overtake the lake water column in a matter of days given favorable water conditions (high water temperature, length of daylight hours, etc.). It is unacceptable for algae to occupy 20 percent or more of the lake water volume.
- Floating aquatic plants – The contractor shall insure that floating aquatic plants (duckweed, etc.) are controlled throughout the lakes and ponds. Floating aquatic plants that appear shall be unacceptable by the City.

5.4 Quality control – The open space worker or parks worker that is assigned to the lakes and ponds will be responsible for monitoring the quality of maintenance performed by the contractor. If maintenance does not appear to be up to the prescribed standards, the open space supervisor will be notified who will then contact the lake contractor to get the problem resolved. The water level of the lake will also be monitored by the open space worker, or parks worker that is assigned to that area. When additional water is needed, the open space supervisor will then contact the Water Resources Department to find out if additional water is available.

## **6. FISH MANAGEMENT**

- 6.1 Fishing rules and regulations for the City of Thornton lakes and ponds are established and enforced by the Colorado Division of Wildlife. In addition to the standard fishing regulations, the following areas have special regulations in place:
- Grandview Ponds – All bass under 15” must be returned to the water immediately.
  - Sprat Platte Lake – All bass under 18” must be returned to the water immediately and bait is not allowed. Only artificial flies and lures are to be used.
- 6.2 Fishing is not allowed at the Eastlake Nature Area. The fish in this lake are used as a food source for birds, raptors and other wildlife.
- 6.3 Fish stocking is done by the Division of Wildlife with a few exceptions. Grandview Ponds is stocked by the City of Thornton prior to the annual kids fishing derby which is held as part of Harvest Fest.

## **7. ENCROACHMENT AND VEHICULAR CONTROL**

- 7.1 Encroachment of private landowners on City open space is strictly prohibited. Private landowners shall not park or store vehicles, construct gardens or other amenities in the open space areas nor should they plant, remove or mow vegetation, or trap or release wildlife.
- 7.2 Driving on open space property to access private property is prohibited unless special permission is granted. Temporary access through open space areas may be granted by the Open Space Division to deliver materials or equipment to private property providing that no feasible alternative route exists. Any disturbance of the open space area will need to be restored to the original condition by the private landowner.
- 7.3 Vehicular traffic in open space areas shall be restricted to maintenance and emergency vehicles. All other forms of motorized transportation (except electric wheelchairs on established trails) are prohibited. Bicycles are allowed but are to be kept on the established trails.



## **8. AREA SAFETY INSPECTION**

- 8.1 Visual inspection of the open space areas will be made at least once daily Monday through Friday in high usage areas and once a week in remote areas. This visual inspection will be made to evaluate site conditions and identify potential maintenance needs or safety hazards, which may require immediate attention. This inspection will identify excessive litter or debris, graffiti and broken or vandalized amenities that may create a safety hazard. Upon discovery of any safety related issue, the Open Space Worker shall notify the Open Space Supervisor. Adjustments in the daily schedules will be made based on the findings of these inspections.

## **9. TRASH AND DEBRIS CONTROL**

- 9.1 Litter shall be picked up on a regular basis in high visibility areas. It shall be picked up on an as needed basis in remote areas. Trash cans are to be emptied when they are more than half filled or are attracting bees, insects and animals such as Raccoons or when park usage indicates that containers may be filled to capacity before the next inspection.

## **10. GRAFFITI REMOVAL**

- 10.1 Upon discovery, Open Space workers shall immediately attempt to remove the graffiti themselves. If the graffiti is particularly stubborn, or there is such a large amount of graffiti that it would be impractical to remove in-house, the Open Space Worker will immediately notify Sparkle Wash, the City's graffiti removal contractor, and coordinate for the removal of any graffiti. Graffiti will be removed within 48 hours from the time it is identified. Sparkle Wash will be notified to remove the graffiti within 24 hours of the City contacting them. All graffiti incidents that require a response from Sparkle Wash will be reported on a Parks Division vandalism report form and photos will be taken and sent to the Police Department. All graffiti incidents that are removed by the Open Space Worker will be documented in the individual's daily report, to include the amount of time it took to remove the graffiti.

## **11. VANDALISM REPAIR**

- 11.1 Vandalism that is creating a public safety hazard will be secured immediately upon discovery. Depending on the object that is vandalized, securing it for safety reasons may mean removal of the object or placing a barrier around the object to prevent possible access by the public. Necessary repairs will be scheduled based on the urgency of the repair. All vandalism will be documented on a Parks Division vandalism report form and reported to the Police Department with photos attached.

## **12. TABLE AND BENCH REPAIR**

- 12.1 All benches will be inspected daily for graffiti and vandalism which will be taken care of immediately. They will also be inspected weekly for loose nuts and bolts. Necessary repairs will be made immediately. Once per year, in the winter, they will be completely refurbished if needed.

## **13. SNOW REMOVAL**

- 13.1 Many of the trails in the open space areas are constructed with granite fines which are easily removed with the snow when the trails are plowed so they are exempt from snow removal. The snow on these soft surface trails is allowed to melt naturally.

## **14. FILL DOG WASTE DISPENSERS**

- 14.1 Dog waste dispensers are to be checked weekly or daily depending on the level of use in the area. Dog waste dispensers shall be re-filled when less than one quarter of the total bags are left in the dispenser.

## **15. PARK SIGNAGE INSPECTION AND REPAIR**

- 15.1 Park and open space signage shall be checked weekly. Any signs that have been vandalized or removed must be restored to normal condition within 24 hrs. If signs are not available to replace, notify the shop foreman or open space supervisory staff so more may be ordered. Graffiti must be removed by Open Space workers immediately, or if excessive graffiti is present, the Parks Division graffiti removal contractor may be contacted with the permission of open space supervisory staff.

## **16. FENCE INSPECTION AND REPAIR**

- 16.1 Fencing that belongs to the City of Thornton will be inspected weekly. Minor repairs are to be made by the Open Space worker. Major repairs such as vandalism shall be evaluated by the Open Space supervisor and an outside contractor will be contacted if required. Any safety issues shall be reported to Open Space supervisory staff. Graffiti shall be reported and photos taken for police purposes.

## **17. TRAIL MAINTENANCE**

- 17.1 Soft surface trails will be inspected weekly for signs of wear and deterioration. Areas that have worn thin, become soggy and muddy or have been eroded by rainfall will have new material added to the trail surface to restore it to a safe, level and firm consistency.
- Hard surface trails will be inspected for cleanliness and deterioration on a weekly basis. Debris will be swept from the trail and deteriorating and cracked surfaces will be put on the concrete or asphalt replacement list.